

CAPITAL STRUCTURE AND ITS IMPACT ON FIRM FINANCIAL PERFORMANCE: EVIDNCE FROM GRANITE MANUFACTURUNG FIRMS

Venkati Ponnala. CFA (icfai) Assistant Professor Finance CoBE, Addis Ababa University

ABSTRACT

This study aims to assess the factors that affect capital structure and their effect on profitability an important relationship that is not given much attention before in the context of granite manufacturing firms in Karimnagar Dist. The study covered 16 granite manufacturing firms operating surroundings of Karimnagar Town and a period of five years from 2010-2014 performance selected purposively. In terms of variables it considered return on equity as a performance indicator; and ECP corresponds to the short-term liability divided by the total liability; PL/ the equity divided by total liability; LP/PL which is the long-term liability divided by equity as control and explanatory variables. Descriptive, correlation and regression analysis were undertaken. Based on the results analysis of short term debt does not have significant relationship with performance. On the other hand, the long term debt has a positive and statistically significant relationship with firms' performance and thus is it instrumental in determining the firms' performance. Thus, firms need to see how they could structure their equity debt ratio in light of the findings so as to optimize their performance.

Background of the Study

Capital structure is one of the important finance topics among the studies of researchers and scholars. Its importance derives from the fact that capital structure is tightly related to the ability of firms to fulfil the needs of various stakeholders. Capital structure represents the major claim to a corporation's assets. This includes the different types of both equities and liabilities (Riahi-

Belkaonui, 1999). Capital structure is the combination of debt and equity that make the total capital of firms. The proportion of debt to equity is a strategic choice of corporate managers. Capital structure decision is the vital one since the profitability of an enterprise is directly affected by such decision. Hence, proper care and attention need to be given while determining capital structure decision. Research on the theory of capital structure was pioneered by the seminal work of Modigliani and Miller (1958). Significant empirical and theoretical extensions followed and the broad consensus paradigm, at least until recently, is that firms choose an appropriate (optimal) level of debt, based on a trade-off between benefits and cost of debt (Krishnan and Moyer, 1997). It has also been argued that profitable firms were less likely to depend on debt in the capital structure than less profitable ones and that firms with a high growth rates have a high debt to equity ratios (Harris and Raviv,1991, Krishnan and Moyer, 1997). The use of debt in an organizations capital structure has both positive and negative effects on its financial performance. Organizations that use an optimum amount of debt in their capital structure have enhanced firm value which is manifested in the form of increased sales, efficiency in production and low taxes. While firms with sub optimal use of debt in their capital structure usually suffer from a variety of financial ailments which Rajani and Zingales (1995) describes as payment of high taxes, high proportions of accounts payable, large deficits in the firms cash flow and in some cases corporate dissolution.

According to Modigliani and Miller, (1963) firms should incorporate more debt in their capital structure in order to maximize the firms value which is manifested trough high profits, increased share prices and efficiency in management. However, this theory based on stringent assumptions of perfect market those are not prevailing in practice. On the other hand, others warn of the dangers of high amounts of debt in the capital structure of a firm, which include, Bankruptcy, liquidity costs and in some cases corporate dissolution.

Financial performance is the subjective measure of how well a firm can use its assets from its primary business to generate revenues. Erasmus, (2008) noted that financial performance measures like profitability and liquidity among others provide a valuable tool to stake holders which aids in evaluating the past financial performance and current position of a firm.Financial performance evaluation are designed to provide answers to a broad range of important questions, some of which include whether the company has enough cash to meet all its obligations, is it

generating sufficient volume of sales to justify recent investment; does the company collect outstanding accounts from customers without creating burden on its cash flow, does the company make timely payments to suppliers to take advantage of discounts, and does the company have sufficient working capital to finance its operations. An effective financial performance evaluation system should be able to attain the goals of promoting goal congruence and coordination, communicating expectations, motivating, providing feedback and benchmarking the organization, (Stanford, 2006).

Mwangi, (2014) established that there exists a statistically significant relationship between financial performance and a firms capital structure. According to Mwangi, (2014) highly indebted firms at the Nairobi securities exchange registered low profits which if not checked could result in bankruptcy. This was attributed to the effect of debt interest of a firm's cash flow which is manifested in the form of inadequate working capital financing that halts the management's ability to invest in profitable ventures. The use of high proportions of debt in the capital structure of organizations has been associated with numerous cases of corporate bankruptcy. A study by Wellington, (2012) indicates that several firms in the United States of America have been placed under receivership due to issues related to their capital structure mix and in particular the use of debt. These firms include Gundhay steel firm, Imperial sugar, Rosella Inc, Washington mutual and general motors. A study by Singh and Hamid, (2010) on the effects of capital structure on the financial performance of large manufacturing firms in Asia indicated that firms in Asia used a lot of debt in their capital structure compared to manufacturing firms in developed countries and this was among the reasons why such firms had deteriorating financial performance. Hence, as the value of the firm is depends on underlying future profitability and risk of the firm, current study is devoted to the profitability and capital structure relationship in granite manufacturing firms. The findings of the previous studies are not consistent and do not allow to be conclusive about the nature of the relationship in different firms. This is particularly true for the manufacturing firms. Thus, this research was aimed at examining the relationship between the capital structure of manufacturing firms and its relationship with the performance of the firms. The matter of capital structure has gained much interest, since the MM Propositions of capital structure irrelevance. Different theories such as pecking order theory and agency cost theory were proposed. Various aspects of capital structure have been put to test and researched. The question is whether the capital structure is relevant in a real market or irrelevant and whether

a firms profitability and hence value is affected by the capital structure it employs or not? Given this, the present study attempted to understand and research on capital structure and its effect on profitability, an important relationship that is not given much attention before in the context of granite manufacturing firms that are operating surroundings of Karimnagar town.

Research questions

The research was an effort to answer the following research questions

- What is the relationship between forms capital structure and their performance?
- What is the relationship between long run financing and profitability?
- What is the relationship between short run financing and profitability?
- What is the relationship between equity on total liabilities and profitability of granite manufacturing firms?

Hypotheses:

H01: There is no significant relationship between long run financing and profitability of granite manufacturing firms.

H02: There is no significant relationship between short run financingand profitability of granite manufacturing firms.

H03: There is no significant relationship between equity on totalliabilities and profitability of granite manufacturing firms.

Review of related Literature

A firm's capital structure refers to the mix of its financial liabilities. There are two different ways of financing the assets of a company this is through equity or debt. Capital structure refers to the way a corporation finances its assets through some combination of equity and debt (Chava and Roberts, 2008). The concept of capital structure has been defined by numerous scholars in different ways, notable among them being Shefrin, (2005) who referred to capital structure as the mix of different types of securities (long term debt and common stock) which are issued by a company to finance its assets. While, Chung, (2007) and Webster, (2012) see capital structure as a mix of debt and equity financing in a firm. From all the definitions above, it is eminent that capital structure in summary refers to the structure of a firm's liability. Capital structure put's into perspective the way in which a firm finances its operations, (Brigham, 2004). This can be through a combination of debt and equity (David, 2011). The theory of capital structure is

attributed to Modigliani and Miller (1958) who in their seminal paper entailed cost of capital, corporate finance and the theory of investment, concluded that the method used to finance a firm's operation does not affect its value since a firm's value is a sum of all its profitable investments. This study was based on the assumptions that there were no taxes, brokerage costs, the firm's earnings were not affected by the use of debt and lastly no information asymmetry. According to Modigliani and Miller,(1958) the existence of a preferred source of financing was irrelevant since in the long run such a choice would not affect the value of the firm. The theory how ever had assumptions that would not hold in the real world since brokerage costs and taxes exist, while a firm's earning is affected by debt. A number of theories from then on were advanced to try and explain the rationale behind a given capital structure decision notable among them being the trade-off theory and the pecking order theory.

Theories of Capital Structure

Trade-off Theory

The trade-off theory of capital structure refers to the idea that a company chooses how much debt and equity to use in financing its operations by balancing the cost and benefits associated with each source of financing. According to the theory firms will chose an optimum capital structure that balances the benefits and disadvantages of both debt and equity.According to Jensen and Meckling, (1976) the trade-off theory predicts that weak firms will rely heavily on banks for debt while profitable and financially stable firms will rely on internally generated funds for investment. Within the trade of theory, there is a debt pecking order with bank debt being preferred over market debt due to the lower implied bankruptcy costs.The trade-off theory states that a company should not borrow up to a point where the costs of debt become too expensive for the firm to bear. The attractiveness of debt decreases with the amount of money paid out as interest to financers. A firm will experience financial distress when it is unable to cope with its financial obligation and is thus declared insolvent prompting proceeding to recover the debt to be instituted which can result in the death of a firm.

Irrelevant and Relevant Theory

Modigliani and Miller (MM), 1958 illustrates that under certain key assumptions, firm's value is unaffected by its capital structure. Capital market is assumes to be perfect in Modigliani and Miller's world, where insiders and outsiders have free access to information; no transaction cost,

bankruptcy cost and no taxation exist; equity and debt choice become irrelevant and internal and external funds can be perfectly substituted. The M-M theory (1958) argues that the value of a firm should not depend on its capital structure. The theory argued further that a firm should have the same market value and the same Weighted Average Cost of Capital (WACC) at all capital structure levels because the value of a company should depend on the return and risks of its operation and not on the way it finances those operations. Miller brought forward the next version of irrelevance theory of capital structure. He appealed that, capital structure decisions of firms with both corporate and personal taxes circumstances are irrelevant (Miller 1977). If these key assumptions are relaxed, capital structure may become relevant to the firm's value. So, research efforts have been contributed to relaxing the ideal assumptions and describing the consequences. This theory was criticized on the ground that perfect market does not exist in real life situation. Attempts to relax these assumptions particularly the no bankruptcy cost and no taxation led to the static trade off theory

Agency Cost Theory

Agency cost theory proposes that leverage disciplines managers, as the debt level may be used to monitor managers (Boodhoo, 2009). Thus, it is to be expected that increasedleverage in the context of low agency costs may raise the level of efficiency and thereby contribute to upgrading firm performance (Akintoye, 2008). Jensen and Meckling (1976)put forward the concept of agency costs. There is an agency relationship between theshareholders and creditors of firms that have substantial amounts of debt. In such firmsshareholders have little incentive to limit losses in the event of a bankruptcy. Agencytheory recognizes that the interests of managers and shareholders may conflict and that, left on their own, managers may make major financial policy decisions, such as the choice of a capital structure, that are suboptimal from the shareholders' standpoint. Thetheory also suggests, however, that compensation contracts, managerial equityinvestment, and monitoring by the board of directors and major shareholders can reduceconflicts of interest between managers and shareholders (Mehran, 1992). It is also suggested that capital structure models that ignore agency costs are incomplete. Debtfinancing is another crucial factor that limits the free cash flow available to managersandthereby helps to control this agency problem (Jensen and Meckling, 1976). Myers (1984) put forth another type of agency cost of debt which arises from theunderinvestment problem. When a firm has debt which matures after an investmentoption expires, shareholders

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories. GE-International Journal of Management Research (GE-IJMR) ISSN: (2321-1709)

have the incentive to reject projects that have positive netpresent values because the benefits from accepting the projects accrues to thebondholders without increasing the shareholders' wealth. The issuance of debt thereforeleads to suboptimal investment for the firm, requiring this type of agency cost to betraded off against the tax savings of debt financing to determine the optimal capitalstructure. Ang, Cole, and Lin (2000) on the other hand, stated that agency costs aresignificantly higher when an outsider rather than an insider manages the firm and lowerwith greater monitoring by banks.

Pecking order theory

Pecking order theory (also referred to the information asymmetry theory), was proposed by Myers (1984). According to Myers, (1984) firms prefer to finance new investments, first internally with retained earnings, then debt, and finally with the issue of new equity. Myers (1984) argues that an optimum capital structure is difficult to define as equity appears at the top and bottom of the "pecking order". According to Myers (1984) internal funds incur no floatation costs thus firms will prefer to use them to finance their investments since they have no conditions attached to it unlike debt. The pecking order theory is about what the firm's management will prefer in terms of the sources of finance to use. Firstly firms will chose internal finance that is using profits from previous years. Secondly if there is insufficient internally generated funds, firms will chose to lend money from credit institutions such as banks and thirdly as a last resort, firms will issue additional shares. In a nut shell the pecking order theory states that a firm's management favours internal financing to external financing.

Financial performance

Van Horn, (2005), defined financial performance as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term according to Pandey, (2007) is used as a general measure of the overall financial health of a business. Research on the firm's financial performance emanates from organizations theory and strategic management. The notion of financial performance is used to describe performance of an entity with the legal status of a company. The concept of financial performance is a controversial issue in finance due to its multidimensional meaning. In analysing a firm's financial performance, emphasis should be made in formulating an adequate description of the concept of a financial performance can be measured. Webster, (2012) defines financial performance as what is accomplished. In analogy

with this definition of performance, the financial performance of a firm will be defined as the outcome of a firm's strategy or an assessment of how well a firm has succeeded in reaching its objective. The measurement of performance can be very subjective, and different studies on how capital structure influences performance have used different indicators: some studies have used Return on Assets (ROA), others Return on Investment (ROI), and some others Return on Equity (ROE) (e.g. respectively Scherer and Ross 1990; Keats and Hitt 1988; and Oswald and Jahera 1991). The present study, however, utilized Return on equity to the as the proxy for company's performance.

Measures of financial performance

Financial performance has been defined by Webster, (2012) as a test of the effectiveness of the strategies employed by the firm. Operational performance measures, such as growth in sales and growth in market share, provide a broad definition of performance as they focus on the factors that ultimately lead to financial performance. The most commonly used performance proxies are Gross profit margin (G.P) Net profit margin (N.P) and operating ratio, return on capital employed (ROCE), and Return on equity(ROE). These measures are from balance sheet and income statements have been used by many researchers (for example Mehran, (2007), and Ang, Cole and Line, 2000). Return on equity is the measure of performance used in this study.

Factors affecting profitability

Profit is the primary objective of any business enterprise (Nimalathasan, 2009). Heavy capital investment is necessary for the success of all business enterprises. Profit is usually a long term objective which measures not only the success of the product and business enterprise, but also of the development of the market for it. It is determined by matching revenues against the associated costs. The only costs placed against revenue, are those which have a contribution in the generation of such revenue. An enterprise should earn profits to survive and grow over a long period of time.Capital invested is eroded if the enterprise fails to make profit, and if this situation prolongs the enterprise ultimately ceases to exist. A number of factors affect the profitability of an enterprise. Their influence varies in the short term, as well as in the long term. Recognizing these factors will be very helpful in managing a business entity. These determinants can be of a positive or negative nature. In the latter case, an important role falls to the manager of the

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories. **GE-International Journal of Management Research (GE-IJMR) ISSN: (2321-1709)**

enterprise, who must make all efforts to improve the financial results of the company (Bhutta and Hasan, 2013).

Many researchers have studied firm specific and macro-economic determinants from different visions and in different milieus. Studies that deal with internal determinants exploit variables such as size, tangibility, growth and debt to equity ratio. There is a positive significant relationship between size and profitability (Akhavein, Berger, and Humphrey, 1997; Smirlock, 1985). Leverage is positively correlated with firm size (Rajan and Zingales, 1995; John, 1999; Booth et al., 2001). The degree of which various financial, legal and other factors such as corruption affect profitability is strongly related to firm size (Bhutta and Hasan, 2013). Firm size is positively related to capital ratios (Goddard, Molyneux, and Wilson, 2004; Bikker and Hu, 2002). The growth opportunities are measured in terms of the fraction of firm's value represented for by assets in place; smaller the proportion of firm's value narrated by assets-in-place, the larger are the firm's growth opportunities (Myers, 1977). The firms with growth opportunities have moderately more development projects, new product lines, acquisitions of other companies and repair and replacement of existing assets.

Moreover, growth opportunities and firm size are positively related to profitability (Abor, 2005). Those firms with low and growth opportunities lean to show high profitability and firms in the middle of the growth opportunities incline to confirm small profitability (Serrasqueiro, Maria and Paulo, 2007). The other group of profitability determinants deals with macroeconomic variables. There is relationship between profitability and inflation (Perry, 1992). He comments that the effect of inflation on firm profitability depends on whether firms' operating expenses and its wages increase at a more rapidly than inflation. The degree of which inflation affects profitability depends on whether inflation prospect are wholly estimated (Athanasoglou, Brissimis, and Delis, 2005). Inflation is positively related to profitability. Actual inflation is significantly positive related to profitability (Athanasoglou, et al., 2005).

Research Design and Methodology

Research design is a blue print for selecting the sources and types of data relevant to the research questions. It basically, provides answers for such questions like: what techniques to be used to gather data? and what kind of sampling to be applied? (Zikgmund et al., 2003). The study employed a descriptive research design. Descriptive research design was particularly suited to the study as it involved analysis of the situation as it were, without manipulation (Osoo and

Onen, 2008). Thus, the study provides a descriptive profile of the effects of capital structure decisions on the financial performance of granite manufacturing firms. A quantitative approach was used as it is viewed as effective to gather large data and comprehensive issues at a specified period of time (Ngwenya, 2010).

Study population and sampling frame

The study was carried out in the granite manufacturing firms, which are predominantly found in surrounding of Karimnagar town. The manufacturing firms desired to be included in the study were those which had been in operation prior to 2010 so as to get at least 5 years data for analysis. Thus, the sampling frame for the study was the list of manufacturing firms that were active before 2010 and are located in surrounding of Karimnagar town. The population consisted of sixteen granite manufacturing firms as who has been operating before 2010. The study period chosen covered a period of five years from the year 2010-2014. The study opts to utilize secondary data which is derived from audited financial statements of granite manufacturing firms which are selected purposively.For the purpose of this study descriptive statistics, simple regression analysis, correlation analysis, and multiple regression analysis were used for analysis. Simple regression analysis opts to be used to directly assess the impact of independent variables on dependent variables. In order to test the hypotheses concerning the relationship between the dependent and independent variables, STATA 12 software was used.

Analytical Framework and Empirical Model Specification

To test the relationship between debt and profitability, the following function was considered where profitability is dependent upon the capital structure.

P = f (CS)ROE = f (ECP, PL, LP/PL, U)

Where:

ROE is the return rate, and it corresponds to the net income (after tax) divided by the equity;

ECP corresponds to the short-term liability divided by the total liability;

PL is the equity divided by total liability;

LP/PL the long-term liability divided by equity,

U is the error term.

ROE indicates the rate of return proportional to the equity, ECP, and PL shows the capital structure of the company, representing the short term liabilities, and equity in relation to the total liability, respectively. The index LP/PL shows the proportion of long term liabilities of in relation to the equity, and U is the error term. The process of estimation of the function will be the Ordinary Least Squares (OLS), for which the classic presuppositions are assumed in conformance to the procedures described by Hair (1998). The process of estimation of the function will be the Ordinary Least Squares (OLS), for which the classic presuppositions are assumed - in conformance to the procedures described by Gujarati (2000), Hair (1998), and Kmenta (1994). The graphic analysis of residues will be used to verify the normality of the term of error and to check if the series is homoscedastic; the presence of auto correlated residuals will be verified through the Durbin-Watson's test and the colinearity among the data for the measure of tolerance and the Variance Inflation Factor.Several functional forms will be tested, including the transformation of data and exclusion of variables, and the choice in the appropriate functional form will be made *posteriorly*, based in the coherence of the signs, significance of the parameters, measured by the test t and by the degree of adjustment of the data, appraised by adjusted R2.

Type of	Variable	Measure	Measure-	Tools Of
Variable			ment	Analysis
			Level	
Dependent	Profitability	Return on Equity = (Earnings after Interest	Scale	Descriptiv
		and Taxes / Equity)		e
Independen	Capital	Long-Term Liability to Total	Scale	Descriptiv
t	Structure	Equity = (Long-term Liability / Total		e
	(LP/PL)	Equity)		
	ECP	ECP = Short-Term Liability / Total	Scale	Descriptiv
		Liability		e
	PL	PL = Equity / Total Liability	Scale	Descriptiv
				e

 Table 1: Operationalization of the Variables

Analysis procedure

The data analyses followed four steps. Step one; involved compiling data to isolate variables that was used in the regression model. Step two, involved computation of ratios, averages and standard deviations described under data collection stage. Descriptive data analysis techniques were used to analysis the data. This involved descriptive tools such as means, mode, variance, standard deviation and frequency distribution. Step three involved conducting diagnosis tests and running the regression model. Step four involved testing the significance of the relationship between variables in the model.

Results and discussion

The descriptive statistics show that over the period under study, profitability measured by return on equity, averaged 31%. This may suggest a good performance during the period under the study given the findings of Nuru (2011) which indicated the average of 110 manufacturing firms ROE to be 3.4. On other hand, it suggests a bad picture for Indian companies when comparing with Abor, (2005) study on Ghana companies; ROE average was 37 %, and with Gill, et al., (2011) study. The ROE measures the contribution of net income per Indianrupees invested by the firms' stockholders; a measure of the efficiency of the owners' invested capital.

	Ν	Mean	Std. Deviation
ECP	65	.8830	.17321
PL	65	2.0051	1.86463
ROE	65	.3898	.48485
LP/PL	65	18.5954	71.09337

Table 2: Descriptive Statistics

Source: (Own Survey)

The Long-Term Debt to Total Equity (LP/PL) stood at 186% and Short-Term Liability / Total Liability (ECP) averaged 88%. These means indicate that on average, the Indian firms have used more debt than equity financing over the study period. Equity to total liability averaged 200%. This indicates that firms have used more equity than debt financing over the study period, confirming the fact that the firms are lowly geared institutions. The maximum and minimum values for debt/equity ratio indicate that the debt/equity composition does not vary substantially

among the firms. The variable ECP, that shows the short-term debt in relation to the total of liabilities, was 0.89 (*SD*=.17) percent on average in the analysis period. The standard deviation which was 17% is relatively higher and indicates a relatively high dispersion of data. The value of 0.89 indicates that the short-term debt corresponds to 89% of the total liability, a fact that can be explained by the low interest rates practiced in the Indian market for funding/financing of that type. The participation of equity in the financing of the companies measured by the index LP/PL, presents average of 18.5 and standard deviation of 71. The data suggest a high level of variability of that capital source, that is, an elevated number of companies falls back mainly upon equity as a financing form. The values are quite high, what is justified by the low debt level, also showing different behavior when compared to the companies headquartered in countries with developed economies.

Table 3. Correlations							
		ECP	PL	LP/PL	ROElogtrans	R ²	
ECP	Pearson Correlation	1	.423**	211	025	0.061957	
	Sig. (2-tailed)		.000	.092	.844		
	Ν	65	65	65	65		
PL	Pearson Correlation	.423**	1	270*	212	4.515166	
	Sig. (2-tailed)	.000		.030	.089		
	N	65	65	65	65		
LP/PL	Pearson Correlation	211	270*	1	0.46	21.16	
	Sig. (2-tailed)	.092	.030		.000		
	Ν	65	65	65	65		
ROElogtrans	Pearson Correlation	025	212	.460**	1		
	Sig. (2-tailed)	.844	.089	.000			
	N	65	65	65	65		
**. Correlation	n is significant at the 0.01	level (2-tail	led).				
*. Correlation	is significant at the 0.05 l	evel (2-taile	d).				

Correlation analysis and coefficient of determination

Table 3.provides the Pearson correlation for the variables that were used in the regression model. Pearson's correlation analysis was used for data to find the relationship between capital structure and profitability. The study found that the firm's profitability (measured by return on equity) is

negatively correlated with the short-term debt (ECP) and equity financing. On the other hand, it has a positive relationship with long-term debt (LP/PL) in the firms covered by the study. Short term debt accounts for only 0.06 % of the variation, while equity financing assumes 4.5 %. The largest variation is accounted for long term debt which accounts for 21.2 %.

Regression analysis

The results of the analysis of the regression estimated to evaluate the influence of the capital structure on the profitability are shown below. The study sought to investigate the relationship between capital structure and profitability measured by ROE. Regression analysis was used to investigate the relationship between capital structure and profitability measured by ROE. Ordinary least squares (OLS) regression results

Table 7. Model Summary

Model	R	R	Adjusted R	Std.	Error	of	the
		Square	Square	Estima	ate		
1	.484 ^a	.234	.196	.42598			

a. Predictors: (Constant), LP/PL, ECP, PL

The adjusted determination coefficient (R^2) shows that 20% of the variations of the return rate (ROE) were explained in conjunct by the independent variables, which, allied to the level of significance of the test F (1%), indicates a good adjustment degree.

Table	8.	Coefficients

Model		Unstandardized		Standardized	t	Sig.
		Coefficier	oefficients Coefficients			
		В	Std. Error	Beta		
	(Constant)	953	.290		-3.284	.002
1	PL	037	.032	147	-1.165	.249
1	ECP	.361	.341	.132	1.057	.295
	LP/PL	.003	.001	.448	3.822	.000

a. Dependent Variable: roelogtrans

The index LP/PL has a larger explanation power in the model, and its positive sign indicates adirect relationship. The result indicates that the return rates are proportional to the debt, in other words: the larger the debt, the larger is the profitability. Those results are in contradiction with the conclusions of Booth et al (2001), Fama& French (1998), Graham (2000), and Miller (1977). On the other hand, the initial propositions of Modigliani and Miller (1958 and 1963) find back up for in the results now discussed. The short-term debt (ECP) presented positive sign showing to be an important variable in the model. The explanation for such fact can reside in the high relative participation of that type of debt, and can also suggest that ECP is a common practice among the most profitable companies, considered the instability of the Indian economy, which arises the need of short run funds to provide the necessary working capital which are the type of resources supposedly offered with relative abundance and easiness by financial institutions. The relative participation of the equity in the capital structure of the company, represented by the index equity divided by the total liability has negative sign and this indicates negative relationship with profitability.

Conclusions:

Based on the results analysis of each hypotheses testing, overall, the conclusions are as follow: For hypothesis 1, profitability has a positive regression coefficient on short-term leverage and long-term leverage. This suggests that highly profitability firms are more likely to use short-term leverage and long-term leverage for financing their investments than the low profitability firms. Finally, profitability has a negative significant regression coefficient on equity. This suggests that highly profitability firms are less likely to use equity for financing their investments than the low profitability firms. Though long term and short term financing are positively related to performance, the short terms debt financing is not significant while the long term one stands to be significant. Therefore, it is possible to conclude that short term debt does not have significant relationship with performance. On the other hand, the long term debt has a positive and statistically significant relationship with firms' performance and thus is it instrumental in determining the firms' performance. In view of the above, unlike the argument by Pecking, higher leverage appears to be important and in influencing granite manufacturing firms, profitability positively. Besides, equity was found to be negatively related with performance; though not statistically significant. Thus, firms need to see how they could structure their equity debt ratio in light of the findings so as to optimize their performance.

References:

- Abor, J. (2005). The Effect of Capital Structure on Profitability: An Empirical analysis of Listed Firms in Ghana. Journal of Risk Finance, 6, 438-47.
- Akhavein, J. D. Berger A. N. & Humphrey, D. B. (1997). The Effects of Megamergers on Efficiency and Prices: Evidence from a Bank Profit Function, Finance and Economic Discussion Series, Vol. 9, Board of Governors of the Federal Reserve System.
- 3. Akintoye, I. R. (2008). Sensitivity of Performance to Capital Structure. European Journal of Social Science, 7(1).
- Akinyomi, O. J. (2013), Effect Of Capital Structure on Firms Performance: Evidence from Nigerian Manufacturing Company. International Journal of Innovative Research and Studies. ISSN 2319-9725 VOL 2 ISSUE 9
- 5. Ang, James S., Rebel A. Cole, and James Wuh Lin (2000) Agency Costs and Ownership Structure, Journal of Finance 1, 81-106.
- 6. Babalola Y. A. (2014). Triangulation Analysis of Capital Structure and Firms' Performance in Nigeria. East Ukrainian National University [Vol. Dahl] 91034 Lugansk, Ukraine
- Bhutta, N. T. &Hasan, A. (2013). Impact of Firm Specific Factors on Profitability of Firms in Food Sector, Open Journal of Accounting, 2: 19-25
- Bikker J. A. & Hu, H. (2002). Cyclical Patterns in Profits, Provisioning and Lending of Banks and Procyclicality of the New Basel Capital Requirements, BNL Quarterly Review, Vol. 221, No. 1, pp. 143-175.
- 9. Boodhoo, R., (2009), Capital structure and ownership structure: a review of literature, The Journal of Online Education, January Edition, p 1- 8.
- Booth, Laurence, VaroujAivazian, AsliDemirguc-Kunt, and Vojislav Maksimovic, 2001, Capital structures in developing countries, Journal of Finance56, 87-130.
- Brennan, M.J. and E.S. Schwartz, 1984. Optimal Financial Policy and Firm Valuation, Journal of Finance, 39, 593-607
- Brigham, E. F., (2004) Financial Management: Theory and Practice,11th Edition, SouthWestern College Publishers, New York
- Chava, S., and Roberts, M. R. (2008). How does financing impact investment ? The role of Debt covenants. Journal of Finance, 63(5), 2089-2121
- 14. Chung, K. H (2007) Asset characteristics and corporate debt policy; an empirical test, Journal of Business finance and Accounting, 20, 83-86.

- 15. David, P, (2011). Optimum Capital structure under cooperate and personal taxation. Journal of Financial Economics, 15, 2033-3838.
- Erasmus, P. D. (2008). Evaluating Value Based Financial Performance Measures, Journal of Finance and Accounting, 5, 56-63
- Field, A. P.(2009). Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (3rd Edition). London: Sage
- 18. Glen, J., and Pinto, B. (2007), Debt or equity? How firms in developing countries choose, paper, International Financial Corporation, Washington, DC.
- Goddard, J., Molyneux, P. & Wilson, J. O. S. (2004). The Firm performance of European Banks: A Cross-Sectional and Dynamic Panel Analysis, Manchester School, Vol. 72, No. 3, 2004, pp. 363-381.
- 20. Goldstein, R., N. Ju, and H. Leland. 2001. An EBIT-based model of dynamiccapital structure. Journal of Business 74: 483-512.
- Harris, M., A. Raviv, (1991), "The Theory of Capital Structure", Journal of Finance 46, 297– 355.
- 22. Hausman, J. A. and Taylor, W. E. (1981). Panel Data and Unobservable In- dividual Effect, Econometrica, 49(6), 1377-1398.
- Hovakimian, A., Opler, T. & Titman, S. (2002). The Capital Structure Choice: New Evidence for a Dynamic Trade-Off Model, Journal of Applied Corporate Finance, (Spring 2002), 15(1).
- 24. Jensen, M., & Meckling, W., (1976). Theory of the firm: managerial behaviour, agency costs and capital structure, Journal of Financial Economics, 3: 11- 25.
- 25. John, W. K. (1999). How Firm Characteristics Affect Capital Structure: An International Comparison, Journal of Financial Research, 22, (2):161-187.
- Kane, A., A. Marcus, and R. MacDonald. 1984. How big is the tax advantage to debt? Journal of Finance 39:841–52.
- Keats, B. and Hitt, M. (1988). A casual model of linkages among environmental dimensions, macro organizational characteristics, and performance. Academy of Management Journal, 31, pp. 570-598.
- Krishnan, V. S., and R. C. Moyer, (1997), "Performance, Capital Structure and Home Country: An Analysis of Asian Corporations". Global Finance Journal 8, 129-143.

- 29. Kyereboah-Coleman, A. (2007), "The impact of capital structure on the performance of microfinance institutions", Journal of Risk Finance, Vol. 8 pp.56-71.
- 30. Mayston, D. J. (2002). Tackling TheEndogeneity Problem When Estimating The Relationship Between School Spending And Pupils' Outcome, DFEE Research Report 328, Department Of Education And Skills, London.
- Mehran, H. 1992. Executive incentive plans, corporate control, and capital structure. The Journal of Financial and Quantitative Analysis 27(4), (December): 539-60.
- 32. Mehran, Hamid, and Rene M. Stulz, 2007, The economics of conflicts of interest in financial institutions, Journal of Financial Economics 85, 267-296.
- 33. Miller M. (1977). Debt and Taxes. Journal of finance 32, 261-275.
- Modigliani F. and Miller M. (1963). Corporate Income Taxes and Cost of Capital: A Correction. American Economic Review 53, 433-443.
- 35. Modigliani, F. and Miller, M. H. (1958). "The Cost of Capital, Corporate Finance and the theory of investment." American Economic Review, 48, 261-97
- 36. Mwangi L.W., Makau M.S. &Kosimbei G (2014): Relationship between capital structure and performance of non-financial companies listed in the Nairobi Securities Exchange, Kenya. Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics 2014 Vol:1 Issue 2
- Myers, S. C. (1977). Determinants of Corporate Borrowing, Journal of Financial Economics, 5, (2):147-175.
- 38. Myers, S. C. (1984). The Capital Structure Puzzle. The Journal of Finance, 39(3): 575-592
- 39. Myers, S.C. (2001). Capital Structure. Journal of Economic Perspectives. 15: 81–102.
- 40. Nakamura M. and Nakamura A. O. (1981), "A Comparison of the Labor Force Behavior of Married Women in the United States and Canada, with Special Attention to the Impact of Income Taxes," Econometrica, Vol. 49, 451-489.
- 41. Ngwenya, V. (2010). Managing parental involvement with education in Zimbabwe. Ph dissertation education management, University of South Africa, November 2010.
- 42. Ong, T. S. & The, B. H. (2011). Capital Structure and Corporate Performance of Malaysian Construction Sector. International Journal of Humanities and Social Science Vol.1No. 2.
- 43. Oso, W. K., and Onen, D. (2008). A general guide to writing research proposal and report (2nd edition) Kampala: Makerere University

- 44. Oswald, S. and Jahera, J. (1991). The influence of ownership on performance: An empirical study. Strategic Management Journal, 12 (4), pp. 321- 326.
- Pandey, I.M. (2009). Financial Management: Capital Structure Planning and Policy (pp.332, 333)
- 46. Perry, P. (1992). Do Banks Gain or Lose from Inflation, Journal of Retail Banking, 14(2):25-30.
- 47. Puwanenthiren P. (2012) Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka, Journal of Arts, Science & Commerce.5, 29-86
- 48. Rajan R. &Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data, Journal of Finance, 50(5):1421-1460.
- Riahi-Belkaonui, A (1999), Capital Structure: Determination, Evaluation and Accounting, Westport, Quorum Books Publisher.
- 50. Ross, H. F. (2008). Agency problems and debt financing: leadership structure effects. Journal of Business Finance & Accounting. Vol. 43 pp.567-91
- Scherer, F. and Ross (1990). Industrial Market Structure and Economic Performance (3rd ed.) Houghton Mifflin, Boston, MA
- 52. Serrasqueiro, Z. Maria N. & Paulo, M. (2007). The Explanatory Power of Capital Structure Theories: A Panel Data Analysis, Icfai Journal of Applied Finance, 13(7):23-38.
- 53. Shefrin, H. (2005) Behavioral Corporate finance. Journal of Applied Corporate Finance, 14, 1245-1255.
- 54. Singh, A. & Hamid J. (2010).Cooperate financial structure in developing countries: World Bank International Finance Cooperation.
- 55. Smirlock, M. (1985). Evidence on the (Non) Relationship between Concentration and Profitability in Banking, Journal of Money, Credit, and Banking, 17(1):69-83.
- 56. Stanford, H. (2006) Leverage and Corporate Performance: Does Institutional Environment
- 57. Stiglitz, J.E. (1972). A re-examination of the Modigliani-Miller Theorem. American Economic Review 59, (December): 784-93
- Strebulaev, I. A.(2007). Do tests of capital structure theory mean what they say? Journal of Finance 62(4): 1747–87.
- 59. Van Horne, J. C. (2005).Fundamentals of Financial Management, 6th Edition Prentice hall International

- 60. Velnampy, T. &Niresh, J. A. (2012). The Relationship between Capital Structure and Profitability, Global Journal of Management and Business Research, 12(13): 67-74
- 61. Webster, J. (2012), Introduction of Financial Management. New York: McGraw
- Wellington, A. (2012), Inflation, Taxes and Cooperate Investment Incentives, Federal reserve Bank of New York Quarterly review .Vol .2, pp.44-50
- 63. Zeitun, R. & Tian, G. G. (2007). Capital structure and corporate performance: evidence from Jordan. Australasian Accounting Business and Finance Journal. Volume I.
- 64. Zikmund, W. G., Barry J., Babin, J. C.and Carr, M. G. (2003). Business Research Methods, 9 th Edition, New York: The Dryden Press.