Journal of Sustainability Science and Management
Volume 10 *Number* 2, December 2015: 65-73
ISSN: 1823-8556

AN EMPIRICAL ANALYSIS OF CAPITAL STRUCTURE DECISIONS IN MALAYSIAN LISTED COMPANIES

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Abstract: This paper attempts to analyze the effect of corporate tax to the firm's capital structure. The study uses the sample of Malaysian firms that are listed in the Bursa Malaysia. We exploit a time series and cross sectional data of 35 companies over 2007-2012 and build an empirical model based on proceeding literature. These data, then, are used to examine the effects of several explanatory variables, i.e., corporate tax, bankruptcy cost, return on assets, and several controlled variables on firm capital structure decision. The results showed that, the significant of corporate tax is consistent with the theory that firms are subjected to lower corporate tax rates which would lead them to employ more debt in their capital structures. Several policy implications can be derived: first, the financial structure should be designed with the emphasis on the role of bank centered and second, the importance of firms-characteristics to capital structure might induce the regulators to strengthen the governance characteristics of firms. In addition, there is also a need to examine the impact of monetary policy on the firm behavior.

JEL Classification: C23; G0; G3; H2
Keywords: Corporate tax, bankruptcy, firm, tax benefit.

Introduction

Capital structure is one of the most important tasks to be fulfilled by financial managers in order to maintain the sustainability of the firms in the long run. In fact, the search for optimal capital structured has dominated the theory of capital structure. However, is there an optimal capital structure in reality? An optimal capital structure can be described as the best debt to equity ratio for the firm in which this will minimizes the cost of financing and maximizes the value of the firm. Thus, financial managers should always choose between debt and equity financing which will be more beneficial to the company. Choosing on the best source of finance also related to the minimizing the tax liability of the company. This is due to the fact that in trade-off theory, interest on debt is tax-deductible which resulted to the lower cost of financing. However, this is not always the case if the debt is used not in the production of gross income.

There is an ample empirical evidence on the way financial managers conduct the capital structure decision (see e.g. Aggrawal (1981), Naidu (1986), Rajan & Zingales (1995), Bevan & Danbolt (2000), Ghosh *et al.* (2000), Booth *et al.* (2001) and Yang *et al.* (2001). The results of these studies show that there are a lot of factors that significantly the capital structure (e.g. size of the firm, country and industry). Realizing the importance of tax in determining the capital structure, the tax deductions also received much attention from researchers. Most of the empirical literatures (among others are Elton & Gruber (1970), Mackie-Mason (1990), Graham (1999) and Booth *et al.* (2001) focus on the benefits of tax. Although payment of tax is a common practice for many firms, the tax puzzle remains a controversial issue in the corporate finance literature. This is mentioned by Titman & Wessels (1988), Fisher *et al.* (1989), Shyam-Sunder & Myers (1999), Anderson & Makhija (1999), Yang *et al.* (2001) and Booth *et al.* (2001) as: "tax deduction encourages firm to utilize debt, and hence encourage bankruptcy". In addition the tax deductions are expected to influence the capital structure decisions.

Although the trend shows that empirical research is becoming the main focus, there is also a large theoretical literature on capital structure (see: Miller (1977), DeAngelo & Masulis (1980), Harris & Raviv (1991)). Focusing on capital structure and taxation, it can be concluded that corporate tax is one of the important factors in the capital structure

decision. A firm that utilizes a higher debt financing is more likely to pay less tax. The fact that traditionally equity financings are treated less favorably than the debt financings has given rise to the earlier mentioned tax puzzle. The existence of this puzzle was created by the fact that firms pay less tax on one hand and are exposed to bankruptcy in the form of higher interest payment on the other hand.

The aim of this study is to examine the impact of corporate tax and explanatory variables on leverage of Malaysian firms over the 2007-2012 periods. This paper discussed the emergence of the existing capital structure theory as a starting point in developing the new model of capital structure theory. This is due to the fact that the conventional capital structure theory just focuses on the static trade-off theory, agency conflicts theory and pecking order theory developed by DeAngelo & Masulis (1980). This country is of particular interest since it is now attempt to achieve the developed status country in 2020. Another interesting aspect of the Malaysian market is that a large number of firms years to years showing the booming of Malaysia market from the local and international investor.

In addition, corporate finance also benefit from the use of a wider array of methods and data sources to test theories. Each method has its strength and weaknesses. It is believed that alternative methods allow different and, potentially, improved the tests of theories.

The remainder of the paper is organised as follows. Section 2 discussed the static trade-off focusing on corporate tax and bankruptcy cost. While it is followed with developing the model to analyse the relation. Section 5 concludes the paper.

Static Trade-off Theory

Bradley, Jarrell, & Kim (1984) stated that the static trade-off theory explains that the tax advantage of debt and several leverage-related costs is related the trade-off in a firm's decision to get optimal capital structure. The firms have to set a target debt-equity ratio that maximized firm value by minimizing the costs of prevailing market imperfections (taxes, bankruptcy costs, agency costs).

The trade-off model does not predict that firms are underlevered (Miller, 1977). The static trade-off assumes the firms with a greater risk of experiencing financial distress tend to borrow less than fims having lower financial distress risk. Moreover, this theory also assuming that benefits from debt can be obtained next to costs.

The Impact of Taxes

The link between debt and tax was initiated by Miller (1977). He focused on the effects of corporate and personal taxes on the leverage ratio. His research also attempted to prove the existence of tax benefit that causes the preference of firm towards debt financing. However, his finding showed that leverage is still irrelevant to the firm capital structure choices.

Later, DeAngelo & Masulis (1980) proved that the relevancy of capital structure only exists in several situations. The uniqueness of optimum capital structure equilibrium can be reached in the presence of corporate and personal taxes. They explained that the increase of inflation decreases the real value of an investment's tax shield and immediately increases the proportion of debt. Therefore, by incorporating the tax element, tax deduction or tax benefit ensures that debt financing would be cheaper than equity financing. Thus, without the existence of personal tax, firm may use debt to reduce its' corporate tax liability. However, if the marginal tax value of debt financing equals to zero, the capital structure is considered irrelevant.

The mixed results have motivated Mackie-Mason (1990) to adopt the incremental and probit model approach to examine the relationship between corporate tax and firm the incentive for firm to utilize debt. The findings reflect that the high tax shield increases the probability of tax deduction. Therefore, it reduces the expected marginal tax rate and hence, there is a less tendency to use debt financing.

Graham (1999) produced an additional evidence of capital structure in the presence of personal tax. In addition, he measured the

changing debt value (incremental) as dependent variable. The results showed that firm uses less debt. He identified two reasons to support his findings: first, the reduction in dividend payment increases the personal tax penalty and decreases the net tax benefit; and second, a lower personal tax rate on the return on equity. These findings also denoted that the corporate tax benefit proportionately diminishes with the tax penalty in personal tax.

On the other hand, the higher dividend payment causes individual to pay high personal tax. Therefore, in order to increase the firm value, firms have to maintain low dividend and low debt. It implies that firms reduce interest payment and taxable dividend without reducing the return on capital. The best strategies of tax deduction and the maximization of a firm's value are: issue more debt and maintain small dividend payments. However, the empirical evidence produced by Fama & French (1998) proves that the positive and negative relationships exist between the dividend and a firm's value; and between the former and taxes, respectively.

Bankruptcy Cost

As mentioned above, debt financing not only produces a tax benefit, but it also leads to bankruptcy. The question arises on how to balance between the tax benefit and the bankruptcy cost. Firm faces financial distress due to the extremely high interest payment which may lead to higher probability of bankruptcy. The probability of firm to face bankruptcy is also due to economic factors including economic risk and financial risk.

The effect of bankruptcy cost on firm financing choices was pioneered by Haugen & Senbet (1978). They considered two situations, namely, bankruptcy cost without any boundary and bankruptcy cost with boundary in debt ratio. Furthermore, they divided the bankruptcy cost in to a direct cost and an indirect cost. They also demonstrated the irrelevance of capital structure in the absence of corporate taxes and the domination of debt in capital structure in the presence of corporate taxes under the framework of perfect markets and associated costless bankruptcy. Their findings found that bankruptcy costs, which affect capital structure decisions, must be trivial or nonexistent if one merely assumes that capital market prices are competitively determined by rational investors.

Since the interest rate leads to bankruptcy, Yang *et al.* (2001) suggested the interest rate swap in analyzing the dynamic of capital structure model. Their research attempts to answer the hypothesis that it is better for a firm to endure a high debt ratio in order to obtain the tax benefit. The interest rate swap is expected to reduce the firm incentive to take high-risk investment and reduce the bankruptcy cost especially amongst larger firms. The findings show that the firm with low bankruptcy prefers to lower its debt ratio range. According to the positive relationship between bankruptcy cost and debt ratio range, it implies that the interest rate swap induces the swap users with higher bankruptcy cost in order to secure a lower debt ratio range.

As suggested by Fisher *et al.* (1989), firms also undergo recapitalization so as to prevent bankruptcy. The increasing amount of debt decreases the leverage ratio and this condition increases the debt amount and obtains the tax benefit. Thus, in this circumstance, it is optimal for the firm to recapitalize. On the other hand, the decrease of debt ratio increases the firm leverage ratio. Besides preventing bankruptcy, the firm may necessarily pursue recapitalization since equity holders may not sell the asset (in the case of fixed assets) in order to pay coupon payments. Therefore, the coupon payment decreases the dividend received by the equity holders. In the case of unlevered and levered firms, the dividends are negative. Therefore, this situation causes the equity holders to experience default and the debt holders will take over the firm and recapitalize. In addition, they also examine the firm's characteristics and include the debt range in analyzing the dynamic capital structure.

The process of firm recapitalization has also been proposed by Scott (1977). In his study, bankruptcy affects the equity value, subordinated

debt and secured debt differently. The findings show that; first, the equity value of firm depends on the value of net operating income and the interest that should be paid to debt holders. Firms with small earnings compared to interest payments can avoid bankruptcy and fulfill the interest payments by selling additional debt (such as subordinated debt), sell assets and equity. Secondly, the total market value of the firm, which issues only subordinated debt, depends on the current value of equity and the face value of debt. For these firms, if they sell the subordinated debt only, then the optimal capital structure is irrelevant. Thirdly, the issuance of secured debt increases a firm's value. As long as the firm has unutilized secured debt capacity, it can increase its total market value by issuing additional secured debt. The findings reveal that the capital structure is relevant if the debt is fully secured. However, the capital structure is irrelevant in two situations. First, if additional debt is issued until the debt holders' claims are greater than the firm's value; and second, in the situation where interest payments do not occur. These situations may cause debt holders to gain only the face value of debt, hence, a firm's debt cannot be fully secured. Therefore, Haugen & Senbet (1978) suggested that it is better for firms to increase their equity when there is a direct bankruptcy cost and *vice versa*.

When a firm faces financial distress because of a high interest expense, Asquith *et al*. (1994) suggested several alternatives to avoid bankruptcy. The alternatives include the issuing of public debt or a restructuring of private debt, assets sales, merger and/or reduction in capital expenditure. Firms can restructure private debt by negotiating contract terms, including exemption in debt payment or full provision of principal payment, and finally, firms with greater secured debt are more prone to bankruptcy. Firms can also restructure public debt by exchange offers. The firm that completes the exchange offer has less probability to be involved in bankruptcy. With assets sales, firms that sell a large portion of their assets also have less probability of being involved in bankruptcy. The results show that a positive relationship exists between the probability of assets sales and the outstanding amount of public debt. They also reveal that if public debt is difficult to restructure, firms need to sell assets or merge in order to avoid bankruptcy. Furthermore, firms that face financial distress may reduce capital expenditure owning to industrial and economic decline, as firms sell their assets. However, it is difficult to determine whether capital expenditure reductions during financial distress are efficient or inefficient. Table 1 below shows a few remarks about researchers, their theories and findings.

Material and Methods

Sample and Data

In this study we examine a sample of companies listed on Main Board of the Bursa Malaysia

Table 1: A few remarks about researchers, their theories and findings

Author (Year)	Theories	Findings
Shyam-Sunder & Myers (1999)	Pecking order and Static trade-off	Pecking order has greater confidence rather than target adjustment model.
Chirinko & Singha (1999)	Pecking order and Static trade-off	Pecking order or Static trade-off can evaluate by using the empirical evidence.
Delcoure (2007)	Modified pecking order	Leverage choices are determine by firm-specific characteristics.
Ahmadinia, Afrasiabishani & Hesami (2012)	Pecking order and Static trade-off	Trade-off between tax benefit and disadvantage of higher risk of financial distress while Pecking order measuring properties by using the market-to-book ratios.
Yang (2013)	Static trade-off	Firm's optimal financing policy can be highly influenced by heterogeneous beliefs.
Christensen *et al.* (2013)	Static trade-off	An optimal outcome of renegotiation process is the violation of the absolute priority rule.

for the period from 2007 to 2012. This sample period is able to observe the capital structure due to the effects of fluctuations in economic activity. For the present study, a sample of 35 out of 870 firms in Bursa Malaysia is selected. We exclude the heavily regulated industries such as financial and securities companies as their financial characteristics and use of leverage is substantially different from other companies. As the study uses a balanced panel data for analysis, all firms with missing data are excluded. The data for pooled and panel econometrics techniques is extracted from the firm's annual reports.

In the following discussion, we will explain the variables utilized in our estimation. Financial leverage is measured by the ratio of total liabilities divided by the total liabilities plus equity market value. We prefer this definition for two reasons: first, in today's world, more firms routinely use short-term debt to fund their long term investments. Thus, the more reasonable numerator for debt ratio is the total liabilities, i.e., the sum of short term debt and long term debt, rather than long term debt alone. Secondly, Fisher *et al.* (1989) argued that the underlying dynamic theoretical model is unable to discriminate between liabilities with different maturities.

Proxies for Determinants of Capital Structure

Tax

Firms need to use more debt to obtain a tax-shield gain if they have higher effective marginal rate tax. This is because many researchers believe that taxes must be important to companies' capital structure. The debt-equity ratios are the cumulative result of years' of separate decisions. Moreover, most of tax shields.

Size

Size and leverage have positively relation. Small firm may not able to take advantage of economies of scale in issuing long-term debt, and not even to have bargaining power over creditors compared to large firm. Besides, size also may a proxy for information that outside investors have. Small firms with high asymmetric information problems should tend to have less equity than debt that resulting higher leverage.

Bankruptcy cost

The traditional tax bankruptcy costs suggest that the trade-off sticking to more debts and exploiting more tax advantage should be increased in bankruptcy cost. It is expected that high bankruptcy cost, firms should have narrower debt ratio range. Cross-sectionally, firms subject to greater bankruptcy costs will employ less debt.

Profitability

Under tax-based models, it stated that profitable firms should have more external financing in order to shield income from corporate tax. However, under pecking order theory, retained earnings will be used as first priorities as investment fund then move to bonds and new equity if needed. Rajan & Zingales (1995) argue that a firm that has a high current cash flow will get more opportunity to earn loans from creditors.

Tangibility

The firm that has fewer tangible assets is likely to have low debt ratio. In short, the relationship between tangibility and capital structure is positively related to leverage. Harris & Raviv (1990) and Williamson (1988) suggest that leverage is positively correlated with tangibility which leverage should increase with liquidation value.

Empirical Model

The basic empirical model is a panel data regression of the firm's leverage against the corporate tax and other explanatory variables. In general, the empirical model is expressed as

$$LEV_{it} = a_{0i} + a_1 CT_{it} + a_2 SIZE_{it} + a_3 BC_{it} + a_4 ROA_{it} + a_5 TA_{it} + u_{ilt} \quad (1)$$

where LEV is leverage, CT is corporate tax, SIZE is firm size, BC is bankruptcy cost, ROA is return on assets, TA is tangible assets, and u_{ilt} is error term.

Since the estimation for equation (1) uses the panel data and relates to individual firm, there is subject to be heterogeneity in these firms over time. In order to take such heterogeneity explicitly in our estimation procedure, several assumptions about the intercept and the error term have to be made through the fixed effects and random effects models.

Results

In order to examine the impact of corporate tax to the firm's capital structure, this section analyzes the estimation results for the pooled OLS model (model 1), random effect model (model 2), fixed effect model (model 3), and two way fixed effect (model 4). Generally, the R^2 values are good, especially with two way fixed effect (0.96). The *p*-value is less than 5 percent, and the null hypotheses for the F-test are rejected. Therefore, the estimated coefficients for all variables (except the intercept and constant) differ from zero.

The selection of the best estimation model is based on the value of Bruesh-Pagan and Hausman tests. The Bruesh-Pagan test shows that the results of RE is better than PLS. While Hausman test shows that FE estimation is better than the RE estimation. Therefore we proceed to the two way fixed effects model. The discussion on the determinants of capital structure is based on the results of two way fixed effects model.

The significant level for each variable is presented by the two way fixed effects results in explaining the significant level of each

Table 2: Result of panel data analysis. Dependent variable: LEV

	Pooled OLS	Random Effect	Fixed Effect	Two Way Fixed Effect
Constant	0.35 (4.67)***	0.31 (5.19)***	0.33 (5.73)***	0.31 (5.07)***
CT	0.002 (0.18)	-0.01 (-1.47)	-0.01 (-2.23)**	-0.01 (-1.97)**
SIZE	0.008 (1.23)	0.01 (1.36)	0.01 (1.06)	0.01 (1.73)*
BC	-0.103 (-8.25)***	-0.02 (-2.62)***	-0.01 (-1.40)	-0.01 (-1.23)
ROA	0.20 (2.94)***	-0.07 (-1.99)**	-0.11 (-3.57)***	-0.11 (-3.65)***
TA	-0.18 (-3.81)***	-0.08 (-2.25)**	-0.04 (-1.36)	-0.06 (-1.66)*
Breusch-Pagan LM test	169.21 (0.0000)		-	
Hausman test	-	69.36 (0.0000)***		
Observations	210	210	210	210
Multicollinearity (vif)	-	-	1.62	-
Heteroskedasticity (- stat)	-	-	42247.72 (0.0000)***	
Serial Correlation (F-stat)			29.962 (0.0000)***	-
R-squared	0.65	0.54	0.44	0.96

1. Figures in the parentheses are t-statistics, except for Breusch-Pagan LM test, Hausman test, Heteroskedasticity and Serial Correlation, which are p-values
2. *, ** and *** indicate the respective 10%, 5% and 1% significance levels

explanatory variable. This model reports that all the independent variables are significant except for BC. Moreover, the sign of all the explanatory variables is consistent with the capital structure theory except for TA. These results show that a larger TA does not support the tendency of firm to acquire debt.

Conclusion

The estimation for the pooled OLS model without any effects (with an assumption the intercept for each cross sectional and time series are constant), with fixed effects, with random effects and with two way fixed effects produces different results. The results reveal that, (1) Tax deduction reduces the current liability item relative to the firms that prefer equity financing. (2) Large firms are relatively more diversified, less risky and difficult to go bankrupt, therefore these firms have higher leverage ratio. For firm size, the finding is consistent with the study done by Oliner & Rudebusch (1992), Anderson & Makhija (1999) and Booth *et al.* (2001). (3) The lower debt portion is reported for the firm with high profitability. This is consistent with previous study done by Myers (1984), Kester (1986), Chang (1987), Friend & Lang (1988), Gonedes *et al.* (1998), Titman & Wessels (1988), Rajan & Zingales (1995) and Booth *et al*. (2001). (4) Firms with higher tangible assets prefer equity financing. For TA, the results are consistent with the study done by Jensen & Meckling (1976), Harris & Raviv (1991), Booth *et al.* (2001), Rajan & Zingales (1995) and Grossman & Hart (1982).

Acknowledgement

This research received funding from RACE grants. Therefore we would like to thank the MOE for providing financial support.

References

Abd. Ghafar Ismail & Nur Azura Sanusi. (2002b). Debt, Tax Benefits and Bankruptcy Costs. Seminar on the Role and Harmonization of Economics and Business Disciplines in Global Competitiveness, Universitas Syiah Kuala, Banda Acheh, October 14-15.

Aggrawal, R. (1981). International Differences in Capital Structure Norms: An Empirical Study of Large European Companies. *Management International Review,* 21(1): 75-88.

Anderson, C. W., & Makhija, A. K. (1999). Deregulation, Disintermediation and Agency Costs of Debt: Evidence from Japan. *Journal of Financial Economics,* 51(2): 309-339.

Asquith, Paul, Gertner, Robert & Scharfstein, David S. (1994). Anatomy of Financial Distress: An Examination of Junk-bond Issuers. *Quarterly Journal of Economics,* 109: 625-658.

Berger, A., & Udell, G. (1990). Collateral, Loan Quality and Bank Risk. *Journal of Monetary Economics,* 25: 21-42.

Bevan, A., & Danbolt, J. (2000a). *Panel Estimation of the Determinants of Capital Structure in the UK*. (http://www.fma.org/Paris/danbolt.pdf) retrieved on 21 November 2003.

Bevan, A., & Danbolt, J. (2000b). Ca*pital Structure and Its Determinants in the UK: A Decompostional Analysis*. (http://www.law.gla.ac.uk/dbase/Accfin/Department/Library/WP2000/2000-2.pdf) retrieved on 21 November 2003.

Bevan, A., & Danbolt, J. (2000c). *Dynamics in the Determinants of Capital Structure in the UK*. (http://www.law_la.ac.uk/dbase/Accfin/Department/Library/WP2000/2000-9.pdf) retrieved on 21 November 2003.

Booth, L., Aivazian, V., Kunt, A.D., & Maksimovic, V. (2001). Capital Structures in Developing Countries. *The Journal of Finance*, 87-130.

Chang, C. (1987). Capital Structure as Optimal Contracts. *Working Paper*. Carlson School of Management, University of Minnesota.

Chaplinsky, S. & Niehaus, G. (1990a). The Tax and Distributional Effects of Leveraged ESOPs. *Financial Management,* 19: 2-38.

DeAngelo, H., & Masulis, R. W. (1980). Optimal Capital Structure Under Corporate and Personal Taxation. *Journal of Financial Economics,* 8: 3-29.

Elton, E., & Gruber, M. (1970). Marginal Stockholder Tax Rates and the Clientele Effect. *Review of Economics and Statistics,* 52(1): 68-74.

Fama, E. F., & French, K. R. (1998). Values versus Growth: The International Evidence. *Journal of Finance,* 6: 1975-1997.

Fisher, E., Heinkel, R., & Zechner, J. (1989). Dynamic Capital Structure Choice: Theory and Tests. *The Journal of Finance,* 44: 19-40.

Friend, I., & Lang, L. H. P. (1988). An Empirical Test of the Impact of Managerial Self-interest on Corporate Capital Structure. *Journal of Finance,* 43: 271-81.

Gertler, Mark. (1988). Financial Capacity, Reliquification, and Production in an Economy with Long-term Relationships. Unpublished manuscript, June.

Ghosh, A., Cai, F., & Li, W. (2000). The Determinants of Capital Structure. *American Business Review,* 18(2): 128-132.

Gonedes, N. J., Lang, L., & Chikaonda, M. (1988). Empirical Results on Managerial Incentives and Capital Structure. *Working Paper*. The Wharton Business School, University of Pennsylvania.

Graham, J. R. (1999). Do Personal Taxes Affect Corporate Financing Decisions?. *Journal of Public Economics,* 73(2): 147-185.

Grossman, S., & Oliver, H. (1982). Corporate Financial Structure and Managerial Incentives, J. J. McCall Ed.: *The Economics of Information and Uncertainty.* Chicago: University of Chicago Press. 123-155.

Harris, M., & Raviv, A. (1991). The Theory of Capital Structure. *Journal of Finance,* 46: 297-355.

Haugen, R. A., & Senbet, L. W. (1978). The Insignificance of Bankruptcy Costs to the Theory of Optimal Capital Structure. *Journal of Finance,* 33: 383-393.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *American Economic Review,* 76(2): 323-329.

Jensen, M. C., & W. H. Meckling. (1976). Theory of the Firm; Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics,* 4: 305-360.

Kester, W. C. (1986). Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporations. *Financial Management,* 15 (Spring): 5-16.

Kunt, D. A., & Maksimovic, V. (1999). Institutions, Financial Markets and Firm Debt Maturity. *Journal of Financial Economics,* 54: 295-336.

Kim, W. S., & E. H. Sorensen. (1986). Evidence on the Impact of the Agency Costs of Debt on Corporate Debt Policy. *Journal of Financial and Quantitative Analysis,* 21: 131-144.

Mackie-Mason, J. (1990). Do Taxes Affect Corporate Financing Decisions? *Journal of Finance*, 45: 1471-1494.

Miller, M. (1977). Debt and Taxes. *The Journal of Finance,* 32(2): 261-275.

Modigliani, F. & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review,* 48(3)(June): 261-297.

Myers, S. C. (1984). The Capital Structure Puzzle. *Journal of Finance,* 39 (July): 575-592.

Myers, S. C., & Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Information Investors Do Not Have. *Journal of Financial Economics*, 13 (June): 187-222.

Oliner, S. D., & Rudebusch, G. D. (1992) Sources of the Financing Hierarchy for Business Investment. *The Review of Economics and Statistics,* 74(4): 643–654.

Naidu, G. N. (1986). Capital Structure Strategies of Australian and South African Firms. *Management International Review,* 26(2): 52-61.

Nur Azura Sanusi. (2002). Empirical Evidences of Capital Structure (in Bahasa Malaysia) *Jurnal Ekonomi Malaysia,* 36: 39-71.

Rajan, R. G., & Zingales, L. (1995). What Do We Know About Capital Structure? Some Evidence from International Data. *Journal of Finance,* 50: 1421-1460.

Scott, J. H. Jr. (1977). Bankruptcy, Secured Debt and Optimal Capital Structure. *Journal of Finance,* 32(1): 1-19.

Shyam, S. L., & Myers, S. C. (1999). Testing Static Tradeoff against Pecking Order Models of Capital Structure. *Journal of Financial Economics,* 51: 219-244.

Smith, C. W., & Watts, R. L. (1992). The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies. *Journal of Financial Economics*, 32 (December): 263-292.

Stulz, R. M. (1990). Managerial Discretion and Optimal Financing Policies. *Journal of Financial Economics,* 26 (3): 27

Titman, S., & Wessels, R. (1988). The Determinants of Capital Structure Choice. *Journal of Finance,* 32: 1467-1484.

Yang, J., Davis, G. C., & Leatham, D. J. (2001). Impact of Interest Rate Swaps on Corporate Capital Structure: An Empirical Investigation. *Applied Financial Economics,* 11: 75-81.

Zellner, A. (1978). Estimator of Functions of Population Means and Regression Coefficients Including Structural Coefficients: A Minimum Expected Loss Approach. *Journal of Econometrics,* 8: 127-158.