Impact of Capital Structure on Performance of Commercial Bank in Sri Lanka

Sathana Vaikunthavasan and S. Bruntha

Abstract--- *The financial decision is an important strategic decision made by banks. It influences on stock holder's risk and return. Financial manager of the company should carefully decide the mix of capital in times for the efficient and effective operation of the business. An optimal capital structure leads to success of the banks. A bank's optimal capital structure refers to the particular combination of liabilities (debt, equity or any other) that maximizes the value of the banks an optimal capital structure. The identifying of the factors that affect the optimum level of debt and equity is very important for financial economist. The mix of capital structure varies from bank to bank. Objective of the study was to reveal the impact of capital structure on financial performance, to evaluate the interrelationship between capital structure and performance and to identify the determinants of a capital structure. Data was collected from secondary source as financial statement of commercial bank (2006-2010). The finding was that there is a positive relationship between the capital structure and bank's financial performance and Level of capital structure had significant impact on performance of commercial bank.*

Keyword--- *Capital Structure, Financial Decision and Performance*

I. Introduction

TO understand how companies finance their operations, it is necessary to examine the determinants of their financing or capital structure decisions. Company financing decisions involve a wide range of policy issues. At the private, they have implications for capital market development, interest rate and security price determination, and regulation. At the private, such decisions affect capital structure, corporate governance and company development (Green, Murinde and Suppakitjarak, 2002).Knowledge about capital structures has mostly been derived from data from developed economies that have many institutional similarities (Booth et al., 2001). It is important to note that different countries have different institutional arrangements, mainly with respect to their tax and bankruptcy codes, the existing market for corporate control, and the roles banks and securities markets play.

Capital structure refers to a mixture of a variety of long term sources of funds and equity shares including reserves and surpluses of an enterprise. Modigliani and Miller's (M&M) theory (1958) is considered as fundamental corporate structure model in the modern corporate finance. The theory ascertained the irrelevance of capital structure to firm's value in perfect markets, without taxes and transaction costs Following on the this perfect classification of market, most subsequent research focused to demonstrate that a firm's capital structuredecision does consider corporate and personal taxes, agency costs, contact law, bankruptcy cost, and other frictions. These aspects of corporate environment are referred as "determinants of capital structure".

Sathana Vaikunthavasan, Lecturer, Department of Marketing, University of Jaffna.
S.Bruntha, Undergraduate, Faculty of Management Studies and Commerce.

ISBN 978-93-82338-07-9 | © 2012 Bonfring

II. Research Problem

Base on the past researches and literature review, the following research question is formulated

- To what extent the capital structure effect on performance of commercial bank in Sri Lanka?
- To what extent the present and past capital structure impact on performance of commercial banks in Sri Lanka?

III. Objectives of the Study

In Sri Lanka banks, play an impart role among other institution. The banking activities are going on an improving manner. The main activities of banks is the mobilizing the deposited from the public who have surplus to save and lend same to the public who have in need of money, keeping a margin as profit. Therefore every bank should have responsibilities to maximize the share holders' wealth and provide quality service to the customer and satisfy their needs effectively for this purpose the bank should maintain the optimum capital structure in order to achieve the future prospective and sustain in the competitive environment.

- To reveal the impact of capital structure on financial performance
- To evaluate the interrelationship between capital structure and performance
- To identify the determinants of a capital structure.

IV. Conceptualization

The following conceptualization model is contracted by the research for this research work.

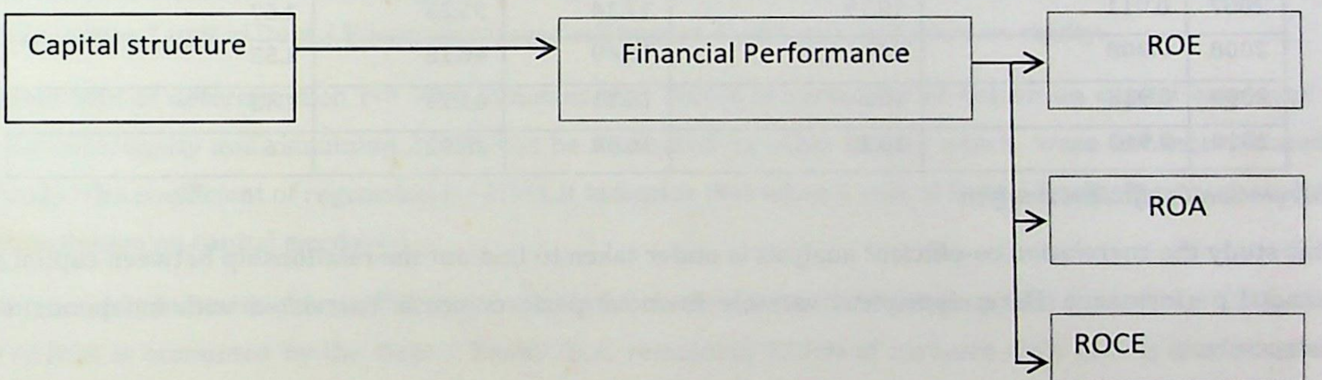

Figure 1: Conceptual Model

Capital structure: Capital structure refers to the way in which an organization is financed by a combination of long term capitals and short term liabilities

Profitability: Profit is a measure of the efficiency of the business. It also generates funds which provide life blood to the business and for achieving many other objectives.

V. Hypothesis

Possible hypotheses were formulated based on literature conceptualization of the research problem and research topic. The objective of this study was to assess the relationship between capital structure and profitability. This research was conducted based on the following hypotheses.

H1:-The capital structure has significant impact on financial performance.

H2: There is positive relationship between capital structure and financial performance

ISBN 978-93-82338-07-9 | © 2012 Bonfring

VI. RESEARCH SAMPLE

The researcher had to analysis overall of financial and other information of commercial bank. The researcher considered the information produced in the past five year (2006-2010). This research mainly depended on secondary data. It was a financial analysis so this research focus on financial statement regarding the capital structure and financial application were obtained from the annual report. Data analysis was done by using ratio analysis and the correlation and regression analysis and statistical explanation.

VII. DATA ANALYSIS

According to the table 1 Debt to capital ratio is 0.929 times in 2006, and then it decreased to 0.911 time in 2007 and 00.908 in 2008. But it increased to 0.912 in 2008. Finally it felt to0.910 in 2010. The commercial bank's debt /equity is higher than equity capital .the debt/equity is increased from 9.6 times in 2008 to 10.3 times in 2010. The existence of debt in the capital structure was to be risky. The firm has a legal obligation to make interest payment on time. ROCE was increased from 29.0 in 2006 to 46.15 in 2008. But ROCE is falling from 46.15 to 28.92 in 2010.

Table 1: Calculations

Year	Debt to capital (%)	Debt/equity(times)	ROE (%)	ROCE	Return on assets
2006	0.929	12.99	12.94	29.00	1.00
2007	0.911	10.19	17.14	35.23	1.67
2008	0.908	9.86	16.49	46.15	1.55
2009	0.912	10.3	15.11	41.79	1.43
2010	0.910	10.1	16.59	28.92	1.6

A. *Correlation Coefficient Analysis*

In this study the correlation co-efficient analysis is under taken to find out the relationship between capital structure and financial performance. Here, dependent variable financial performance is correlated with independent variable capital structure.

Table 2: Correlations of Coefficient

	Debt / Equity	Debt to Capital	ROE	ROCE	ROA
Debt / Equity					
Debt to Capital	.961*				
ROE	-.927*	-.925*			
ROCE	-.882*	-.789	.783		
ROA	-.934*	-.892*	.949*	.713	

In the table 2, the Correlation value between Debt equity and Debt to capital of Bank is 961** which is significant at 0.01 level; represent Strong Positive relationship between them. The Correlation value between debt equity and return on equity of Bank are -.927* which is significant at 0.05 levels; represent Strong Negative relationship between them. Therefore when debt equity increases, financial performance for commercial bank decreases. The Correlation value between debt Equity and return on capital employed of Banks is -882.* which is significant at 0.05 level; represent Strong Negative relationship between them. The Correlation value between debt equity and return on asset of Bank is -.934* which is significant at 0.05 levels, represent Strong Negative relationship between them

The Correlation value Debt to capital and Return on Equity of Banks is-.925* which is significant at 0.05 levels, Strong Negative relationship between Debt to capital and Return on equity of Bank. The Correlation value Debt to capital and Return on asset of Banks is which is -.892* significant at 0.05 levels, Strong Negative relationship between them. The value of Correlation between debt to capital and return on capital employed of Bank is -.789 which is not significant at 0.05 levels, represent Negative relationship between debt to capital and return on capital employed of Bank.

B. Regression Analysis

Here financial performance is the dependent variable and capital structure of the independent variable. From these independent and dependent variables, the following relationships are formulated (Table 3).

Table 3: co-Efficient Determinant

Model	R	Adjusted R^2	B	T	Sig.
Debt / Equity and ROE Constant	.930[a]	.819	-.664 24.331	12.115	.001
Debt /equity and ROCE Constant	.882[a]	.704	-2.441	7.375	.005
			73.543		
Debt/Equity and ROA Constant	.934[a]	.830	-.122	8.695	.003
			3.103		

The R Square is a descriptive measure of goodness of fit. Here 81.9% of the ROE influence on the debt to equity. Another 18.1 percentage is influenced by other determinants of debt to equity .The coefficient of regression β is-0.664. It indicates that when 1 unit of Debt / Equity increases took impact -0.664 unit on Return on equity.

The coefficient of determination r^2 is 70.4. It means that 70.4% of variability of Return on capital employed can be accurate by debt/equity and remaining 29.6% can be attributed by other factors which were not incorporated in the present study. The coefficient of regression is -2.441.It indicates that when 1 unit of Debt / Equity increases took impact-2.441unit on Return on capital employed.

The above table indicates the coefficient of correlation between the Debt / Equity and ROA. R^2 is 0.872. 87.2% of variance of ROA is accounted by the Debt / Equity. But, remaining 12.8% of variance with ROA is attributed to other factors. The coefficient of regression is -0.122. It indicates that when 1 unit of Debt / Equity increases took impact-0.122unit on Return on assets.

VIII. Conclusion

The objective of this study find out the relationship between the capital structure and financial performance of commercial bank of Ceylon plc's over 2006-2010 period. Hypothesis one is "There is a positive relationship between the capital structure and bank's financial performance".Objective1 - To Evaluate the interrelationship between capital structure and performance. It has the following result

	ROE	ROCE	ROA
Debt/equity	-.927*	-.882*	-.934*
Debt to capital	-.925*	-.925*	-.892*

so, there is negative relationship between the capital structure and bank's financial performance". At the same time correlation Value is significant at the 0.05 level of (2- tailed). Therefore objective 1 has been achieved by this hypothesis.

ISBN 978-93-82338-07-9 | © 2012 Bonfring

Hypothesis 2 is as Level of capital structure significant on performance of commercial bank.objective2 - To reveal the impact of capital structure on financial performance. There is significant negative relationship between the capital structure and bank's financial performance at 0.05 significant levels. So H_2 is accepted. Therefore Objective 2 is achieved by accepted this hypotheses. Correlation analysis explains that there is strong positive relationship between debt equity and debt to capital (0.961). ROE, ROCE, & ROA has strong negative relationship with Debt equity at -0.927, -0.882, &-0.934 respectively. ROE, ROCE, &ROA has also strong negative relationship with debt to capital at -0.925,-0.789 & -0.892 respectively. At the same time ROE has strong positive relationship with ROCE & ROA at 0.783 &0.949 respectively. ROCE &ROA consist also positive relationship at 0.713.

IX. Suggestions and Recommendations

The following suggestions are recommended to increase the bank's financial performance based on capital structure. The debenture and other liabilities are going on increase the deposits from public by introducing new deposits system and motivating the people to deposit money. Introducing new information technology and conducting mobile service in the rural level regarding the electronic banking system. Social responsibilities of the bank should be improved. Equity capital should be increased, because it helps to increase the financial performance measures. Due to this, financial performance is stimulated. Political changes are very important factor in the share market. It is also determine the bank performance. Therefore, political should possible to increase the financial performance of the bank. Inflation and exchange rate also affect the bank's performance. So, government should consider the economic growth to control the inflation.

References

[1] Ante public, 1998, "Measuring the performance of intelleatual Potenital in knowledge Economy, 2nd McMaster world congress on measuring and meaning Intellectual capital by the Australian Team for Intellectual potential

[2] Booth, L, Aivazian V, Demirguc-Kunt, A & Maksimovic.V(2001) Capital structures in Developing countries, the Journal of Finance

[3] Elma Puntaier (2009), "capital Structure and Profitabily, S & P 500 Enterprises in the Light of the 2008 Financial crisis" University of Leicester, Great Britain

[4] Frank, M.Z, Goyal V.K (2007), Capital Sturcture Decisions: Which factors are reliably Important?

[5] Govind Roa, D and Rao,P.M (1999), Impact of working capital on Profitability increment Industry- Acorrelation Analysis.

[6] Handbook of listed company (2009)" listed by Colobo stock exchange".

[7] Harris, M and A.Raviv(1991) "the theory of capital structure" Journal of Finance(46(1)

[8] Koperunthevi,K (2010) Working Capital Management and Firms' Performance: An Analysis of Sri Lankan Manufaturing Companies, W, ayampa journal of Management.

[9] Mahira Rafiquen(2011) Effect of Profitability & Leverage on capital structure: A case of Pakistan's Automobile Industry, economic and finance Review volume 1 .

[10] Najibullah S.(2005) An Empirical Investigation of relationship between Intellectual Capital & Firms' Market value & Financial Performance in Context of commercial banks of Bangaladesh", Independent University , Bangaladesh