## Financial Management

The Signalling model by Ross (1977) suggests that an increase in gearing should lead to a rise in share prices as managers are signalling their increased optimism. Arnold 1998. Discuss

#### Introduction

The Capital structure of a company is the combination of funds under which a company finances its company activities. This usually comprises of a mixture of debt and equity funding. Equity being funds sourced through the issue of shares and debt being borrowings. Dividends are paid to its shareholders if a company is financed either partly or entirely by equity. This is assessed as a proportion of the net profit. Therefore it is important to study the dividend theory along with the capital structure theory as the value of a company is often measured by its share price. The signalling theory by Ross (1977) is one approach concerning Capital structure but there are others, which require our consideration.

## Traditional

The traditional theory of capital structure believes the benefits of using cheap debt capital can lower the overall cost of capital providing the cost of equity and the interest rate of the debt remain constant. They believe the advantages of borrowing overcome the disadvantages of financing using only shareholders funds. Another advantage is that interest payments on debt are allowable against income taxation, whereas dividends are not (Pike et al, 2003).

Their view also was that as long as the increases are small and the prospect of default remote, shareholders are unlikely to respond unfavourably to these minor changes.

Sooner or later however shareholders may become concerned by the greater financial risk and will seek higher returns for themselves. The greater the possibility of default will also have investors raising their requirements. This series of events will see the WACC (Weighted Average Cost of Capital) rise and the value of the company and the shareholders wealth will fall. "The weighted average cost of a company is calculated using the cost of equity, the cost of debt and the market value of equity and debt as weights. WACC is simply the rate of return that links earnings with value." (Maugham, 2000).

The Traditional model requires an optimal gearing level which maximises the value of the company and minimises its WACC.

However, in 1958 Merton Millar and Franco Modigliani put forward a theory that in a perfect capital market the value of a company was dependent on its income generation and the degree of company risk irrespective of its capital structure. They also suggested the value of a company is not affected by how it is financed.

"...With well functioning markets (and neutral taxes) and rational investors, who can 'undo' the corporate financial structure by holding positive or negative amounts of debt, the market value of the company-debt plus equity-depends only on the income stream generated by its assets. It follows, in particular, that the value of a company should not be affected by the share of debt in its financial structure or by what will be done with the returns-paid out as dividends or reinvested (profitability)."

(Modigliani, 1980, in Bailey, 2004)

This theory was challenged mainly due to the assumptions that MM made. In the first instance they assume there is no tax and secondly that there are perfect capital markets however in the real financial world this is obviously not the case.

In 1968 MM revised their theory and took into consideration the implications of tax. The effect of this was to change their analysis quite dramatically; by the introduction of tax they were suggesting that the value of the company rises as debt is added because of the tax benefits received. They therefore concluded that companies should be as highly geared as possible.

In 1977 MM changed their opinion once again. By suggesting that, if debt was cheaper than equity, demand for debt would increase therefore the cost of debt would also increase. They therefore assumed that there were no tax benefits of debt.

# Signalling

Signalling theory implies a positive relationship, in which companies with higher cash flow signal their performance with higher gearing. The signalling models suggest that higher gearing is associated with higher cash flow in the same time period (Ross (1977); Harris and Raviv (1991).

According to the signalling theory, managers possess asymmetric information regarding the firm's investment prospects. Managers then convey to the market their expectations of future performance through their financing decisions.

. "Because a high dividend-payout policy will be costly to firms that do not have the cash flow to support it, dividend increases signal a company's good fortune and its manager's confidence in future cash flow." (Brealy & Myers & Marcus, 2004)

Conversely, if a company profits fall and they have to cut down on their dividend payments this can send a warning sign to the markets as it may indicate poor profit expectations, which could cause a reduction in the share price.

Also companies sometimes hold a share reserve to top up dividends. However this is only a short term contingency. Although, when Microsoft, who usually reinvested funds, began to pay dividends to their shareholders, there was a rise in their share prices.

However, in the main, managers try to keep dividends constant as this points to consistency and a steady income stream to the market.

#### Agency

The Directors of a company are the agents who have been chosen by the shareholders to direct the managers who make the decisions in the firm. In the financial world of asymmetric information, managers might have an incentive to spend money on imprudent investment or acquisitions, to the detriment of shareholders. This is backed by the agency cost models of gearing initiated by Jensen & Meckling (1976) who stated that, managers have other objectives, which may involve wasteful usage of the company's free cash flow. However incentive schemes for managers, such as profit related bonuses and stock options can reduce the tendency to invest in risky projects.

One of the advantages of debt is that it limits free cash flow available to managers, another is by imposing a capital structure with a higher proportion of debt can lead to an increase managers focus on profits and therefore raise the company's value.

(Harris & Raviv, 1991). Grossman and Hart (1982), also believed this view and stated that, "If bankruptcy is costly for managers, perhaps because they lose benefit of control or reputation, then debt can create an incentive for managers to work harder, consume fewer perquisites, make better investment decisions, etc., because this behaviour reduces the probability of bankruptcy." (As cited in Harris & Raviv, 1991).

#### The Case of British Telecom

When Fairchild investigated BT debt levels they found that over the period 1998-2991, British Telecom (BT) dramatically increased its debt levels, from £4.3bn in 1998 to £31bn in 2001. This was accompanied by a downgrade in BT's credit rating and a dramatic decrease in the company's share price. Subsequently, BT responded to pressure from analysts and investors to reduce the debt level, from £31bn to £18.4bn by March 2002. However, the share price has continued to fall, though not so dramatically. Hence, BT provides an ideal case study of the effects of capital structure on company value, and the incentives behind management's capital structure policy.

## Conclusion

Due to the complexity of capital structure decisions it is difficult for a company to find the right debt-equity mix that maximises a company's value. The various different theories with partly conflicting opinions show that there is no 'one' accepted theory for an optimal capital structure, even though there is no doubt it is vital to a company. However, many factors are involved when the effect of gearing on a company's value is considered.

Debt can be extremely beneficial to a company but the more debt it has, the greater the risk of financial danger and bankruptcy costs. In the real financial world investors will carefully observe all these signals therefore; capital structure decisions can have important implications for the value of a company. As there is no general rule to determine the right debt-equity mix for a company; it needs to be considered in a more specific way, depending on industry factors and past performance. Moreover, company-specific factors may guide the right capital structure.

As stated by Stewart C. Myers the search for the optimal capital structure is impossible to do and nobody has found the formula for it. He also argues that 'there is no magic in leverage'

# **Bibliography**

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