Abstract
The fundamental reason for carrying out corporate restructuring is to further enhance the long-term survival of firms through greater efficiency and cost-effectiveness. As a result, firms are bound to conduct financial restructuring as part of their corporate restructuring program. This involves some adjustment on their capital structure as there is a need to have changes on either their debt proportions or equity proportions. This article explores certain critical areas of capital structure. The argument here is based on the life cycle of a company, firm specific characteristics and type of business dimensions. This study also offers a conceptual understanding on capital structure in a given set of factors/variables. It is also postulated here that researchers should look into the possibility of remodeling their work on capital structure.

Keywords: Corporate restructuring, Firm characteristics, Capital structure

1. Introduction
Corporate restructuring has undoubtedly become a major program for many organizations as it paves ways for greater efficiency and cost-effectiveness. Both corporate and business strategies are currently integrated into restructuring program to yield greater financial performance in both short and long run. The general framework for corporate restructuring comprises of reorganization of assets (acquisitions and sell-offs), creating new ownership (spin-offs, split-ups and equity carve-outs), reorganizing financial claims (exchange offers, leveraged recapitalization, financial reorganization and liquidation) and other strategies (e.g., joint ventures, LBOs, etc) (Weston, Siu and Johnson, 2001).

Corporate restructuring is intended to either reacting to crisis or to be part of the company’s pre-emptive plan for their survival in the industry. Restructuring process is a lengthy and a painstaking one. It presents many challenging tasks and requires analysis of social benefits and costs. The most difficult task is to persuade the most suffered to understand the desirability of the reform efforts (Yoon, 2004). In the mean time, strategic evaluation of re-engineering, restructuring and downsizing policies are perceived as the influential management paradigm. With this, companies are able to fully leverage on their core competences in creating superior competitiveness (Morden, 1997).

Palliam and Shalhoub (2002) found that corporate restructuring could be an impetus for organizational change. Corporate restructuring also positively correlated with companies’ long term profitability. Significant cost reduction and increases in market shares are expected to result from corporate restructuring. Companies are to have sound knowledge of their industrial structures which are constantly changing before restructuring their operations. In the light of corporate restructuring, innovative approach is also needed to establish a viable competitive advantage (Proctor, 2001).

In general, corporate restructuring could be viewed as a company’s expansionary program which includes mergers and acquisitions, takeovers and green-field investment. On the other hand, its contractionary program could be referring to divestiture, downsizing, down-scoping and the third one which is quite common that is financial restructuring. Thus, the effects of corporate restructuring on financing decision and capital structure in particular cannot be denied.

Financial restructuring obviously involves equity or debt restructuring that has direct influence on capital structure. In short, it can be clearly restated that debt restructuring is a means of conducting financial restructuring program that has effect on a company’s capital structure (Miller and Modigliani, 1958; Myers and Majluf, 1984; Majumdar and Chibber, 1999).

Hence, this is a study that makes an attempt to put forward certain critical areas of capital structure that so far have not been rigorously explored but these areas tend to create a significant impact in the manner the literature on capital structure is understood.
2. Debt and equity

Debt and equity are the two different sources of funds for a company. As both involve costs to the company, there is a need for the company to choose the right option that minimizes its costs and in most cases, companies tend to choose the right combination of debt and equity that might result in the lowest costs. Thus, the use of debt and equity proportions are the measurement tools for capital structure. Glen and Pinto (1998) describes that determining debt and equity is an important financial decision faced by companies. Capital structure is defined as total debt to total assets at book value, influences both the profitability and riskiness of the company (Bos and Fetherston, 1993).

Hence, capital structure concerns the relative proportions of debt and equity financing that helps companies to minimize their overall financing cost (cost of capital). However, lowest cost (discount rate) is actually maximizing their market values (maximizing the present value of dividends). With this view, the discount rate is the cost of capital that can also be formulated as Weighted Average Cost of Capital (WACC).

\[
WACC = (Proportion of Debt \times Cost of Debt) + (Proportion of Equity \times Cost of Equity)
\]

Financial risk refers to an increase in volatility or uncertainty of a company’s earnings due to borrowing. Studies indicate that companies without borrowings (unlevered firms) show less fluctuation in their earnings, whereas, companies with borrowings (levered companies) show greater fluctuation in their earnings when there are changes in their financial performance. Hence, some specific implications of borrowing on levered firms could be outlined as follows; borrowings require interest payments that in effect, slash firms’ net incomes, interest expenses as fixed costs that increase the volatility of net incomes and thus, affect EPS and borrowings also relatively reduce the proportion of the equity in a company’s capital structure and hence, reduce the number of shares outstanding.

3. Traditional view and the modern theory

In general, as company’s borrowing rises, its financial risk also goes up and this forces shareholders to increase their required rate of return. This in turn causes WACC (discount rate) to go up and hence, reduces shareholder value (present value of dividends).

Let us take a closer look at the traditional view first. The traditional view argues that when gearing ratio is too low, the company loses cheap debt but if its gearing ratio is too high, financial risk together with WACC will increase and subsequently shareholder value will drop. This signifies that when financial risk increases, shareholders will demand high required rate of return. It can be concluded that under the traditional view, to increase debt is welcomed but if it is too high, then the company has to face financial distress. In short, the guiding principle is that debt should be handled with great caution. (Myers and Majluf, 1984; Kester, 1986; Friend and Lang, 1988; Majumdar and Chibber, 1999)

In contrast, the Modern Theory, developed by Merton Miller and Franco Modigliani- MM’s Theory (1958), challenged the traditional view by reiterating the fact that capital structure is irrelevant to company value and cost of capital through the process of ‘arbitrage’. They argued that value of a company depended on its income stream and the degree of business risk but not debt and equity. Thus, companies can go up to 100 per cent debt financing. MM’s propositions can be summarized as follows;

3.1 MM proposition I (without tax)

Value of Unlevered = Value of Levered = Operating Income/ ke

\( k_e \) - required rate of return by shareholders

3.2 MM proposition II (without tax)

The rate of return required by shareholders increases linearly as the debt/equity ratio is increased and this is supported by the formula below;

\[
k_{eg} = k_{eu} + (k_{eu} - k_d) \frac{V_B}{V_S}
\]

\( k_{eg} \) - of a levered company

\( k_{eu} \) - of an unlevered company

\( k_d \) - cost of borrowing

\( V_B \) - borrowing

\( V_S \) - equity

3.3 MM proposition I & II (with tax)

i. Value of a levered company = Value of an unlevered company + Tax rate x Borrowing

ii. \( k_{eg} = k_{eu} + (1-T)(k_{eu} - k_d) \frac{V_B}{V_S} \)
iii. Thus, \( WACC = \left\{ k_{eg} \times \left( \frac{V_S}{V_S + V_B} \right) \right\} + \left\{ k_d (1-T) \times \left( \frac{V_S}{V_S + V_B} \right) \right\} \)

4. MM’s capital structure theory and risk-return trade-off

MM’s initial model was the classification of firms into ‘homogeneous risk classes’ as a way of controlling for inherent operating or business risk (Pike and Neale, 2003). Hence, the formula can formulated as follows;

i. \( k_{eg} = R_f + (ERm - R_f) \times Bu \times \left[ 1 + \frac{V_B (1-T)}{V_S} \right] \)

ii. \( k_{eg} = R_f + Bu (ERm - R_f) + (ERm - R_f) \times Bu \times \left[ \frac{V_B (1-T)}{V_S} \right] \)

iii. \( Bg = Bu \left[ 1 + \frac{V_B (1-T)}{V_S} \right] \)

iv. \( Bu = \frac{Bg}{1 + \frac{V_B (1-T)}{V_S}} \)

\( k_{eg} \) - of a levered company, \( V_B \) - borrowing, \( V_S \) - equity, \( ERm \) - market return, \( R_f \) - risk free rate of return, \( Bu \) - beta of unlevered firm, \( Bg \) - beta of levered firm, \( T \) - corporate tax

5. Pecking order theory

According to Myers and Majluf’s (1984), firms prefer to raise capital by internal financing instead of external financing. Assuming that the firm’s managers always obtain better information than investors which will generate adverse selection cost and to dominate the cost and benefits so they raise capital from retain earnings, then riskless debt, followed by risky debt and equity. With better information, they can avoid issue equity in order to maximize the market value. The preferences order reflects the costs of different capital financing option. According to Myers and Majluf (1984) and Myers (1984), firms always prefer scenarios’ such as internal finance over external finance, safe debt over risky debt, convertibles debt and finally common stocks.

6. Static trade off theory

According to Myers (1984), Static trade off theory is the need to balance gains and costs of debt financing. Static trade off theory argues firms will choose the equity and debt financing to balance the costs and benefits of debt in order to achieve optimal capital structure. Optimal capital structure is to maximize the firm value. Firms issue equity when their debt is above the desired target of debt and issue debt when the debt is below the target. Hence, firms issue debt and equity proportionately to stay close to the target if they want to have external financing.

According to the trade off theory, firm will borrow up to the desired target of debts when the benefits of tax shield is offset by the costs of financial distress such as bankruptcy costs and agency costs. The financial distress can decrease the market value of the firm. When firms have the high level of debt and they cannot make the interest payment, they will have bankruptcy cost. The costs of debt were known as bankruptcy cost and financial distress. The costs which associated with issuing more debt were known as costs of financial distress (Modigliani and Miller, 1963). The financial cost will arise when firms issued high level of debt and could not make the debt payment. However, the benefit of debt is tax deductibility of interest payment and it always leads the firms to the use the debt.

According to trade off theory, high profitable firms always have more income of tax shield and those firms can always service the debt without financial distress. Furthermore, other benefit of debt is to mitigate the conflicts of interest between manager and shareholder. Managers have the incentive to waste free cash flow on inferior investments. However, debt financing has always limits the free cash flow available for managers which lead to a control agency problem (Jensen and Meckling, 1976). Subsequently, the company with debt financing will have greater concentration on shareholding because equity is less outstanding. Hence, the conflict of interest between manager and shareholder can be reduced by using debt financing.

7. Critical review

Modigliani and Miller (1958; 1963) came out with an advancement in the capital structure by creating a new body of knowledge for understanding capital structure. Obviously, they reiterated that capital structure is irrelevant to company value. The validity and reliability of their theory has been tested by many researchers all over the world. In addition, Modigliani and Miller (1966) claim that industrial classification and other key assumptions are very important to their theoretical model. Despite the criticisms by many researchers, Hamada (1969) and Stiglitz (1974) do support MM’s view with regard to irrelevance of capital structure to company value. However, skepticism about the MM’s findings remain intact as in the real world, banks do not finance projects up to 100 per cent.
Theis and Casey (1998) carried out a study on a number of companies in the UK. The main focus was on companies’ capital structure and a special focus was on the MM’s tax rationale for debt levels. They pointed out that shareholders prefer lower levels of debt and less diversification to reduce the threat of insolvency. Dividends are negatively correlated with debt levels supporting the traditional view that market will respond positively when debt level is reduced.

Titman and Wessels (1988) indicate that costs and benefits are associated with debt and equity financing. However, they failed to prove that future growth, volatility of earnings and firm sizes have the effect on capital structure. Myers (1977) argues that tangible assets (fixed assets) can support a higher debt level as compared to intangible assets such as growth opportunities. Mean time, Thies and Klock (1992) claim that the relationship between earnings variability and financial leverage is ambiguous and the findings are quite mixed.

Wood (2004) revealed that required returns on debt and equity can have ‘near-constancy as capital structure varies. He added that there was a need to create a period by period capital structure and required returns as market conditions change across time and projects are financed in arbitrary manner. This means that WACCs tend to differ (change) from time to time with regard to the type of project to embark on as cash flows of one project differ compared to the other. As such, there will be various WACCs in given situations. In fact, capital structure is not required as an input in optimizing the value of debt through the use of FPV (financing present value). In essence, this argument is somewhat correlated with the MM’s theory. The pecking order model describes that firms prefer equity financing but evidence shows that they do prefer bonds to stock (Myers and Majluf, 1984). In another study, Stulz (1990) points out that debt levels are positively related to firm company value.

In the mean time, studies were also carried out on finding a relationship between capital structure and profitability. As a result, debt-equity ratio in line with the expectation that equity financing is more profitable (Zoe Frangouli, 2002). For a simple reason, more equity financing reduces shareholders’ required rate of return and thus, reduces discount rate (WACC). This in turn increases net present value (NPV). For simplicity, as equity financing increases, interest payment is relatively lower, hence net income will be higher.

Debt-financing is dictated by the company’s ownership structure and cost of capital. However, capital structure decision is also dictated by company size, issue size and condition of the security market and it seems the determination of capital structure can be intuitive (Joseph T.L. Ooi, 2000). This could be an expanded version of the traditional view.

In addition, based on the managers’ perspectives, a few meaningful conclusions could be made in relation to capital structure. In the context of industry cyclicality, capital structure under the non-cyclical industry seems to be more manageable and is closer to the optimal debt ratio and whereas, capital structure under the cyclical industry needs to be managed on a broad range basis (Groth and Anderson, 1997). However, they suggested that tax shield offers benefits to shareholders and management to make fullest use of the borrowings in lowering its WACC. In addition, lower business risk allows greater proportion of debt to be used in the capital structure. Nonetheless, these arguments do not seem to support the Modern Theory (MM’s Theory) in an explicit way.

In another study, it was revealed that financial leverage level tended to differ due to various factors (Al-Sakran, 2001). It was added that in the presence of tax, companies tended to increase their debt financing as this would be beneficial to them in the form of tax shield. This is quite relevant to the MM model but the overall findings are centered to the traditional view as there was a negative relationship between growth and debt financing. This indicates that (as propagated by the traditional view) when debt financing rises, risk also increases, shareholders’ required rate goes up, need for higher dividends, thus lower retention ratio and this causes lower growth.

Boateng (2003) showed size of the Joint Venture (JV) and type of industry can have effect on capital structure. The result of the industry effect on capital structure also indicates that firms in textile, building and construction, mining and exploration have a higher gearing compared with firms in food processing, agriculture, financial services, automobile and transport. He added that perceived risk and tax laws would be considered as factors that tend to influence the capital structure. This signifies that companies are quite opportunistic to fully leverage on borrowings but not taking borrowings excessively. Harris and Raviv (1988) describe that debt forces the managers to liquidate non-profitable operations if cash flows are poor. Barclay, Smith and Watts (1995) prove that there is a positive relationship between leverage and size of the earnings increase.

The mixed findings refer to either positive or negative relationship between leverage and profitability. According to Stulz (1990), the debt can be the positive and negative effect on the firm value. The effect of debt on the firm value depends on the growth opportunities. Therefore, debt is positive related to the value of a low growth opportunities firm and the debt is negative related to the value of a high growth opportunities firm. Mcconnell and Servaes (1995) stated that the correlation between leverage and performance is negative for high growth opportunities firm and positive for low growth opportunities firm. The measurement of performance of Mcconnell and Servaes (1995) is Tobin’s Q. Then,
Jung, Kim and Stulz (1996) also have the results that consistently related to them in which the influences of debt on the firm value are depend on the firm growth opportunities.

In addition, Abor (2005) found that the mixture result of Ghana firms showed significantly positive relationship between ratio of short term debt to total assets and profitability. Then, Abor (2005) also found that the ratio of total debt to total assets is positively related to profitability. However, the ratio of long term debt to total assets is negatively related to profitability which was measured by Return on Equity (ROE). Thus, methods used do have influence on capital structure studies.

Riddiough (2004) argues that MM theory hardly exists but however, the right combination of debt and equity will minimize WACC. As transaction costs and conflict between owners and lenders generally increase as a result of higher gearing, he suggested that supplemental financiers (subordinated debt, convertible debt) could be allowed to leverage on the optimal capital structure. The success of this approach is very much dependant on the perceived risks and transaction costs. Hence, he pointed out that equity financing would still be favourable and again it is favouring the traditional view. Harris and Raviv (1991) provide a comprehensive literature on capital structure and the findings well spread to the two main views.

8. Argument

In spite of the many studies carried out on capital structure, it has been noted that very few studies attempted to challenge the traditional view and further explore the applicability of the MM’s view given a specific business environment with some specific firm characteristics. Many researchers get complacent with their findings especially when their findings go in line with the traditional view as a result of the corporate restructuring program and thus the old mind-set still seems to be more prevalent. However, it is evident that companies have started engaging themselves in relatively higher gearing operations though this will result in higher shareholders’ required rate of return and effectively higher cost of capital but via tax deductibility, greater profitability could be achieved (Boateng, 2003; Al-Sakran, 2001). In short, as argued earlier, the life cycle of a company, firm specific characteristics and type of business environment will have impact on capital structure (Wood, 2004; Groth and Anderson, 1997; Al-Sakran, 2001; Boateng, 2003). Thus, it should be pointed out that coupled with the firm characteristics (size, growth, etc), the business dimensions (business environment) in which companies are operating could give a significant impact on capital structure. These business dimensions could be viewed either global dimension (global companies) or regional dimension (regional/local companies), though not rigorously discussed in finance, however, this is an important as aspect to consider (etc Doz, 1986; Tor, 1995) in global investments. Hence, these dimensions might split the discussions of corporate restructuring, debt restructuring and the implications on capital structure where different results could be expected.

The basic fundamental argument is that higher debt results in relatively lower equity and lower dividends but retained earnings (retention ratio) which will in turn push up the company’s sustainable growth. Thus, higher debt results in higher growth assuming the company’s business risk remains the same. And, firm’s level of growth will tend to have impact on its decision on the use of debt for its financing activities and this will in turn influence its performance as well (Stulz, 1990; Mcconnell and Servaes, 1995; Mcconnell and Servaes, 1995; Kim and Stulz, 1996; Abor, 2005).

The current literature is very much dominated by the input of large companies mainly from the global dimension (US and European companies) which are relatively much larger than the companies in the regional dimension (e.g. developing nations).

Thus, these two groups tend to have different ‘tunes’ of growth. Practically, global companies are in the maturity stage will have lower growth as compared to regional companies which are striving for international expansion will tend to have higher growth. As firm growth level has its own significance on capital structure, there is a need to get the current literature incorporated with how companies in regional dimension should adjust to their capital structure when they are confronted with different levels of growth opportunities.

The main argument in this study is, while the need to adjust capital structure for greater profitability remains intact, these companies however, should consider the effect of their existing growth level (whether high or low), so that optimality in their capital structure could be achieved and their investment decisions will be more fundamentally sound. Hence, firm growth should be taken as an important moderating variable.

Besides growth, according to the trade off theory, firm will borrow up to the desired target of debts when the benefits of tax shield is offset by the costs of financial distress such as bankruptcy costs and agency costs. The financial distress can lower the market value of the firm. When firms have the high level of debt and they cannot make the interest payment, they will have bankruptcy cost. The costs of debt were known as bankruptcy cost and financial distress. The costs which associated with issuing more debt were known as costs of financial distress (Modigliani and Miller, 1963). The financial cost will arise when firms issued high level of debt and could not make the debt payment.

However, the benefit of debt is tax deductibility of interest payment and it always leads the firms to the use the debt. It
should be noted in the context of regional dimension mainly involving Asian companies, company size does matter as vulnerability to ‘economic shocks’ and difficulty for long-term survival (as compared to US and European companies) are always the main aspects to look into (Thorpe and McCaffer, 1991; Langford et al., 1993; Spencer and Winch, 2002, Chan, Tam and Cheung, 2005). Therefore, the calculation of WACC of these kinds of companies should not be static or fixed for a long period as their exposures in the business environment tend to change from time to time. However, the period of short-term and long-term must first be clearly defined and constructed to reflect the real dilemma faced by the companies and this could even be extended to type of industry.

Another important question is that how frequent these companies should review their WACC to reflect the true or actual cost of capital. This is essentially important as most companies would have either overstated or understated WACC (Note1), if they were to adopt a fixed WACC. This tends to give misleading information on their Investment Opportunities Schedule (IOS) for various stages of operating cycle and also causes disastrous investment decisions in cases where firms are faced with economic shocks. Hence, the construction of WACC must vary in accordance with the life cycle of company in a given business environment.

9. Conclusion

To some extent, it is also evident that the traditional view has been greatly devastated by the ‘modern practitioners’. Instead, they do not mind having debts as high as possible for greater sustainability and at the same time reaping tax rebates to the maximum. As this practice would trigger many researchers therefore, there must be some models to explain the effects of firm’s level of growth opportunities and operating cycle on its decision on the use of debt as part of its strategy to minimize financing cost. Hence, this study is expected to add more value on the applicability of the traditional and MM theories on capital structure.

References


**Notes**

Note1. Weighted Average Cost of Capital (Proportion of Debt x Cost of Debt) + (Proportion of Equity x Cost of Equity)