

To What Extent Capital Structure Decision can Affect a Listed Company's Total Market Value

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Abstract

The capital structure decision is to optimize the proportions of debt to equity. For a listed company, market value is the price at which willing buyers and sellers would trade the assets. The company's capital structure decision has positive, negative and uncertain effects on its own total market value, which may be adjusted by the controllable leverage decision making. Furthermore, the relevance between them is far stronger than the ongoing managerial reform (i.e. the cost control). Along with the intensive study of the equity incentive plan, the extent of influence of capital structure decision on a listed company's total market value should be explored more deeply.

Key words: Capital Structure; A Listed Company; Market Value

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INTRODUCTION

With the rapid development of the financial market around the globe, the influence of the firm capital structure on the firm market value has aroused lots of attention from the investors and academic researchers. The capital structure decision is to optimize the proportions of debt to equity.

For a listed company, market value 'is the price at which willing buyers and sellers would trade the assets' (Ross & Westerfield, 2008). This paper attempts to discuss the various effect of capital structure decision on a listed company's total market value in terms of the factors, such as the tax, the cost and the signaling, etc.

1. POSITIVE EFFECT

1.1 A Case

Within the catalogues of listed companies, the levered companies and unlevered companies can exist simultaneously in the financial market. The unlevered companies, whose capital structure belongs to the sole composition, are all-equity. As is mentioned by Agrawal and Nagarajan (1990), in the survey of about 100 all-equity companies on the NYSE, these companies do not use the leverage, whose capital contains only little short term debt. However, these companies perform better in the industry, and have higher total market value than those who use the leverage in the industry. Doesn't it mean that the capital structure decision has no effect to the total market value? In other words, these listed companies only need all equity financing. The capital structure decision is irrelevant to their total market value; the ratios of debt to equity in these companies change, these companies' total market value is invariant. Apparently, the scope of this view is narrow. According to the analysis of Ross & Westerfield (2008: 481), the reduction of the agency costs of equity boosts these companies' total market value, so they perform better in the industry. Through the case, we can see that, to know how much effect the capital structure decision imposes on the company's total market, we cannot only look at the surfacial phenomena; it suggests that the factors relevant to decision making should be considered in detail, such as corporate tax, the personal taxes, the financial distress costs and the agency costs.

According to Teach & Edward (2008), 'Modigliani and Merton showed that a company's total market value is independent of its capital structure in an ideal world of perfect markets, no taxes and no bankruptcy costs'. The inference shows the unrelated connection between the capital structure and the company's total market value is impossible in the real world with informational asymmetry, various tax burden and bankruptcy costs. A company must operate its business successfully in rapid response to the market situation, the national taxes and so on. Otherwise, it will suffer the risk of market and the penalty from the government. Now, I will discuss the relation between the capital structure decision and the company's capital value from the following aspects:

1.2 The Corporate Tax

In the real world, any company cannot escape the government claims, and cannot avoid the corporate tax (e.g. VAT, corporate income tax, etc). Together with the corporate tax, the capital structure decision of a listed company plays an important role in its total market value. For example, as is mentioned by Wu & Yue (2009), when China's government raises the corporate tax rate, the listed companies correspondingly increase the debt by regulating their capital structure decision. The motivation of interactive adjustment derives from the 'tax shield' which is produced by the debt (Ross & Westerfield, 2008). Generally speaking, the debt interest is deductible before the company tax; however the equity dividend isn't deductible before the company tax in the countries around world currently. The debt financing can bring extra benefit for the company by the debt interest offsetting the tax. What's more, the debt plays a positive effect on the company's total market value, just as is claimed by the Modigliani and Miller propositions with corporate taxes, the total market value of a company with leverage is equal to the value of an unlevered company plus the present value of the tax shield, which is equal to the company tax rate times the value of the debt. It means that, under the influence of the different corporate tax policies between the debt interest and the equity dividend, the distinctive capital structure decision results in the distinctive total market value. Furthermore, if the government raises the corporate tax rate, the tax shield from the debt will become larger than before. In this condition, the company raises capital by increasing the debt, the company's total market value will boost. It seems that the bigger the amount of debt financing is, the bigger the company total market value is.

2. NEGATIVE EFFECT

2.1 The Financial Distress Costs

Actually the target of the entire debt financing cannot be realized; the company can not make a hurry decision by

taking the corporate tax into account only. The risk of debt financing should also be considered by the company. More and more debts not only produce more and more tax shields for the company, but also increase the risk of the company financial crisis if the company can not pay off the debt according to the agreement. The risk causes the 'financial distress costs' (Ross & Westerfield, 2008), which include a series of fees paid for liquidators, lawyers, accountants and other costs difficultly appraised. According to Ross & Westerfield (2008), those costs are fairly large, and can also offset the tax shield from the debt. And these fees and costs should be finally afforded by the shareholders. As a result, the financial risk limits the random expansion of the company's debt. In accordance with the view of Leonid & Vladimir (2005), the probability of the company's bankruptcy always limits the amount of debt. The company has to control the debt level to reduce the ratio of debt to equity and to prevent the possibility of financial risk. If the company indulges an excessive debt financing, the company's total market value will slide under the influence of the financial distress costs. As Nieh & Yau & Liu (2008) claim, the company should constrict the debt ratio in an optimal range instead of extravagance to realize the purpose of maintaining and boosting the company's total market value. It suggests the listed companies should use the leverage in a proper manner. Otherwise, accompanying of the increase of debt level, the financial distress costs caused by the debt financing will impose a negative effect on the company's total market value. Under this circumstance, the debt financing is negative to the company's value.

2.2 The Agency Costs

According to the agency theory, in the process of the capital structure decision, the conflict between the bondholders and the shareholders results in the agency costs of the debt, which make a company's total market value decrease. The shareholders pursue some selfish activities by agency privilege, for example, 'incentive to take large risks, incentive toward underinvestment, milking the property, etc' (Ross & Westerfield, 2008: 460). These behaviors would hurt the interest of the bondholders, in revenue, the bondholders increase the cost of the company's debt financing by improving the interest of the debt or limiting the amount of debt to protect their benefits. As a result, the company's total market value is reduced because the agency costs have come here. The agency costs of the debt are primitively the product of the capital structure. They keep the innumerable links with the capital structure. The issue about how to reduce the agency costs of the debt is actually about how to decrease the conflict between the shareholders and bondholders and how to optimize the capital structure. The reason the agency costs of the debt make the company's total market value decrease derives from the inharmonic capital structure.

And meanwhile, another conflict between the big shareholders who hold a large proportion of equity and the small shareholder who hold a small proportion of equity also causes the agency costs of the equity. The small shareholders are inactive to work; the big shareholders are active to create more value for the company. The increase of the conflict between the small shareholders and the big shareholders results in the increase of the agency costs of the equity, which cause the company's total market value to decrease. This conflict is aroused by the equity distribution which belongs to the capital structure decision. In brief, the external contradiction from inside the equity also causes the agency cost of the equity, thus making the company's total market value decline. It shows that a company's capital structure decision between the debt and the equity affects the company's total market value, and also either the debt or the equity alone can impose some influence on the company's total market value.

As is mentioned by Jensen & Meckling (1976), the agency costs also occur between the shareholders and the managers. Driven by the selfish benefit, the managers enjoy their life, minimize the personal labor and improve the extra bonus in the terms of excessively increasing the administrative fees. These negative behaviors will make great loss to the shareholders and cause the company's total market value to decrease.

3. UNCERTAIN EFFECT

3.1 The Personal Tax

Besides the corporate tax, the capital structure decision also has influence on a listed company's total market value through the personal tax (e.g. personal income tax, estate tax, etc). As Zeng (2008) argues, the increase and the decrease of the personal tax give the firm some effects that change the company's total market value. The connection between the personal tax and the company's total market value is built by the lenders. When the company relies on the equity raising capital, the stockholder gets the dividends which are equal to the earning before corporate tax minus the corporate tax minus the person tax on equity dividend, or the stockholder gets the capital gains which are equal to the capital gains minus the personal tax on capital gains. When the company relies on debt raising capital, the bondholder gets the interests which are equal to the earning before corporate tax minus the personal tax on bond interest. Generally speaking, the shareholders get less income than the bondholders due to the personal tax where the former's tax burden is higher than the latter in the countries of world. Because the personal tax supplies more earnings for bondholders than for shareholders, the lender prefers becoming a bondholder to becoming a shareholder, the money supply in the equity market would be less than that of the bond market. When the company

chooses the different capital structure decision to the debt financing or the equity financing, the company's total market value will, thus, be different

3.2 The Signaling

As is mentioned by Ross & Westerfield (2008: 474) in the pecking-order theory, it's accepted that when the company share market price is higher than the actual value, the company will raise the money by issuing the stock. However, when the company share market price is lower than the actual value, the company will raise the money by borrowing. The public favorably respond to the company's debt financing behavior under the influence of the signal theory. The market price of the company's assets will rise when the company raises the money by the debt financing. In fact, the company cannot entirely rely on these theories to choose the debt financing or the equity financing. The uncertainty of the capital structure decision brings a fluctuation to company's total market value. For example, even though a company performs poorly, it may cater to the public and issue the debt financing in order to maintain the company's total market value. In the long term, the decision of the company's debt financing has a negative effect on its own total market value. Just as is said by Aivazian & Geb & Qiu (2005), a company underperforms with a low growth chance, the decision relying on the debt financing has a disciplining effect for the company's total market value.

4. THE CONTROLLABILITY

4.1 The Financial Distress Costs

As is mentioned by Iyer & Savita (2008), although the financial distress costs are fairly large, the company may negotiate with the bondholder and sign the tighter covenants (e.g. limitation to the highly risky investment, limitation to the dividend, etc) with their bondholder to reduce these costs. Under the influence of the covenants,

The financial distress costs become smaller, the company's total market value would be subjected to synchronal decrease when the risk of the debt financing increases rapidly. As a result, the risk of debt financing may be controlled in range by the rational managers although the rapid increase of the debt has a negative effect on the company's total market value.

4.2 The Agency Costs

The reduction of agency costs by making the equity in the hands of a minority and improving the transparency of financial information will make the company total market value rise. According to Clas & Mikael & Sara (2007), the buyout of the equity brings a positive influence on the company's value. When the minority monitor a company and decrease the diversification of shareholders, the company operating efficiency will improve more than before. Furthermore, when the agency costs of the equity

decrease, the company's total market value rises. Just as is said by Mao & Connie (2003) that, 'the total agency cost of debt does not uniformly increase with leverage'. The agency costs may be controlled in range by the rational managers, the company's total market will boost under the influence of the reduction in the agency costs of the equity which ever caused great loss to the company's total market value. As is mentioned by Agrawal and Nagarajan (1990), about 100 all-equity companies on the NYSE acquire the capital structure suitable for these companies, and make the agency costs of the equity minimize, and thus realize the faster growth than the counterparts in the industry.

5. THE RELEVANCE

The impact on the company's value produced by the change of capital structure is stronger than the impact on company's value produced by the ongoing management reform including the cost control, the function re-allocation and so on. Just as is mentioned by Clas & Mikael & Sara (2007), it proves that the change of capital structure imposes a stronger influence on the company's total market value.

6. A POSSIBLE ATTEMPT: THE EQUITY INCENTIVE PLAN

As Alessandro (2007) argues, the equity incentive plan represents the classical example of the capital structure decision impacting on the company's total market value, which is created and developed by the Anglo-Saxon. Its target is to encourage the company to create the systematic investment plan. In order to reduce the agency costs between the managers and the shareholders and enhance the company's market value, the company reforms the capital structure in terms of the equity incentive plan, changes the equity proportion in the capital structure and assigns the equity to the managers by the executive. This decision making brings the managers and the shareholders into one target of gaining more earnings and maximizing the company's market value. According to Fich & Shivdasani (2005), in order to reduce the agency costs of the equity caused by the conflict between the big shareholders and the small shareholders, the company's executive boosts their individual equity by carrying out the equity incentive plan and increasing the company's equity proportion in the capital structure, and then bring the big shareholders and the small shareholders into one target of contributing more value to the company. As is mentioned by Leonard (1990), after a company reforms the capital structure of the equity in terms of the equity incentive plan, the company's total market value responds positively. Accompanying with the intensive study of corporation finance and the equity incentive plan, the

effect of the capital structure decision on the company's total market value would be described more scientifically. For example, as is mentioned by the Sec Edgar (1995), the market value of the Production Operators Corp. and the company's shareholders established few connections.

'Generally accepted criteria is market value of Shares Owned as Percent of Base Salary. Recommended Salary Multiple: President (5 times, 500% of salary), Executive Vice President (3 times), President, KAMLOK Oil & Gas (3 times), Vice President, Operations and Engineering (2 times), Vice President, Sales & Marketing (2 times), Vice President, Business Development (2 times), chief Financial Officer (2 times)'

CONCLUSION

The company's capital structure decision has positive, negative and uncertain effects on its own total market value, which may be adjusted by the controllable leverage decision making. Furthermore, the relevance between them is far stronger than the ongoing managerial reform (i.e. the cost control). Along with the intensive study of the equity incentive plan, the extent of influence of capital structure decision on a listed company's total market value should be explored more deeply.

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