

Capital Structure Immunize or Infect Value of the Firm

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ABSTRACT

The study examines the capital structure that envisages firm immunize or infects the firm value, the firm tends to prefer risk minimization and higher return structure, and the value of the firm differs greatly across the industries. Finance strategy is equated widely with crafting and maintaining a profitable fit between the financial need and the disbursement of firm investment. Capital structure and value of the firm is controversial and famous unsolved issues in the field of finance. Still, there is inconclusive in any research circumstance. But firm decision making folder is arguable and challenging against capital structure decisions and achieving the optimal capital structure is one of the most vital and important issues. At the same time capital structure decisions plays important role in the field of finance for saving firm's stability, profitability and strength. Stability, profitability and strength are major factors for any firm. In order to achieve three successive factors, a manger of a firm improving business process often is required to make the capital structure related decisions in a proper order. This study examines the optimal capital structure where the value of the firm enriches its optimum. The study highlights by observing that if external sources of finance are costly to firms than internally generated funds., there will typically be a benefit to invest which adds value to the extent that it helps ensure that a firm has sufficient internal funds available to take advantage of attractive investment opportunities. Study delineates how these financing strategies should depend on such factors as shocks or shift to investment and financing opportunities which leads to maximize the value of the firm.

Keywords: Value of the firm, Optimal Capital Structure, Stability, profitability, strength

INTRODUCTION

Business unit stakes financing, management very seriously, many of the authors found that financial management is ranked as one of their most important activities. It helps to contributes prominent value to the economy, deprived of additional value to the economy. Given it real world prominence, one might guess that the topic of capital structure would command a great deal of attention from policy makers, and practitioners would therefore have a well developed body of wisdom which to deal with setting financing strategy. Unfortunately, finance theory has had much less clear cut guidance to offer on the logically prior questions about financing strategy. What sorts of risk should be financing strategy? Should managers be optimizing financing strategy? What kind of instruments will best accomplish the financing objectives? Finding solutions to these questions is difficult because, paradoxically, the same arbitrage logic that helps the refining company decide option relates deltas also implies that there may be no reason for it to engage in financing activity in the first place. As an ultimate objective of the firm is shareholder wealth maximization, it is most important and necessary activity of the firm managers. In this process, firm effort to maintain maximum return and minimum risk by achieving the wealth maximizations. In the making decisions about the capital structure in the firm, it should consider wealth maximization as well as any other decisions. Any types of firm have

own capital structure, its entire capital provided his owners, this kind of firm called unlevered in the financial literature. On the other hand, firm entire capital capitalized by debt holders which is called the levered firm. Real business environment there is no pure levered or unlevered firm; it has capitalized proportionately by the owners and debt holders.

In order to achieve firm ultimate objective, it is noted that there are a number of potential rational to explain why the firm might wish to use certain financing strategy. However, it seems fair to report that there is not yet unique, accepted framework which can be used as a guide in setting capital structure strategies. In this paper, researcher illustrates how financing strategy can be designed in a variety of setting towards the optimal capital structure. In order to achieve this study was built on one strand of the past work on financing that examine the implication of ownership, capital structure and its determinants, product market and capital structure, non-debt tax shield and value of the firm. Extensively speaking, this study argues that if capital market imperfections make externally obtained funds more expensive than those generated internally, they can generate a rationale for financial strategy and it helps to achieve firm stability, profitability and strength. The basic implication of this argument can be understood as follows. If the firm unable to select the proper financing strategy for capital structure, there will be some variability in the cash flows generated by the resources in place. Simple accounting implies that this variability in firm internal cash flow may affect in either; (a) variability in income generated externally or (b) variability in expenses can be identified in general in term of decreasing returns. If the supply of external finance were perfectly elastic, the optimal expected solution of external finance would be to leave external financing plans not affected in the face of variations in internal cash flows, taking up the entire gap by changing of the amount of external finance raised. However, this mechanism no longer works well if the marginal cost of funds goes up with the financing externally. On the other hand financing plans may be traded off with some increase in external financing, but also some decrease in investment. However, available finance influences both investment and financing plan in a way that is costly to the firm. Strategic approach can reduce certain variability in financing; it can impact increasing the value of the firm. The model that study develops following section is much in the valued in the above argument. However, it takes the argument several steps rather than direct that there is a role for financing strategy, the study is able to show how a firm's optimal financing strategy implement depends on the nature of its investment and financing policies. Further, study illustrates how a well-designed financing strategy can enable a firm to optimally coordinate its investment and financing policies. Ultimate expected results of the financing policy are fulfilling the shareholder objectives.

Acceptable and extremely valid legend of the shareholder gains maximum benefit to its interest, thus managers of the firm are to achieve maximum value of the firm as an agent of the owners. Capital structure and value of the firm related decisions are extensive decisions of any kind of company. Thereby all business community should identify that impact of capital structure and the value of the firm. The main activity in the managers of the firm is capital structure related decisions. It comprises fundraising and investment. Firm investment capital consists with two main devices which are debt and equity capital. According to Myers (1984), Bowman (1980), and Gupta, (1968) revealed that there are two folders of the equity capital divide into retaining and public offering.

It depends on the firm's preference or capital requirement. The firm capital structure includes long term debt, short term debt, common stock, preferred stock and debenture etc. Above financial aspects are major of the financing plan, which are invested by the various types of investments. An also that return explains to stakeholders about company preference. Therefore, these are more important factors to study. The main problem for this study is how much investment, both debt and stocks should be obtainable? How can one govern the optimal capital structure by achieving the maximum level of value of the firm? Above two researchable issues interest any researcher attention.

OWNERSHIP, CAPITAL STRUCTURE AND ITS DETERMINANTS

The growth of privatization, deregulation, international businesses, global competition and new information and production technology has changed the world of management accounting. These changes



have special implications for transitional and newly industrialized or emerging economies. There are various theories and models regarding to the capital structure and firm value enlightens. Modigliani and Miller (1958) have provided the basis for the modern thinking on capital structure and shows the impact of debt-equity ratio of firm value. This made two propositions under perfect capital market condition. As stated before, there has been extensive research and examines the determinants of capital structure and value of the firm both in developing and emerging economies (Modigliani and Miller, 1958; Nasirzade & Mostaghiman, 2010; Banerjee and Bowman, 1980; Bredly, Jarrell, and Kim, 1984; Gupta, 1968; Zhao Bei and Wijewardan 2012).

There are various theories and models regarding to the capital structure and firm value enlightens. This made two propositions under perfect capital market condition. A first proposition is related to the value of firm and capital structure introduced by Modigliani and Miller (1958) that shows the value of the firm is independent of its capital structure. In the second proposition mentions one thing regarded to cost of capital, which is the investment cost per capita. It mentions the cost of equity plus or debt capital. Indirectly, that implies the financial risk. According to Pandey (2004) states that the capital structure decision of a firm influences its shareholder return and risk. Because of it, the market value of its shares may be affected by the capital structure decision (Antoniou, Guney and Paudyal (2002); Zhao Bei and Wijewardana (2012). The research is expected to do by using with assumption of that capital structure has significant influence on company Market Value Ratios mainly. Normally, Capital Structure consists with debt and equity. Due to debt and equity can influence the value of the firm. The determination of the capital structure of a company is a difficult task. Therefore the selection of capital among the debt and equity can impact to the value of the firm. The value of the firm consists with a market value of debt capital and market value of equity capital. The return of capital structure can influence to the value of the firms.

PRODUCT MARKET AND CAPITAL STRUCTURE

Theories of Modigliani and Miller theory, trade off theory, pecking order theory and agency cost theory have been discussed one aspect of capital structure. This model based on the idea that the choice of debt in the first stage of the financing strategy as a commitment to successive output strategies in the second stage, in which product market competition revenue takes place, has traditionally been developed in an input output product level choice quantity competition setting. These models invent the seminal work of Brander and Lewis (1986), moreover as studies by Maksimovic (1988, 1998) and Glazer (1994). In the conceptual concept of Cournot competition model, debt pledges firm's shareholder to be a more cost leader market behavior and equilibrium debt levels are positive, even in the presence of agency costs of debt and in the absence of tax-related and other benefits of debt (Evgeny and Lyandres, 2006). Alternative conceptual model of oligopolistic competition is Bertrand-type product price competition and product capacity cost price competition. Further, show that the alter study cost price competition, company select debt in maximum point of equilibrium level if the uncertainty and risk is product demand related. However, if product costs are uncertain and risky, debt conveys a strategic disadvantage and is not selected in equilibrium. On the other hand, the contrary result for the case of product capacity level cost price.

Similar to most pre commitment models the static model developed here has two stages. First, companies operate the market and select their financial structures. The latter is concise by the face values of debt maturing lastly. Each firm's owner sets out their firm's debt level with considering the ultimate objective of maximizing the value of the firm while charming the company's own and its competitors' consequent product output market strategies. Finally, the owners of each firm select company, product output market strategy before examining the firm's cash flow. The comprehension of the insufficient, together with the product output market strategies select by the company and by its competitors, determines whether the firm is solvent. If the comprehension of the insufficient above value, the firm is solvent; it repays its debt and distributes the residual cash flow to its shareholders. If the realization of the shock is below the threshold value, the firm's cash flow equals zero, which leads to solvent. The analysis of strategic debt



choices is developed in a duopolistic frame. However, varying the contact constraint that is prominently interest rate, which pronounces the amount to which company's selects move their competitor's market value, assists studying the relation between the amount of competitive contact among firms in product output markets and their optimal operating strategies and capital structure choices. All the findings of the model with respect to relations between the contact variables and company's optimal financial and operating leverage continue complete in a more than two company setting. The model's setup allows examining the effects of the amount of competitive contact with the company's financial and operating leverage decisions, as opposed to opinion on one of the probable determinants of the level of contact. The inclined will be settled by finding but perfect equilibrium still unsolved issues. The strategic effect of debt follows in the market from the fact that after the debt levels have been selected. However company's shareholders take only the cash flows stable and sufficient conditions considered if company selects their operating leverage strategies (Harris and Raviv 1991). Thus, debt serves as an assurance device to select a more aggressive operating leverage strategy in the final stage of the strategy.

NON DEBT TAX SHIELD AND VALUE OF THE FIRM

One of complicating issues for today's financial managers is the relationship between components of the capital structure and mixture of loan and stock for financing. Regarding these issues that capital structure effects on investment projects with positive or negative current value by accepting particular investment. In this circumstance capital structure model, tax relevancy and its effect is important, therefore meaningful and weak relationship between non-debt tax shield and Debt ratio is vital. Although the tax has an effective role in capital structure decisions relation between business risk and debt ratio. Antoniou et al (2002), conclude their research determinants at company capital structure analysis, manage effective factors on capital structure in developing countries. Tax shield effect on capital structure differ from developed and developing countries. On the other hand, Effective factors in ten developing country's capital structure has been analyzed by Booth et al (2001), they reveals that their capital structure affected by the same variables in developing countries results shows that most profitable companies have a lower debt ratio. Hence, it is controversial issues exists between developed and developing countries. Jensen and Mackling (1976) conclude their study is to investigate the theoretical factors and reasons for selected model for capital structure from the perspective agency theory and stakeholder interest conflict of economic unit. Jensen and Mackling (1976) argue that it can create a balance between the benefits and costs of debt and achieved an optimal capital structure. In practice, there is no optimal capital structure situation and it is proved at the conceptual model and theoretical aspect.

METHODOLOGY

In here population considered 367 companies listed on the Colombo Security Exchange (CSE) in 2011. The manufacturing sector has 32 listed manufacturing firms. The study was depended on secondary data collected from audited financial statements. Period of data covers three years from 2012 to 2014 and study period confirmed unusual fluctuation in the economy is not reported. In the aspect of quality of the data it is a common agreement in the field of finance audited annual reports data is accepted. Research findings of Myers (2001) have reported measurements of capital structure variables hence, this student selects well established measurement for this study. There are six variables, use as dependent and independent, dependent variables are selected as Market value per share (MVPS) and Price earning (PE) ratio as a firm market value measure. As independent variables Total debt to total equity (TDTE), total debt to total assets (TDTA), Long term debt to assets (LTDA) and short term debt to total assets (SDTA) are capital structure measurement. Mainly three types of analysis have used to employ this study, namely; descriptive, correlation and regression model. It is identifying two dependent variables, therefore two regression models have been introduced.

$$\text{Model1 } MVPS = \alpha_{1,1} + \beta_{1,1}TDTE + \beta_{1,2}TDTA + \beta_{1,3}LTDA + \beta_{1,4}SDTA + \lambda_1$$

$$\text{Model2 } PE = \alpha_{2,1} + \beta_{2,1}TDTE + \beta_{2,2}TDTA + \beta_{2,3}LTDA + \beta_{2,4}SDTA + \lambda_2$$



Where;

MVPS and PE are dependent variables; TDE, TDTA, LTDA and STDA are independent variables. α intercept, β coefficient of variables, λ error term

RESULTS AND DISCUSSION

Table 1 provides descriptive statistics of the study variables. Study sample firms on report average values of MVPS and PE of 67.5219 and 56.0997 respectively as dependent variables in both models. This MVPS value is considerably higher when compared to other gain of the market, but compared to standard deviation is high that imply reported degree of volatility and uncertainty of firm value is high. PE ration variation is more than the MVPS.

Table 1: Descriptive Statistics

Variables	Average	Std. Deviation
Market Value Per Share (MVPS)	67.5219	66.0281
Price Earning (PE)	56.0997	331.8452
Total Debt to Total Equity (TDTE)	0.5163	0.5539
Total Debt to Total Assets (TDTA)	0.2380	0.2112
LTDA (Long Term Debt to Assets)	0.1196	0.1424
STDA (Short term Debt to Assets)	0.1185	0.1797

Source: Researcher, 2015



However, the value of long-term debt to assets and short term debt to assets ratios represents a notable difference between the samples. These value exhibit manufacturing industry's company assets invested more equity than the debt. However, there is no significant difference between short terms debt to asset investment is less, that the implication is the practical essence of the field of finance. According to Booth et al. (2001) report an Asian reign long-term debt to assets and short term debt to assets ratios ranging from similar range. In contrast, in Rajan and Zingales (1995), the long-term debt to assets and short term debt to assets ratios of a sample of firms in G-7 countries are higher than Asian region. The TDTE (51.63%) and TDTA (23.80%) total debt value is higher when compared to the total equity. Invested percentage capital of total asset on total debt is 23.80%, which shows higher value. On the other hand, the worsening financial performance, there are three additional reasons for the observed low long-term debt and short term ratios. First, the long-term debt ratio can be misleadingly low given that many companies use short-term debt on the rolling basis (Antoniu.Guney and.Paudyal, 2002; Xiao et al., 2004). Second, it could reflect that financing institute specially banks are vigilant in issuing long-term debt and short term debt in order to lower credit risk given that the moral hazard of borrowers is severe in Sri Lanka.

Table 2 reports the Pearson correlation coefficients between variables. Except for MVPS and PE, TDTE, and LTDA the correlation coefficients between independent variables are statistically significant. PE and all correlation coefficient are statistically not significant. TDTE and TDTA, LTDA, STDA the correlation coefficients are statistically significant and also coefficient values are high compared to the other values.



Table 2: Correlation Metric

Variables	MVTB	PE	TDTE	TDTA	LTDA	STDA
MVTB	1					
PE	-0.044	1				
TDTE	-0.172	-0.075	1			
TDTA	-0.227*	-0.072	0.758**	1		
LTDA	-0.049	-0.090	0.742**	0.542**	1	
STDA	-0.230*	-0.014	0.303**	0.746**	-0.154	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

According to the table 3 of model 1 and 2 summary adjusted R square Values are 0.08 and 0.009 respectively. It is considerably low; therefore the models are not the best. The table 3 of coefficients shows the impact independent variables on the dependent variables. Estimation equation of both models is as follows.

$$\text{Model 1 } MVPS = 82.296 - 15.885TDTE + 2248.977TDTA - 2234.794LTDA - 2316.853STDA$$

$$\text{Model 2 } PE = 88.67 + 7.034TDTE + 110.070TDTA - 351.248LTDA - 172.113STDA$$

According to above equation MVPS model 1 has negative impact of TDTE, LTDA and SDTA and positive impact on TDTA but statistically insignificant. Model 2 PE has negative impact of LTDA and SDTA and TDTE and TDTA positive impact, but both values are statistically insignificant.

Table 3: Regression Model Results

$$\text{Model 1 } MVPS = \alpha_{1.1} + \beta_{1.1}TDTE + \beta_{1.2}TDTA + \beta_{1.3}LTDA + \beta_{1.4}STDA + \lambda_1$$

$$\text{Model 2 } PE = \alpha_{2.1} + \beta_{2.1}TDTE + \beta_{2.2}TDTA + \beta_{2.3}LTDA + \beta_{2.4}STDA + \lambda_2$$

Variables	Model 1		Model 2	
	Coefficient	p-Value	Coefficient	p-Value
Constant	82.296	0.000	88.675	0.092
TDTE	-15.885	0.485	7.034	0.953
TDTA	2248.977	0.215	110.070	0.991
LTDA	-2234.794	0.217	-351.248	0.970
STDA	-2316.853	0.201	-172.113	0.985
R ²		0.080		0.009

CONCLUSION

This study presents two models that demonstrate a mix results among firms' leverage and the extent of competitive contact in their industries. This result is unable to generalize, types of limited gain models that show the conceptual difference between optimal capital structure choices in a duopoly and in a perfectly competitive industry. An important feature of the model is that most subsequent studies of the contact between firms' capital structure and value of the firm decisions. The model demonstrates that, regardless of the value of the firm positively affects their optimal leverage whenever debt carries a strategic advantage. The model's predictions are tested using 3 years of data, while employing two proxies for the extent of contact among firms. The empirical tests demonstrate that the extent of contact among proxies of capital structure and it is an important determinant value of the firm. Statistically and economically, these results are not significant relations between the proxies for the degree of contact



leverage and value of the firm. Overall, it is found that corporate financing in Sri Lanka PLCs has both some cohesions to, and differences from, that of the firms traded in CSE. It also shows that the various types of debt capital such as long term and short term debt examined in this study do not appear to have significant effects on capital structure choices in Sri Lanka. These results should be of interest to those that are interested in the emerging manufacturing sector. Further research is needed to examine whether the longitudinal data tested in this study are statistically significant. On the other hand, in the Sri Lankan context, state-owned banks and financial institutes may play vital role issuing debt instruments, both short and long term, since, the role of CSE with regard of debt instruments does not contribute as expected amount of debt. The capital structure instruments, effects are deferent over the deferent situation and the business aspect and therefore study unable to predict the unique conclusion and solution for the issues of capital structure.

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