Factors Of Capital Structure: A Case Study Among Listed Companies In Colombo Stock Exchange Under S&P Sl 20 Index

*AhamedLebbe Abdul Rauf
** SubaitheenFathima Nuflah

* & **Department of Accountancy and Finance, South Eastern University of Sri Lanka

Abstract

This study attemptedto examine determinants of capital structure on the leverage of the listed companies of Colombo stock exchangeunder S&P SL 20 index by using firms' internal factors with debt to equity ratio and tested the hypothesis in the context of fourteen S&P companies in Sri Lanka, over the period of 2004-2015.For thepurpose of determining capital structure, six firm level explanatory variables of profitability, tangibility, size, growth, age and tax-shield were selected and regressed against the appropriate capital structure measure of debt to equity ratio. A sample of fourteen S&P SL 20 index specific companies was taken and secondary data were collectedover the study period of 2004 - 2015. For the purpose of data analysis, descriptive, correlation and multiple regression analysis are applied.

The regression results reveal that the R squared is 0.736 which indicates that about 73.6 percent of the variability of debt to equity ratio is explained by the selected firm-specific factors of profitability, tangibility, size, growth, age and tax-shield. Further results reveal thatprofitability, tangibility and age are negatively related to debt to equity ratio as indicated by their respective coefficients. However size, growth and tax-shield proved a positive association with the leverage ratio and are expressed by their coefficients.The tax-shield is only found to have a positive relationship with leverage and it is statistically significant, but size and growth are insignificant with leverage. The study suggested investors should observe its performance before making decisions, managers should give substantial attention to growth rate variable before lenders seek to evaluate and predict the risk associated with lending capital to their respective borrowers.

Keywords: Capital structure, debt to equity ratio, profitability, tangibility

Background of the Study

The capital structure decision is one of the most important decisions made by financial managers in this modern era. The capital structure decision is at the center of many other decisions in the area of corporate finance. One of the many objectives of a corporate financial manager is to ensure low cost of capital and thus maximize the wealth of shareholders. Hence, the capital structure is one of the effective tools of management to manage the cost of capital. An optimal capital structure is reached at a point where the cost of the capital is minimal. But, what are the potential determinants of such optimal capital structure? This is the key question that has been answered by this research in the case of listed companies, of Colombo stock exchange (CSE) under S&P SL20 index that covers largest blue chip companies chosen from the universal of all stocks listed on CSE.To broader the understanding of capital structure models, Rajan and Zingales (1995) have attempted to find out whether the capital structure choices in other countries are made based on factors that similar to those capital structures influencing ones in U.S firms. Four factors; tangibility of assets, growth, firm size and profitability were tested to see their influences on leverage.

However, there were not many researches directed towards developing countries that saw the applicability of the theories of capital structure developed from the developed nations. Booth et al. (2001), Maghyereh (2005), Amidu (2007), Abor (2008), and Bas et al. (2009) were among the scholars who have studied the capital structure issues in the developing nations. Thus, one of the prominent studies was done by Booth et al. (2001). They have undertaken an interesting study by taking secondary data from the International Finance Corporation (IFC) for the largest companies in 10 developing countries. Several variables were tested and

1

analyzed to explain capital structure determinants by considering the impact of taxes, agency conflicts, financial distress and the impact of informational asymmetries. The variables mentioned include tax, business risk, asset tangibility, sales, return on assets and market-to-book ratio. On the other side, one of the latest studies was conducted by Bas et al. (2009) in developing countries.

The capital structure of firms has not also been investigated; there is no clear understanding on how firms construct their capital structure and what internal factors influence their corporate financing decision. Therefore, given the unique financial features of banks and the environment in which they operate, there is a strong ground to conduct a separate study on capital structure determinants in companies (Myers,1984).

Kareem and Saud (2014) study, they investigated five determinants of capital structure (leverage) in three subsectors of the Omani Industrial companies (food, construction and chemical) listed on Muscat securities market for the period 2008–2012. The findings of the study indicatedthatthere is a statistically positive association between risk and tangibility and leverage. Also, there is a statistical negative association between growth rate and profitability and leverage, while there is no association with size. Regression analysis indicates that size, tangibility and risk have a statistically significant effect on leverage.

 Zhang (2010) investigated   into the determinants of capital structure for the small and medium sized enterprises (SMEs) in British manufacturing industry and the effects of product category on the determinants of capital structure. Results suggested that profitability, tangibility and size are positive and growth is negatively related to the debt/equity ratio, and age is in inconsistent relationship with the debt/equity ratio of British manufacturing SMEs. Product category does exert effects through the determinants of capital structure and profitability is the most important determinant through which product category imposing effects on capital structure.

Atseye, Ndifon and Awara (2014) they investigated in a developing economy, such as Nigeria's, financial markets lack the capacity to meet the financial requirements of business firms. Firms utilize loans, leases and other interest-bearing financial obligations as sources of debt financing. The results of the regression indicated that profitability, tangibility, volatility (operational risk), growth opportunities and firm size are important factors influencing the choice of financial mix among Nigerian firms.

Nwidobie and Mike (2015)they examined the determinants of corporate capital structure of thirty-five firms listed on the NigerianStock Exchange between 2006 and 2012. Results reveal that the three leverage ratios (Total Leverage Ratio, Long-Term Leverage Ratio and Short-Term Leverage Ratio) are negatively and significantly related to profitability. Firm size and asset tangibility are, however, positively and significantly related to leverage proxies. This study, therefore, tried to examine determinants of capital structure on the leverage of the listed companies of Colombo stock exchangeunder S&P SL 20 index by using firms' internal factors with debt to equity ratio and tested the hypothesis in the context of fourteen S&P companies in Sri Lanka, over the period of 2004-2015.

Methodology

The framework of this study comprised of seven variables, dependent variable (debt to equity ratio) and six independent variables are profitability, tangibility, size, age, growth and tax shield.
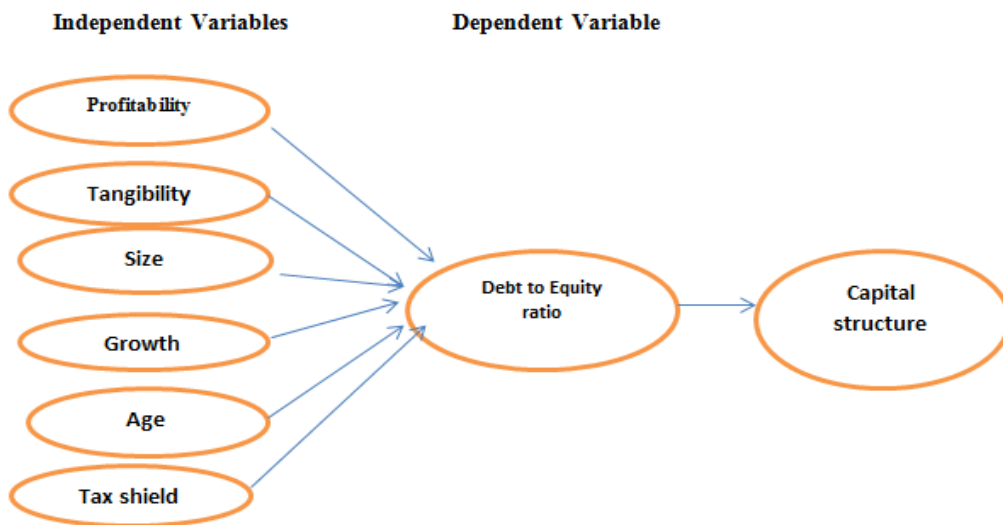
Source: Researcher Developed

Figure 1 Conceptual Framework for the Research

This research presents an empirical analysis of the determinants of capital structure of listed companies of CSE under S&P SL20 index with most recent available data. It is an explanatory research and has employed a quantitative method. For this purpose descriptive, correlation and multiple regression analysis are applied. A multivariate regression model was used to analyze the data collected from the financial statements of listed companies of CSE which have an age 12 years and above. Based on the regression outputs, test of the data used and hypotheses; and analysis of the result were made.

Table 1 Measurement of variables

	Name of variables	Formulas
Dependent variables	Debt to Equity ratio (DER)	Total liabilities/total share holders' equity
Independent variables	Profitability (PR)	Operating income/total asset
	Tangibility (TA)	Fixed asset/total asset
	Size (SZ)	Natural log of total asset=In(total asset)
	Growth (GR)	(TA current year-TA previous year/TA previous year)*100
	Age (AG)	Number of years in business.
	Tax-shield (TXS)	Interest expenses*corporate tax rate

Due to availability of data for this study, the study considers only 14 companies under S&P SL20 index of cse, which were listed on the Colombo Stock Exchange in Sri Lanka for a period of twelve years from 2004 to 2015. This study period has been specifically chosen after considering both the availability of data and the effective management of the research work.

Results and Discussion

Table 2 demonstrates the summary of descriptive statistics for the variable values used in the sample. The summary of descriptive statistics includes the mean, standard deviation,

3

minimum and maximum of one dependent variable (DER) and six explanatory variables (PR, TN, SZ, GR, AG, TXS) from year 2004 – 2015. The data contain samples of fourteen listed companies under S&P SL 20 index in Colombo stock exchange for the past twelve years (2004 – 2015)

The average annual profitability of the listed companies under investigation is found to be 74.5 percent. Since profitability was measured by the ratio of operating income to total assets, the maximum attained average profitability rate is 13.2 whereas the lowest recorded average profitability rate is 0.002. The mean of asset composition is found to be 38.39 percent indicating that the listed companies fixed assets represent only 38.39 percent of the total assets. Due to the nature of the business companies have high current assets, which is equal to approximately 61.61 percent. The growth of assets over the twelve year study has recorded an average rate approximately 20 percent. Where all the companies' scores are between negative growth of - 24 percent and highest growth score of 674 percent.

Table 2 Summary of Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
DER	168	14.56	20.60	17.46	.11	1.53
PR	168	.00	13.27	.74	.13	1.71
TN	168	.01	1.30	.38	.02	.35
SZ	168	.02	234.04	7.33	1.77	23.06
GR	168	-24.79	674.18	20.52	4.15	53.79
AG	168	9.00	171.00	64.07	3.87	50.26
TXS	168	807.40	1.00	1.56	1.88	2.44
Valid N (listwise)	168					

Source: SPSS output

The analysis of the relationship between dependent variable (DER) and independent variables (PR, TN, SZ, GR, AG, TXS) is detailed in Table 3 as follows using the correlation matrices.

The Pearson correlation of coefficient between DER and profitability is -0.427, this negative coefficient illustrates; there is a lower negative correlation between the DER and profitability of the firms. If one variable increase other variable will decrease. At significant level, the correlation is negative, but highly significant. The Pearson correlation of coefficient between DER and tangibility is -0.584, this negative coefficient illustrates; there is a lower negative correlation between the DER and tangibility of the firms. If one variable increase other variable will decrease. At significant level, the correlation is negative, but highly significant. Correlation of coefficient between DER and SZ is positive (0.330), this positive sign which means that the variables have direct correlation with each other; this implies that an increase in the size of the companies is associated with an increase in leverage. The result indicates that the return rates are positively proportional to the DER. At significant level, the researcher statistically concludes that, the correlation between DER and size is positive and highly significant.

Table 3 Correlation Matrix for Variables

		DER	PR	TN	SZ	GR	AG	TXS
DER	Pearson Correlation	1						
PR	Pearson Correlation	-.427**	1					
TN	Pearson Correlation	-.584**	.380**	1				
SZ	Pearson Correlation	.330**	-.092	-.228**	1			
GR	Pearson Correlation	.036	-.014	-.071	.036	1		
AG	Pearson Correlation	-.370**	.336**	.214**	-.126	-.070	1	
TXS	Pearson Correlation	.724**	-.132	-.474**	.134	.002	-.059	1

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

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

Source: SPSS output

The correlation of coefficient between DER of the companies and GR is 0.036 positive, which means that the growth rate of the companies increase the firm's profitability. At significant level statistically concludes that, the correlation between firm growth rate and GR is positively insignificant.The correlation of coefficient between DER and AG is negative (-0.370), this negative sign which means that the variables have indirect correlation with each other; this implies that an increase in the age of the companies is associated with and decrease in leverage. The result indicates that the return rates are negatively proportional to the DER. At significant level, the researcher statistically concludes that, the correlation between DER and age is negative and highly significant.The correlation of coefficient between DER and TXS is highly positive (0.724), this positive sign which means that the variables have direct correlation with each other; this implies that an increase in the tax on the companies is associated with an increase in leverage. The result indicates that the tax shield is positively proportional to the DER. At significant level, the researcher statistically concludes that, the correlation between DER and size is highly positive and significant.

The results also show that size, growth and tax shield are positively correlated to profitability, while profitability, tangibility, and age have negative correlation with profitability. This implies that the larger size of listed companies and growing companies tend to have higher profitability, whereas, profitable listed companies tend to have fewer tangible assets.And also growth rate have insignificant but other variables are have significant relationship.As concluding analysis, the selected explanatory variables are found to have a strong and significant relationship with the dependent variable. Therefore, the selected independent variables can explain the dependent variable with a considerable degree.

The regression result is generated based on the specified model. Therefore, the results of the regression analysis are discussed in relation to each of the independent variables in Table 4.

5

The F-statistics of the regression result (F=74.98) and its p-value 0.000 proves there is a significant relationship between the capital structure (leverage) measured in terms DER and the determinant explanatory variables measured in terms of PR, TN, SZ, GR, AG and TXS.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	17.573	.148		118.930	.000
PR	-.186	.041	-.209	-4.578	.000
TN	-.583	.215	-.137	-2.709	.007
SZ	.011	.003	.172	4.131	.000
GR	3.272	.001	.001	.028	.978
AG	-.006	.001	-.213	-4.910	.000
TXS	3.729	.000	.596	12.925	.000
R	.858a				
R square	.736				
Adjusted R square	.727				
F	74.979				.000a
N = 168			Durbin-Watson =1.924		

a. Dependent Variable: DER

Source : SPSS output

The R squared is 0.736 which indicates that about 73.6 percent of the variability of debt to equity ratio is explained by the selected firm-specific factors (Profitability, Tangibility, Size, Growth, Age and Tax-shield). In other words, about 73.6 percent of the change in the dependent variable is explained by the independent variables that are included in the model.The following multi linear regression (MLR) model results explain the relationship between leverage (total debt to assets – TDA) and the capital structure determinants;

DER = 17.53 – 0.186PR -0.58TN + 0.011SZ +3.27GR -0.006AG + 3.279TXS + e

The t-statistics show that the explanatory variables such as profitability, tangibility, size, age and tax-shield appear to be significant. Profitability, size and tax-shield aresignificant at 1 percent significance level and growth rate is highly insignificant at 10 percent significance level.

Profitability, tangibility and age are negatively related to debt to equity ratio as indicated by their respective coefficients of -0.186, -0.583 and -0.006. The negative effect of profitability on DER is very low, such that a 1 unit increase in profitability (keeping other variables constant) would decrease the tendency of the listed companies' debt taking by 0.186 units. However size, growth and tax-shield proved a positive association with the leverage ratio and are expressed by their coefficients of 0.011, 3.272 and 3.279 respectively.

6

The regression results show a negative relationship between profitability and leverage, because profit has a negative coefficient (-0.186). Profitable firms accumulate internals funds and this enables them to depend less on external debts. Even though profitable firms may have better access to external financing, the need for debt finance may possibly be lower, if new investments can be financed from accumulated funds. This finding is consistent with the pecking order theory that suggests that profitable firms prefer internal financing to external financing. There is no support of risk influencing the level of leverage of firms in Sri Lanka. The coefficient of risk on leverage indicates highly significant (0.000).

In this study, the sign of the tangibility variable coefficient is found to be negative, and statistically significant. This result, tangibility significant variable, contradicts with various previous research findings. However, the observed sign coincides with the static trade-off theory, pecking order theory and agency cost theory that theorizes negative relationship between leverage and tangibility. The observed sign implies that firms with high tangibility tend to finance their investments with external financing and they tend to prefer debt over equity. In general, with the exception of the significant result, tangibility's observed negative relationship with debt to equity ratio is generally consistent with prediction and assumption that firms with higher ratio of fixed assets serve as collateral for new loans, favoring debt.

This study found size to be highly statistically significant at the 1 percent level and have positive impact on the firm's leverage. This suggests that larger companies of cse tend to have higher leverage ratios. But the regression result of significance linked to growth (GR) rejected the alternative hypothesis favoring the null hypothesis that infer no any significant relationship between capital structure and growth variable.

In this study, age is estimated to have a significant negative relationship with The leverage of listed companies in CSE. The negative relationship is statistically significant at 1 percent significance level. This implies that older listed companies use more debt than younger or newer ones do. Numerically, the 0.006 coefficients of age variable (making the other variables constant) imply that every additional 1 year increases the leverage measure (DER) by 0.006. The observed sign coincides with the static trade-off theory, but opposes pecking order theory. Accordingly, with 1 percent significance level and direct relationship between age and leverage, it is expected that aged listed companies in CSE maintain a high debt to equity ratio and utilize more debt source compared to equity source. In this study, TXS is found to have a positive relationship with leverage and is statistically significant at the 1 percent level of significance. This result is consistent with the static trade-off theory for short term loan but contradicts with long term loan. Operating in a developing country, most listed companies in CSE. Use short term financing due to macroeconomic factors, and the characteristics of the firm.

Conclusion and Recommendation

This study was carried out in order to investigate capital structure and profitability of the manufacturing sector. It has analyzed two important aspects of capital structure and profitability and performance evaluation by descriptive, regression and correlation analysis. The conclusions for objectives have been identified and appropriate recommendations for the future work in the same area were given as suggestion in the research point of view.

As a result, profitability variable attained an inverse relationship with the capital structure measure that supports Pecking order theory, but opposes the Static trade-off theory. This suggests that highly profitable listed companies in CSE maintain low debt to equity ratio and they utilize more equity sources as compared to debt sources for making their capital structure. Tangibility variable has a direct relationship with financial leverage and also statistical significance. That is, tangibility variable does have influence on listed companies' financial decisions with negative relationship. This relationship is consistent with the three theories of capital structure.

7

Size variable displayed a positive relation with financial leverage and is found to be a more important determinant of companies financing pattern. Larger companies in the CSE listed companies maintain high leverage ratios. Therefore, the size's relationship with financial leverage supports the static trade-off theory and Agency cost theory but contradicts with Pecking order theory. The negative relationship between age and leverage was also found out as significant determinant variable of companies' financial decision. The positive relationship between growth and financial leverage supports Static trade-off and Agency cost theories of capital structure. Lastly, tax shield variable displays a positive relation with financial leverage.This positive relation verifies that firms with high tax-shield use more debt than equity. This evidence is consistent with the static trade-off theory for only short term debts.From the test of consistency of capital structure relevancy results, the researcher asserted that all the capital structure relevancy theories: Static trade-off, Pecking order and Agency cost theory is partially accepted in listed companies of CSE, though there is more evidence for the static trade-off theory

As a concluding remark, this research found that profitability, size, age and tax-shield are some among the firm-specific factors that determine listed companies, of cse' capital structure and are also found to be similar to the factors that influence the capital structure of firms in developed and other developing counties that are studied by different researchers. However, in acknowledging the influence of other pertinent factors, like corporate governance, legal framework and institutional environment of the countries; that are not included in this study, capital structure decision is not only the product of firm's own characteristics but also the macroeconomics environment in which the firm operates.

The findings of the study are deemed to benefit investors, professional managers, lenders, academicians and policy makers in the country. Therefore, the writer has, based on the major findings discussed above, drawn the following recommendations to investors, listed companies under S&P SL20 index, lenders, policy makers in Sri Lanka and academicians.External investors and shareholders should appreciate the discussed variables that determine the capital structure of particular listed companies and observe its performance before making decisions of whether or not to buy or sell its particular stock when secondary market begins to operate in Sri Lanka.

The study has identified the determinants of capital structure of listed companies in CSE. Therefore, companies should stipulate standards to determine the proportion of debt to equity ratio. The financial managers of listed companies should give substantial attention to growth rate variable.Before lenders seek to protect themselves from excessive use of corporate leverage through the use of protective covenants, they should consider the capital structure determinant variables studied above to evaluate and predict the risk associated with lending capital to their respective borrowers.

References

Abor. J (2008) Determinants of the Capital Structure of Ghanaian Firms. *African Economic Research Consortium, Nairobi,* 176, 1-34.

Adedeji.A (1998) Does the Pecking Order Hypothesis Explain The Dividend Payout Ratios Of Firms In The UK? *Journal of Business Finance and Accounting,*25 (9/10), 1127-1155.

Al Ani.K.M, andAl Amri.M.S(2015) Verslas: Teorija ir praktika / Business: Theory and Practice. Retrieved from http://www.btp.vgtu.lt16 (2), 159–167.

Allen.D. (1991) The Determinants of the Capital Structure of Listed Australian Companies: the Financial Manager's Perspective, *Australian Journal of Management,* 16 (2), 103-28.

Allen.D. and Mizunot, H (1989) The Determinants of Corporate Capital Structures: Japanese Evidence, *Applied Economics*, 21 (5), 569.

Allen. M (1995) Capital Structure Determinants in Real Estate Limited Partnerships", *Financial Review*, 30 (3), 399-426.

Amidu.M. (2007) Determinants of capital structure of banks in Ghana. *Journal of Management,* 2, 67-79.

Ashenafi.B. (2005) Determinants of Capital Structure in Medium Enterprises in Ethiopia. Research paper, Submitted to Addis Ababa University, School of Graduates, Ethiopia.

Atseye.F.A and Ndifon.O.and Awara.F (2014) Determinants of Financial Structure: Evidence from Nigerian Quoted Firms,R*esearch Journal of Finance and Accounting.*

Barclay.M. and Smith. C.M. (1999). The Capital Structure Puzzle: Another look at the evidence. *Journal of Applied Corporate Finance*, 12, 8-20.

Benkraiem. R, Gurau. C. (2013) How do Corporate Characteristics Affect Capital Structure Decisions of French SMEs? *International Journal of Entrepreneurial Behaviour and Research* 19(2), 149-164.

Booth. L, Aivazian.V., Demirguc-Kunt. V.,and Maksimovic, V (2001) Capital structures in developing countries,*Journal of Finance*, 56, 87–130.

Diamond. D. and Rajan.R. (2000). A theory of bank capital, *Journal of Finance*, 55, 2431-2465.

Diamond.W (1989) Reputation Acquisition in Debt Markets.*Journal of Political Economy*, 97, 828-862.

Fama. E. and French, R. (2002) Testing the Tradeoff and Pecking Order Predictions about Dividends and Debt, *Review of Financial Studies*, 15, 1-33. 70

Frank, M.Z. and Goyal, V.K (2003) Testing the Pecking Order Theory of Capital Structure.*Journal of Financial Economics*, 67, 217-248.

Graham, J.R (2000)How big are the Tax benefits of Debt? *Journal of Finance 55, 1901- 1941.*

Gropp. R. and Florian. H (2007)What can corporate finance say about banks' capital structures? *Journal of Finance*, 21,1-31.

Gujarati. D. N. (2003) Basic Econometrics. 4th Edition, Boston: McGraw-Hill.

Hamid. A. and Omar.R(2005) A study on the Problems and Prospects of Franchisors in Operating their Franchise Business in Malaysia. Retrieved from http://ir.uitm.edu.my/5060/1/LP_TAHIR_A.HAMID_05_24.pdf.

Harris. M. and Raviv.A (1988) Corporate Control Contests and Capital Structure,*Journal of Finance*, 45, 321-349.

Harris. M., and Raviv. A (1991)The theory of capital structure,*Journal of Finance*, 46, 297–355.

Harris.M. and Raviv. A. (1990) Capital structure and the information role of debt,*Journal of Finance*, 45, 321–349.

Henrik. S. and Sandra. S. (2004).Capital Structure: A Swedish Real Estate Study,*Journal of Finance*, 95, 1–33.

Hovakimian.A., Opler.T., and Titman. S. (2001) The Debt-Equity Choice", *Journal of Financial and Quantitative Analysis*, 36 (1), 1-24.

Jalilvand. A. and Harris. R. S. (1984) Corporate Behavior in Adjusting to Capital Structure and Dividend Targets: An Econometric Study, *Journal of Finance,* 39 (1), 127- 145.

Jensen. M., and Meckling. W.H. (1976) Theory of the firms: Managerial behavior, agency costs and ownership structure,*Journal of Financial Economics*, 3, 305–360.

Khan .M. Y. and Jain. P. K (2006) Management Accounting and Financial Analysis. 2nd Edition, McGraw-Hill Publishing Company Limited, New Delhi, India.

Khan M. Y. (2008). Financial Management: Text and Problems. 5th Edition, McGraw-Hill Publishing Company Limited, New Delhi, India.

Klein. D. P. and Belt, B. (1993) Sustainable Growth and Choice of Financing: A Test of the Pecking Order Hypothesis, *Review of Financial Economics*, 3, (1-2), 141- 154.

Maghyereh, A (2005) Dynamic Capital Structure: Evidence from the Small Developing Country of Jordan,*Journal of Economics and Management* 13, 1-26.

Modigliani. F. and Miller,.M (1958) The cost of capital, corporation finance and the theory of investment,*American Economic Review*, 48, 261– 275.

Modigliani.F. and Miller, M (1963) Corporate income taxes and the cost of capital. American Economic Review, 53, 433–443.

Myers. S. C (1977) Determinants of Corporate Borrowing. *Journal of Financial Economics,* 5, 147–175.

Myers. S. C. (2001) Capital Structure, *Journal of Economic Perspectives*, 15, 81-102.

Myers.S. C and Majluf, N. S. (1984) financing and investment decisions when firms have information those investors do not have,*Journal of Financial Economics,* 13, 187– 221.

Najjar. B. and Taylor. P. (2008)The Relationship between Capital Structure and Ownership Structure. *Journal of Managerial Finance*, 34(12), 919-933.

Nwidobie, M.B,Kajola, S.O and Onaolapo, A.A (2015)Determinants of capital structure: A study of Nigerian quoted companies,*European Journal of Business and Management ,*7 (23),

Octavia. M. and Brown, R., (2008) Determinants of Bank Capital Structure in Developing Countries. Research Paper Series, Department of Finance, The University of Melbourne, Victoria 3010, Australia.

Pandy. I. M. (2005) Financial Mangemnt. 9th Edition, Vikas Publishing House Pvt. Ltd., India.

Perrin. R. (2002) Handbook for Collage Research. 2nd Edition, Houghton Miffilin Company, Boston, United States.

Rajan. R. and Zingales. L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data, *Journal of Finance,* 50, 47-81.

Richard. P.and Bill N. (2004) Corporate Finance and Investment: Decisions and Starategies. 2nd Edition, Prentice-Hall of India Private Limited, New Delhi, India.

Ross S.A. (1977). The Determination of Financial Structure: The Incentive- Signalling Approach, *Journal of Economics*, 8, 23-40.

Ross. S. A., Westerfield R. W. and Jaffe J. F. (2006). Fundamentals of Corporate Finance. 7th Edition, McGraw-Hill – Irwin, Boston, United States.

Shyam-Sunder.L. and Myers.S. C. (1999). Testing Static Tradeoff against the Pecking Order Models of Capital Structure, *Journal of Financial Economics*, 51, 219-244.

Titman S. and Wessels.R. (1988). The determinants of capital structure choice. *Journal of Finance,* 43, 1 –19.

Titman. S.(1984). The Effect of Capital Structure on the Firm's Liquidation Decision, *Journal of Financial Economics*, 13, 137-151.

Van-Horne J. (1989) Financial Management and Policy. 12th Edition, Upper Saddle River, Prentice-Hall, New Jersey, U.S.A.

Zhang .Y.(2010) The Product Category Effects on Capital Structure: Evidence from the SMEs of British Manufacturing Industry , *International Journal of Business and Management*, 5 (8), Au.