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The Capital Structure Decisions of Different Industries and Markets

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Abstract: In the development of the economic market, capital structure has an important impact on enterprise development. It can influence the investing capital of enterprises and profits. So, enterprises in different industries choose different capital structures. Firstly, this paper introduces different opinions of scholars about capital structure and firm performance. Then, M&M theory will be introduced to analyze its advantages and limitations. Next, this paper will discuss the capital structure of different industries, mainly focusing on the retail industry, real estate industry, and the healthy technology industry; these industries are special in capital structure. Afterwards, this paper will analyze the capital structure of developing countries and developed countries, they have different capital structures and ways of financing, especially Vietnam and China. Finally, this paper makes a conclusion about different views on capital structure and explains the reasons that different industries and countries choose capital structure. Meanwhile, this part introduces the contribution of the paper and its drawbacks.

Keywords: Capital Structure, Financing, Firm Performance

1. Introduction

With the development of the economy, China has a special period in 2022 and 2023. Due to inability to fulfill financial obligations, a lot of famous real estate companies declared bankruptcy. This situation is very similar to Japan during 1986-1991 and America during 2001- 2008. For example, Evergrande Group is the largest and famous company, and its debt-to-asset ratio was 65.8%, higher than the industry average, which led to its solvency and liquidity being poor. When the market changed, Evergrande declared bankruptcy. Other bankrupt companies, Country Garden and Sunac China Holdings Limited, are top real estate companies and have declared bankruptcy. This company has high liabilities, and their liability in capital structure takes up above 50%. Capital structure is a very important theory in firm performance, scholars have different views about capital structure around the world. It can be roughly divided into three aspects. Booth et al. show that based on the data of enterprises in developing countries, it is found that the higher the degree of debt, the weaker the profitability of the enterprise [1]. They think that capital structure has a negative correlation with firm performance. Capital structure is positive for firm performance. Research by Olowofeso et al. on listed agro-based firms in Nigeria verified the presence of a favorable connexion between capital structure and financial performance [2]. On the other hand, some researchers think that capital structure has a converse relationship with firm performance. For example, a further study by Shehryar

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on 50 corporations in India found a converse relationship between capital structure and firms' financial performance [3]. Researchers have different opinions on capital structure and firm performance, but they all agree that capital structure is very important in firm performance.

This paper will analyze the capital structure of different countries and areas and make a conclusion about different views of capital structure. Next, this paper will introduce the development process of M&M theory first and then analyze its advantages and limitations. Then, make an analysis of capital structure in different markets and industries. Finally, make a conclusion about the views of capital structure.

2. Theoretical Basis

Modigliani and Miller found the M&M theory, which was the first theory to analyze capital structure and became an important basis for later theories. M&M theory has some limitations because its condition is under the perfectly efficient market assumption. This condition is different from the actual situation. So, in the later theory development, Modigliani and Miller provided more conditions, such as taxes, bankruptcy costs, and asymmetric information in the early MM theory, which is based on the five premises. Firstly, the capital market is perfect and has no transaction costs. Secondly, all borrowing rates are the same, with no borrowing risk. Then, investors have the same risk for future returns. Afterwards, all cash flows are sustainable. Finally, operating risk is represented by the variance of EBIT profit. Under this premise, the size and source of liabilities do not affect the company's value because the financing cost brought by liabilities will offset the cost of equity financing. That is, debt does not affect the comprehensive cost of capital, and the company's value is certain. MM theory without income tax is the first theory of capital structure. However, the MM theory has some limitations. Its conditions are very trenchant. So, after 1963, two scholars put forward tax conditions. Since the interest on the company's debt is tax-exempt, as long as the debt continues to increase, the comprehensive cost of capital will continue to decrease, and the financial leverage effect will be more obvious. The optimal capital structure is reached when there is only debt capital in the capital structure. Although MM theory is the origin of capital structure, it is unsuitable for reality. In the actual environment, enterprises will only reach 100% debt under normal operation, but many enterprises with high debt will fall into financial difficulties or go bankrupt. Even so, M&M theory still provides a valuable contribution to capital structure.

3. Different Industry Analysis

3.1. Capital-Intensive Industry

The rapid development of the real estate industry in the past 20 years has ushered in a bottleneck period. The background that China's economy has entered the "new normal", the real estate market has officially entered the adjustment stage. At the same time, the regulation of the real estate industry is also increasing. In order to enhance anti-risk capability and meet the challenges of market environment change, the real estate industry must optimize the capital structure as the only way for enterprises. China Evergrande Group is a very famous enterprise, and its main business is real estate. In 2009, Evergrande Group was successfully listed on the Hong Kong Stock Exchange and became the most valuable enterprise in the mainland real estate industry. At the end of 2015, Evergrande Group formed a new pattern of diversified industries, with the real estate business as the core and other diversified businesses developing together. The high expansion has led to a substantial increase in corporate debt. After Evergrande Group entered a new business, it did not stand firm but immediately invested in the next business, which led to its debt ratio being too high, and its solvency was very dangerous. Generally, the real estate industry has a high debt ratio; they need a lot of funds to operate.

Table 1: Asset-liability ratio of Evergrande Group and the real estate industry.

	2022/12/31	2022/12/31	2022/12/31	2022/12/31	2022/12/31	2022/12/31
Asset-liability ratio	132.59%	122.45%	84.77%	83.75%	83.58%	86.25%
Average asset-liability ratio of real estate development enterprises	-	-	80.70%	80.40%	79.10%	79.10%

From the Table 1, it shows that Evergrande has higher asset-liability ratio than real estate industry, and real estate industry and Evergrande both has ratios above 70%. Generally, Generally speaking, the optimal range of asset-liability ratio is 40%-60%. However, the real estate industry has a certain degree of particularity, and its asset-liability ratio is usually higher than that of other industries. Generally, the debt ratio of real estate industry is very high, this condition is dangerous when external environment changes.

3.2. Labor-Intensive Industry

Generally, healthy industry has a low debt ratio, they kept that ratio below 50%. Lian illustrated that the weight of factors that promote debt is higher than that of factors that inhibit debt [4]. Considering the impact of all factors on the capital structure, the promoting effect is greater than the inhibiting effect. The author think that the debt-asset ratio of Jichuan Pharmaceutical should be 42.54%. Therefore, the adjustment direction of the capital structure of Jichuan Pharmaceutical is upward, expand the scale of debt and increase the asset-liability ratio. So, considering the impact of all factors on the capital structure, the promoting effect is greater than the inhibiting effect. Therefore, the adjustment direction of the capital structure of Jichuan Pharmaceutical is upward, that is to say, expand the scale of debt and increase the asset-liability ratio. Compared to leading enterprises, the debt-asset ratio of Jichuan Pharmaceutical is lower than top enterprises, it need more funds to put into research and development and take up more market share. Also, the author provides some advice to optimize the capital structure.

On the other hand, the capital structure of an enterprise cannot be separated from the investment of funds. In order to stand out and develop stably, it is necessary to have enough capital to expand the scale and improve the competitiveness of enterprises. Therefore, an enterprise must first consider its own capital structure before financing, and a reasonable capital structure is directly related to financing costs, but also indirectly affects economic benefits. A good capital structure helps to maximize the value of an enterprise. In the context of such fierce market competition, enterprises need to optimize and improve the capital structure according to the existing environment to adapt to the environment to maximize the value of enterprises. The capital structure of an enterprise cannot be separated from the investment of funds. In order to stand out and develop stably, it is necessary to have enough capital to expand the scale and improve the competitiveness of enterprises. Therefore, an enterprise must first consider its own capital structure before financing, and a reasonable capital structure is directly related to financing costs, but also indirectly affects economic benefits. A good capital structure helps to maximize the value of an enterprise. In the context of such fierce market competition, enterprises need to optimize and improve the capital structure according to the existing environment to adapt to the environment to maximize the value of enterprises. Based the analysis of Y company, Chen think that the optimal capital structure of a company is 40%-57%, Y company has a growing debt-asset ratio from 2015-2018 year [5]. Asset-liability ratio is a measure of the ratio of corporate liabilities to total assets, and the larger the ratio, the higher the default risk of the debtor. The equity ratio has a positive relationship with the risk of capital structure. The equity multiplier is that the greater the index, the higher the degree of indebtedness of the company, thus affecting the

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financial leverage and thus increasing the generation of financial risks. Company Y is a pharmaceutical company. China's pharmaceutical industry is a typical light debt enterprise. Unlike real estate enterprises, they can borrow a large amount by their own characteristics, but the pharmaceutical industry is different because they do not have a large number of real estate and real estate mortgage loans, so the capital liability ratio of the pharmaceutical industry is at a low value. Too high an asset-liability ratio will bring financial risks to enterprises. Once the funds cannot be operated or the business situation is not good, they will face greater pressure and even make enterprises go bankrupt.

4. Different Markets Analysis

4.1. Developing Countries

Corporate finance structures vary widely among developing countries. In the past 50 years, developing countries have made great achievements in economic development, such as South Korea, Singapore, Malaysia, Brazil, and other countries with rapid economic growth. Especially after 1980, these countries have achieved a high degree of industrialization, created industrial and technological infrastructure, trained a large number of technical and managerial personnel, and have become strong competitors of developed countries. Economists have done many studies on these developing countries for a long time, but only some have made comparative studies on the capital structure of companies in different countries. On the one hand, before 1970, various developing countries were at different starting stages, and there was a lack of standard and comparable data, so it wasn't easy to compare the capital structure of companies in different countries systematically. On the other hand, because the theory of capital structure was still very imperfect at that time, economists' understanding of the capital structure of national companies was still in a very shallow stage. In the past 20 years, the theory of capital structure has made great progress. Economists have begun to recognize the essence of capital structure, and there is a theoretical basis for the comparative study of the capital structure of companies in different countries. At the same time, capital markets in many developing countries are increasingly developed and improved, providing a large amount of data for comparative studies. These two developments have made such comparative studies possible. In this aspect, Cui finds that there is also a large gap in the ratio of assets to liabilities [6]. Among them, companies in South Korea, India, and Thailand have debt-to-asset ratios of 53.2%, 31.8% and 62%, respectively. In comparison, companies in several other countries have lower debt-to-asset ratios of between 8% and 20% from 1980-1990. Especially for Vietnam is a fast-developing country, and in recent years, it has rapidly grown in the monetary market. Trang put forward that the increase in total liabilities increases the assets of enterprises, but it also exposes Vietnamese financial institutions to greater risks [7]. As a result, this also makes managers more hesitant to invest or borrow, leading to a decline in profits. The author makes a conclusion by comparing it with financial institutions in Vietnam and analyzing the security companies, banks, and financial companies.

Ramadan and Ramadan identified the effect of capital structure on the performance of 72 companies listed on the Amman Stock Exchange during the period between 2005 and 2013 [8]. The authors used ROA as a measure of profitability and the ratios of long-term debt to total assets and total debt to total assets as indicators of capital structure. Applying OLS regression, the authors stated that debt ratios are negatively related to performance. Well-performing firms are less dependent on credit. This result is consistent with the Pecking-order theory when companies prefer equity.

4.2. Developed Countries

Developed countries have capital structures that are different from other developed countries, such as America and England, where half of the funding comes from internal sources, led by debt financing

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with a higher proportion of endogenous financing. Zhang researches the differences between Western and China [9]. Regarding the different financing methods, western enterprises are in the process of financing funds from their own business accumulation. This kind of financing nearly takes up above 50%. However, in China, a lot of enterprises intend to finance funds from exogenous financing. In the financing cost aspect, the author shows that the debt financing of enterprises mainly includes bank loans and corporate bonds, which have tax-saving effects in the mature Western financial market. Compared with equity financing, the procedure of issuing corporate bonds is simpler, the threshold is lower, and the issuance cost is less. Therefore, in terms of financing cost, debt financing is obviously better than equity financing. Therefore, debt financing has become a preferred external financing method for Western enterprises. Meanwhile, Yin and Wang have the same opinion on financing structure; they show that profit retention, long-term debt, and equity financing are the main sources of long-term funds for Chinese enterprises [10]. Internal financing is mainly profit retention, while external financing is mainly long-term debt and equity financing. Also, western enterprises occupy a larger share of retained earnings. In terms of financing order, it is first internal financing, then debt financing, and finally external financing.

On the other hand, Liu finds the difference between bank loans and bond financing; in debt financing, she thinks that Chinese and Western enterprises mostly choose bond financing in direct financing [11]. While in China, they mostly choose to borrow from banks, which means indirect financing. Meanwhile, about the difference between bond financing and equity financing, she thinks that the cost of bond financing is much lower than that of equity financing, so in foreign countries, enterprises often choose debt financing when they choose direct financing. These scholars have consensus views about the financing. Due to the different policy and market environments, this situation has adapted to the development of enterprises.

5. Conclusion

These scholars have different opinions about capital structure, this is because every industry and country have different environment, such as policy, culture, and habit. They think that the real estate industry has a high debt ratio because the production cost of the real estate industry is very expensive. They need a vast of debt to develop their market. But, this means that the industry has high risk. The asset-liability ratio of the retail industry is low and has an uncertain impact on corporate performance. In the healthy industry, they have a low debt ratio, do not like real estate, do not have mortgage loans, and put most of their funds into research. So, the corporate form determines its capital structure. As for different countries, the main difference between the capital structure of developing and developed countries is internal and external financing. This paper supplements deficiencies about the capital structure and firm performance in different industries and countries. Also, it provides an important reference about the Vietnam market, which is very special on capital structure. But, it is still incomplete; more reviews need to be considered in the future.

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