The Relationship between Capital Structure and the Profitability in Sri Lankan Companies

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Abstract:-

Capital structure has been an important issue from the financial management point of view. Because it is linked with the firm's ability to meet the demand of various stakeholders and strategy. An appropriate capital structure is a critical decision for any businesses, because not only for maximizing returns but also to deal with competitive environment. The main purpose of any organization is the profit maximization and it can be most frequently found that their capital structure is a blend of equity and debt. Therefore various patters of capital structures can be seen in different organizations. The literature provides many arguments on the relationship between capital structure and the organizations' profitability. This opens a question that really whether there is any relationship between these two variables in Sri Lankan context. The findings based on 100 listed companies measured using both descriptive and Independent – samples T test revealed that there is a significant positive relationship between capital structure and the profitability in Sri Lanka.

Key words:- Capital structure, profitability, profit maximization

1. Introduction

The main objective of the organizations in the world is to maximize their wealth. Stake holders of the organizations always in alert with the performance of the entity. Therefore it is the responsibility of company personnel to perform well within the industry to fulfill their stakeholders' preference. In current world there's no stable economic condition. No one can predict the future happenings in the economy. Hence organizations have a greater challenge with stabling in the industry. Therefore they have to find out strategic means and modes to achieve their targets.

Earlier business organizations were applying price strategies for better performances. That is to maximize their profit. But later they realized that the price is not the one and only factor which affect to the company's profitability. Therefore at present they are in applying more strategies like advertising, branding, quality enhancing, CSR practices, methods of business financing etc. In current world businesses are in practicing of doing changes to their capital structure as a strategy of maximizing the wealth without limiting to pricing and marketing strategies.

But the question is the relationship between the organizations' performance and said strategies and the significance of the impact on the organization's performance from those strategies.

Company's capital structure is one of the most important parts in business position. It is a decision making assertion on potential investors' perspective because it is a combination of equity and debt financing of organizations. . Some organizations finance its business activities totally from ordinary share holder's funds. But some are preferred to

finance their business by mixing debt capital with equity capital. It depends on the time factors and the views of the financial performance of the company. When they determined the weightage they consider the effect of outgoing on the financial performance of the company. If the organization has financed through equity it has to pay dividend and if it is through debts it has to pay interest as the return for financing.

According to the finding of researchers, most of the users of the financial statements, such as share holders, potential investors, lenders and employees, pay more attention on the capital structure of the company, But not in the same perspective. It vary depend on the reason for interesting with the financial indicators of the specific organization. However, majority's interest s with the company's profitability. Because all of their returns will depend on the company's profitability and the payability of debts and other obligations.

However, the importance is the wealth maximization. It is the ultimate target of the entities. Therefore there is a need to evaluate the validity of applying various strategies for better performance of the organizations.

1.1 Identification of the Research Problem

There's no doubt that the organizations always seeking cost effective ways to increase their profitability. Researchers argued on various strategies in various ways. But majority of them focused on marketing strategies applied by the organizations.

Some researchers argued that there is a positive relationship between capital structure and the profitability. If so, what is the purpose of having different kind of Capital structures within different organizations? And why they change their weight of debt and equity? It means that it is not adequate to evaluate the relationship. But it is very much essential to find the significance of the relationship

Igor Filatotchev and Rostislav Kapelyushnikov (2001) revealed that there is a negative relationship between capital structure and the profitability. Since the organizations main purpose is the wealth maximization, are they engage with the activities cause to minimize the wealth? However, Organizations change their pattern of capital structure time to time. What will be the purpose of that?

There are certain arguments on non linear relationships. (Morck, Schleifer and Vishny, 1988) That means there's no impact on the profitability from the capital structure of the organization. Those different arguments open a question regarding the real effect of capital structure on the profitability.

Therefore there is a need to find out whether there is a relationship between the capital structure and the profitability of organizations and the significant of the relationship.

1.2 Objectives of the Study

The study based on the data gathered from the listed companies in Colombo Stock Exchange and identified the following objectives.

Primary objective
To identify relationship between Capital structure and the financial performance of Sri Lankan private sector organizations.

Secondary objective
To identify the significance of the relationship
To identify the effective capital structures of companies.

Based on the above objectives the study attempted to test the following hypotheses.

H_{1a}: There is a relationship between capital structure and financial performance

H_{0a}: There is no relationship between capital structure and financial performance.

H_{1b}:There is a significant relationship between capital structure and financial performance

H_{ob}: The relationship between capital structure and financial performance is not significant

1.3 Significance of the Study

Organization finances their activities in various ways. They obtain loans from lending institutions and issue capital stocks to preference share holders in order to finance the company from debt financing. But it can seem that most of the organization prefers to finance its activities from owners' equity capital. General reason behind that is the level of obligation to Finance Providers. That is the rate of interest, percentage of dividends and the payment obligation. Therefore it is important to find out that to what extend it is effect to the profitability of company. If there is no any relationship between the capital structure and the profitability the companies no need to evaluate the size of loans and the effect from it. Hence there is a need to check the nature of the relationship: i.e. positive or negative. Findings of this research study will assist the company's management in making their decisions over the financing and investing activities

2. Literature Review

Chandler (1977, 1990) has identified 5 ownership categories; Institutional investor ownership, Family ownership, bank ownership, corporate ownership and government ownership. Company performance was measured by three variables; Market-to-book value of equity, Return on Assets and sales growth. His study was based on the correlations between each variables identified in ownership categories and the performance. Higher the ownership shares of the largest owner higher the performance up to a certain point but beyond that there is a little impact on performance. It was found that there is an effect of ownership on ROA and Market book value but no effect on sales growth. K. Ramaswami (2001), his study based on the state and private ownership on performance and identified that there is a limited impact of ownership on performance of organizations which are operating in a weakly contesting environment and *vice versa.* Change in ownership structure from state to private causes little or no effect on firm's performance unless there is an increase in competitive rivalry. (Grosse and Yanes 1998; Shirlay and Nellis, 1991) R. Chaganti and F. Damanfour (1991) focused on corporate executives, family owners and Insider-institutional investors and outside institutional investors. It was found that the stock ownership by outside institutions is positively related to firm's financial performance and it is significant. The study relating to medium and large scale organizations found that ownership concentrations is positively associated with the enterprise performance. Further the ownership by foreign companies and banks is associated with better performance than domestic ownership. (Alexander Pivovarsky, 2003) A. Belkaoui and Ellen Pavlik (1992) identified two measures of ownership structure namely; stock concentration and management stock holdings. It pointed out that the impact of ownership structure on performance will defer depending on the above two measures. The relationship between stock concentration and performance is negative at low range and positive at high range of stock concentration. When ownership rises beyond 25% both profit and market share will increase, which shows the stockholders have more power and they are able to intervene in management actions leading to value maximization. A study based on privatized company in Russia identified two main categories of ownership as inside shareholders, outside shareholders and state (Filatotchev. I, Kapelyushnikov. R., Dyomina. N, Aukutsionek. S, (2001). Inside shareholders was further divided into managers and workers. Outside shareholders divided into individual shareholders, other enterprises, commercial banks, investment funds and foreign investors. The study reveled that in general there is a negative relationship between ownership structure and the firm's performance. It is also found that effects of ownership do not depend on the identity of the largest shareholder. (Igor Filatotchev, Rostislav Kapelyushnikov, 2001) Firms are divided into family and non family owned business and the performance was measured in terms of productive efficiency and profitability. Return on Equity (RoE) no. of employees, value added per worker, capital-

labour ratio were the variables selected as the measures of performance and found the correlation between capital stock and the each of these variables. In the case of non-family businesses there is no correlation between capital stock and the return on investment (ROI), where as in family businesses there is a positive relationship between these two. It also emphasize that organizations should select an appropriate ownership structure that maximizes the market value of the firm. Richard Spiller (1972) found that the companies' better performance is associated with the stock form of ownership. Correlation coefficients for four relationships of size and performance in terms of assets and net premiums were computed. The data indicated that the relationship of ownership and performance could not be attributed to the size differences of the firm. Bradley, Jarrell, and Kim (1984) identified that there are three specific factors which affect the optimal capital structure of a firm; the variability of firm value, the potential impact of financial distress and the level of non-debt tax shield. There is an inverse relationship only between first two factors and leverage. Most research has focused on the firms' factors and the capital structure. For example Balakrishnan and fox (1993) examined the impact of firms' specific characteristics and industry characteristics on capital structure. A research undertaken by Simerlya and Li based on finding out the relationship betweencapital structure and performance under the environmental conditions. They hypothesized that under the stable environment, higher leverage will lead to better performance and under the dynamic environment, leverage will lead to poor performance. It is found that the environment moderate the relationship between capital structure and performance. Performance was measured only by Return on Assets.

Statistical analysis favored the hypotheses indicating that there is a positive and significant when environment dynamic is low, non significant at moderate or stable dynamism and negative when it is high. Further they measured the size of the firm in terms of the number of employees, indicated that had a positive impact on performance. Cable and Yasuki (1985) found that ownership concentration is positively related with firm's performance. Prowse (1992) found that no significant relationship between ownership concentration and financial performance among Japanese firms. Eric and Shapiro (2002), ownership was measured by 3 variables; five largest block holders, financial institutions and non financial companies and RoA for performance. Firm growth is positively related to profitability and the relationship with firm size is always negative. Further higher levels of debts are more profitable. In a study of Charles and Snell (1989), it is hypothesized that ownership structure directly affects productivity through the effects of powerful stockholders. Morck (1988) found that there is a positive relationship between insider ownership and performance efficiency for lower levels of ownership. Demsetz and Villalonga (2001) suggest that capital is significant in explaining performance. Further previous research by authors including Morck, Schleifer and Vishny (1988) suggests that the relationship between ownership and performance is nonlinear. A study undertaken by Emma Welch (2003) found that the ownership is not statistically dependent on the performance measure and results provide limited evidence of a nonlinear relationship between managerial share ownership and firm performance.

Literature provides evidences that ownership has been explained as private and public (Gorriz.C.G, Fumas.V.S (1996) and Grosse. R. and Yanes. J, (1998). Company performance was measured by three variables; Market-to-book value of equity, Return on Assets and sales growth and long term debt as the percentage of total capital was used as the measure of capital structure and ROE and ROA as the determinants of performance. However, when the literature is considered carefully some studies (Hill.C.W.L, Snell.S.A, (1989), (Belkaoue.A, Pavlik.E, (1992) have defined ownership structure in terms of capital structure. This study also mainly concentrated on how organizations gave financed their capital in Sri Lanka. It was measured mainly

based on proportion of equity and debt capital. Further the primary objective as mentioned earlier is to find out whether there is any relationship between firms' capital structure and the profitability. Accordingly following variables were identified.

Capital Structure	Profitability
• Equity-Capital Ratio • Debt-capital ratio	• Return on Capital (ROC) • Return on Assets (ROA)

3. Methodology

In order to find out the relationship between capital structure and performance a sample of 100 public limited companies listed at Colombo Stock Exchange was selected randomly. The data were gathered merely from secondary sources basically published annual reports. An average value for 5 years period from 2005-2009, were used for all selected variables. Both descriptive and parametric tests were used to analyze data through SPSS package.

4. Data Analysis

Table 1: group statistics

	Capital Structure	N	Mean	Std. Deviation
Return on Capital	EC	77	4.06	5.092
	DC	23	6.90	7.903

In study the capital structure was identified as equity capital and debt capital concerning two independent samples. Sample consists of 77 companies with equity capital and 23 companies with debt capital. The average return on capital for companies with equity capital and debt capital amount to 4.06 and 6.9 respectively and had shown a standard deviation of 5.09 and 7.9

Table2 : Independent samples test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
	Lower	Upper	Lower	Upper	Lower
Return on Capital	5.78	.018	-2.04	98	.044

There is a significant relationship between capital structure and Return on Capital. (P-value>0.05)

Table 3 : Group statistics

Capital Structure		N	Mean	Std. Deviation
Return on Assets	EC	77	1.60	.909
	DC	23	2.04	.724

The other measure used to determine the profitability was the Return on Assets (ROA). The average ROA pertaining to equity capital companies and debt capital companies were 1.60 and2.04 respectively.

Table 4: Independent samples test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
	Lower	Upper	Lower	Upper	Lower
Return on Assets	1.56	.21	-2.12	98	.036

There is a significant relationship between capital structure and Return on Assets (ROA). (P-Value>0.05).

Table 5: Debt-equity ratio and return on capital

R	R Square	Adjusted R Square
.196(a)	.038	.029

a Predictors: (Constant), Equity Capital

The Pearson coefficient of correlation gives a positive correlation between debt equity ratio and the return on capital.

5. Conclusion

The data analysis supported the above stated hypothesis of H_{1a} and H_{1b}. It can be concluded that there is a relationship between capital structure and the firm's profitability and the relationship is significant. Both the measures used to determine the profitability (ROC and ROA) has shown a significant relationship with the capital structure. Therefore it can be concluded that there is a significance relationship between capital structure and profitability. According to the positive correlation between debt-equity ratio and the return on capital, it can be concluded that higher the equity capital higher the firms' profitability and lower the equity capital will results in lower profitability. Accordingly this becomes an important factor in determining the firms' capital requirements and they should pay more attention on this area.

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