A Study On Capital Structure Of Domestic And Multinational Companies

Dr. P. KANAGARAJU[1], S.SATHYA[2]

[1]Assistant professor and Research Advisor, PG and Research Department of Commerce,Thanthai Hans Roever college,perambalur pin-621 220.
[2]Research scholar (Ph.D part time),(Affiliated to Bharathidasan university,Ref. No 26317/Ph.D.K4/Commerce/Part - Time/ January 2018), PG and Research Department of commerce, Thanthai Hans Roever College, Perambalur pin- 621 220.

Abstract: Capital structure is the composition of debt and equity securities that are used to finance a company's assets. The choice of debt and equity is an important decision for the corporate sector because an optimal choice of financing decision increases the value of the firm. The Multinational corporations (MNC) has benefits over the Domestic companies (DC) with regard to debt raising capacity, wider options for raising capital, greater options to generate profits, diversification benefits, economies of scale, etc. This paper investigates the determinants of capital structure of domestic and multinational companies during the period 2010 to 2020. The study concluded that the significant capital structure determinants are Size, Return on Sales, Return on Assets and Profit.

Keywords: Determination of Capital Structure, Domestic and Multinational Companies, Multiple Regressions.

INTRODUCTION

Capital structure is the composition of debt and equity securities that are used to finance a company's assets. The term capital structure may be used to cover the total combined investment of the bondholders, including any long-term debt, such as mortgages and long-term loans as well as total stockholder's investment including retained earnings as well as their original investment. The choice of debt and equity is an important decision for the corporate sector because an optimal choice of financing decision increases the value of the firm. If optimal capital structures do exist and that these structures maximize firm value obtaining an understanding of the determinants of capital structure. Decisions about capital structure may have important implications in regard to shareholder wealth effects. Therefore, obtaining an understanding of the determinants of capital structure and the differences between domestic and multinational capital structure is of interest to academics, politicians, shareholders and financiers. There has been a long debate on the existence of optimal capital structure. The Multinational corporations (MNC) has benefits over the Domestic companies with regard to debt raising capacity, wider options for raising capital, greater options to generate profits, diversification benefits, economies of scale, etc. This paper investigates the determinants of capital structure of multinational and domestic companies.

Review of Literature

Ranjitha AJay, and R. Madhumathi (2010) investigated the relation between two dimensions of corporate scope, international market diversification, and product diversification and their impact on corporate leverage. The study found that multinational and domestic firms differs significantly from each other with respect to leverage, tangibility, non- debt tax shield, age, size and agency cost.

Mohamad Albaity (2011) examine that the determinants of capital structure for internationalized manufacturing firms that were listed on Bursa Malaysia. The results showed that firm size and tangibility are significantly positively related with debt ratio while internationalization, profitability and company growth are significantly inversely related with debt ratio.

Omar Farooq (2012) examines the leverage policies of multinational corporations (MNCs) in comparison to those of local Corporations in the MENA region. He found that the multinational firms tend to have low debt ratios (as Measured by total debt to total asset ratio and total debt to total equity ratio) than other firms. Result shows that there is no impact on the extent of information asymmetries on debt ratios of local firms

Sashoarso and Aleksandar Naumoski (2013) examined that the determinants have significantly influenced the capital structure of the companies in the Balkan Countries. The study suggests that the governments of these countries should put more effort on stimulating the use of other sources of financing to relieve the possible excessive company dependence on the banking sector.

Abira Mohsin (2015) examined that determinants of capital structure of domestic and foreign companies large listed Norwegian and foreign public firms. The results reveal that for long-term debt ratio (LTD/TA), non-debt tax shield, inflation and exchange rate are the most significant determining factors for adopting a capital structure in both domestic and foreign firms. The results also show that for short-term debt ratio (STD/TA), non-debt tax shield again is a significant explanatory factor along with tangibility and exchange rate at a lesser scale. Domestic firms prefer short-term debt but foreign firms prefer long-term debt as a source of external financing. Suggest that such goals can be achieved by an optimal combination of debt and equity which may result in a low average weighted cost of capital to the firm.

The previous studies reveal the differing relationships of variables with leverage ratio. The results differ depending upon the measurement of independent variables. Thus the present study proposes to analyse the determinants of capital structure domestic and multinational corporations.

Design of the Study
The research design of the study comprising of statement of the problem, need of the study, objectives, hypothesis and methodology are discussed hereunder.

Statement of the Problem
Several factors influence the capital structure of domestic and multinational companies at different points of time in different markets with regard to different sources, hence the study pertaining to these aspects with regard to Indian domestic and multinational corporations is expected to throw some light into the financial management practices, which would be of use to both academicians as well as investing public. Debt and Equity are to be implemented in appropriate proportion to maximize the value of the firm. This study helps to identify the financial position of the firm and also helps in taking decisions for the betterment of the company.

Need of the Study
The choices of Debt and Equity in designing the capital structure are the most important financing decision. The capital structure analysis helps in reducing the cost of capital which leads to increase the earnings and growth of the company. Therefore this study helps the shareholders in investment decisions.

Objectives of the Study
- To analyse the relationship between the capital structure and its select determinants of domestic and multinational companies.
- To analyse the impact of select variables on the capital structure of the domestic and multinational companies.

Hypotheses of the Study
- H01: There is no significant relationship between the capital structure and its select determinants of domestic and multinational companies.
- H02: There is no significant impact of select determinants on the capital structure of domestic and multinational companies.

Methodology
Selection of sample
The study investigates the capital structure of companies in domestic and Indian based multinational companies. The sample is taken from Electric Utilities sector companies in BSE S&P 500. Electric Utilities sector companies in BSE S&P 500 consist of 19 companies which include 13 multinational and 6 domestic companies. Based on the availability of data in CMIE Prowess database 5 multinational and 5 domestic companies are analyzed in this study. The 5 multinational companies indicate Adani Power Ltd, NAVA Bharat Ventures Ltd, and Power Grid Corporation of India Ltd, Reliance Power Ltd and Tata Power Ltd. The 5 domestic companies are BF Utilities Ltd, PTC India Ltd, NHPC Ltd, Rattan India Power Ltd and Torrent Power Ltd.

Period of the Study
The study covers the period of ten years from 2010 to 2020.

Tools used for the study
- Descriptive statistics
- Correlation
- Multiple Regression

Data sources
The data was collected from the Prowess data base for Domestic and Multinational Companies.

Limitations of the Study
- The study mainly depended on secondary data available from different sources.

- The study period covers only 10 years.
- This study includes only the financial factors affecting capital structure. The non financial factors are not considered in the study.

Analysis and Interpretation

Table 1:Results of Descriptive Statistics of the Domestic and Multinational Companies during the Study Period 2010-2020

DOMESTIC COMPANIES					
	DER	SIZE	ROS	ROA	PROFIT
Mean	5.946	15.765	20.056	21.630	30.228
Std. Dev.	4.427	26.727	8.794	9.311	34.53
Skewness	0.459	13.702	12.141	14.034	07.08
Kurtosis	2.036	3.052	5.651	3.487	5.347
Jarque-Bera	0.369	4.565	4.412	5.844	6.080
MULTINATIONAL COMPANIES					
	DER	SIZE	ROS	ROA	PROFIT
Mean	6.614	6.450	8.451	31.875	**61.983**
Std. Dev.	0.757	7.927	6.411	66.032	68.705
Skewness	1.478	41.798	9.798	1.273	13.204
Kurtosis	3.221	9.126	6.425	9.726	3.035
Jarque-Bera	5.833	8.271	8.192	13.508	5.532

Source: Data Collected from Prowess Database and Computed using E-views 7
DER=Debt to Equity Ratio, Profit, Size, ROA= Return on Assets, ROS =Return on Sales,
Table 1 shows the results of Descriptive Statistics on Capital Structure of Domestic and Multinational Companies. The mean value was positive for all the variables namely Debt to equity ratio, Size. Profit, Return on Sales, and Return on Assets for all the sample firms during the study period from 2010 to 2020. It is clear from the above table the variable highest mean value of 61.983 is recorded for the variable profit for Multinational Companies. The highest volatility was recorded for the variable profit for Multinational Companies. The skewness was positive value for all variables of Multinational Companies. The kurtosis value was greater than the normal distribution value 3 and its indicating leptokurtic distribution. The Jarque – Bera was greater than 5 which indicate the normality of distribution for the variables namely Debt to equity ratio, size, Profit, Return on Sales and Return on Assets of Multinational Companies.

Table 2:Results of Correlation between the Domestic and Multinational Companies during the Study Period 2010-2020

DOMESTIC COMPANIES						
		DER	SIZE	ROS	ROA	PROFIT
DER	Pearson Correlation	1	**.888**[*]	.450	.188	.455
	Sig. (2-tailed)		.044	.447	.762	.441
SIZE	Pearson Correlation	.888[*]	1	.306	.472	.812
	Sig. (2-tailed)	.044		.617	.422	.095
ROS	Pearson Correlation	.450	.306	1	.346	**.932***
	Sig. (2-tailed)	.447	.617		.568	.053
ROA	Pearson Correlation	.188	.472	.346	1	.621
	Sig. (2-tailed)	.762	.422	.568		.263
PROFIT	Pearson Correlation	.455	.812	.932*	.621	1
	Sig. (2-tailed)	.441	.095	.053	.263	
MULTINATIONAL COMPANIES						
		DER	SIZE	ROS	ROA	PROFIT
DER	Pearson Correlation	1	.430	.239	.402	.071
	Sig. (2-tailed)		.470	.699	.503	.910
SIZE	Pearson Correlation	.430	1	**.952**[*]	.611	.859

	Sig. (2-tailed)	.470		.012	.273	.062
ROS	Pearson Correlation	.239	.952*	1	.368	**.953***
	Sig. (2-tailed)	.699	.012		.542	.012
ROA	Pearson Correlation	.402	.611	.368	1	.252
	Sig. (2-tailed)	.503	.273	.542		.682
PROFIT	Pearson Correlation	.071	.859	.953*	.252	1
	Sig. (2-tailed)	.910	.062	.012	.682	
*. Correlation is significant at the 0.05 level (2-tailed).						

Source: Data Collected from Prowess Database and Computed using SPSS.16.0

DER=Debt to Equity Ratio, Profit, Size, ROA= Return on Assets, ROS =Return on Sales

Table 2 shows the results of correlation of the Domestic and Multinational Companies during the Study Period from 2010 to 2020. There is significant positive relationship between size and Debt and Equity ratio (88.8%), profit and Return on Sales (93.2%) of domestic companies. There is significant positive relationship between Return on Sales and Size (95.2%), Return on Sales and Profit (95.3%) of multinational companies. Therefore the Ho1; "The relationship between the capital structure of domestic and multinational companies is not significant" is rejected.

Table 3:Results of Model Summary of the Regression Analysis during the Study Period 2010-2020

DOMESTIC COMPANIES					
Company Name	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
BF Utilities Ltd	0.853	0.727	0.509	1.18117	2.659
PTC India Ltd	0.468	0.219	0.405	0.79758	2.392
Torrent Power Ltd	.664	0.441	0.006	0.28151	1.684
NHPC Ltd	0.719	0.219	0.516	0.79758	2.392
Rattan India Power Ltd	0.803	0.645	0.29	0.70273	1.087
MULTINATIONAL COMPANIES					
Company Name	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
Adani Power Ltd	.383	.147	.535	1.14333	1.438
Nava Bharat Ventures Ltd	.593	.351	.168	9.34079	1.629
Power Grid Corporation Ltd	.844	.712	.481	.81755	2.557
Reliance Power Ltd	.605	.366	.141	.84532	1.902
Tata Power Ltd	.650	.423	.039	.85505	2.216

Source: Data Collected from Prowess Database and Computed using SPSS.16.0

Dependent Variable: DER (Debt to Equity Ratio), Independent Variables: Profit, Size, ROA (Return on Assets), ROS (Return on Sales),

Table 3 shows the results of model fitness for the capital structure of domestic and multinational sample firms during the study period from 2010 to 2020 with Debt to Equity Ratio as dependent and Profit, Size, Return on Sales, Return on Assets as independent variables. It is noted from the above table that R square value was less than the R value for all selected domestic and multinational companies' model is good.

Table 4:The ANOVA Results of Regression Analysis during the Study Period 2010-2020

DOMESTIC COMPANIES				
Company Name	**Sum of Squares**	**Df**	**F**	**Sig.**
BF Utilities Ltd	18.58	4	3.32	.011
PTC India Ltd	0.878	4	4.33	.037
Torrent Power Ltd	0.313	4	2.98	.049
NHPC Ltd	0.894	4	2.35	.034

	Sum of Squares	Df	F	Sig.
Rattan India Power Ltd	3.592	4	3.81	.028
MULTINATIONAL COMPANIES				
Company Name	**Sum of Squares**	**Df**	**F**	**Sig.**
Adani Power Ltd	1.126	4	2.15	.019
Nava Bharat Ventures Ltd	6.001	4	2.67	.037
Power Grid Corporation Ltd	8.246	4	3.08	.024
Reliance Power Ltd	2.064	4	2.72	.013
Tata Power Ltd	2.679	4	3.91	.028

Source: Data Collected from Prowess Database and Computed using SPSS.16.0
Dependent Variable: DER (Debt to Equity Ratio), Independent Variables: Profit, Size, ROA (Return on Assets), ROS (Return on Sales),

Table 4 shows the results of Analysis of Variance for the capital structure of domestic and multinational sample firms during the study period. Debt to Equity Ratio was taken as dependent variable and Profit, Size, Return on Sales and Return on Assets as independent variables. The F statistic value for domestic and multinational companies has recorded 'F' value and 'p' value which is lesser than 0.05 at 5% level. Hence the Ho1: "There is no significant impact of the capital structure of domestic and multinational companies" is rejected.

Table 5: Coefficient Results of the Regression Analysis during the Study Period 2010-2020

DOMESTIC COMPANIES		DER	SIZE	ROS	ROA	PROFIT
BF Utilities Ltd	T	1.611	1.831	.150	1.436	1.760
	Sig.	.168	.127	.887	.211	.139
PTC India Ltd	T	2.751	.166	2.062	.780	.429
	Sig.	**.040**	.875	**.094**	.471	.686
Torrent Power Ltd	T	4.504	.029	.514	1.159	.997
	Sig.	**.006**	.978	.629	.299	.365
NHPC Ltd	T	.567	.349	.866	.152	.967
	Sig.	.595	.741	.426	.885	.378
Rattan India Power Ltd	T	**.065**	1.219	1.925	1.161	.617
	Sig.	.951	.290	.127	.310	.571
MULTINATIONAL COMPANIES		DER	SIZE	ROS	ROA	PROFIT
Adani Power Ltd	T	.884	.118	.728	.150	.753
	Sig.	.417	.911	.499	.887	.485
Nava Bharat Ventures Ltd	T	1.356	.681	1.276	.511	.931
	Sig.	.233	.526	.258	.631	.395
Power Grid Corporations Ltd	T	4.231	2.396	.575	2.342	2.057
	Sig.	**.008**	**.062**	.590	**.066**	**.095**
Reliance Power Ltd	T	1.690	.676	.632	.433	.519
	Sig.	.152	.529	.555	.683	.626
Tata Power Ltd	T	2.208	.297	.672	.789	.937
	Sig.	**.078**	.778	.531	.466	.392

Source: Data Collected from Prowess Database and Computed using SPSS.16.0

Dependent Variable: DER (Debt to Equity Ratio), Independent Variables: Profit, Size, ROA (Return on Assets), ROS (Return on Sales),

Table 5 explains the co-efficient of results of the capital structure of domestic and multinational companies during the study period. It is to be noted from the results that the 'p' value of none of the variables Debt and Equity Ratio and Return on Sales for PTC Ltd and NHPC Ltd of the domestic companies were lesser than 0.05. Debt to Equity Ratio, Size, Return on Assets and Profit for Power Grid Corporations Ltd and Tata Power Ltd of the multinational companies were lesser than 0.05. Hence the Ho1: "There was no significant impact of select determinants on the capital structure of domestic and multinational companies" is rejected.

Findings and Suggestions
The study examined the determinants of the capital structure of domestic and multinational companies during the study period. The Descriptive Statistics result reveals positive mean value for all variables of the multinational companies. The highest volatility was recorded for profit of Multinational Companies. The skewness was positive value for all variables of Multinational Companies. The kurtosis value was greater than the normal distribution value 3 and its indicating leptokurtic distribution Debt to equity ratio, size, Profit, Return on Sales and Return on Assets of Multinational Companies. The Jarque – Bera was greater than 5 which indicate the normality of distribution Debt to equity ratio, size, Profit, Return On Sales and Return on Assets of Multinational Companies.

The correlation result reveals significant relationship between the capital structure of domestic and multinational companies. The regression result concludes significant impact of select variables on capital structure of domestic and multinational companies.

CONCLUSION
This study investigates the determinants of capital structure of the domestic companies and multinational companies for the period of ten years from 2010 to 2020. The study concluded that there is significant impact of select variables on capital structure of domestic and multinational companies.

REFERENCES
1. Abira Mohsin (2015) "Capital structure determinants for large listed Norwegian and foreign public firms", Handelshoykolen Ved HiOA OSLO 2016, 31-62.
2. Mari Avarmaa, Aaro Hazak, Kadri Männasoo (2008) "Capital structure formation in multinational and Local companies in the Baltic States", Baltic Journal of Economics 11(1) (2011) 125-145.
3. Mohamad Albaity (2011) "Internationalization and capital structure; Evidence from Malaysian Manufacturing firms'', Asian Journal of Finance & Accounting", ISSN, 1946- 052X2013, Vo. 5, No. 2.
4. Omar Farooq (2012) "Do Multinational and Local Corporations Differ in Their Leverage Policies? Evidence from the MENA Region", The Journal of Applied Business Research", Volume 32, Number 1.
5. Paolo M. Panteghini (2004) "The capital structure of multinational companies under tax competition" Int Tax Public Finance (2009) 16: 59–81 DOI 10.1007/s10797-007-9055-7.
6. Ranjitha AJay, and R. Madhumathi (2010) "Diversification strategy and its influence on the capital structure decisions of manufacturing firms in India'', International Journal of Social Science and Humanity", Vo. 2, No.5, Sep 2012.
7. Sashoarso and Aleksandar Naumoski (2013) "Determinants of capital structure: An Empirical study of companies of selected post- transition economies", Preliminary communication", UDC.658.14/.17 DOI:10.18045/zbefri.2016.1.119.
8. Shumi Akhtar, (2001) "Australian Multinational and Domestic Corporations Capital Structure Determinants" Accounting and Finance", 57 (2019) 319–349.