



Theories Linking Capital Structure with Financial Performance 2018

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Abstract

The choice of capital structure is one of the most important and fundamental aspects of corporate finance studies. It is a controversial topic among finance scholars. In the mid-1950s when Modigliani and Miller devised their concept of “Modigliani-Miller (M&M) propositions,” the assumption was made that in a perfect market, capital structure is irrelevant and does not affect a firm’s value. Following M&M theory, finance scholars developed various theories based on the assumption of the perfect market. First, trade-off theory assumes that firms trade-off between the benefits and costs of using debt and equity as a source of financing when considering market imperfections such as taxes, bankruptcy cost, and agency cost. Second, pecking order theory examines the issue of asymmetric information between shareholders and firms’ managers. The main goal of this theory is to minimize the problem of asymmetric information using internal sources as the first choice, if internal sources are not enough to fund a business as financing requires, then external sources are resorted to be used. Third, agency cost theory argues that corporate governance comprises ownership structure and how processes are properly implemented, given that these impact on firm performance, firm value and subsequently the capital structure. Other scholars examine whether firm performance can be determined by the choices of capital structure which can be predicted by the efficiency risk and franchise value hypotheses. This study aims to shed light on the capital structure theories that have been used by scholars; various empirical studies are reviewed to clarify the capital structure theories.

Keywords: Capital Structure; Leverage; Trade-off Theory; Pecking Order Theory; Agency Cost Theory

1. Introduction

Maximizing firms’ shareholder wealth is an important duty of finance businesses’ managers. Scholars argue whether this goal can be reached through capital structure choices. To make this possible, firms should minimize their cost of capital and provide a return which adequately provides for the risk taken by shareholders and above the opportunity cost (Jahanzeb, 2013). Originally, Modigliani and Miller (1958) proposed that in a perfect market, capital structure is irrelevant and does not affect a firm’s value as explained in more detail in the following section. Previously, there were extensive discussions in literature on: First, the optimum capital structure choices and determinants; and second, the impact of capital structure on firms’ value and performance (Allen et al., 2013; Berger, 1995; Frank and Goyal, 2007; Myers, 1984). Following Modigliani-Miller (M&M) theory, several other theories were developed based on the assumption of the perfect market. First, trade-off theory contended that firms trade-off between the benefits and costs of using debt and equity as a source of financing when considering market imperfections, for example, taxes, bankruptcy cost, and agency cost (Luigi and Sorin, 2009). Second, pecking order theory pioneered by Myers and Majluf (1984) looked at the issue of asymmetric information between shareholders and firms’ managers. The main goal of this theory is to minimize the problem of asymmetric information using internal sources as a first choice. If internal

sources are not enough to fund the firm as financing requires, then external sources are employed. In addition to trade-off theory and pecking order theory, this study utilizes agency theory, which was conceived by Berle and Means (1932). They argued that corporate governance comprises ownership structure and processes which impact on a firm's performance and its value.

Reference will be made to reverse causality between capital structure and firm performance which can theoretically be predicted according to the efficiency risk and franchise value hypotheses (Berger and Di Patti, 2006). The above-mentioned hypotheses have been used by researchers as theoretical bases for assessing the impact of firm performance on the choice of capital structure. On the one hand, the efficiency risk hypothesis assumes that firms experiencing both high performance and profitability employ more debt in their financing preference choices because these firms generate more cash flow. They also are able to repay all debt obligations and interest rates (Berger and Di Patti, 2006; Margaritis and Psillaki, 2010; Yeh, 2011). As a result, the efficiency risk hypothesis asserts that firm performance positively impacts on capital structure. This is very different from the franchise value hypothesis which assumes that firms performing well use less debt in their financing sources, to protect their income and value that these firms have generated over time due to liquidity distress. This theory posits a negative relationship between firm performance and leverage (Margaritis and Psillaki, 2010; Yeh, 2011). In the following subsections, more details about these theories are provided starting with M&M theory followed by trade-off theory, pecking order theory, agency theory, and the efficiency risk, and franchise value hypotheses.

1.1. Capital structure definition

Capital structure is defined as the financing sources that firms use to finance their assets, operations and future growth, particularly the proportions of debt (leverage) and equity (Jensen, 1986). As well, capital or financial leverage refers to the degree to which a company's total capital comprises debt (Arnold, 2014). The terms leverage and gearing can be used interchangeably. However, leverage is used more frequently in the United States and while gearing is applicable to the United Kingdom. In terms of banks' capital structure, Greenbaum et al. (2016) defined bank capital structure as a mix of equity, subordinated debt, and deposits that banks use to finance their assets, operations, and future growth. Leverage ratio serves as the capital structure indicator and is basically defined as the firm's debt/total assets. Diamond and Rajan (2000) state that banks' capital structure is almost similar to that in non-finance firms. However, they also found that the main differences are due to variations in the role of capital, range of industries that firms operate in, and how the economy works. Diamond and Rajan - according to their model - contend that non-finance firms benefit more from using banks' funding and liquidity offering, while finance firms do not have that access due to capital regulations. As a result, they built a new model based on banks' capital structure to better understand all the relevant issues concerning this capital structure.

Furthermore, according to Diamond and Rajan (2000), banks' operations in the form of liquidity-creation and credit-creation are influenced by banks' capital structure. From this perspective, they started examining whether banks could finance their operations from customers' deposits or should use other sources such as debt or equity. Diamond and Rajan (2000) indicated that banks could not fund borrowers with only deposits because depositors are not negotiable and no specific period is set aside for depositors to use their money. Consequently, they suggested that banks should use different sources of finance such as debt and equity to protect themselves against depositors' shocks. Sorokina (2014) asserted that the capital structure of financial institutions differs from the capital structure of non-finance firms, in at least two respects. First, banks heavily depend on deposits to finance their primary operations. Second, finance firms - and particularly their capital structure - are subject to government legislation and regulations.

2. Capital Structure Theories

The M&M theory comprises two versions: (i) M&M without tax and (ii) M&M with tax. In the following subsections, these two versions are explained in more detail.

2.1. M&M without tax

The theory of capital structure was pioneered by Modigliani and Miller (1958) (henceforth M&M) who bequeathed the first proposition about capital structure and its irrelevance to firm value. M&M argued that changing proportions of the firm's capital structure will not change the firm's market value under perfect market conditions where there is no tax, no transactions cost and both individuals and firms have the same access to the capital market. In other words, a firm's value will remain whether the firm is leveraged or otherwise. Modigliani and Miller reached this proposition based on the idea of "homemade leverage" whereby shareholders adjust the amount of financial leverage by borrowing and lending on their own. Home-made leverage can be defined as the use of personal borrowing to change the overall amount of financial leverage to which an individual is exposed (Ross et al., 2008). To permit home-made leverage both firms and individuals must have the same access to the capital market, and then shareholders can adjust their own portfolios using the home-made leverage function to create different patterns of payoffs by borrowing and lending on their own. As a result, it does not matter how a firm's shareholders finance their assets since they receive equal benefits that can be achieved by duplicating or offsetting the effects of the firm's leverage through home-made leverage. Based on these assumptions, M&M revealed their first proposition which is as follows:

M&M Proposition 1 (no tax): The value of the leveraged firm is the same as the value of unleveraged firm. Therefore, a firm's value is unaffected by the capital structure in the perfect market.

M&M proposition I (no tax) emphasized that the value of a leveraged firm is equal to the value of an unleveraged firm. This assumption can be expressed as shown in Equation 1:

$$VL = VU \quad (1)$$

M&M Proposition 1 stated that changing the capital structure will not change a firm's value. Modigliani and Miller examined the effect of financial leverage on the cost of equity. Since cost of debt is cheaper than cost of equity and using debt more than equity, this will result in the lower cost of capital; however, using debt will increase a firm's risk. If a firm's risk increases, shareholders will demand a higher return on their investment (Ross et al., 2008). Modigliani and Miller asserted that the cost of equity is positively related to leverage. From this assumption they developed their second proposition as follows:

M&M Proposition 2 (no tax): A firm's cost of equity is a positive linear function of its capital structure.

Based on this proposition the cost of equity can be expressed as:

$$r_E = r_A + \frac{D}{E} (r_A - r_D) \quad (2)$$

Where:

r_E = the cost of equity;

r_D = the cost of debt;

r_A = the required rate of return of firm's assets (weighted average cost of capital [WACC]);

D = the value of the firm's debt; and

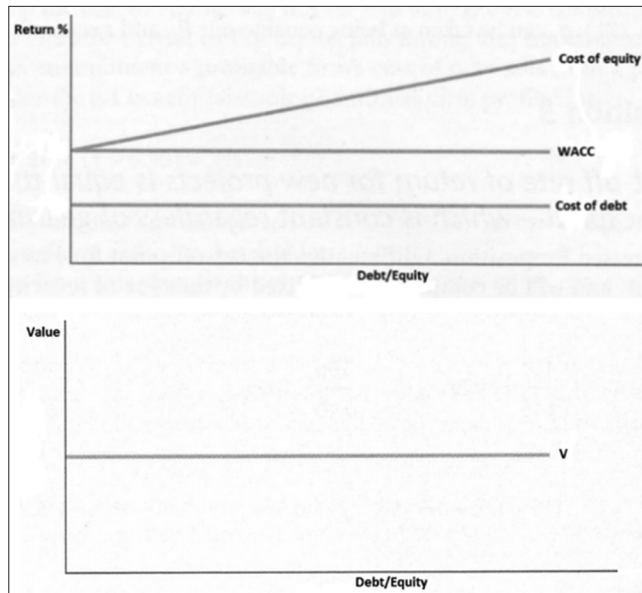
E = the value of the firm's equity.

Formula 2 was derived from the original WACC to solve the cost of equity.

$$WACC = \frac{E}{V} \times r_E + \frac{D}{V} \times r_D \quad (3)$$

Figure 1 explains M&M propositions 1 and 2. It shows the impact of leverage on the cost of equity. If a firm intends to increase its debt, this will result not only in risk but also increased debt/equity ratio; consequently, shareholders will require a higher return on their investment. It also illustrates that WACC is not affected by any change in the debt/equity ratio because the benefit of using debt is precisely offset by the increase in the cost of equity from borrowing. As a result, WACC stays constant and the implication of M&M proposition 1 is: The firm's overall cost of capital is independent of its capital structure.

Figure 1: The cost of debt, equity, and weighted average cost of capital and firm value under the Modigliani-Miller proposition (no tax) Arnold (2014)



2.2. M&M with tax

In 1963, Modigliani and Miller updated their proposition by adding a firm's tax to their previous propositions. They examined the effect of corporate taxes on both a firm's value and cost of equity. Basically, tax shield benefit is the tax saving achieved by a business from interest expenses (Arnold, 2014). On the one hand, the leveraged firm will benefit from a tax deduction because it will only be taxed after interest expenses. On the other hand, the unleveraged firm which does not have interest expenses will be taxed on its total earnings. For this reason, leveraged firms pay less tax because interest expenses are deducted. It implies that a leveraged firm has greater cash flow than an unleveraged firm which is made possible by the tax shield benefit. Consequently, M&M assumed that the firm's value increases as long as the firm's cash flow increases.

M&M proposition 1 (with tax): The value of the leveraged firm is equal to the value of the unleveraged firm plus the present value of interest tax shield

$$V_L = V_U + T_c D \quad (4)$$

Where:

V_L = the value of leveraged firm;

V_U = the value of unleveraged firm;

T_c = the firm's tax rate; and

D = the firm's debt.

M&M examined the effect of leverage on the firm's cost of equity. In a world of no tax, M&M stated that leverage increases the firm's risk which results in higher cost of equity which shareholders demand. This suggests that a positive relationship exists between cost of equity and leverage. In a world where there is a tax, M&M expect the same conclusion; however, they added the amount of tax shield benefit to be added to the equity. As a result, the tax shield benefit will reduce the total firm's cost of capital.

M&M proposition 2 (with tax): The cost of equity rises with leverage because risk to equity rises with leverage

Based on M&M proposition II (with tax), the firm's cost of equity can be expressed as:

$$r_E = r_A + \frac{D}{E}(1 - T_c)(r_A - r_D) \quad (5)$$

Where:

r_E = the cost of equity;

r_D = the cost of debt;

r_A = the required rate of return of firm's assets (WACC);

D = the value of the firm's debt;

E = the value of the firm's equity; and

T_c = firm's tax rate.

Furthermore, WACC can be expressed as:

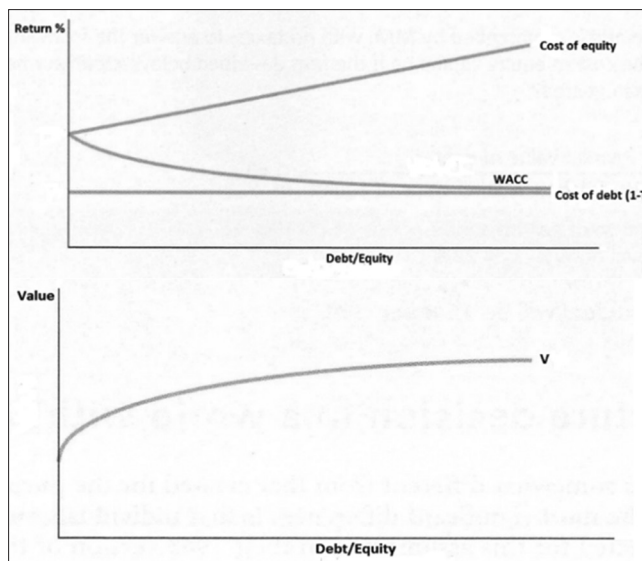
$$WACC = \frac{D}{V} \times r_D (1 - T_c) + \frac{E}{V} \times r_E \quad (6)$$

From the previous analysis, we can see that the M&M propositions (with tax) suggest firms should, in the absence of bankruptcy costs, use 100% as debt because there are tax shield benefits that businesses can exploit. Figure 2 summarizes the M&M proposition (with tax). It illustrates the relationship between cost of equity, cost of debt after tax, and WACC. It can be clearly seen that WACC declines and debt/equity increases which mean the more debt used the less WACC is obtained. We can see clearly that the WACC is declining as long as the firm uses debt because certain tax shield benefits enable the firm's value to increase. Remarkably, the less WACC, the higher firm value will be (Arnold, 2014).

2.3. Trade-off theory

This theory emerged following Modigliani and Miller (1963) added tax shield benefits to their original M&M propositions. Since M&M theory suggests using debt to obtain tax shield benefits, this will lead to 100% debt financing, which obviously results in a high level of risk. For this reason, Kraus and Litzenberger (1973) added bankruptcy cost to M&M theory, stating that since bankruptcy cost "risk"

Figure 2: The cost of debt, equity, and weighted average cost of capital and firm value under the Modigliani-Miller tax model Arnold (2014)



has a positive relationship with debt, obtaining more debt will lead to higher bankruptcy cost. The result is that if the firm obtains the optimum capital structure, it should trade-off the tax shield benefits with financial bankruptcy costs. In general, this theory assumes that firms balance between debt and equity financing based on costs and benefits after considering market imperfections, for instance, tax shield benefits, bankruptcy cost, and agency cost (Luigi and Sorin, 2009). Specifically, to attain the optimum capital structure which results in minimizing the cost of capital and maximizing the firm's value, companies should use debt up to the point where the value of tax shield benefits is balanced by the increase in possible bankruptcy costs. This is referred to as the static trade-off theory (Luigi and Sorin, 2009; Myers, 2001). The static trade-off theory is based on the one period model, where no adjustment and transaction cost is considered. In contrast, the dynamic trade-off model is a multi-period model which takes into account the serial correlation as well as the transaction cost. More specifically, the dynamic trade-off model tends to consider the issue periodically. For example, the optimum capital structure for firm A in this year could depend on the optimum capital structure in the next year.

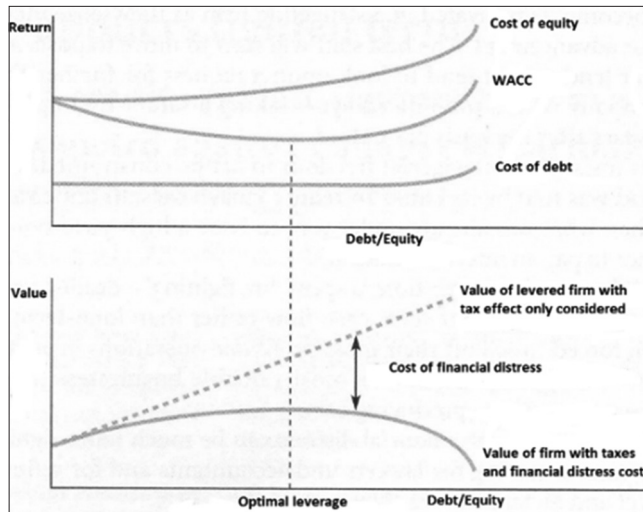
Researchers have empirically tested the veracity of trade-off theory. Miller (1977) pointed out that tax shield benefits seem to be high while bankruptcy cost seems to be minor which implies that relatively high leverage is preferred. Myers (1984) criticizes this theory in that if tax is a fundamental basis of this theory then it should exert a powerful impact. However, in empirical studies, the effect of tax variability seems to be minimal. Moreover, trade-off theory assumes that firms that are highly profitable should have an equally high leverage ratio to protect themselves from taxation (Fama and French, 2002; Myers, 1984; Titman and Wessels, 1988). In addition, Frank and Goyal (2007) listed some predictions based on the trade-off theory. First, highly profitable firms tend to have lower expected costs derived from financial distress. Thus, profitability is positively correlated to leverage. Second, if the firm's market-to-book ratio is high, this will result in high growth opportunities and higher cost of financial distress. Moreover, size, sales, and the firm's age are inverse proxies for a firm's volatility as well as the cost of bankruptcy. Therefore, trade-off theory expects that larger firm size and high volume of sales, as well as older firms, tend to use more debt. This theory stipulates that the higher bankruptcy cost or Z-score is negatively related to leverage. The Z-score, developed by Altman (1968), measures the probability of bankruptcy (Hillegeist et al., 2004).

The trade-off theory predicts that interest rates have a positive relationship with leverage since an increase in interest rate will reduce the value of both equity and debt. However, it reduces the value of equity more than debt; thus, firms will be highly leveraged. Frank and Goyal (2007) find that equity financing is more expensive than debt under the trade-off theory.

Figure 3 explains the relationship between cost of equity and cost of debt with WACC. It also reveals the optimal capital structure under trade-off theory which can be achieved by balancing between tax shield and cost of financial distress.

2.4. Pecking order theory

Pecking order theory was pioneered by Myers and Majluf (1984), and it was originally attributable to Donaldson (1961) who conducted a survey study among United States firms, observing that firms prefer to use internal financing sources such as retained earnings (Frank and Goyal, 2007). The pecking order theory assumes that a firm has three sources of financing: Retained earnings (internal source), debt, and equity (external sources). It assumes that firms should use internal sources to avoid asymmetric information cost, if their internal sources of finance are not enough to fund operations, business ventures, etc.; only then should the firm resort to external sources. However, the firm must consider the asymmetric information cost when it decides to use external sources, and equity financing is more affected by asymmetric information than debt. Pecking order theory is consistent with the signaling effects of capital structure choice to investors. On the one hand, when a firm announces plans to issue equity, the stock price will be influenced. Conversely, an announcement of issuing debt may indicate that the firm has the ability to repay that debt which signals the firm expects good business performance in the future. In addition, from the point of view of investors, they assume that equity is more risky than debt although both entail risks. Investors will demand a higher rate of return on equity more than on debt (Frank and Goyal, 2007). As well, pecking order theory explains well the level of

Figure 3: The cost of capital and firm value with taxes and financial distress as leverage increases Arnold (2014)

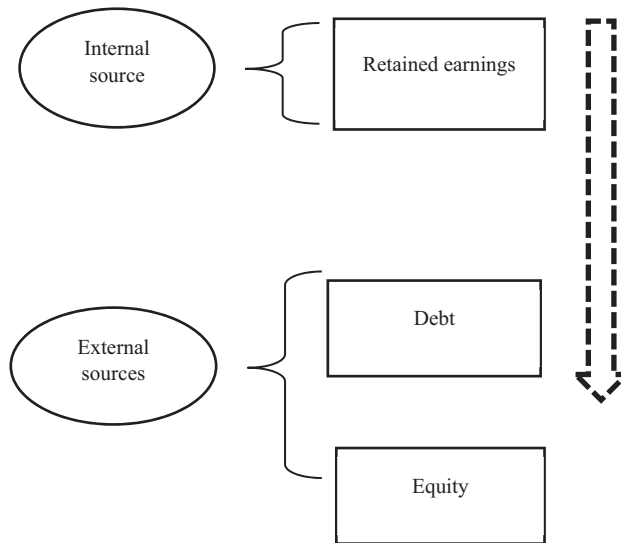
profitability which is negatively related to leverage (Frank and Goyal, 2007). However, the theory does not take into consideration the agency cost since it implies giving more power to managers to control cash flow, which was inconsistent with the normative thrust of agency theory proposed by Jensen and Meckling (1976) [Figures 4 and 5].

2.5. Agency theory

Agency theory was originally developed by Berle and Means (1932), who argued that corporate governance comprising ownership structure had an important role to play and impacted on firm performance and firm value. Berle and Means (1932) stated that the separation between ownership and control will reduce the agency problem which will result in maximizing firm value. It does this by encouraging managers to act more in the business owners' interests. Extending this, Jensen and Meckling (1976), stated there are three different agency conflicts: First, between managers and shareholders; second, between debt holders and equity holders; and third, between majority shareholders and minority shareholders. These conflicts lead to rising agency cost which can seriously undermine firm value. Jensen (1986) explained that agency cost must be minimized to increase firm value and increase shareholders' wealth. Agency cost can be decreased through several mechanisms and one of these is debt. It has long been debated that debt could be used as a monitoring mechanism to mitigate agency cost.

While the conflict between managers and shareholders can be reduced through debt, using debt to finance firms' operations will reduce agency cost because it decreases free cash flow which can be exploited by managers to serve their own interests and not those of shareholders. Debt obligations and interest payments encourage managers to do their best to meet all a company's debt obligations; otherwise, firms will become bankrupt due to the strong relationship between debt and bankruptcy cost. Therefore, if firms fail to pay back their debt obligations, firms will be under threat of default, and hence, all managers are at great risk of losing their positions and reputations.

The conflict between majority shareholders and minority shareholders is another assumption of agency theory in regard to ownership structure and its impact on firm value and performance. The majority of shareholders have strong monitoring and controlling power due to their voting rights, especially if managers are the majority shareholders. Therefore, leverage can mitigate the opportunistic behavior of managers. In this scenario, managers and directors will engage in less opportunistic behavior and will do their best to repay all debt and interest obligations. Consequently, all efforts by majority shareholders especially if they are managers will lead to minority shareholders benefiting in the long-term. It can

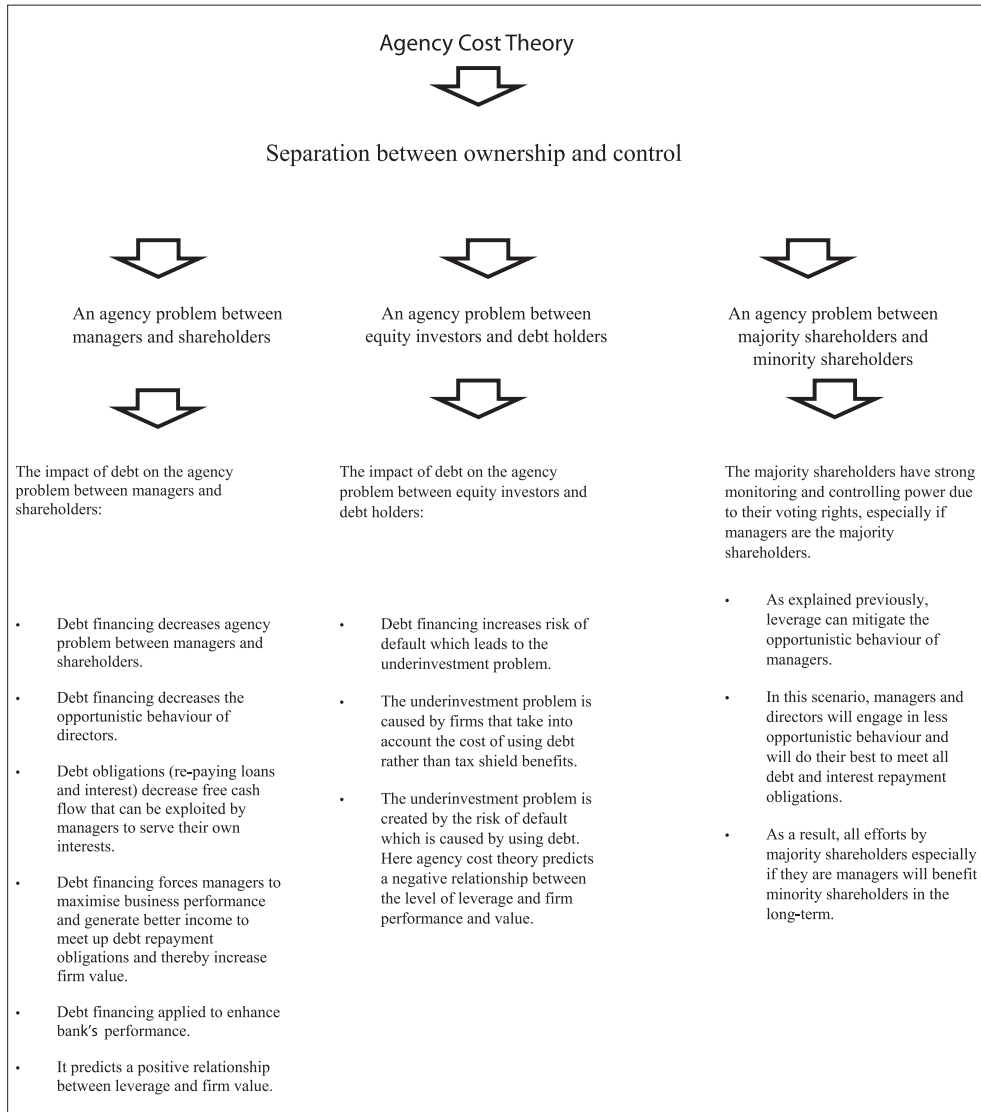
Figure 4: Pecking order theory (researchers)

be clearly seen that agency theory suggests that firm should use more debt to mitigate agency conflict between managers and shareholders. Doing so will minimize the agency problem and increase firm value.

However, using more debt will lead to an increase in a firm's risk and bankruptcy costs. In turn, the conflict between debt holders and equity holders will sharpen due to the risk of default that firms are subject to, which significantly impacts on firm value. Conflicts between equity holders and debt holders derive from issues concerning underinvestment. This problem happens because firms take into account the cost of debt (serves debt holders), more than benefits (serves equity shareholders). Stulz (1990) argues that debt payment can positively help shareholders because it forces managers to pay the interest obligation, which reduces the overinvestment problem. In contrast, debt could negatively influence shareholders because high-interest payments will lead to the likelihood of projects not being profitable, thus resulting in the underinvestment problem. Therefore, firms must take into account that debt should be determined by the trade-off between cost of debt and benefits. According to Myers (1984), when a firm experiences a high level of bankruptcy, even if it has the available cash flow and better NPV projects, equity investors will make no effort to invest in such a firm because the value obtained by it will largely go to the debt holders. It is clearly evident that agency theory suggests firms should use more debt to mitigate agency conflict between managers and shareholders to enhance firm value.

In contrast, to mitigate conflict between debt holders and equity investors, firms should use less debt because not doing so will increase the risk of default, which is due to the underinvestment problem. Utilizing debt should be determined by the trade-off between cost of debt and tax shield benefits (Stulz, 1990). Driffield et al. (2007) investigated the impact of ownership structure on capital structure and firm performance for the period 1994–1998 in four Asian countries, i.e. Indonesia, South Korea, Malaysia, and Thailand. In their study, the sampling is divided into two groups - family and non-family firms. Their results show that ownership concentration positively affects leverage in family firms but negatively impacts on leverage in non-family firms. In addition, the influence of managerial opportunism or moral hazard (measured by the separation of control and cash flow rights) on capital structure and firm performance has been examined. The results show that managerial opportunism has a significant positive impact on leverage and firm performance in family firms while it has an insignificant relationship in non-family firms.

Another empirical study by Margaritis and Psillaki (2007) looked at the relationship between capital structure and firm performance and considered the impact of reverse causality of firm performance on

Figure 5: Summary of agency cost theory (researches)

the capital structure decision according to the efficiency risk and franchise value hypotheses. This study emphasized the agency cost hypothesis pioneered by Jensen and Meckling (1976) that firms with larger debts tend to curtail agency cost thus increase firm performance. Using a sample of French firms, Margaritis and Psillaki (2010) examined the relationship between capital structure, ownership structure, and firm performance. Their study investigated whether ownership affects the capital structure and firm performance as well as reverse causality between firm performance and capital structure. They employed X-inefficiency as a measure of firm performance while debt to total asset served as the leverage ratio. Furthermore, ownership concentration was the indicator of ownership structure, and it emerged in this study that ownership concentration was found to positively impact on firm performance. It did this through lower agency cost. On the other words, Margaritis and Psillaki concluded that high ownership concentration led to low agency cost and subsequently resulted in better performance. In contrast, firms with dispersed ownership structures experienced high agency cost.

2.6. The efficiency risk and franchise value hypotheses

The main theories regarding capital structure mainly interpret the relationship between capital structure and firm performance, mainly in terms of the impact of the former on the latter. With regard to the reverse causality between capital structure and firm performance which can be theoretically predicted by the efficiency risk and franchise value hypotheses (Berger and Di Patti, 2006), these hypotheses have been used by researchers to evaluate the impact of firm performance on the choice of capital structure. The efficiency risk hypothesis assumes that firms enjoying high performance and high profitability employ more debt in their financing preference choices because these firms generate more cash flow and can repay all debt and interest obligations (Berger and Di Patti, 2006; Yeh, 2011). Consequently, the efficiency risk hypothesis posits that firm performance positively impacts on capital structure. Meanwhile, the franchise value hypothesis contends that high performing firms use less debt in their financing sources to protect their operating income and value that such businesses have generated over time due to liquidity distress. The franchise value hypothesis posits a negative relationship between firm performance and leverage (Margaritis and Psillaki, 2010; Yeh, 2011).

Empirically, many researchers have investigated the impact of capital structure on firm performance. However, only a few studies - Berger and Di Patti (2006) in the US, Margaritis and Psillaki (2010) in France, Yeh (2011) in Taiwan, and Driffield et al. (2007) in Asia - examine reverse causality between firm performance and capital structure utilizing the efficiency risk and franchise value hypotheses. Berger and Di Patti (2006) examined the relationship between capital structure and 7320 US banks' performance, documenting the significant and positive impact of leverage on their performance. It emerged that higher leverage or lower equity capital ratio resulted in the ability to make more profits, which indicated a positive relationship between leverage and performance. This finding confirms the assumption of the efficiency risk hypothesis. Furthermore, Driffield et al. (2007) examined the simultaneous relationship between firms' capital structure and their valuation. They detected a negative association between firm value and level of leverage. This outcome is in line with the franchise value hypothesis.

Other empirical studies by Margaritis and Psillaki (2007) and Margaritis and Psillaki (2010) utilized the quantile regression method to examine reverse causality from firm performance to leverage, observing that firm performance plays a significant role in capital structure decisions and choices. Specifically, both studies stated that firm performance positively impacted on leverage when a firm has low to middling levels of leverage; however, this relationship becomes much more negative if a firm has a high level of leverage. This result is in line with both the efficiency risk and franchise value hypotheses. This finding supports the efficiency risk hypothesis where high performing firms tend to use more debt because they can meet their debt obligations. Therefore, it is revealed that firms with high levels of performance tend to use more debt; however, applying more debt may increase bankruptcy costs and overall risk, thus subjecting companies to more financial distress and possible default. Furthermore, emphasized here is the fact that the negative relationship between firm performance and leverage was observed for these firms who already applied high levels of leverage. This is also explained by the franchise value hypothesis which posits that high performing firms tend to successfully minimize their debt levels to avoid bankruptcy and financial distress.

3. Conclusion

Capital structure theories have existed for many decades, but they still constitute a major puzzle in the literature. The optimum capital structure for firms cannot be generalized to all other firms which make the choices of capital structure difficult for managers and scholars. Since the development of M&M which was originally proposed in the 1950S and deemed capital structure to be irrelevant to firm value, trade-off theory, pecking order theory, and agency cost theory have sort to clarify the relationship between capital structure and firm value and performance. This paper found that in recent times scholars have tested whether capital structure choices can be affected by bank performance using a reverse causality approach, utilizing the efficiency risk, and franchise value hypotheses. The efficiency risk hypothesis found firms which performed well and enjoyed high profits employed more debt in their financing preference choices because they can generate higher cash flows and are able to repay all debt and interest obligations. In contrast, the franchise value hypothesis assumed that such high performing

firms employ less debt in their financing sources to protect their operation incomes and value. While the theories described here to some extent can explain the capital structure choices and optimum capital structure, it is still debatable what the outcomes will be due to these hypotheses' different predictions.

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