CHAPTER 2
LITERATURE REVIEW

2.1 Capital Structure, Operating Leverage and Company Performance

Economic theory explains that long-run dynamic investment decisions about firm expansion involve adding new physical capital to the existing plant, equipment, production and administration. Any combination of equity stock, long-term notes and bonds, and retained earnings is possible. Each source of finance has its own cost considerations. It is unnecessary for equity stock to involve any dividend cost, but it is subject to a risk cost called 'raiding'. If the firm's performance in the commodity market is poor, its market value may fall and the decreasing stock price will make it vulnerable to takeover by raiding. An investor or group of investors will buy up a percentage of the stock and take control of the firm. Long-term notes and bonds have an interest cost but generally they are not subject to risk due to raiding since direct ownership is absent. Long-term contractual bonds are subject to risk of default if the firm cannot make interest payments out of current operating revenue and is otherwise forced to borrow to cover the interest payments.

Retained earnings have an opportunity cost to consider. If a large proportion of profit is retained, then the firm will rely less on other two sources of finance. But foregoing dividends in the short-run can depress the market value of the firm, the Modigliani-Miller (M&M) effect not withstanding. Recall that the M&M effect is that investors are indifferent between income (dividends) and capital gains (increased value of the firm's stock), given profit and investment policy and no discrimination between the income tax rate and the capital gains tax rate. However, if a short-run drop in dividends affects the expectation of the permanent dividend stream, then the value of the stock will fall. Also, how the increased retained earnings are expected to be used will affect the expected return on the stock and thus its price. Raiding can occur. Long-term debt is an appropriate debt ratio for this problem.

Hence, the firm arrives at an optimum long term debt ratio over time for its investment horizon, taking into account its expected incremental revenue and cost streams for alternative financial plans. To a considerable extent, the optimum long term debt ratio will reflect managerial preferences for debt versus equity, given financial market factors. Based on revealed preference theory, under ideal conditions, the observed or current long term debt ratio is assumed to be the ideal or optimum ratio. If this ratio rises over time, then leverage or gearing is higher and the risk of default is greater, relative to the risk of raiding.

As suggested by Modigliani-Miller (1958) after relaxing its assumptions, firms have an optimal capital structure. Firms arrive at their optimal leverage ratio by calculating the tax advantages, costs of financial distress, mispricing and incentive effects of debt versus equity. The empirical literature has searched for evidence that firms choose their capital structure as this theory predicts by estimating firm leverage as a function of firm characteristics. Firms for whom the tax shields of debt are greater, the costs of financial distress lower and the mispricing of debt relative to equity more favorable are expected to be more highly levered.

Despite its theoretical appeal, researchers in financial management have difficulty in finding the optimal capital structure. The best that academics and practitioners have been able to achieve are prescriptions that satisfy short-term goals. While the opinion that the use of leverage was one way to improve the performance of an organization can be true in some circumstances, it may not be the case where either the complexities of the competitive environment or the long-term survival needs of the organization is dominant.

The use of leverage either to discipline managers or to achieve economic gain is the 'easy way out' and, in many instances, can lead to the demise of the organization. The fact that an optimal capital structure has not been found is an indication of some flaw in the logic. Rather than to question 'What is an optimal mix of debt and equity that will maximize shareholder wealth'; it should have been 'Under what circumstances should leverage be used to maximize shareholder wealth?' Why? Because debt and equity have profound

long-term implications for corporate governance that far exceed the exigencies of the moment.

A better understanding of the issues at hand requires a look at the genesis of the concept of using debt to control managers and to reconcile this thinking with the need to survive in the competitive environment today.

Professor Franco Modigliani and Merton Miller (M&M) Proposition I in 1958 proved under a very restrictive set of assumptions that the value of a firm is independent of its capital structure. In other words, it does not matter how a firm finances its operations, hence capital structure is irrelevant. It is however, based on a few assumptions, including no brokerage costs, no taxes, no bankruptcy costs, investors can borrow as the same rate as corporations, a perfect market exist where all investors have the same information and EBIT is not affected by use of the debt.

However, this proposition's relevance is being questioned because of daily reports of companies increasing their value after a revamp in the capital structure. The M&M theorem is deemed unrealistic and irrelevant because of its unrealistic assumptions. However, M&M provided some clues about what is required for capital structure to be relevant and hence to affect a firm's value. The work of M&M has provided an agenda for the research community for the last 40 years by dropping or relaxing some of the assumptions and see how it affects some of the conclusions.

M&M Proposition II in 1963 backed proposition I where in this follow up paper, M&M relaxed the assumption that there are no corporate taxes. The tax code allows corporations to deduct interest payment as an expense, but dividend payment to stockholders is not deductible. This differential treatment encourages corporations to use debt in their capital structures. Indeed, M&M demonstrated that if all their assumptions hold, this differential treatment leads to a situation that calls for a 100 percent debt financing. The increase in financial leverage will increase the returns but the risk (of default) will increase to commensurate.

$$R_E = R_A + \underline{D} (R_A - R_D)$$
$$E$$

This is the famous M&M Proposition II, which tells us the cost of equity depends on three things; the required rate of return of the firm's assets, R_A, the firm's cost of debt, R_D and the firm's debt-equity ration, D/E.

M&M Proposition II shows that the firm's cost of capital can be broken down into two components. The first one, R_A, is the required return on the firm's assets and depends on the nature of the firm's operations. It is termed business risk and does not depend on the capital structure. The second component is $(R_A - R_D)*D/E$. For an all-equity financed firm, this component is zero. As the firm increases its debt-equity ratio, its return on equity also increases. This is because shareholders need to be compensated for risks arising from debt financing. The extra risk is called financial risk. Both the business risk and financial risk add up to form the total systematic risk of the firm.

$$\beta_E = \beta_A + \underline{D} (\beta_A - \beta_D)$$
$$E$$

The beta of a firm's assets is a weighted average of the betas of the individual securities.

M&M demonstrated that if all their assumptions hold, the differential treatment of allowing the debt interest payment to be deducted as an expenses but dividend payments to shareholders are not, leads to a situation that calls for 100% debt financing. However, in real world, we noticed that this is not happening. There is no company which chose to adopt 100% debt financing. This is because Miller (1977) argued that the required rate of return on share is relatively lower than the rate of return for debt when he introduced the effect of personal taxes in his studies. He found that the deductibility of interest favors the use of debt financing but the more favorable tax treatment of income from stocks lowers the required rate of return on share and thus favors the use of equity financing.

It is difficult to say what the net effect of these two factors is. Most observers believe that interest deductibility has the stronger effect, hence that the tax system will favor the corporate use of debt. However, the effect is certainly reduced by the lower capital gains tax rate.

Hamada (1972) and Rubinstein (1973) extended the analysis by deriving the corresponding relationship in terms of systematic risk. Both these risk-return relationships have been derived for the case of perfect market and in which there is only corporate income tax. Hamada developed the following equation to specify the effect of financial leverage on beta:

$$\beta = \beta_U + (1 + (1 - T)\frac{D}{E})$$

It shows how increases in debt / equity ratio increases β.

Yagill (1982) extended Hamada's analysis by adding bankruptcy cost. The ultimate formula is as follows:

$$\beta_e = \beta_n + \frac{D}{E}(\beta_u - \beta_d)(1 - T_c)$$

The equation reduces to Hamada's beta expression only if debt is risk-free.

Haim Ben-Shahar (1968) states that in a world free from tax and constant interest rates, the investor is indifferent to the firm's rate of financial leverage. He is able to maneuver his portfolio accordingly by adjusting the proportion of bonds and stocks to mirror that of a corporate's financial leverage. All stocks belonging to a specific risk class are regarded as perfect substitutes. An increase in debt will have a corresponding increase in risk and return. In other words, for a return and its commensurate risk, capital structure can be adjusted. This will be congruent to M&M Proposition II.

Carleton (1977) took an opposing view of M&M Proposition II. He noted that there is an inverse relationship between rate of return and degree of financial leverage. Rate of

return and leverage are jointly determined by a system of simultaneous equations. The variables will be interactive set of financial management choices and market behavior. After running a regression, the mean rate of return was at an increasing function and financial leverage a decreasing function of earning variability.

He has proven mathematically that rate of return and financial leverage has a negative relationship, given the regression method. His findings reveal that the mental exercise of arbitrarily varying rate of return to see what happens to leverage is misleading and invalid, given that they are jointly determined by a complex process involving product and financial markets and corporate financial decision responses to owner preference. He also argued that it is variance, not rate of return that ultimately affected leverage.

2.2 The Effect of Bankruptcy Costs and Tax Shield on Capital Structure

One factor that affects the amount of risk that a firm might undertake will be bankruptcy costs. There are both direct and indirect bankruptcy costs, the former involving legal and administrative costs arising from hiring lawyers and accountants, the latter will be pressure from all quarters squeezing the company out of its last breath. The pressure can be exerted by suppliers, customers, bondholders and even stockholders. If the costs and risk of bankruptcy are high, the financial leverage will be low. Also, firms holding intangible assets or growth opportunities tend to have less borrowing power than firms holding tangible assets. Thus they tend to have less debt and lower financial leverage.

Baxter (1967) states that the risk associated with excessive leverage will likely increase the cost of capital of the firm. A high degree of debt increases the likelihood of bankruptcy and therefore increases the riskiness of overall earnings streams. Since there appear to be very real costs associated with bankruptcy, other things equal, excess leverage can reduce value of the firm.

This is supported by Marsh (1982) who had done a study on how firms select between financing instrument at a given point in time. The study was done on United Kingdom firms between 1959 and 1974 by employing a descriptive model of the choice between debt and equity. Marsh found that firm do appear to make their choice of financing instrument as though they had target levels in mind (target capital structure) for long term debt ratio. The target levels are themselves a functions of company size, bankruptcy risk and asset composition. Bankruptcy costs do influence the choice of firms between debt and equity.

This led to the development of *The Trade-off theory of leverage*, which is discussed in section 2.4.2. This is where firms trade off the benefits of debt financing against the higher interest rates and bankruptcy costs. In addition, both Bradley, Jarrell and Kim (1984) and Philosophov (1999) have found that the capital structure of the company as shown by its leverage is related inversely to the expected cost of financial distress (bankruptcy cost). This means that the higher the expected bankruptcy costs, the lower will be the company optimal capital structure.

2.3 The Optimal Capital Structure and the Determinants

It is commonly considered that corporate well-being and management efficiency is fully reflected in the value of corporate shares. Hence the optimal corporate capital structure must maximize the corporate share value. Such a simple optimization criterion leads to great difficulties in obtaining practical optimization results because there are no explicit quantitative relations between the various capital structures and the corresponding share values. It is always emphasized that these dependencies are only qualitative and there is no methodology for quantitative assessment of the optimal value of debt and maximal share value.

Quoting from Brigham (1992),

Subsequent researchers and M&M themselves, extended the basic theory by relaxing the assumptions. Other researchers attempted to test the various theoretical models with empirical data to see exactly how stock prices and capital costs are affected by capital structure. Both the theoretical and empirical results have added to our understanding of capital structure, but none of these studies has produced results that can be used to precisely identify a firm's optimal capital structure.

Philosophov (1999) has developed a probabilistic Bayesian approach that enables quantitative assessment of optimal debt ratio (capital structure) and included calculation of probability of corporate bankruptcy in the future as a function of the time interval remaining until the bankruptcy. The probability is then used in a modified formula of discount share valuation to calculate the share value of a corporation that can become bankrupt at some future moment.

Philosophov believes that to determine the optimal capital structure, he must first calculate the probabilities of bankruptcy of the corporation at various moments in future in dependence on its leverage, current financial position and macroeconomic environment. This is because there is a common belief that the possibility of corporate bankruptcy limits the permissible amount of debt and predetermines the existence of an optimal capital structure. He then determines how the probabilities influence the corporate share value. The study's findings confirmed that the total debt to equity ratio maximizing the share value could be found for each bankruptcy rate.

Bradley, Jarell and Kim (1984) also found the existence of optimal capital structure by using cross-sectional, firm-specific data to test for the existence of an optimal capital structure. They found that the average firm leverage ratios are strongly related to industry classification and that this relation remains strong even after they exclude regulated companies. More important, they find company leverage ratios are related inversely to earnings volatility.

According to Solomon (1963), the financial leverage is concerned (and ignore all other considerations that may affect the choice between debt and equity), there exists a clear optimal position – namely the point at which Marginal cost of more debt is equal to, or greater than the company's cost of capital.

Marsh (1982), Ooi (1999), Bevan and Danbolt (2002), and Bradley, Jarrell and Kim (1984) have all look into what are the determinants of capital structure. In explaining the choice between debt and equity, Marsh (1982) used three groups of variables. The first group consists of variables, which measure deviations from target debt levels. The second group of variables includes company size, risk and asset composition. Finally, the third group of variables is the performance of share prices to capture the short term timing considerations such as market condition.

The second measure was the standard deviation of scaled earnings (EBIT). The final two measures of risk were the beta of the company's equity, and the standard deviation of the returns on the company's shares. He found that risky firms were more likely to issue equity to share the risk than to employ debt. This is consistent with the trade-off theory of leverage. But contrary to the theory, he found a negative relationship between debt ratios and firm size. He argues that small firm, due to their limited access to the equity capital market, then to rely heavily on bank loans for their funding requirements. Ooi (1999) also found an inverse relationship between firm size and gearing. Surprisingly, Ooi found that corporate performance and tax burden do not appear to have any significant effect on the capital structure decision of property companies.

In a recent study by Bevan and Danbolt (2002), gearing was found to be significant and positively correlated with tangibility and logsales, and significant and negatively correlated with the market-to-book ratio and the level of profitability. The findings of positive gearing and size of the firm as measure by logsales is consistent with the theory but contradict with Marsh (1982) and Ooi (1999). The findings of negative correlation between gearing and profitability is also in contra with Philosophov (1999) who find a positive relationship.

Meanwhile, Bradley, Jarrell and Kim (1984) have identified three determinants of optimal capital structure base on its comparative statistics and simulations model. The three determinants are (1) costs of financial distress, (2) level of non-debt tax shields and (3) variability of firm value.

Surprisingly all of them use debt ratios, such as debt/equity ratio to measure the gearing while beta is most popularly used to measure the risk. In summary, the capital structure of the firm is influenced by various firm-specific attributes such as tangibility, firm size, profitability, type of firm, growth rate, market-to-book ratio and macroeconomic factors such as tax, risk and market condition. But as pointed out in the discussion by Pointon and Tucker (2001), they said that the approach to managing capital structure by the finance directors in real life is governed by very different factors from those of the textbook approach.

They said that the approach is influence by the factors such as debt controls, equity controls, monetary environment and accounting regulations. The main types of debt controls involve credit ratings and covenants. The equity controls involve analysts' views and the market sentiment. Monetary environment elements consists of interest rates, inflation and currency fluctuations. Some of the problem areas in accounting are brands, research and development and goodwill.

A. Panno (2003) has done an empirical study on the determinants of capital structure by developing a descriptive model of choice and then estimated using Logit and Probit estimation procedures. His findings states that the explanatory variables can be divided into four groups. Firstly, the *proxies for target ratios*. This can be further categorized into three points; (a) *firm size*, which should be positively related to the leverage ratio, (b) *operating risk*, the leverage ratio should be negatively related to the risks faced by the firm, as primarily determined by the variability and uncertainty of its sales and costs and (c) *asset composition*, the higher the proportion of assets in place, the higher one would expect a company's long term debt ratio to be.

Then, the *liquidity ratios* is found to have varied effects on the capital structure decision. Firms with higher liquidity ratios might support a relatively higher debt ratio, due to a greater ability to meet short-term obligations when they fall due. From these effects one should expect a positive relationship between a firm's liquidity position and its debt ratio. However, firms with greater liquid assets may use these assets to finance their investments. If this happens there will be a negative relationship between the firm's liquidity ratio and its debt ratio. Moreover, the liquidity of the company's assets can show the extent to which these assets can be manipulated by shareholders at the expense of bondholders.

Thirdly, *profitability*. The profitability of a firm gives the ability to use retained earnings over external finance, which is in line with the Pecking Order theory. Therefore, it is expected that profitability and debt ratio should have a negative association. Lastly, the *deviations from target ratios* also is an important determinant of the capital structure decisions. The deviation from the target is defined as the difference between the target and the long-term debt ratio's current value. The latter is taken as the ratio that the company would have immediately after making the issue if it chose to raise debt. This presumably is the figure the company would be concerned with, since it takes full account of the effect of the size of the proposed issue on the debt ratio.

2.4 Other Related Theories

A central issue in corporate finance research is the question of why, despite the large tax advantage enjoyed by debt, firms have fairly low leverage ratios. This question motivated much of the early research on agency theory (Jensen and Meckling, 1976 and Myers, 1977), important work on information asymmetries (Myers and Majluf, 1984), three American Finance Association presidential addresses (Miller, 1977; Myers, 1984 and Leland, 1998) and some well-regarded recent research (Graham, 2000).

The consensus view underlying this vast literature is that bankruptcy costs alone is too small to offset the value of the tax shields and that other factors, such as agency costs, must be introduced into the cost-benefit analysis to explain observed capital structures. Miller (1977) memorably characterizes the discrepancy by comparing the trade-off between tax gains and bankruptcy costs as 'like the recipe for the fabled horse-and-rabbit stew-one horse and one rabbit'.

Graham (2000) and Graham, Lang and Shackleford (2004) have attempted to evaluate the extent to which Miller's intuition captures the essence of the capital structure problem using contingent-claims model. Consistent with this intuition, the models they have developed typically imply optimal levels of leverage that are substantially higher than those observed in actual firms. These models, however, are generally static and do not consider the rights of bondholders to force firms into bankruptcy. As a result, this literature has not yet provided a compelling answer to the question of whether observed capital structures represent a value-maximizing choice, or whether firms are throwing away value by substantially under-leveraging their assets.

2.4.1 Agency Theory

One of the defining characteristics of business in the 1990s was the adoption of prescriptions from agency theory to address the managerial excesses of the 1970s and 1980s. The classic agency theory concept was developed by Berle and Means (1932). They observed that ownership and control had become separated in larger corporations as a result of the dilution in equity positions. This situation provided an opportunity for professional managers, as those in control, to act in their own best interest. Today, the central issue for agency theory is how to resolve the conflict between owners and managers over the control of corporate resources through the use of contracts which seek to allocate decision rights and incentives.

The contractual device suggested by agency theory to accomplish the transfer of wealth from the organization to the investors is debt creation. Debt provides a means of bonding manager's promises to pay out future cash flows. It also provides the means for controlling opportunistic behavior by reducing the cash flow available for discretionary spending. Top managers' attention is then clearly focused on those activities necessary to ensure that debt payments are made. Companies failing to make interest and principal payments can be declared insolvent and can be dissolved. This use of debt as a disciplinary tool makes survival in the short-term the central issue for all concerned.

Agency theory also has important implications for the relationship between stockholders and debt-holders. Stockholders are interested in the return over and above that amount which is required to repay debt. Debt-holders are only interested in the debt payment specified in the contract. Stockholders are seen as sometimes being interested in pursuing riskier business activities than debt-holders would prefer. When this occurs debt-holders may charge higher prices for debt capital and institute greater control measures to prevent top managers from investing capital in riskier undertakings.

However, agency theory does not take into consideration competitive environments, nor does it consider the necessity for managers to make choices beyond a stockholder wealth-maximizing perspective. This would seem to be a serious omission for two reasons. First, debt and equity represent different constituencies with their own competing and often mutually exclusive goals. Second, as the level of debt increases, the corporate governance structure can change from one of internal control to one of external control.

For firms that adopt debt as a control mechanism, lenders become the key constituents in the corporate governance structure. This can have a significant impact on both managerial discretion and on the ability of an organization to deal effectively with its competitive environment. From a firm's perspective, a higher cost of debt capital can decrease its attractiveness to various stakeholders and greater external control by debt-holders may interfere with the firm's ability to navigate effectively within its competitive environment.

This would indicate that firms needing to engage in riskier business activities because the firm must respond to changing competitive pressure; the use of debt financing would be an impediment subjecting managers to both the discipline and constraints of the capital markets.

2.4.2 Static Trade-off Theory

The Static Trade-off theory states that a firm's optimal debt ratio is viewed a trade-off of the costs and benefits of borrowing, holding the firm's assets and investment plans constant. According to Fama and French (2002), the Trade-off model predicts that leverage decisions are based on a trade-off between a number of costs and benefits and can be categorized in four ways: bankruptcy costs, taxes, free-cash flow and stockholder-bondholder agency problems.

The firm is portrayed as trading off the benefits of debt financing via favorable corporate tax treatment or interest tax shields; against the higher interest rates and various costs of bankruptcy or financial embarrassment. It is supposed to substitute debts for equity, or equity for debt, until the value of the firm is maximized. The costs of the adjustment of capital structure should be considered. If the costs are low, all firms should be at their optimal capital structure. The optimal capital structure will be at the point of tax saving from an additional dollar in debt financing that is exactly balanced by the increased bankruptcy costs associated with additional borrowing.

The fact that interest is a deductible expenses makes debt less expensive than common or preferred stock. In effect, the government pays part of the cost of debt capital, or in other words, debt provides tax shelter benefits. As a result, using debt causes more of the firm's operating income (EBIT) to flow through to investors. Therefore, the more debt a company uses, the higher its value and stock price.

However, Fama and French (2002) argue that firms limit their use of debt to hold down bankruptcy-related costs. Firms in bankruptcy have very high legal and accounting expenses and they also have a hard time retaining customers, suppliers and employees. Moreover, bankruptcy often forces a firm to liquidate or sell assets for less than they would be worth if the firm was to continue operating. Bankruptcy-related problems are most likely to arise when a firm includes a great deal of debt in its capital structure. Therefore, bankruptcy costs discourage firms from pushing their use of debt to excessive levels.

Wedig, Sloan, Hassan and Morrisey (1981) test their own variation on Static Trade-off theory against the null hypothesis on 1978 – 1983 data comprising a mixture of investor-owned, government and nonprofit hospitals using a linear OLS regression, with long-term leverage as the dependent variable. They use a tax shield variable as a proxy for the benefit of borrowing and use the ratio of fixed assets to assets as the only independent variable. Their empirical test shows a positive tax shield benefit coefficient and a negative risk coefficient at significant levels. This supports the trade-off theory.

2.4.3 Pecking Order Theory

The Pecking Order theory states that firms prefer internal finance, followed by debt, convertible bonds and equity as a last resort. The rationale is that firms do not want to tarnish their reputation by defaulting on their debts, regardless of protective shields such as involuntary bankruptcy and thus earnings are preferred for financing purposes. The Pecking Order theory implies a negative coefficient on risk in a linear equation predicting leverage. Donaldson's (1969) book observed that the companies following the Pecking Order theory will not maximize the shareholders' value, however, it is not so obvious today, given that changes in tax structure.

Fama and French (2002) also made a study on Trade-off and Pecking Order theory. Their empirical study includes 3000 firms from 1965 to 1999 period. The Pecking Order and Trade-off models share a number of common predictions. Firms with a lower volatility of earnings and cash flow, assuming that larger firms have less volatility, should have higher payouts. Firms with more volatile earnings should carry less debt. However, the findings presents conflicting predictions of the two models. The Pecking Order model predicts that more profitable firms have lower leverage, as there is no need to increase debt when profits exceed investment needs. The Trade-off model expects these profitable firms to have higher leverage, as they can safely carry a higher amount of lower cost debt. The evidence presented confirms the assumptions of the Pecking Order model, revealing an important failure of the Trade-off model.

The Trade-off model is verified in its unique prediction that firms with higher levels of tax deductions, such as depreciation or research expenses, have lower leverage. The Pecking Order model fails in the assumption that firms will always issue debt before stock. In the special case of non-dividend-paying firms with low level of leverage, likely small growth firms, the largest new issuance of equity was found. This model would expect large equity issuance to come from firms that had previously maximized the use of leverage in their capital structure. Perhaps this violation of the simple Pecking Order model is consistent with a more complex version of the Pecking Order model. These small growth firms anticipate high future investment opportunities and may be saving their borrowing power to fund future projects. Therefore, from the empirical studies, the Pecking Order model is more dominant and there is some flaws in the Trade-off model.

2.5 Malaysian Findings

Izwan (2001) had done quite a thorough insight on the relationship between leverage and profitability of selected companies in Malaysia. Izwan's study comprises 96 companies listed on Main Board of Bursa Malaysia under 7 different sectors over the period of ten years (1990 – 1999).

The main findings show that there was a negative relationship between leverage and profitability for the ten years period. However, considering the difference in economic situation, the pre-crisis period saw a positive relationship whereas period during the crisis indicates a negative relationship between the two variables. The relationship however was weak or in other words, the use of leverage does not help to increase companies' profitability but it will increase the risk of bankruptcies.

Similar studies have been done in other economic sectors. Chandran (2003) investigates the relationship between capital structure and corporate performance of firms in the Industrial product sector. A sample of 53 companies listed on the Main Board of Bursa Malaysia over a six year period, from 1996 to 2001 was chosen. Overall, Chandran's (2003) report concludes that capital structure is inversely related to the corporate performance of companies in the Industrial product sector. This is consistent with the findings of Izwan (2001).

Foo's (2002) findings on the relationship between capital structure and corporate performance is consistent with both the above studies. His study includes companies listed on the Main Board of Bursa Malaysia, Trading/Services sector and Plantation sector, from 1996 to 2000. The findings of this investigation show that most of the variables represent capital structure or the debt usage show negative effect on the corporate performance of the firms in both the sectors. Ideally, the capital structure of both types of firm should consists of very low debt ratios and low level of common equity with Trading/Services firms consists of larger proportion of long term debt while Plantation firms consists of low liabilities (excluding debt) usage in maximizing their corporate performance.

Suresh's (2002) study focuses on Finance and Consumer product related companies, listed on the Main Board of Bursa Malaysia from 1997 to 2001. Evidence suggests that different proxies of dependent variable retort differently to the proxies of capital structure. There is both positive and negative relationship among the proxies. As for finance sector, the large firms' performance is less influenced by capital structure due to

big amount of deposit and don't rely on borrowing too much. Whereas, the medium and small firm's performance are influenced by the changes in the capital structure due to low amount of deposit and rely on debt and equity financing.

As for the consumer product, the large consumer product firms' performance is partly determined by the changes on capital structure. As for the medium and small size firms, the relationship between capital structure and performance is also significant but at lower level as compared to large companies. This is due to other more dominant factors such as demand of the product, technology, competition and others. The overall conclusion revealed that a relationship exists between capital structure and corporate performance of firms in the Finance and Consumer product sector.

Leong (2003) has done a study on effect of firm size on stock return in Malaysia. The study employed a sample of 70 stocks listed on Bursa Malaysia from 1995 to 2002. He empirically proven that firm size is not significant in explaining stock return. Liew's (2004) study on firm size effect on stock returns in Malaysia has a somewhat different findings. The results obtained are mixed where there is no sure winner over the period. Small firms appear to be more volatile and tend to come down harder when the market is facing correction due to economic down turn. This is consistent with the perception that expected future cash flows affect the value of a company and when the prospect of earnings is down, hence the deeper the discount rate of stock price. Thus, its impact on stock returns is also questionable. However, there are more evidence of its impact after the economic crisis. This might signal that the role of firm size in explaining the stock returns will be more evident. Liew (2004) concludes that firm size is also another important variable that can be used to explain the cross-sectional stock returns. The larger firms are outperformed because they are more stable than the smaller firms especially during the economic crisis.