Effect of Liquidity and Capital Structure on Financial Performance: Evidence from banking Sector

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Abstract: This research is titled as the impact of liquidity and capital structure on the financial performance of Cement sector firm. Capital structure and liquidity both play a vital role in growth and profitability of the firm. The data of fifteen cement sector firms were randomly analyzed, for the period of 2008 to 2014. The statistical approaches i.e. correlation, fixed effect, random effect and hausman tests were applied. The results indicated that all capital structure variables, i.e. Debt to equity, debt ratio, funded capital ratio and Funded debt ratio has negative relationship with firm financial performance of these selected cement sector firms. The results also indicated that liquidity proxies, i.e. quick ratio and current ratio have significant positive impact on the financial performance of these cement sector firms. On the bases of the findings of this study it is suggested that these firm's manager should take care of its capital structure proxies as it negatively impacting its financial performance. On the bases of findings, it is also advised that these managers should further improve the mechanism of liquidity.

Key Words: Liquidity, Capital Structure, Financial Performance, Correlation, Fixed and Random.

Introduction:

Background of the study:

Liquidity plays a key role in the uplift of a firm. Liquidity is a measure which represents the ability of a firm having cash to meet immediate and short term obligation.

Its high level of trading activity, allowing buying and selling with minimum price disturbanceIn context of a corporation, the ability of the corporation to meet its shortterm obligations. Capital structure simply reflects the efficiency of a firm in term of its assets use, financed through different options.

The three most basic ways to finance are through debtequity(or the issue of stock), and, for a small busin ess, personal savings. Capital structure usuallyrefers to howmuch of each type of financing a company h olds as a percentage of all its financing. Generally speaking, acompany with a high level of debt compar ed to equity is thought to carry higher risk, though some analystsdo not believe that capital structure mat ters to risk or profitability. Investment returns helps in providing an idea to efficient management to generate earnings through assets. Which can be obtained by dividing the firm's annual earnings by its total assets and it is shown as percentage. Most often it is meant as "return on investment". The capital

of the firm represents the amount of fund which is used for the firm's fixed assets, accounts receivable, marketable securities and inventories. Which helps in the firm's corporate growth? For any type of business, it is very important for a business development to have a well develop capital structure. Any business firm need to be very selective in establishing the capital structure for the firm to achieve its objectives. Capital structure and liquidity in association with financial performance have been separately investigated and the combine impact has been rarely touched in the context of Pakistan. Rehman (2011) investigated capital structure and its relationship with profitability of cement sector and textile sector firms. The same kind of study was also conducted by shah and Hijazi (2004). This study has been conducted using the cement sector firms' data for the period of 2010 to 1014, covering the most recent period and very compact size of capital structure variables.

The combination of liquidity variables and capital structure variables has been always a major concern for the financial managers in different companies. There is always an issue with these variables how best to combine these elements to improve the firm financial performance. This research is intended to find the gray area about the impact of these variables on the financial performance of these selected cement sector firms.

Objectives of the Research:

I. To describe and analyze the liquidity and capital structure practices in cement sector for the period of 2010-2014

II. To investigate the effects of capital structure and liquidity on the financial performance of Cement sector firms.

Significance of the study:

The research holds its significance in following:

a.This study will provide some essential guidelines to the financial managers of these firms in combining the elements of these variables.

b.This study will through the managers how best to combine these proxies, which will helpful in uplifting the firm profitability.

c.This study will enable the practitioners somehow curious about the underlying practices of liquidity and capital structure.

d. This research will add quality literature of liquidity and capital structure from local context.

e. This research will provide some social benefits to the society.

Hypotheses:

H01: Firm quick ratio has negative impact on the financial performance of cement sector firms.
H1: Firm quick ratio has positive impact on the financial performance of cement sector firms.
H02: Firm current ratio has negative impact on cement sector financial performance.
H2: Firm current ratio has positive impact on cement sector financial performance.
H03: Firm DER has negative impact on cement sector financial performance.
H3: Firm DER has positive impact on cement sector financial performance.
H04: Firm DR has negative impact on cement sector financial performance.
H4: Firm DR has positive impact on cement sector financial performance.
H05: Firm FCR has negative impact on cement sector financial performance.
H5: Firm FCR has positive impact on cement sector financial performance.
H06: Firm FDR has negative impact on cement sector financial performance.
H6: Firm FDR has positive impact on cement sector financial performance.

LITRETURE REVEIWE:

Meaning of capital structure:

Capital structure is the combination of long term liabilities and firm equity of the firm. Capital structure is the mix of debts and capital of the firm.

As for as the perfect capital market is concerned in which the element of transaction costs does not exist, where all participants including individuals and firms could get funds at uniform interest and no taxes are applied, which helps not affecting the investment decision.About such scenario two findings were found by Modigliani and Miller. The first type of proposition exhibits the firm value being the independent of capital structure. Whereas the second type of proposition focuses on the importance of the cost of equity for a leveraged firm. And also the risk associated with.Which means that as the value of leverage increases for a firm the, the firm will likely to earn more value? Capital structure also represent the numerous options through which a firm can finance its assets.Zulfiquar and Mustafa (2007) argued that every business and firm uses a variety of different levels of a mixture of equity, debt for the reason to maximize the market value of the firm, as Capital structure can affect liquidity and profitability of a firm.

Capital structure and Firm Profitability:

After the contribution had been made by chudson in 1945, this capital structure phenomenon was tested by Modigliani& Miller (1958). They conducted a study to highlight the importance of capital structure and its impact. Their study is very key and the most important study in the field of capital structure even today. They argued that the capital structure is due to the benefits of tax benefits and other benefits. They argued that this has been taken from the market imperfection.

MM fostered the two major propositions:

Propositions I: It tells that firm value is completely independent form the capital structure of the firm.

Propositions II: It tells that the cost of equity capital has direct association with the firm's capital structure.

These MM propositions are very vital, which predicts about equity cost which is dependent on the rate of return from assets, the cost of firm debt and the firm debts of equity.

The Miller comprehend as, "Our propositions regarding the weighted average of the cost of capital about any firm would remain the same irrespective of the firm different financing sources, which it does choose from the available sources" (Miller, 1988, P.307).

The M&M propositions were time and again tested by many researchers. Barges (1962) tested their propositions within the time frame of just four years. He found some laws in their propositions like he argued that biases do occur in the situations and the tradition views.

Barges finds out some weakness in their research propositions and the methodology they applied. Barges concluded that the independent nature of the firm from its value is wrong (1962 P. 147).

Jensen and Meckling (1976) performed a research on capital structure. They identified the agency problems which exist between Shareholders and manager because of the manger shares in the company is less than 100%. They found the element of agency problem can be better deal if the firm increases the share of the managers in board or increases the portion of financing debts. Such arrangement can minimize the agency issue. As per the behavior of free cash flow hypothesis, the term Free cash flow m and all projects provide net cash flow. In such a situation where there will be more cash flow, the managers may use it for their personal benefits, rather helping to maximize the value of the firm. Jensen (1986) argued that such kind of situations can be handled due to the increase in the value of the stake of the stakeholders. This can be done by increasing debts in the capital structure.

Ahmad and Farid (1980) analyzed the Malysian firms and argued that the capital structure has strong effect on the financial performance of firm. He argued that firm debts to equity as increases it will negatively affect the firm profitability if it is increased beyond certain limits. He also elaborated that the

firm debts ratio has positive impact where as he found that firm funded leverage ratio has negative impact on the firm financial performance proxies.. Lamothe (1982) also viewed the importance of capital structure combination. He argued that firm D/ E ratio and debts ratio has insignificant impact on the profitability of the firm. He argued that capital structure can affect the financial performance of the firm. He also argued that an optimal capital structure does exist for any firm. Myers (1984) explored the capital structure, which he termed as the Trade-off Theory, which tells that every firm holds some specific and targeted debts for the reason of benefiting from debts as these combination makes proper ratio.. Myers farther explains his work as follow.

Interest expense helps in decreasing the tax liability and causes an increase in cash saving. The companies use the taxes as shield and try to meet the interest liability.

Myers found that with an increase in the firm debts it will definitely increase the firm default chances. So it is necessary that firm should maintain an optimal level of debts to better deal with the financial performance.

Myers and Majluf (1984) investigated the area of capital structure and termed their work as POT theory. This theory suggests that every firm use a through level of decisions whenever they formulate capital structure.

Initially every firm likes prefer common stock financing means providing funds from internal sources i-e retained earnings. In case the company needs external funds or extra finance then they go first for bank to take loan after that if needed more, and then go for other options like public debt. Thus according to POT the financially strong and profitable firms are less likely to incur debt for new project or expansion of the existing one because they have the internal sufficient available funds to meet all the requirement of the project.

Myers and Mujluf (1977) argued that the under-pricing is due to less information, so they argued that better information helps in the firm expected cash flows both at present and past.

Ross (1977) investigated the impact of capital structure and finds that firm ROE can be negatively affected by the firm debts to equity ratio, if not balanced. He also argued that firm funded leverage ratio is very vital for the financial performance.

In his particular theory he explained that the amount of debt is very vital which highlight the trust of the investors in the firm. There is issue of that more debts as it gives signals to the market. It is presumed that the level of debts give confidence to the managers and help the future cash flows.

Baskin (1985) conducted a research and found that capital structure is very risky element of a firm. He concludes that it is very vital for the firm success and improved financial performance. He found that a firm should maintain such a level of the capital structure which will not start affecting negatively the financial performance. Baskin emphasized that the majority of managers try to have a balanced dividend policy and try to avoided new issuance of equity shares and thought the these are just for the secondary concern.

Kamma (1986) argued that the capital structure has strong effect on the financial performance of firm. He argued that firm debts to equity as increases it will negatively affect the firm profitability if it is increased beyond certain limits. He also elaborated that the firm debts ratio has positive impact where as he found that firm funded leverage ratio has negative impact on the firm financial performance proxies. There are so many studies which focused on the relationship between the firm characteristics and the capital structure. The characteristics liken on debt tax shields, growth, volatility, internal fund availability, systematic risk, profitability, assets structure and firm size in industry. There are numerous studies which found a relationship between capital structure and profitability (Malitz ,1985, Kester ,1986, friend and Lang ,1988, Titman and Wessels,1988, EL- Khouri ,1989 and Canda ,1991).

Myers (1995) analyzed in his research study that profitably and leverage is negative correlated with each other. It is very important to point out that the above studies were the comprehensive in United states for example Malitz used the least squares for the analyses of data of manufacturing company for years (1978-1980).

Rehman alam (2011) He found that both debt to equity ratio and Debt ratio has significant impact on the firm performance. Titman and Wessels used linear structural modeling for the analysis of 469 manufacturing company data from (1974-1982).Candaused820 company data from all US industries from (1972-1987).

Bradley, Jarrell and Rim (1984) conduct a research study on capital structure. They found that profitability is negative relationship with capital structure. They used ordinary least square to check the data of 20 years (1962-1981).

EL-Khouri(1989) agree the conclusion of Bradley, Jarrell and Kim and conducted a review on capital structure and profitability. He used a sample of 27 different sectors for 19 years. He found that profitability and optimal capital structure has considered negatively related with profitability of the company.

Mohammad Khan Jamal (1994) conducted a study on capital structure and profitability of listed companies of Kuala Lumpur stock exchange (KLSE). In this study ordinary leased square and correlation are used to analyze the data. ROI is used for Profitability and deb Z-ratio and debt equity ratio is used for capital structure. There is an adverse relationship between equity size and debt with return on investment.

Jasir, Ilyas (2006) analyzed a research on the determinants of capital structure variables by investigating the non-financial companies of KSE. It shows that profitability was inversely related to capital structure. Along this debt increase the profitability of a firm.

Hijazi and Shah (2004) analyzed capital structure of KSE non-financial firm using data of five years. He found that capital structure variables i-e Debt ratio and debt equity ratio has negative impact on the firm profitability. He found that capital structure variables financial liquidity ratio has also negative impact on profitability.

Hijazi and Yasir Bin Tariq (2006) take a research on component of capital structure investigating Cement industry of KSE. They concluded that high fixed assets ratio leads to high debts ratio. Besides this low profitability is the result of high debts.

Rehman,A (2011) analyzed the impact of capital structure on the financial performance of cement and textile sector firms and found that capital structure variable have key impact on the financial performance of these sector firms. He found that both debt to equity ratio and Debt ratio has significant impact on the firm performance. He also found that firm Funded debt ratio and Funded leverage ratio has negative insignificant impact on the firm financial performance.

Research Methodology:

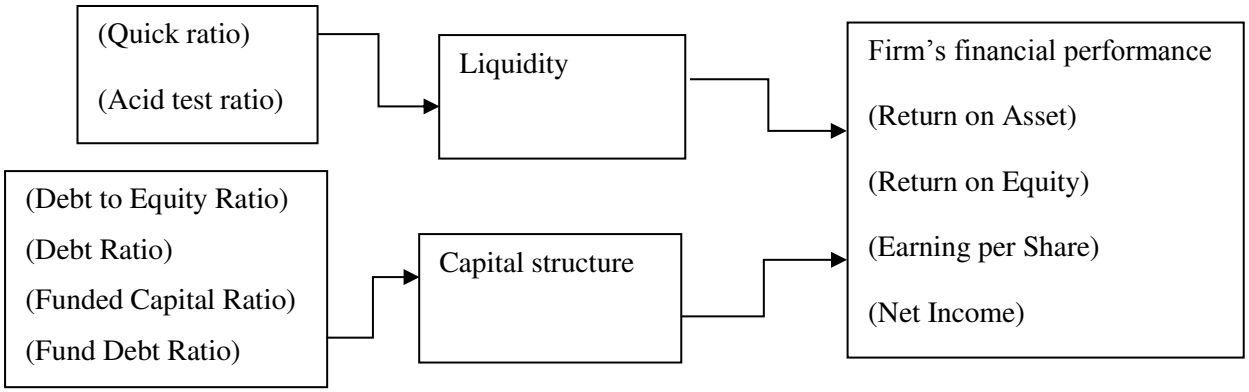
Population, Sampling and Sources of Data:

Population represents the total number in any set up to be taken for the research purposes. Like population of cement sector firms mean all firms registered on stock exchange. The population of this study is all cement firms listed on KSE. Total fifteen firms have been randomly selected for the data analysis of this study.

The data of research in hand was collected from the cement sector firm's annual reports, the web site of stock exchange and balance sheet analysis by state bank of Pakistan.

Theoretical Framework:

On the basis of the literature the following theoretical frame work has been developed.



Statistical Tools and Technique:

The data was analyzed by the statistical techniques like correlations and regression to know the relationship between variables and the impact of independent variables on dependent variables.

Research Models:

These are the model for the studies. Through this model we will reach to the conclusion of our objectives.

ROA= B0 + B1D1E +B2DR +B3FCR +B4FDR +B5QR +B6CR +μ

ROE= B0 + B1D1E +B2DR +B3FCR +B4FDR +B5QR +B6CR +μ

EPS = B0 + B1D1E +B2DR +B3FCR +B4FDR +B5QR +B6CR +μ

Ni = B0 + B1D1E +B2DR +B3FCR +B4FDR +B5QR +B6CR +μ

Data Analysis and Findings:

Pearson correlation

Correlation has been applied here to understand the correlation among different variables of this study i.e. the liquidity and capital structure with financial performance.

Table 1

Correlation

	ROA	ROE	EPS	NI	D/E	DR	FCR	FDR	QR	CR
ROA	1.000									
ROE	0.35	1.000								
EPS	0.31	0.15	1.000							
NI	0.18	0.16	0.13	1.000						
D/E	-0.13	-0.15	-0.09	-0.12	1.000					
DR	-0.32	-0.27	-0.43	-0.23	0.22	1.000				
FCR	-0.19	-0.13	-0.15	-0.13	0.23	0.24	1.000			
FDR	-0.22	-0.28	-0.29	-0.34	0.22	0.13	0.14	1.000		
QR	0.26	0.32	0.24	0,28	0.08	0.22	0.27	0.23	1.000	
CR	0.32	0.29	0.29	0.32	0.08	0.17	0.36	0.25	0.36	1.000

The table 1 shows the correlation matrix regarding the all independent and dependent variables which have been used in this particular research study. The results prove that the firm liquidity having positive association with firm financial performance as the proxies being used to show liquidity are QR and CR which indicates positive correlation with the dependent variable of this study the financial performance. However, the proxies of capital structure showing negative association with firm financial performance. All the capital structure facets known as the capital structure proxies showing negative association.

Regression analysis:

Regression has been applied in this research to find the impact of the independent variables of this study on the dependent variable.

Model 1: ROA = B0 + B1D/E + B2DR + B3FCR + B4FDR + B5QR + B6CR +μ

Table 2

Regression of Model 1

Variables	T. value	P. value
D/E	-1.34	0.068
DR	-2.63	0.011
FCR	-1.57	0.054
FDR	-2.32	0.020
QR	2.28	0.021
CR	3.21	0.001

R. square.0.47, adjusted square 0.46 F.value=22.34

The table 2 represents the results of the first model of this research. The results indicating that all capital structure proxies showing negative impact on the financial performance of firm. DR and FDR these two proxies has shown negative but significant impact, however D/E and FCR showing negative but insignificant impact on the financial proxy ROA. Further the results showing that both proxies of liquidity have positive but significant effects on the firm return on assets. The R-square of the model is 0.47 which tells that almost 47 % changes are occurred in ROA due to changes in these set of independent variables. The F-value is 22.34 which tells that this over all model is significant.

Model 2

ROE= B0 + B1D1E +B2DR +B3FCR +B4FDR +B5QR +B6CR +μ

Table 3

Regression of Model 2

Variable	T. values	P. values
D/E	-1.55	0.067
DR	-2.34	0.023
FCR	-1.65	0.068
FDR	-2.21	0.024
QR	2.78	0.015
CR	2.77	0.013

R. square =0.51, F. values = 14.56

The table 3 represents the results of the 2nd model of this research. The results indicating that all capital structure proxies showing negative impact on the financial performance of firm. DR and FDR these two proxies has shown negative but significant impact, however D/E and FCR showing negative but insignificant impact on the financial proxy ROE. Further the results showing that both proxies of liquidity have positive but significant effects on the firm return on equity. The R-square of the model is 0.51 which tells that almost 51 % changes are occurred in ROE due to changes in these set of independent variables. The F-value is 14.56 which tells that this over all model is significant.

Model 3

EPS = Bo +B1D/E + B2DR + B3FCR +B4FDR + B5QR +B6CR + μ

Table 4

Regression of Model 3

Variables	T. Values	P. Values
D/E	-0.98	0.181
DR	-2.17	0.023
FCR	-1.33	0.076
FDR	-2.12	0.024
QR	2.28	0.021
CR	2.92	0.013

R. square0. 46F.value =12.75

The table 4 represents the results of the 3rd model of this research. The results indicating that all capital structure proxies showing negative impact on the financial performance of firm. DR and FDR these two proxies has shown negative but significant impact, however D/E and FCR showing negative but insignificant impact on the financial proxy EPS. Further the results showing that both proxies of liquidity have positive but significant effects on the firm EPS. The R-square of the model is 0.46 which tells that almost 46 % changes are occurred in EPS, due to changes in these set of independent variables. The F-value is 12.75 which tell that this over all model is significant.

Model 4

Ni = Bo +B1D/E +B2DR + B3FCR + B4FDR + B5QR + B6CR +μ

Table 5 Regression of Model 4

Variables	T. Values	P, values
D/E	-1.01	0.067
DR	-2.42	0.011
FCR	-1.51	0.068
FDR	-3.09	0.004
QR	2.81	0.013
CR	3.21	0.005

R-square 0.45, F-value 11.45

The table 5 represents the results of the 4th model of this research. The results indicating that all capital structure proxies showing negative impact on the financial performance of firm. DR and FDR these two proxies has shown negative but significant impact, however D/E and FCR showing negative but insignificant impact on the financial proxy Net income. Further the results showing that both proxies of liquidity have positive but significant effects on the firm NI. The R-square of the model is 0.45 which tells that almost 45 % changes are occurred in Net income, due to changes in these set of independent variables. The F-value is 11.45 which tell that this over all models is significant.

Conclusion:

This research was conducted to know the impact of firm capital structure and liquidity on the financial performance of the cement sectors firms. The study used the secondary data of sample cement sector firms. The data was collected from the annual reports and balance sheet analysis of joint stock companies by state bank of Pakistan. The data was collected for the period 2006 to 2014. The data was analyzed through statistical tools like correlation and regression. The results revealed that the capital structure proxies have negative correlation with financial performance proxies of the cement sector firms. The results indicated that debts to equity ratio and funded capital ratio has negative significant impact however the debts ratio and Funded debts ratio were found having negative significant impact on the financial proxies of cement sector firms. The results indicated a positive correlation of the liquidity with the financial performance of the cement sector firms. The results found that both quick ratio and current ratio have positive significant impact on the financial performance of the cement sector firms.

Recommendations:

Following are the recommendations based on the results of this study.

As the capital structure proxies showing negative impact on firm performance, so it is suggested that the firm financial managers should wisely use the combination of debt to equity. They should ensure such a combination which will help the firm in achieving its goals.

Both quick ratio and current ratio has shown positive impact on the financial proxies of the cement sector firms, it is therefore suggested that the more the firm have the cash and near to cash resources the firmer will perform better in term of its financial performance.

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