Impact of Financial Leverage on Firm's Performance - A Case of Cement Production Industries of Pakistan

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Abstract

This study is an attempt to set up a stochastic relationship between financial leverage and firm's performance of cement industry operating in Pakistan. For this study 23cement producing firms working out of these 18 are consolidated in the review and six years yearly information from2010 to 2015 with respect to financial leverage influence on firm's performance for said sector were contemplated. The specimen measure for eighteen firms for a long time comprises of 106 perceptions. A Conventional Slightest Square model is connected on the information to build up a causal relationship between the factors. The review finds that financial leverage influence has a factually huge opposite effect on firm's performance at 99% certainty interim.

Keywords: Financial Leverage, Firms' profitability, Cement Sector

Introduction

In any research the most vital target of scholar is to focus the elements those have influence negatively or positively to the firm's productivity. It's defined by many researchers that monetary effect is the topmost fundamental amongst another variables that may impact the firm's performance. Thus it's required that every single firm should show specific attention to the furthermost important question regarding amount of financial leverage, cost related with capital and its effect on firm of performance. Generally firm's burrows finance from investors and banks to improve their sales capacity that ultimately rise firm's earnings, such amount of finance invested through lenders shows financial leverage connected along the firm. Usually measurement of financial leverage is done from proportion of total debts that firm's own with all total assets possessed by the firm. Financial leverage ratio explains to what extant firms has used burrowed money for financing its capital structure. If firm use most of its finances burrowed from lender then ultimately firm have to pay more of fixed cost linked with the finance burrowed from lenders. All those fixed cost associated with the financier finance of debt which is usually called as interest amount. As well as if firms use less amount of finance financed through burrowers than firm have to pay less of fixed cost which can increase net profits. If firm lends most of its finances through investors that firm deposits as cost of debt to the investors called markup rate that eventually affects to less net earnings of any industry or firm and also contribute to lowers the profitability of firms. On the other hand in economic flourishing period the financial leverage of the firm increase that will give benefit to the firm, but if there is recession in economy than financial leverage have an adverse effect on firms profitability because in economic recession there can be cash flow problem on behalf of the organization and organization may not able to meet cost of finances (interest charges). This occurs as in economic collapse firm may have less sale volume thus not capable to cover its markup expenses have to pay to investors. Many of the studies conducted previously((Jnag, 2005); (Wessels, 1998) (Titman, 1998) (Rajjan, 1995) on the book value as well as on market value to calculate financial leverage. Similarity Many researcher (Miller, 1977) (Sheel, 1944); (Myers, 1948)conducted research and propose in their studies as financial leverage prompt markup of investment, and eventually losses the stock price also firms profitability. Trade theory of capital structure conveys firms may give preference of debt to relish a noticeable profit. The firm embraces extra debt that eventually firm will have less expanse of revenue tax, however at other side of coin shows us that there will be increase in financial risk. Debt is valuable if a firm got extreme earnings which expand the return to stockholders. According to (Mandelker, 1984)Financial leverage always comes beneath business policy development it supports to rise the degree of return by producing a larger profit on lent finance than the expanse of consuming that finance. Debt aids a firm in relation to constructing impending policies as immovable expanse of debt is commonly pre-defined that recognize policy planning as expanse of markup always known to firm. Researcher also conclude (Larry, 1995)) that leverage is said to be positive as firms profit on resources invested in firm is higher than the earning paid prior to expanse known as interest expense and tax payments paid on debt, that if return on resources invested by the firm is a lesser amount of than before tax interest rate than we can say that leverage has inverse relation with firm's performance. The studies on Indian stock markets (Majumdar, 1997)displays that there exists negative correlation between the leverage and firm's performance as lending institutions are generally owned by government of India. (Meckling, 1976)I in their research recommended that there are certain problems among the debt investors and the stockholders of the firm due to this there firm's performance have negative impact.

The reason for research remained to review effect of financial influence of cement generation organizations and its net earnings and performance those recorded on Karachi Stock Trade. To study scholars taken just a single expecting variable, financial leverage was utilized as a part of common slightest square straight forward relapse display which was measured as the proportion of aggregate obligation, which incorporates

here and now and long haul obligations, to aggregate resources which incorporate current resources and noncurrent resources. Subordinate variable was benefit which was measured as the proportion of net pay after assessment to aggregate resources likewise called return on resources (ROA). There has been not very many reviews directed in the developing nations, particularly there's insufficient work done on the Pakistan's cement sector. Pakistan's capital markets seem to have abnormal state of uneven data then created economies markets. Consequently in this review we are attempting to look at effect of financial leverage on the Pakistani company's performance recorded in cement industry. Financial statements of 18 cement production industries as per year 2010 to year 2015 were placid of company's official websites to collect data from annual reports of different cement manufacturing firms.

To study that is there any effect of financial leverage related to influence on firm's performance of cement production industries in Pakistan?

This specific research basically centered on testing the accompanying

Hypothesis:

Financial influence has noteworthy negative effect on firm's performance.

Research Objective

The research objective of this report is to find importance of financial leverage and its impact on the performance of cement sector. The study will thus help company directors and managers to make informed decisions about financing.

Literature review

The leverage of any firm includes the warning signs that indicate the managers about the information regarding investment opportunities present in financial market. All investment theories of structure of investment reveals that the financial managers of the firms who wants best opportunities for profits economic growth should select a less leverage, due to fact that if there external debts increases then they can't use the benefit of investing opportunities hence there may be an inverse relationship amongst the firm's profitability and leverage of firm, so the financial managers of firm with maximum opportunity of growing there profits will prefer the low leverage.

(Baker, 1973)Assessed that result of money related use on industry gainfulness. This review created and tried by utilizing a model comprising of two conditions, one clarifying industry performance for normal market structure variable and leverage: second one was another condition incorporating risk factors to describe leverage. He gauged contrarily as the proportion of value to aggregate resources for the main firms in an industry more than ten years. To begin with the utilized two phases minimum square technique for estimation which indicates use is critical and has the hypothetically remedy negative sign which implies low measures of use tend to raise industry benefit raises. Besides he utilized common minimum square estimation which likewise supported similar outcomes.

(Kester, 1986)Found a negative relationship between debt/asset ratios and profitability of firm. Also (Wessels, 1998)Found in their studies that firms which have high profit level, while all things remain equal, would have lower debt level since they can have such funds from equity. (Rajan, 1995) Also confirm in their work that there is significant negative correlation between leverage and profitability of a firm. (Fu, 1997) In his studies examined significant relationship between capital of financial leverage and firm's financial performance. (Timan, 1988)according to them tax benefit grants necessarily are not due to debt usage and high leverage of firms can generate agency problems among those who holds shares and debts in a firm that basically also predicting a negative relationship of leverage and profitability.

(Graham, 2000)Found in his work that all highly profitable firms show there debt level low as it have negative relationship between debts ratio and profitability of firm.

(Mesquita, 2003) Researched on study similar as ours and examined rate of return with short-term holds an inverse relationship with long term debt and equity. Also (Ceasar, 2003) and (Hall, 2004) examined negative connection among profitability of firm with elongated term of debts and short term debts. (Amsaveni, 2009) Explained in his studies that there is negative relation between leverage and firm's profitability. To explain this relationship of leverage and firm's profitability they the data of 20 years from annual reports of selected sector to find the negative relation of leverage and firm's profitability.

Similarly, (P.Govindasamy, 2010)did analysis on data of annual reports to understand that how leverage impact on the firm's profitability and for this they investigate the relation of leverage and earning earned by each share. They examined leverage in three different ways and those are basically are types of leverage. Financial leverage, combine leverage and operating leverage. For this reason he took seven open recorded organizations those are recorded on Bombay stock trade. He used data of seven year form respective annual reports. Tool he used for the analysis of his study was Analysis of Variance (ANOVA). He uses this data to evaluate the hypothesis to find the relationship of financial leverage and earnings per share. Financial leverage use is brought about because of settled money related expenses in firm. It is the capacity of the firm to utilize settled money related charges to amplify the impacts of progress in EBIT on the acquiring per share. It includes the utilization of assets acquired at a settled cost in the trust of expanding the arrival to the shareholders.

There is a nearby connection exists between the budgetary use and income per share of the organization. The effect of money related use is horrible when the winning limit of the firm is not as much as what is normal by the loan specialist. The outcomes propose that there is a huge negative relationship exists between monetary use and profit per share. (Pratheepkanth.Puwanenthiren, 2011) Examined in his studies financial leverage and financial performance and found an inverse relationship because of cash outflows due to interest payments. (Khan, 2012)Did study using financial leverage as independent variable and firm's profitability as depended variable and found negative and inconsistent relationship between these two variable.

Another research conducted by (Abbas, 2012) displayed a negative and inconsistent relationship debts and financial performance. (Ferati, 2012)shows in his study a taking short term debts and long term debts as independent variables and firm's profitability as depend variable and found negative correlation of long terms debts with financial performance & positive correlation between short term debts with financial performance of company.

(Akhter, 2012) in his research shows on the study of spinning sector firms that they firms usually prefer internal financing as compared take external finance i.e. from banks. (Maina L.K, 2013) In Kenya examined the impact of obligation value proportion execution of firms recorded at the Nairobi Securities trade and found a huge negative relationship between capital structure and all measures of execution.

METHODOLOGY

Method to collect data

The secondary information basically required to play out the exploration was assembled from the official websites of cement production industries working in Pakistan. Different Annual Reports of eighteen firms were utilized for pulling out information.

Sample Size

There were twenty three cement production organizations registered on KSE 100 index, eighteen organizations were chosen, while four organizations were barred because of inaccessibility of information in chose test year. The information utilized with the end goal of research comprised of six years yearly information of the factors utilized as a part of this review. Information of the considerable number of

factors had a place with period beginning of 2010-2015 was engaged in this review.

Variables Explanation

Firm's Performance is utilized as needy variable in this review which was measured as the proportion of net wage after duty to aggregate resources. It is a thorough pointer of an association's execution since it gives data with respect to how well organization is utilizing its aggregate advantages for produce benefits. Gainfulness (ROA) = Net Income/Total Assets Financial use is utilized as free factor in this review which was measured as the proportion of aggregate obligation to aggregate resources. Add up to obligation incorporates here and now obligation development of short of what one year and long haul obligation development of over one year. This proportion gives a sign of an organization's aggregate obligations in connection to aggregate resources. The greater the proportion, greater is use of organization utilizing and the extra threats are industries expecting.

Financial related Leverage = Total Debt/Total Assets

Statistical Model

$ROA=\beta_o+\beta_1$ (Financial Leverage) $+\varepsilon$

Hypothesis H1

Financial leverage has critical inverse effect on industries financial performance.

Statistical Technique

OLS Simple Linear Regression examination method will be utilized for tested created hypothesis. The procedure will be utilized as a part of this review in light of the fact that the independent and dependent variable in numeric (scale) and underneath of circumstance prediction power of regression analysis is durable as associated with the other method. The specimen of eighteen firms of cement production industries registered on Karachi Stock trade was taken; Simple Linear Regression (SLR) as a factual procedure utilized for this inspection. The recognized procedure was utilized to look at the effect of concentrated free factor on the dependent variable i.e. firm's Performance. For the examination and investigation of the information Statistical Package for the Social

Sciences (SPSS) utilized. Taking after are the outcome of test.

Inferential Analysis

Table 1.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.564	.288	.271	8.62425

The model rundown table clarifies the measure of changeability in the dependent variable clarified by the independent variable. The estimation of r-square is 0.288 that implies roughly 28.8% of the changeability of ward variable "Firm's performance" is clarified by the variable "Financial Leverage" and staying of the fluctuation is unexplained independent.

Table 1.2 ANNOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	3524.324	1	3524.324	23.353	.000[b]
	Residual	8056.600	106	76.081		
	Total	11580.924				

ANOVA is test to find regression model is legitimate or not. F-measurements are 23.353 are greater what's more, sig value denotes impact of overall model and explanatory power of the model at 5% level of noteworthiness this infers trial of ANOVA is greatly noteworthy and model is appropriate of specified indicators.

Table 1.3 Coefficient

Model		Unstandardized Coefficient		Standardized Coefficient		
		B	Std. Error	Beta	t	Sig.
1	Constant	22.003	3.264		7.652	.000
	Financial leverage	-3.64	.052	-5.26	-6.420	.000

Overhead table is connected of factors of the regression model. Coefficients' table demonstrates the hugeness of independent variable explaining the dependent variable. The un-standardized coefficient (B) value demonstrates the greatness and relationship between dependent variable "Firm performance" and independent variable "financial Leverage". In case that regard is certain that suggests there is a positive relationship exist among dependent and independent variable. In the occasion that regard is negative, which is for our circumstance, this suggests there is a negative relationship exists among marker and ward variable. In case there is one unit increment in financial leverage of the firm and it will decrease the industry financial performance by 0.38 units. The t-test experiences are significantly immense at 5% level of vitality that suggests coefficient regard changes on a very basic level from zero and pointer is making tremendous duty in the model

.Hypothesis Assessment summary:

Theory review of this research is that it is an inverse correlation occurs among financial leverage influence with firm's performance of organizations in cement production industries registered on Karachi Stock Exchange. Theory evaluations on the premise of measurable test outcomes are:

Conclusions, Limitation and Recommendations

Conclusions

This review explored the connection among and firm's performance of the organizations has a place with cement production industries of Pakistan. It was theorized here that it is a critical negative correlation exist among financial leverage and firm's performance. As measurable test outcome demonstrates that there is an inverse correlation occurs between financial leverage and the firm's performance of cement production industries. Exceedingly influence companies of cement have brought down benefit a decreases influence on firm's performance. The consequences of review is steady with the aftereffects have past reviews led by (Timan, 1988) (Wald, 1999) (Sheel A. , 1994) (Cheong, 2005)The after effects of this review are most certainly not coordinating with the after effects of past reviews directed by (Stulz, 1995) did review and found a noteworthy positive relationship amongst influence and gainfulness. He led the review in Ghana where the cost of obligation is lesser than the markup rate of finance in Pakistan and he took nearly twenty organizations registered on stock trade of Ghana. This could be the reason of contradiction in eventual outcomes of both reviews

Limitation and Recommendations

This review was compelled to the associations has a place with cement production industries of Pakistan which are registered on Karachi Stock Exchange. Data was extracted out from year 2010 to year 2015. Firm's Performance as dependent variable was measured as the proportion of net pay after duty to aggregate resources and financial leverage was utilized as the free factor and was measured as the proportion of aggregate obligation to aggregate resources proportion. Information of 23 firms registered on Karachi Stock Exchange was accessible to lead this review. This review can likewise be directed by taking information of all organizations recorded on Karachi Stock Exchange. The cement production industries of Pakistan is highly leverage according to research. Most organizations have taken obligation for extension of their units which oblige them to pay settle cost on obligation which is extraordinary in Pakistan. High settled cost put antagonistic effect on firm main concern which implies it diminishes net earnings of the firm.

Bibliography

Abbas. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchange. . *World Applied Sciences Journal* , 20(5). pp. 666-673.

Akhter, P. H. (2012). The Determinants of Capital Structure: A Case from Pakistan Textile Sector (Spinning Units). *In Proceedings of 2nd International Conference on Business Management.*

Amsaveni. (2009). Impact of leverage on profitability of primary aluminum industry in India. *Indian Finance Journal,* , 20, 35-55.

Baker, S. (1973). Risk Leverage and Profitiabilty: An Industry Analysis. *Review of Economics and Statistics*, 55(4); 503-507.

Banafa, A. M. (2015). The impact of leverage on Financial performance of listed non financial firm in Kenya . *Internation Journal of Finance and Accounting* , 4(7), 1-20.

Ceasar, G. &. (2003). "Capital Structure and Financing of SMEs: Australian Evidence. *" Journal of Accounting and Finance* , 43, 123-147.

Cheong, E. Y. (2005). The effect of financial leverage on profitability and risk of restaurant firms. *The Journal of Hospitality Financial Manegments*, 13, 200-210.

Emamgholipour. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchange. *World Applied Sciences Journal*, 20(5). pp. 666-673.

Exchange, K. S. (n.d.).

Ferati, R. ,. (2012). Capital structure and Profitability: The Macedonian Case . *European Scientific Journal*, 8 (7).

Fu. (1997). Relationship between Capital Structure & Profitability: A time-Series Cross-Sectional Study on Malaysian Firms. *(PhD dissertation, Universiti Utara Malaysia).*

Graham, J. R. (2000). How big are the tax benifits of Debts. *the Journal of Finance* , Vol No 5.

Hall. (2004). "Determinants of the Capital Structures of European SMEs". *Journal of Business Finance & Accounting*, Vol. 31, No. 5 & 6, pp. 711- 728 52.

Jhang. (2005).

Jnag. (2005).

Kester, W. (1986). Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporations". *Financial Management,*, pp. 5–16.

Khan, A. (2012). The relationship of capital structure decisions with firm performance: A study of the engineering sector in Pakistan . *Internation Journal od Accounting and Financial Reporting* , 2(1). 245.

Larry. (1995).

Maina L.K. (2013). Capital Structure and Financial Performance in Kenya: Evidence from Firms listed at the Nairobi s . *Jono Kenyatta University of Sceince and Techonology Research Conference.* Kenya. Nairobi.

Majd, P. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchangel . *World Applied Sciences Journal*, 20(5). pp. 666-673.

Majumdar. (1997).

Mandelker. (1984).

Mansourimina. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchange. *World Applied Sciences Journal* , 20(5). pp. 666-673.

Meckling, J. a. (1976).

Mesquita, J. .. (2003). Capital structure &profitability: the Brazilian case. *In Academy of Business & Administration Sciences Conference*, (pp. pp. 11-13.).

Miller. (1977).

Myers. (1948).

N.A.Y, T. .. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchange. *World Applied Sciences Journa*, 20(5). pp. 666-673.

P.Govindasamy, C. M. (2010). Leverage: an analysis and its impact on profitability with reference to selected cement companies in India. *Journal of Economics, Finance and Administrative Science,* ., 27, 50-75.

Pratheepkanth. (2011). Capital Structure &Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka. *Journal of Arts, Science & Commerce*, 2(2).pp. 171-181.

Pratheepkanth.Puwanenthiren. (2011). Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka. *Journal of Arts, Science & Commerce.*, (2): 1-13.

Rajan. (1995). what do we about Capital structure. *Journal of Finance*, 50, 1421-1460.

Rajjan, Z. (1995).

Ramezani. (2012). Relationship between Cost of Capital &Accounting Criteria of Corporate Performance Evaluation: Evidence from Tehran Stock Exchange. . *World Applied Sciences Journal 20(5)*, pp. 666-673.

Sheel. (1944).

Sheel, A. (1994). Derterminants of Capital Structure choice and emperical on leverage behaviour: A comparative analysis of hotel manfacturing firms . *Hospitality Research Journal*, 17, 3-16.

Stulz, L. L. (1995). Leverage investment and firm growth. *Journal of Financial Economics*, 40, 3-29.

Timan, S. a. (1988). The Determinants of Capital Structure Choice . *Journal of Finance* .

Titman. (1998).

Trade of Theory. (n.d.).

Wald, J. (1999). How firm characteristics affect capital structure. *Internation comparison Journal of Finance Research* , 22,161-188.

Wessels, T. a. (1998).