## Financial Management II AM 327

Student Number: 00054178

**Tutor: Mel Williams** 

Tutor Group: Group 4 (Thursday)

Critically discuss, in not more than 1500 words (and not less than 1200 words), the contributions which the following articles make to the capital structure debate

"The search for Optimal Capital Structure" and

"Still Searching for Optimal Capital Structure"

(Steward Myers, Stern & Chew, 3<sup>rd</sup> Ed)

The search of optimal capital structure, Stewart C. Myers stated that it is impossible of doing it and nobody has found the formula for it. He also argues that 'there is no magic in leverage'. It, however, has progress. Optimum capital structure is a balance of combination of debt and equity ever since Modigliant and Miller's (MM's) showed in 1958 that capital structure is irrelevant. According to this, firms can only increase shareholders wealth by making good investment which is implicitly supported by Brealey and Myers's Fourth law "You can make a lot of money by smart investment decisions than by smart financing decisions". But I would like to ask 'how a good investment without a smart finance?" The law doesn't say that financing is irrelevant. Only investment has priority, financing decisions as a support. Thus investment decisions and financing decisions bring us to think about profitability and borrowing (debt, leverage) respectively. Both of the investment decisions and financing decisions, they are worth to take time in considering the issue in term of tax, risk, asset type, managers' behaviour and rationality of investors.

Steward C. Myers stated that firms generally try to search an adequate debt

(leverage) proportion to maximize market value firm, but MM's proposition I argue that "if capital markets are doing their job, all the effort trying to increase value by tinkering with capital structure are fruitless".

Steward C. Myers also stated about financing decision that there is a positive relationship between profitability and leverage which, on the one hand, has a consensus with static tradeoff theory. On the other hand, in contrast, Care Kester (1986) find that, within an industry, the most profitable firm borrow less and less profitable firm borrow more. Pecking order theory gives support on the negative intra-industry correlation between profitability and leverage. Baskin (1989) supports this by conducting dozen corroborating studies. In addition, recent empirical research done more specifically by Michael Ling and Ileen Malitz and by Scott Williamson, confirms that firms have a huge dependence on intangible assets, research and development (R & D) and growth opportunities borrow significantly less, on average, than firms holding mostly tangible asset. The organization theory implies this implicitly by saying that growth firms i.e. depends greatly on intangible assets, R & D, growth opportunities should keep their share price by issuing equity not debt to finance future real investments. In concluding that there is a negative relationship between leverage and R & D expense, growth opportunities and value of intangible assets which is found by Sheridan Titman and Roberto Wessels.

Some firms may try to increase the earning per share (EPS) by borrowings but it is not good for shareholders because lenders have the prior to claim the firm's asset and operating profit resulting in higher risk borne by shareholders. Moreover, it can't reflect the real market value of the firm. Organizational theory, however, states that there is advantage for firms from borrowing result of the deductible interest

on debt. It motivates firms to borrow more until the margin is just set off by the value loss due to agency cost of debt. Therefore, improving the current borrowing situation, maximize the market value of firm. The organizational theory, in contrast, stated that as debt increase, corporate wealth must go down. There is no doubt that too much debt will lead to financial trouble. Steward C. Myers suggests needing to distinguish which kind of trouble and bewaring of the cost of trouble carefully. So we are not only concerning about the trouble come up with.

The state tradeoff theory, additionally, reflects the reflection of stock price of equity issue, retirement and exchange which also explained by pecking order model. Clifford Smith's (1986) in consensus on this shows that almost all leverage-increasing transactions are good news and leverage-decreasing transactions are bad news. It is because there is an advantage of tax shield, as mentioned before, on borrowing to increase the leverage. Such tax savings might partially go to increased surplus and partially go to equity. It, however, doesn't reflect what the event of studies found. On the one hand, managers may not diligently pursue an optimum capital structure. They regard it happened in a random manner and may not be a good value maximizer. On the other hand, there is a discrepancy between shareholders' interest and managers' interest which will be discussed later on. Nevertheless, this conforms to the witnesses of corporate control. If we take this proposition, then what is the role of financial decision play in capital market? How does it help us to understand the financial decision made by firm? Specifically, what would a managerial and organizational theory look like? Moreover, managers' attribute, incentives and rationality of investors would affect the level of borrowing and leverage. Therefore, according to the above mentioned reasons, they basically determine whether the capital structure is optimum and the market value maximization of firm.

Pecking order theory focuses on the problem come up with the asymmetric information between managers and outsider investors. From the outside investors' point of view, managers are deemed having earlier and more information. Provided that managers are in the interest of firms of maximizing market value of firm, they will only issue stock when it is overpriced. Outside investors, however, understand that managers get advantage in asymmetric information. They have no intention buying such stock because their interest is to maximize their own wealth. As a consequence, the firms are capable of rising money by either issuing stock, which is overpriced, with a discount at a price that not a fair price of what managers considered or issuing debt when stock is underpriced. But rational investors won't allow such circumstance occurs. Thus firms are forced to issue debt only regardless of the stock price. There is no doubt that it is better for firms to finance internally than finance externally as debt service predetermined and firms prefer to issue debt to equity as dividend is sticky. This establishes the pecking order: Dividend policy is sticky; Firms prefer internal finance to external finance; If external finance is required, they will issue the safest security first i.e. debt before equity finance.

There is tax advantage on borrowing for firms which make full use of interest tax shield. There is, however, no presumption that borrowing is a good thing for firms, too much debt can lead to trouble. Static tradeoff theory gives us not too much help in understanding of firms' decision while organization theory and pecking order theory may be able to explain the negative relationship between profitability and leverage. However shareholders seemed to control the firms' choice of capital structure and investment risk. In maximizing the value of their claims, shareholders will choose strategies that reduce the value of other claimants. But all claimants must be jointly recognized in the determination of capital structure, which should

depend on tax, risk, asset type, managers' behaviour and rationality of investors. Even if the above arguments haven't prescribe the way in which to search an optimum capital structure in a explicit way, and might lead managers to some degree of confusion, the above arguments lead two primarily facts come out. The first fact is that shareholders regard almost all leverage increasing security issues or exchanges as good news, and leverage decreasing leverage security as bad news. The second fact is that the strong negative relationship between profitability and finance leverage.

(1231 words)

## **Bibliography**

Agency Costs, Risk Management, and Capital Structure, Hayne E. Leland, The Journal of Finance, vol. LIII, no. 4 August 1999

An Empirical Investigation of the Pecking Order Hypothesis, J. Baskin, Financial Management, vol. 18, no. 1, Spring, 1989

Capital and Ownership Structure: A comparison of United States and Japanese Manufacturing Corporations, Carl Kester, Financial Management, vol. 15 no. 1, Spring 1986

Corporate Financial Management, Glen Arnold, Financial Times, Prentice Hall

Investment Banking and the Capital Acquisition Process, Clifford Smith, Journal of Financial Economics, vol. 15, no. 12, January-February 1986

Investment Patterns and Financial Leverage, Michael Long and Ileen Malitz, National Bureau of Economic Research, January 1983

Optimal Leverage and Aggregate Investment, Bruno Biais and Catherine Casamatta, The Journal of Finance, vol. LIV, no. 4 August 1999

The Determinants of Capital Structure Choice, Sheridan Titman and Roberto Wessels, Journal of Finance, vol. 43, no. 1, March 1988

The Moral hazard Theory of Corporate capital Structure: Empirical Tests, Scott Williamson, Unpublished Ph.D. Dissertation, MIT, November 1981