Impact of Corporate Governance & Capital Structure on Firm Financial Performance: Evidence from Listed Cement Sector of Pakistan

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Abstract
The motivation behind the research is to investigate and examine the important components that impact on capital structure & corporate governance on firm’s budgetary performance related to listed cement industry of Pakistan. It made use of auxiliary information from audited financial statements of 10 listed cement organizations at Pakistan Stock Exchange (PSX) since 2007 to 2016 using Pooled regression Model to examine the Hypothesis. The study used three dependent variables to measured the firm performance they (ROA, ROE, NPR), and four independent variable to measured the corporate governance and capital structure and they are (Board Size, Audit Committee, LTDR & STDR). Observational outcomes researched that transient obligation proportion and Long haul debt proportion has significantly influence with ROA & NPR. Furthermore, board size and audit committee has insignificant association with the firm financial performance. Consequently, the research stated that ROE has inconsequential whether negative or positive association with all the independent variables namely Board size, Audit Committee, STD, and LTDR. The result of the study is value to both academics and policy makers.


1. Introduction
The endeavor of the study is to comprehend the key factors and investigate the impact which capital structure and corporate governance has had on organizational financial execution of PSX listed companies of cement industry, cement industry remain worthable in the development of an economy of nation and in Pakistan its remains playing an important and vital role in the addition of nation finance. The purpose of selecting specifically this sector for study is because its relating to the economy of Pakistan’s volume and importance it posses the blend of domestic and internal corporations. Construction internally and externally has the highest usage of cement. As per the economic survey of 2016-2017 the growth rate of the cement consumption is recorded 7.19%. This investigation means to provide the insight of companies financial performance listed under cement sector and will conclude that how the capital structure and corporate governance of the cement industry in Pakistan which will not only contribute in the literature but will also helps the researchers, practitioners and analyst in the decision making process.

1.1 Cement Industry:
The cement sector of Pakistan assumes an imperative part in the budgetary progression of the nation. As of now, the cement industry is being pay Rs 30 billion against taxes to national exchequer, this industry gives employment to more than 150 thousand people and holding 1.2% of overall creation (PACRA, 2014). During the previous time thus the cement industry have accomplished remarkable stature, to take care of domestic and international demand requests from Africa, Middle East and Afghanistan (Business Recorder, 2011). The total production of the four units was just 1800,000 tons per annum at the period of autonomy and these units were situated at Karachi, Rohr, Wan and Dandot. The limit of production has expanded from 18 million tons to 45 million tons (Siddiqui, 2015). There is a possibly of towering demand of Products due to the projects of CPEC, the leading competitors have effectively reported the future extensions, which will additionally build the generation limit up to 53 million tons (The News, 2015).

1.2 Corporate Governance
Corporate governance is concern with the framework of policies, customs, laws administration and the way organization controls and deals with the association with stakeholders engaged with respect to financial performance of an organizations and also setting up transparency and responsibility throughout the firm. (Common wealth Secretariat and GCG Forum, 2006). A basic definition of corporate governance has given by the board under the presiding of Sir Adrian Cadbury The Financial Aspects of Corporate Governance(the Cadbury Report) in 1992.

"Corporate organization is structure by which an association controlled and facilitated. People from board are in charge of the association of their affiliations. The examiners' part in association is to relegate the authority and
behind introducing "the code of conduct" is to protect the interest of the stakeholders and develops the investors' confidence. The standard Regulatory Bodies: (SECP), has working to outline ideal structure of corporate governance in this corporate world. Institute of the corporate governance has also been attempting to maintain a strategic distance from any fraudulent practices in the business world. In March, 2002, for growing good structure of the corporate governance, SECP has been published "The code of conduct", on corporate administration of listed organizations of Pakistan. The code is an appropriate framework which is encouraging SECP to check whether every one of the organizations are in agreement with the great practices of corporate governance or not as all the listed organizations will undoubtedly act as per this code.

It basically helps the SECP in governing, administering and controlling the stock listed companies. The aim behind introducing “the code of conduct” is to protect the interest of the stakeholders and develops the investors and market confidence as well. The principal stakeholder of the company includes the stockholders, board of directors, company’s administration while regulators, creditors, banks, workers, clients & consumers, suppliers, society and the environment are among the other stakeholders (Ibrahim et al, 2010).

1.3 Capital Structure
The critical choice for any association respects of its monetary execution is to pick the capital structure of firm. It is the way which let firm see how to use its different wellsprings of assets to keep up the execution and development of an association. There are distinctive courses for lifting the capital or financing the organizations. It can compose lease financing, use warrants, issue convertible bonds, offers, and sign forward contracts or exchange bond swaps. It can issue numerous assorted securities in limitless mixes. There are an assortment of hypotheses regarding the matter of capital structure which talks about the effect of principle things like fund sources, impose points of interest and required rate of return. Past investigations presumed that there are sure inward and outer elements like social, lawful, monetary, charges and macroeconomic markers which influence the ideal capital structure of any association.

1.4 Firm Performance
Managerial Performance generally is estimated on an association's financial performance (Jr, 1991), Metcalf and Titard (1976) characterized financial performance as the demonstration of performing financial movement with a specific end goal to accomplish financial objectives over a defined timeframe. It is the activity of estimating the consequence of an association's arrangements and operations in monetary terms. Metcalf and Titard (1976) brought up that the financial performance is to transmit on a comprehension of some financial aspects of a business organization. It might demonstrate the situation of an organization at a minute in time as displayed in proclamation of financial position or may uncover a series of activities over a given timeframe as introduced in statement of comprehensive income. The financial performance investigates distinguishes the financial strength and weaknesses of the organization by legitimately setting up relationship between the items of the statement of financial position and explanation of comprehensive pay by choosing the information relevant to the choice under consideration from the aggregate information contained in the financial articulations, organizing the data in an approach to highlight meaningful connections and clarify and make interference and conclusions. Ratios are utilized as a benchmark for assessing financial performance of an organization and help to condense large amounts of financial information and to make qualitative judgments about the association's performance. Measures of monetary performance of a firm are return on value, return on resources and profit for deals, and so on. (Tharmila and Arulvel, 2013). Net Profit Ratio as well using to measure the profitability of an organization in this study.

1.5 Board Size
It is always a difficult task to find an ideal size of the board (Ning, Davidson, & Wang, 2015); the soonest composing on board size is by Lipton and Lorch (1992) and Jensen (1993). Proclaimed that the inclination for littler board size orginates from innovative and hierarchical change which eventually prompts cost cutting and downsizing. Hermalin and Weisbach (2003) guaranteed the probability that greater sheets can be less effective than little sheets. Exactly when board contain an extreme number of people association issues may increment, as couple of officials may take after along as free-riders. Lipton and Lorch (1992) recommends confining the number of directors on a board to 7 or 8, it would be a troublesome for the CEO to control if number maximizes than mentioned. A huge board could likewise bring in less important discussions, since convey the opinions inside an
extensive gathering is for the most tedious, troublesome and much of the time consuming difficult outcomes in an absence of cohesiveness on the board (Lipton and Lorch, 1992).

Others saying that, smaller board size will lead to a lack of diversity of opinions and issues of staffing other committees. In Pakistan, board size is not fixed as it may vary depending upon the size of the company; however, there should be a minimum of five directors (“Code of Corporate Governance 2012 Amended July 2014 – SECP,” 2017) Previous studies have established that firm performance and board size have a strong positive correlation (Dalton, Daily, Johnson, & Ellstrand, 1999).

1.6 Composition of Audit Committee
An audit panel is one of the major working advisory groups of an organization's governing body that is responsible for managing financial and revelation. Arrangements of internal control & Consistence with laws and regulations, survey system, financial reporting process, these are the primary purpose of an audit committee to oversight. The composition of review board relates to the presence of autonomous directors in review panel. Corporate governance code of Pakistan states that there should be at least one independent director in the audit committee. For our study, we have included the number of non-executive directors as well in the composition of audit committee. The chairman of an audit committee should be an independent director. Investors are more inclined to trust those companies in which the proportion of independent directors is higher in comparison (Uzun et al., 2004).

Composition of corporate governance & capital structure methods of companies affect significantly on corporations’ capacity and have positive or negative influence on factors of performance. The research intends to provide the insight of companies financial performance listed under cement sector and will conclude that how the capital structure and corporate governance of the cement sector in Pakistan which will not only contribute in the literature but also helps the researchers, practitioners and analyst in the decision making process. The investigation concentrate on data assembled from fourteen PSX listed firms under cement sector.

1.7 Research Objective
To explore the effect of capital structure and corporate governance on firm efficiency targeting listed cement sector of Pakistan.

1.8 Purpose of the Study
This study intends to provide the insight of companies financial performance listed under Cement industry and will conclude that how the capital structure and corporate governance of the cement industry in Pakistan which will not only contribute in the literature but also helps the researchers, practitioners and analyst in the decision making process. Previously there has not conducted enough research on the effect of corporate governance and capital structure on firm performance of the listed cement sector of Pakistan. So our aim is to conduct research on this area, which will identify the techniques used by the firms for managing the governance and capital structure and will help the organizations to improve their performance.

1.9 Research Question
Is there an impact of corporate governance & capital structure on financial performance of Pakistan’s cement industry?

1.10 Problem Statement
Corporate governance assumes an imperative part in the development of an economy. The good principle of corporate governance is mandatory for any kind of business to lead at peak or globally advancement. Huge numbers of studies have conducted with regards of corporate governance yet there isn't any unified theory to consider the impact of corporate governance and Capital structure on firm efficiency. Based on survey of accessible literature in different local and global journals, a minimum counting of studies discovered which concentrates over corporate administration segments like review board, non executive directors and board meetings.

1.11 Research Hypothesis
This research mainly focused on evaluating and testing the subsequent hypothesis:
Ho1: Board size has a significant impact on organization performance?
Ho2: Audit committee has a significant impact on organization performance?
Ho3: Short term debt has a significant impact on organization performance?
Ho4: Long term debt has a significant impact on organization performance?
2. Research Methodology

The data required to examine the research has been assembled from the official websites of the sector and is being analysed. Secondary data was collected for research working, which is secondary and the main focus in collection of data is:

- State Bank of Pakistan
- Pakistan Stock Exchange
- Company’s Financial Statements.

2.1 Model Specification

Pooled regression model used for examination of hypothesis, which further clarifies the study, the statistical model is as under:

\[ Y = \beta_0 + \beta (\text{Mechanism of CG & CS}) + e \]

- \(Y\) is the dependent variable that is firm performance measured by (ROA, ROE and NPR)
- \(\beta_0\) is constant
- \(e\) = the error term


2.2 Variables

- Independent Variable
  - Corporate Governance is selected as independent variable and evaluated by two measures
    - Board size = Number of members on the board
    - Audit committee = Number of independent directors and members in the audit Committee outside the directors.

  Capital Structure is selected as another independent variable and evaluated by two measures ratios:
    - Long term debt ratio = Long term debt / (Long term debt + Equity)
    - Short term debt ratio = Short term debt / (Short term debt + Equity)

- Dependent Variable
  - Financial Performance is selected as dependent variable and measured by the two ratios:
    ```
    \[ \text{Return on Assets} \]
    ```
    ```
    \[ \text{Return on Equity} \]
    ```
    ```
    \[ \text{Net Profit Ratio} \]
    ```
3. LITERATURE REVIEW

This segment highlights some of the empirical researches which have already been conducted previously. The great number of studies carried out by different authors and critics to measure and analyse the financial performance of firms through evaluating the influence of diverse financial factors of corporate governance and capital structure. According to (Drobetz, Schlillohfer, & Zimmermann, 2003) conducted the cross sectional study on German firms and the results showed that the quality level of corporate governance has significant relationship with valuation of firm. Aligned with findings it is well set up that value of organization effects corporate governance positively.

(Decker, Cronqvist, and Fahlenbrach, 2011), led an examination “Evaluating the Impacts of Vast Investors Utilizing a Geographic Instrument”, analyzed the effect of extensive number of investors on profitability of U.S public companies. The researchers generated the data in which all shareholders that holds more than five percent stock of the companies were tracked. Sample span of six years from 1996 to 2001 was taken from Standard & Poor 1500. The conclusion draws that there is a critical connection between large number of investors and profitability (estimated by ROA) and effect positively.

Results also suggested that larger number of shareholder’s skills and opinions play major function in influencing profitability of companies. According to (Oladeji, Ikpefan, & Olokoyo, 2015) completed an exploration to inspect “the impact of capital structure on organization executionin Nigeria”. Using ten year data from 2003-2012 of six petroleum companies in Nigeria. Panel data was generated for the selected companies and presumed that the linkage exists between organization financial performance and leverage. Moreover (Omondi & Muturi, 2013) in the examination “the components influencing the monetary execution listed companies at Nairobi Securities Exchange in Kenya”, the conclusion draws that leverage has a significantly inverse affect on firms’ financial performance. Result inferred that organization size and liquidity had huge positive relationship between firms’ money related execution. Multiple-regression was applied to analyse the sample data and proposed that company size, leverage and liquidity play significant role in recovering the financial performance of companies.

(Pathirawasam, 2013), aimed to analyze the effect of possession focus and other firm particular components on organization monetary execution. The sample size of 102 organizations registered on Colombo Stock Exchange (CSE) was selected. The data were analysed by using both pooled OLS regressions. The conclusion draws that ROA has an insignificant correlation with ownership concentration. Although quick ratio, inventory and firm size is decidedly and fundamentally connects with return on assets and negative relationship with firms’ financial performance.

In addition, (Tailab, 2014) thought about “the impact of capital structure on fiscal execution. For gainfulness, he embraced (ROE) as the proportions of net pay to add up to investors’ value and (ROA) as the proportion of net pay to add up to resources, as a surrogate for monetary execution of firms. Also, firms’ size, add up to obligation, here and now obligation, long haul obligation and obligation to value proportion were chosen to indicate the capital structure. Utilizing an example time of nine years from 2005 to 2013 of thirty Vitality American firms was chosen. Savvy Fractional Slightest Square (PLS) numerous relapse strategy was utilized for examination. The investigation demonstrated that the total commitment has a huge connection and impact adversely on ROE and ROA, while estimate as far as deals has fundamentally negative effect just on return on value of the American firms. Then again, a fleeting obligation has critical &direct impact on ROE. Moreover, long haul obligation, estimate (as far as aggregate resources) and obligation to value has an inconsequential either negative or positive association with gainfulness. The review of the outcomes was restricted as the extent of test was little.

For the long term and continueing survivability of the companies, the correlation between capital structure and efficiency of firms cannot be neglected as the progress in the productivity is mandatory. This research extended (Abor, 2005) conclusion concerning the impact of capital structure on productivity. Sample span of 272 New York Stock Exchange listed companies were tracked to generate the data. Correlations and regression model were used as statistical technique. Furthermore, (Gill, Amarjit; Biger, Nahum; Mathur, Neil, 2010) specified that total debt ratio, short-term debt ratio and long-term debt ratio has positive correlation with profitability. However, indicated that fleeting obligation proportion and aggregate obligation proportion has positive association with ROA in both the manufacturing and service industries.

In addition another paper by (Onaolapo and Kajola, 2010) exhibited “the effect of capital structure on affiliation monetary execution”. Board information were broke down by using trial of 30 non budgetary Nigerian Stock Trade recorded organizations for an example traverse of seven year from 2001 to 2007.Ordinary Slightest Squares (OLS) was used as a procedure for estimation. The result recommended that obligation proportion and has significant& converge relationship with the organizations’ monetary execution (estimated by ROE and ROA), with these discoveries the examination indicated consistency with going before experimental investigations.

Return on equity (ROE) = Net Income / Total Equity

Return on assets (ROA) = Net Income / Total Assets

Net Profit Ratio = Profit after interest / Total Sales
The study by (Ali, Zia, & Razi, 2012) intended to analyse “the effect of capital structure on the productivity of Pakistan petroleum sector”. Utilizing an example of twelve KSE listed organizations for a time of ten years from 2001 to 2010. Data were analysed by using regression analysis and the conclusion demonstrated that significantly positive relationship exists between capital structure and firm efficiency of the companies under oil sector. This investigation has probability for imitation in other sectors like textile, pharmaceutical and manufacturing & cement. In overall investigation capital structure choice has a significant impact and generally profitability is depended on the capital structure choice.

(Umar, Tanveer, Aslam, & Sajid, 2012), carried out a research on “Impact of Capital Structure on organization efficiency: Evidence from Pakistan”. Top hundred (KSE) listed companies were tracked to generate the data with sample span of four years from 2006 to 2009. Data was analysed by using Generalized Least Square regression model. The conclusion draws that long haul liabilities, short term liabilities and aggregate liabilities has inverse correlation with profit margin, EBIT,ROA, and EPS. Furthermore, long term liabilities directly affect price earnings ratio & ROE and short term liabilities inversely affect the price earnings ratio while short term liabilities and total liabilities has insignificant correlation with ROE.

The study by (Zeitun & Tian, 2007) empirically aimed to analyze “the effect of capital structure on corporate performance”. The panel data were generated and analysed by using sample of 167 Jordanian companies with a period of fifteen years from 1989 to 2003. The conclusion draws that correlation between an organization capital structure and efficiency measures is sufficient and negative while the short term debt ratio has a sufficient and positive influence on corporate performance measure. (Muritala, 2012), in his study “An experimental investigation of capital structure on firms’ execution in Nigeria”, he analyzed and understands the association of capital structure with financial performance of firm by yearly data of ten companies with a span of five year. He used Pesaran & Shine unit root test with Panel Least Square (PLS) as analysis tool in his study to evaluate the variables. The study suggested inverse correlation between capital structure and functioning firm performance. Although, the outcome confirmed that performance of firm has significant positive correlation with asset turnover, firm size, and firms’ age. ROA provided the evidence of significant inverse relationship with asset tangibility. The results suggested that the selected firms were not efficiently operating the fixed asset as compare to their total assets sensibly to create positive influence on the performance of firms.

Mean while (El-Sayed Ebaid, 2009), presented a research on topic “the impact of capital structure choice on firm performance in Egypt”. The researcher generated the data with sample span of nine years from 1997 to 2005 was taken from Egyptian Exchange (EGX) listed companies. Data analysed by using multiple regression model. The conclusion draws that there is almost no significant affect of capital structure choice (measured by leverage) on performance of firm (measured by ROA, ROE & GPM).

The study conducted by (Dar, Naseem, Niazi, & Rehman, 2011) examined the correlation among four corporate governance surrogates measured by board size, CEO status, annual general meeting (AGM) and audit committee with two firms’ financial performance surrogates measured by profit margin and return on equity. Data was originated from annual reports of Karachi Stock Exchange listed companies under oil & gas sector for the sample span of seven years from 2004 to 2010. Panel data methodology was taken and for estimation Ordinary Least Squares. Multiple Regression model was used to observe the impact of the variables. The conclusion draws an evidence of a major influence and positive significant correlation between return on assets with board size plus with AGM. Whereas return on assets has inverse correlation with CEO status and audit committee size and both have significant influence on it. The results additionally described that there is no significant correlation between PM, board size an annual general meeting (AGM) as well as with audit committee. The audit committee and CEO status has a significantly negative correlation with PM. The suggestion of this result is that the firms’ size of board must be limited and right combination of executives should be involved on board.

Furthermore (Gill & Mathur, 2011), conducted the research on “the impact of board size and the CEO duality on the value of Canadian manufacturing firms”. The sample size of ninety one (91) Toronto Stock Exchange listed manufacturing companies from Canada for a time period of three years from 2008 to 2010 was selected. To analyze the data, co relational and non experimental research methodology was used for findings. According to the analysis, large number of directors (board size) effect negatively on the firms’ value. The results also showed that the dual role of CEO effect positively on the value of companies. As well as, firm performance, firm size, and potential growth of the company have positive effect on the value of Canadian manufacturing companies.

(Morekwa Nyamongo & Temesgen, 2013), analysed “the effect of governance on performance of commercial banks in Kenya”. In this research the performance is measured by using two surrogates: return on assets & return on equity. Corporate governance was taken as main independent variable and measured by three surrogates i.e. board size, CEO duality and independent director. Panel econometrics technique was used to examine the correlation of governance with banks’ performance. The conclusion draws that board size must be limited because a large board has no direct impact on banks performance and the continuation of independent directors has a tendency of improving the banks financial performance. Whereas no indication found that dual role of CEO affect the performance of the commercial banks of Kenya.
Issues related to the corporate governance have obtained wide concentration of researchers because of the growing economic crisis around the globe. The research study carried out by (Danoshana & Ravivathani, 2013), the key objective was to explore “the impact of corporate governance on the performance of listed financial organizations in Sri Lanka”. The appropriate corporate governance mechanisms were recommended for recovering the performance of registered financial organizations. To accomplish the research objectives, the two key dependent variables return on equity and return on assets were taken to describe the performance of the organization and to measure the corporate governance, three surrogates were used i.e. Board size, audit committee and meeting frequency of the company as independent variables. A sample of twenty five listed financial firms was selected with sample span of five years from 2008 to 2012. Findings confirmed the measures of corporate governance significantly affect the performance of firms and both board size and size of audit committee effect positively on performance of firms. Whereas, meeting frequency affects the firms’ performance negatively.

According to (Vo & Nguyen, 2014), carried out a research on “the relationship between corporate governance and firm performance: Empirical study in Vietnam”. The researcher generated the data of 177 Ho Chi Minh City Stock Exchange (HSX) listed companies with sample span of five years from 2008 to 2012. Generalised Least Square technique was used to analysed the data. The conclusion draws that CEO duality affects positively on performance. Results also suggested that board independence and performance has an inverse correlation; moreover board size has no correlation with and performance. Furthermore (Habib, 2016), presented a research on “Relationship between corporate governance and firm performance: A case study in Bangladesh”. The data consist of seventy seven Dhaka Stock Exchange listed companies with sample span of three years from 2010 to 2012. Generalised Least Square technique was used to analysed the data. The conclusion draws that CEO duality, board compensation and female members on board affects positively on performance. Results also suggested that board size and performance (measured by ROA) has an inverse correlation.

(Yasser, Entebang, and Shazali, 2011), introduced the examination on “Corporate administration and firm execution in Pakistan: The instance of Karachi Stock Trade (KSE)- 30”. The surrogates utilized as free factors for corporate administration i.e. board estimate, review advisory group, double part of President or administrator and board creation. Also, for firm execution two surrogates were utilized as reliant factors are return on value and overall revenue. Information of two years 2008 and 2009 was created from thirty stock recorded organizations in Pakistan. The conclusion draws the proof that ROE has decidedly noteworthy relationship with board 12ynthesis and review council. While President/administrator duality has fundamentally feeble relationship with ROE, though PM and Chief/director duality has no huge connection. Net revenue fundamentally and emphatically connects with board creation and in addition with review council individuals and board estimate. The proposal of this was the extent of board must be constrained and right mix of administrators ought to be required on board.

4. Result & Discussion

4.1 Pooled Regression Model (ROA)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Prob.</th>
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</thead>
<tbody>
<tr>
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</table>

R-squared 0.422207  Mean dependent var 5.589600
Adjusted R-squared 0.397879  S.D. dependent var 10.86724
S.E. of regression 8.432589  Akaike info criterion 7.150792
Sum squared resid 6755.313  Schwarz criterion 7.281050
Log likelihood -352.5396  Hannan-Quinn criterion 7.203509
F-statistic 17.35470  Durbin-Watson stat 0.995941
Prob(F-statistic) 0.000000

Figure: # 1
The above estimation show that the (LTDR) and (STDR), has significantly influence on (ROA), but the Board Size & Audit Committees do not significantly influence on (ROA) as the sig value of OLS regression model of Board size & Audit Committee is greater than 0.05, $R^2$ value indicates how much of the total variation in the dependent variable that is (ROA) can be explained by the independent variable which are (LTDR), (STDR), Board Size (BS) and Audit Committee (AU) i.e. 42.22%, we find that the adjusted $R^2$ value of our model is 0.39 with the $R^2=0.42$. The sig value of F-statistics is less than 0.05 which means the model is significant. The negative sign of coefficient has suggested that (LTDR, and STDR) have inverse relation with returned on assets (ROA), but has positive relation with “Audit Committee and Board Composition” as the coefficient value is in positive which indicates the relationship is positive or parallel. The mean of ROA is (5.58 +, - 10.86), that means performance of management in utilizing the resources ROA is (5.58) as an average score, this means that for each 100th of funds it earns (5.58), which is measured by ROA.

### 4.2 Pooled Regression Model (ROE)

**Dependent Variable: ROE**

**Method: Panel Least Squares**

**Date: 04/10/18  Time: 02:33**

**Sample: 2007 2016**

**Periods included: 10**

**Cross-sections included: 10**

**Total panel (balanced) observations: 100**

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<th>Std. Error</th>
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<td>-0.310294</td>
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</table>

| R-squared | 0.018069   | Mean dependent var | 38.44920   |
| Adjusted R-squared | -0.023275 | S.D. dependent var | 275.5345   |
| S.E. of regression | 278.7226   | Akaike info criteron | 14.14702   |
| Sum squared resid | 7380136   | Schwarz criterion | 14.27728   |
| Log likelihood | -702.3509 | Hannan-Quinn criter | 14.19974   |
| F-statistic     | 0.437043   | Durbin-Watson stat | 2.214395   |
| Prob(F-statistic) | 0.781544   |                     |            |

**Figure: # 2**

The above estimation show that no variable is significantly influence on Return on equity as the sig value of OLS regression model of all the above variables are greater than 0.05, $R^2$ value indicates how much of the total variation in the dependent variable that is Return on Equity (ROE) can be explained by the independent variable which are (LTDR), (STDR), Board Size (BS) and Audit Committee (AU) i.e. 1.80%, we find that the adjusted $R^2$ value of our model is -0.02 with the $R^2=0.01$. The sig value of F-statistics is greater than 0.05. The negative sign of coefficient has suggested that (LTDR, STDR, Board and Audit) have inverse relation with returned on Equity (ROE). The mean of ROE is (38.44 +, - 275.53), that means performance of management in utilizing the resources ROE is (38.44) as an average score, this means that for each 100th of stock holder funds it earns (38.44), which is measured by ROE.
4.3 Pooled Regression Model (NPR)

**Dependent Variable:** NPR

**Method:** Panel Least Squares

**Date:** 04/10/10  **Time:** 02:40

**Sample:** 2007-2016

**Periods included:** 10  
**Cross-sections included:** 10

**Total panel (balanced) observations:** 100

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<th>Std. Error</th>
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<td>0.0248</td>
</tr>
<tr>
<td>STD</td>
<td>-0.783464</td>
<td>0.148706</td>
<td>-5.268566</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared: 0.347153  
Adjusted R-squared: 0.319665  
S.E. of regression: 36.55626  
Sum squared resid: 126954.1  
Log likelihood: -499.2144  
F-statistic: 12.62914  
Prob(F-statistic): 0.000000

**Figure # 3**

The above estimation show that the (LTDR) and (SDR), has significantly influence on Net Profit Margin Ratio (NPR), but the Board Size & Audit Committees do not significantly influence on Net Profit Margin Ratio (NPR), as the sig value of OLS regression model of Board size & Audit Committee is greater than 0.05, R² value indicates how much of the total variation in the dependent variable that is Net Profit Margin Ratio (NPR), can be explained by the independent variable which are Long-Term Debt Ratio (LTDR), Short-Term Debt Ratio (STD), Board Size (BS) and Audit Committee (AU) respectively. The R² value of our model is 0.31 with the R²=0.34. The sig value of F-statistics is less than 0.05 which means the model is significant. The negative sign of coefficient has suggested that (LTDR, and STD) have inverse relation with Net Profit Margin Ratio (NPR), but has positive relation with “Audit Committee and Board Composition” as the coefficient value is in positive which indicates the relationship is positive or parallel. The mean of NPR is (0.45 +,- 44.32), that means performance of management in generating the profit (0.45) as an average score, this means that for each 100th investment it earns (0.45), which is measured by NPR. That means the company is more efficient in converting the sales into actual profit.

5. Conclusion

This research investigates the impact of CG & CS on organizational performance of listed cement industries at Pakistan Stock Exchange (PSX). 10 cement firms have been selected for this study and the study used the data of 10 years taken from audited financial statements since 2007 to 2016 using Pooled regression model. The statistical result from estimation have shown that there is significant relation of LTDR-term debt ratio with performance of an organization measured by (ROA & NPR) but there is insignificant relationship of (ROE) either negative or positive with all the independent variables to be specific Board Size, Audit Committee Long-term debt and short-term debt ratio. The variables which are found statistically significant in model are STD & LTD has negative relationship with ROA, as the results of the study are corresponding with the previously conducted studies by Umar, Tanveer, Aslam, & Sajid, (2012), Talib, (2014). The argument is justified on the ground that the firms with lesser STD & LTD proportion prompt to higher financial performance. According to Umar, Tanveer, Aslam, & Sajid, (2012), ROE has not sufficient either negative or positive association with STD & LTD. Mean while El-Sayed Ebaid, (2009), presented the relationship that there is almost no significant effect of capital structure choice on performance of firm (measured by ROE). Dar, Naseem, Niaz, & Rehman, (2011) and Narwal & Jindal (2015) has presented the statistically insignificant relationship between the variables in model is Board size and ROE , as the results of the study are corresponding with the previously conducted study. While Danoshana & Ravivathani, (2013) and Habib, (2016) presented that Board size and performance (measured by ROA) has either negative or positive relationship. In brief its concluded that the firm or authority is better to concentrate on investing their own resources rather than generating the stockholder equity.
6. Limitations & Future Research

This study is based on a small sample size. In future the study can conduct by increasing the sample size. In this study the only three variables were used to measure the performance but in future it could change or increase the number of variables. The current economic condition of the country might vary in future. There are more companies in cement sector that are also listed on Pakistan Stock Exchange (PSX). Keeping in view the existing situation of Pakistan the study can also be performed on other sector’s companies listed on Pakistan Stock Exchange to present the analysis of corporate governance choice and capital structure effect on financial performance. A comparative study can also be conducted comparing findings from emerging and developed countries.

7. References


