The Effect of Corporate Governance and Capital Structure on Firms' Performance: Investigation on Petroleum Sector in Pakistan

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ABSTRACT

The attempt of the research is to realize the key factors and examine the effect of corporate governance and capital structure on firms' financial performance belonging to petroleum sector which are registered on Pakistan Stock Exchange (PSX). The study focuses on data gathered from five companies of petroleum sector keeping in view the present situation of Pakistan and current economic, political and legislative environment to evaluate and judge the challenges and risks affecting the firms' performance. Only a single source of data is used which is secondary. The sample employed in the current research is comprised of five firms listed in the PSX index under the petroleum sector. The sample size selected for the purpose of this research is consisting of nine years annual data of the variables starting from year 2007 to year 2015 used. Multiple Regression model is used as the statistical technique and SPSS statistics has been used for examination of hypotheses. The empirical results investigated that Short term debt ratio and Long term debt ratio has significantly negative correlation with ROA. The firms with lesser STD & LTD ratio lead to higher financial performance. Consequently, board size and no. of shareholders has insignificant relationship with ROA. Furthermore, the study investigated that ROE has insignificant either negative or positive relationship with all the independent variables namely Board size, No. of shareholders, Short-term debt ratio and Long-term debt ratio.

Keywords: *Corporate governance, capital structure, ROA, ROE, Short term debt ratio and Long term debt ratio.*

INTRODUCTION

Oil is the world's most essential energy resource. It produces power for factories and other synthetic materials that, in the modern world, we often take for granted and it had, has and will have a never-ending demand thus leads towards affirmative investment opportunities, not only in Pakistan but internationally. The purpose of selecting specifically this sector for the study is because relating to the economy of Pakistan's volume and importance it posses the mixture of local and internal corporations. Transport and power are among the main sectors which has the highest usage of oil and petroleum products. As per the economic survey of 2014-2015 the growth rate of petroleum products is recorded 4.3%.

The research intends to provide the insight of companies financial performance listed under petroleum sector and will conclude that how the capital structure and corporate governance of the petroleum sector in Pakistan which will not only contribute in the literature but also helps the researchers, practitioners and analyst in the decision making process.

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Various empirical researches have presented the linkage of firms' financial performance with capital structure and corporate governance. Corporate governance is concern with the framework of policies, customs, laws administration and the way company controls and manages the relationship with stakeholders engaged with respect to financial performance of firms and also setting up transparency and responsibility throughout the organization. The key measures used for corporate governance system are considered from the outlook of Annual general meetings (AGM), Board size, Shareholders, CEO Management, Audit committee size and Board committees. Although the capital structure approach focuses on the change that effect the worth of the firm and determines the various aspect either effect positively or negatively to debt & equity combination of organization's capital structure.

Whereas capital structure consists of the capital structure management concepts, which is practically guaranteed to obtain the return on the investment and venture made in the organizations. Therefore, for successful operations, capital structure decisions of any of the company are very important. The key measures adopted for the capital structure management are Short term debt ratio, Leverage, Long term debt ratio, Quick ratio, and Debt to assets ratio. Financial performance which measures the accomplishing economic goals of firms is being an issue of concentration in the professional researches. The financial performances of companies transmit to the several subjective processes to utilize its specified resources from prime mode of functions to generate the revenues. Many of the studies present three major determinants to measure the financial performance of firms are Return on assets, Return on equity and Profit margin.

One of the crucial decision that finance experts of any organization takes is about capital structure which influence the weighted average cost of capital as well as the market value of shares. There are a variety of theories on the subject of capital structure which discusses the impact of main things like finance sources, tax advantages and required rate of return. Past studies concluded that there are certain internal and external factors like social, legal, financial, taxes and macroeconomic indicators which affect the optimal capital structure of any organization but the various factors vary for various industries and country to country as well.

Pakistan has taken the measure step of regulating the corporate governance properly. The two main regulatory bodies: State Bank of Pakistan (SBP) and Securities and Exchange Commission of Pakistan (SECP), which has been united and working hard to frame optimal structure of corporate governance in this corporate world. Institute of the corporate governance has also been working to avoid any fraudulent practices in the business world. In March, 2002, in favour of developing good structure of the corporate governance, Securities and Exchange Commission of Pakistan (SECP) published "the code of conduct" on corporate governance for the stock listed companies of Pakistan. The code is a proper frame work which is facilitating SECP to check whether all the companies are in agreement with the good practices of corporate governance or not as all the listed companies are bound to act according to this code.

It basically helps the SECP in governing, administering and controlling the stock listed companies. The aim behind introducing "the code of conduct" on corporate governance is to protect the interest of the company's 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. This research study is taking two main variables for measuring the affect of corporate governance on the firms' financial performance under petroleum sector which is board size and no. of shareholders. Shareholders include individuals, banks & financial institutions, insurance companies, public sector companies, mutual funds, modaraba companies and federal government, securities and exchange commission of Pakistan, foreign investors and others. There are certain number of shareholders, number and percentage of shares they own under each category. While the board of management Chairman, Managing Director and other members.

For measuring the impact of capital structure this study is taking short-term and long-term debt ratios as the main factors. Equity and debt are among the two main components of the capital structure and it is one of the most crucial decisions that a firm must choose to work on the optimal capital structure taking various factors and stake of the investors into the account. The selection of right combination of equity and debt is the main decision that will ultimately impact the profit maximization and remain competitive in the industry.

Corporate governance refers to the designed system through which SECP is controlling and directing the stock listed companies. No. of shareholders and board size two main variables which have been used by the past researchers and this study also taken these variables into account in order to exploring its impact on the petroleum sector of Pakistan. The board of directors in stock listed company is responsible for the ensuring the good governance in the firm while the shareholders are responsible for appointing the auditors and directors for ensuring the good practices and for the sake of their stake and in this way they contribute and ensure that the company is following the appropriate corporate governance structure.

The board of directors are not only responsible for setting the strategically goals for the firms but also to provide the righteous supervision and leadership to ensure the practical working of the set goals and report to the shareholders regarding their stewardship. It is important for the board of directors to follow the laws and regulations as they are answerable to the shareholders in general meeting. Considering the above facts and figures and from the past literature, this research paper is taking corporate governance and capital structure into account for studying and concluding the effect of both on the financial performance of stock listed companies under petroleum sector in Pakistan.

The purpose of the research is to realize the key factors and examine the effect of corporate governance and capital structure on firms' financial performance of petroleum sector which are registered on Pakistan Stock Exchange (PSX).

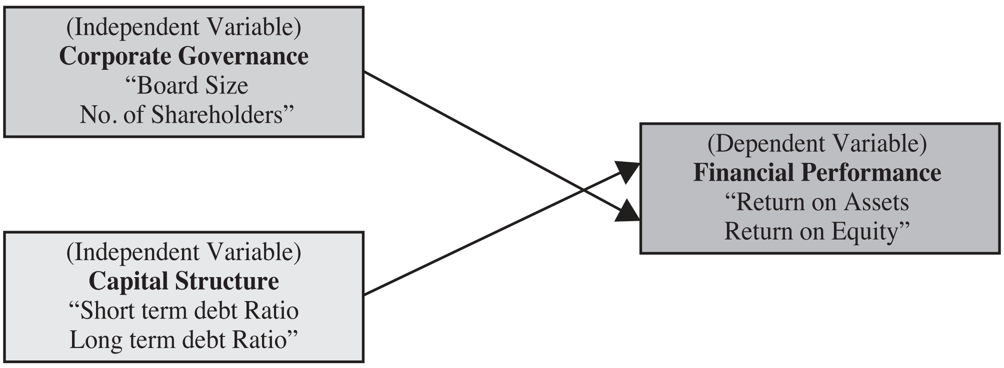
The corporate governance composition and capital structure methods of companies affect significantly on corporations' capacity and have positive or negative influence on factors of performance internally and externally. The proposition of this research is general and has been surfaced time to time because of the growing economic & financial crisis globally.The study focuses on data gathered from five PSX listed companies under petroleum sector keeping in view the existing situation of Pakistan to present the analysis of corporate governance choice and capital structure effect on financial performance within time duration of nine years.

To assess the corporate governance composition and capital structure affect on financial performance of firms associated to petroleum sector of Pakistan.

This research mainly focused on evaluating and testing the subsequent hypothesis:

Ho1: Board size effect insignificantly on performance of firm ROA.
Ho2: No. of shareholders effect insignificantly on performance of firm ROA.
Ho3: Short term debt effect insignificantly on performance of firm ROA.
Ho4: Long term debt effect insignificantly on performance of firm ROA.
Ho5: Board size effect insignificantly on performance of firm ROE.
Ho6: No. of shareholders effect insignificantly on performance of firm ROE.
Ho7: Short term debt effect insignificantly on performance of firm ROE.
Ho8: Long term debt effect insignificantly on performance of firm ROE.

Theoretical Framework



The above theoretical framework is a combination of two different models developed by (Peters & Bagshaw, 2014) and (Tailab, 2014) in their studies. All the measures presented are consistent with the previous literature; only No. of Shareholders has been added to show the pathway of the research to investigate effect of corporate governance composition and capital structure on financial performance of firms associated to petroleum sector of Pakistan.

RESEARCH METHODOLOGY

The data required to examine the research has been assembled from the official websites of the sector is being analysed. Only a single source of data is used, which is secondary and the main focus in collection of data is from:

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

Variables

- **Independent Variable**

Corporate Governance is selected as independent variable and evaluated by two measures namely Board size and No. of shareholders.

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 Performanceis selected as dependent variable and measured by the two ratios:
Return on equity (ROE) = Net Income / Total Equity
Return on assets (ROA) = Net Income / Total Assets

Inclusion Criteria

The study focuses on data gathered from five companies of petroleum sector keeping in view the present situation of Pakistan and current economic, political and legislative environment to evaluate and judge the challenges and risks affecting the firms' performance within time duration of nine years.

Sample & Sampling technique

The sample employed in the current research is comprised of five firms listed in the PSX index under the petroleum sector. The sample selected for the purpose of this research is consisting of nine years annual data of the variables used in this study. The sample span of all data is starting from year 2007 to year 2015. The firms are selected using non-probability sampling technique. Panel data methodology for the selected firms is generated because it's a combination of time series and cross sectional data.

Statistical Model

Multiple Regression model is used for examination of hypothesis which further clarifies the research. The model is as under:

$$ROE = \alpha + \beta1\ (B.Size) + \beta2\ (Shareholders) + \beta3\ (STD.Ratio) + \beta4\ (LTD.Ratio) + \varepsilon$$
$$ROA = \alpha + \beta1\ (B.Size) + \beta2\ (Shareholders) + \beta3\ (STD.Ratio) + \beta4\ (LTD.Ratio) + \varepsilon$$

α = Y - Intercept
β = slope of coefficient (Parametric Constant)
ε = error

Statistical Technique

Multiple Regression model is used in this research paper as the statistical technique for examination of the hypothesis. This particular technique is used in this study as the independent and dependent variables are numeric (scale). As compare to the other techniques the foretell power of the regression analysis is forceful in this condition.

LITERATURE REVIEW

This segment highlights some of 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, Schillhofer, & 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 corporate governance affects the value of firm positively.

(Becker, Cronqvist, & Fahlenbrach, 2011), conducted a research "Estimating the Effects of Large Shareholders Using a Geographic Instrument", analyzed the impact of large number of shareholders 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 significant association between large number of shareholders and profitability (measured by ROA) and affect positively.

Results also suggested that larger number of shareholder' skills and opinions play major function in influencing profitability of companies. According to (Oladeji, Ikpefan, & Olokoyo, 2015) carried out a research to examine "the impact of capital structure on firm performance in Nigeria". Using ten year data from 2003-2012 of six petroleum companies in Nigeria. Panel data was generated for the selected companies and concluded that there significant relationship exists between firm financial performance and leverage. Furthermore (Omondi & Muturi, 2013) in the study "the factors affecting the financial performance of listed companies at Nairobi Securities Exchange in Kenya", the conclusion draws that leverage has a significantly inverse affect on firms' financial performance. Results also concluded that company size and liquidity had significant positive relationship between firms' financial performance. 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 examine the impact of ownership concentration and other firm specific factors on companies' financial performance. The sample size of 102 companies 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 positively & significantly associates with return on assets and negative relationship with firms' financial performance.

In Addition, (Tailab, 2014) studied "the impact of capital structure on financial performance". For profitability, he adopted return on equity (ROE) as the ratios of net income to total shareholders' equity and return on assets (ROA) as the ratio of net income to total assets, as a surrogate for financial performance of firms. And firms' size, total debt, short-term debt, long-term debt and debt to equity ratio were selected to specify the capital structure. Using a sample period of nine years from 2005 to 2013 of thirty Energy American firms was selected. Smart Partial Least Square (PLS) multiple regression method was used for analysis. The analysis showed that the total debt has a significant correlation and effect negatively on ROE and ROA, whereas size in terms of sales has significantly negative impact only on return on equity of the American firms. On the other hand, a short-term debt has significant &direct effect on ROE. Furthermore, long term debt, size (in terms of total assets) and debt to equity has an insignificant either negative or positive relationship with profitability. The overview of the results was limited as the size of sample was small.

For the long term and continuing survivability of the companies, the correlation between capital structure and profitability of firms cannot be overlooked as the progress in the productivity is essential. This research extended (Abor, 2005) conclusion concerning the effect of capital structure on profitability. 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 short-term debt ratio and total debt ratio has positive relationship with ROA in both the manufacturing and service industries.

In Addition another paper by (Onaolapo & Kajola, 2010) presented “the impact of capital structure on firm’s financial performance”. Panel data were analysed by using sample of 30 non financial Nigerian Stock Exchange listed companies for a sample span of seven year from 2001 to 2007.Ordinary Least Squares (OLS) was used as a method of estimation. The outcome suggested that debt ratio and has significant& inverse relationship with the firms’ financial performance (measured by ROE and ROA), with these findings the study showed consistency with preceding empirical studies.

The study by (Ali, Zia, & Razi, 2012) intended to analyse “the impact of capital structure on the profitability of petroleum sector of Pakistan”. Using a sample of twelve KSE listed companies randomly selected for a period 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 profitability of the companies under petroleum sector. This study 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 Firms’ Financial Performance: Evidence from Pakistan”. Top hundred Karachi Stock Exchange (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 term liabilities, short term liabilities and total 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 a firm's capital structure and firm's performance measures is significant and negative while the short term debt ratio has a significant and positive influence on corporate performance measure. (Muritala, 2012), in his study "An empirical analysis of capital structure on firms' performance 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. Therefore, this study proposed that asset tangibility of firm should be a determined factor to capital structure as firms with additional tangible assets are not much likely to be financially controlled.

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.

In the globalization of trade economics, the standard of good quality corporate governance is obligatory. According to (Narwal & Jindal, 2015) presented in their study "The impact of corporate governance on the profitability of Indian textile sectors". The data was generated from annual financial statements of textiles companies for a sample span of five years from 2010 to 2014. The paper exercised five measures of governance, namely the board size, board meetings, audit committee members, director's compensation (director's remunerations) and non executive directors as the independent variables while the profitability as the dependent variable. Data was analysed by using Correlation and Ordinary Least Squares regression model. The results showed that the board size, board meeting and non executive directors do not have significant relationship with the profitability. However a strong positive relationship is examined between director's compensation (director's remunerations) and profitability and Audit committee have inverse relationship with the profitability. Another study explained by (Herdan & Szczepańska, 2011) intended a comparative investigation between director's remuneration (director's compensation) and firm's performance of Poland and UK listed companies. Findings affirm that the relationship between the director's payments and the firms' size is positive. The study also explained the positive association exist between directors remunerations and return on capital.

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.

Furthermore, (Kyereboah-Coleman & Biekpe, 2006) observed the correlation of corporate governance and financial performance of companies in Ghana and the conclusion showed that size of board and CEO duality had no significant relationship with performance although board composition has positive influence on firms' performance. (Akpan & Riman, 2012), conducted the study "Does corporate governance affect bank profitability? Evidence from Nigeria". The sample of the Nigerian banks was taken to examine the affect of corporate governance on the performance of bank. The results revealed that the board size of directors and the number of the shareholders has a significant positive effect on both the return on equity and return on assets. Moreover, study also examined that the assets' quality, equity providers and directors also have an influence on the performance of bank.

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, & Shazali, 2011), presented the research on "Corporate governance and firm performance in Pakistan: The case of Karachi Stock Exchange (KSE)-30". The surrogates used as independent variables for corporate governance i.e. board size, audit committee, dual role of CEO or chairman and board composition. And for firm performance two surrogates were used as dependent variables are return on equity and profit margin. Data of two years 2008 and 2009 was generated from thirty stock listed companies in Pakistan. The conclusion draws the evidence that ROE has positively significant association with board composition and audit committee. While CEO / chairman duality has significantly weak association with ROE, whereas PM and CEO/chairman duality has no significant correlation. Profit margin significantly & positively associates with board composition as well as with audit committee members and board size. The suggestion of this was that the size of board must be limited and right combination of executives should be involved on board.

DATA ANALYSIS AND FINDINGS

Following tables demonstrate the test results of the firms' financial performance measured by ***ROA*** to prove it statistically:

Descriptive Analysis

The table below present a picture about descriptive statistics. There are 45 observations. We have highest mean of shareholders that is 11000.6889 whereas the lowest mean is 0.0720 of LTD.

Table 1: Descriptive Analysis of Factors

N	Minimum	Maximum	Mean	Std. Deviation	
ROA	45	-.32	.58	.1480	.18932
ROE	45	-8.23	2.18	.3160	1.36785
B.SIZE	45	7.00	10.00	8.9556	1.02149
SHAREHOLDERS	45	1772.00	24305.00	11000.6889	6855.47834
STD	45	.09	1.03	.5658	.24376
LTD	45	.00	.47	.0720	.12054
Valid N (list wise)	45				

Correlation Analysis

The table below present the correlation statistics that gives a clear picture of correlations among the dependent variable (ROA) with its 2 independent variables (STD &LTD). The other two independent variables namely Board size and No. of shareholders are not correlating with the dependent variable. The correlation between ROA with STD ratio is -0.736 and with LTD ratio is -0.359. Due to the fact significance levels which are smaller than 0.05, there is a sufficient evidence to reject the null hypotheses Ho3 & Ho4 and state that STD ratio and LTD ratio are significantly negatively correlated with ROA.

Table 2: Correlation Analysis of Factors

		ROA	STD	LTD	B.SIZE	SHAREHOLDERS
Pearson Correlation	ROA	1.000	-.736	-.359	.291	.091
	STD	-.736	1.000	-.061	-.356	-.302
	LTD	-.359	-.061	1.000	-.134	.301
	B.SIZE	.291	-.356	-.134	1.000	-.046
	SHAREHOLDERS	.091	-.302	.301	-.046	1.000
Sig. (1-tailed)	ROA	.	.000	.008	.026	.277
	STD	.000	.	.344	.008	.022
	LTD	.008	.344	.	.190	.022
	B.SIZE	.026	.008	.190	.	.381
	SHAREHOLDERS	.277	.022	.022	.381	.
N	ROA	45	45	45	45	45
	STD	45	45	45	45	45
	LTD	45	45	45	45	45
	B.SIZE	45	45	45	45	45
	SHAREHOLDERS	45	45	45	45	45

Model Summary Analysis

The model summary table describes the total deviation in the dependent variable explicated by the independent variable. The value of Adjusted R square is 0.679 which shows about 67.90% of the deviation in dependent variable "ROA" is explained by the independent variables "Short term debt ratio, Long term debt ratio, Board size and No. of shareholders" and remaining of the variance is inexplicable.

Table 3: Model Summary Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842[a]	.708	.679	.10722

Analysis of Variance

Analysis of variance (ANOVA) is obtained to find whether the regression model is applicable or not. F-statistics is 24.296 which is high and the significance is 0.000 describes that there lies strong significance between our tested parameters which is even less than 1% level of significance.

Table 4: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.117	4	.279	24.296	.000[a]
	Residual	.460	40	.011		
	Total	1.577	44			

Analysis of Coefficients

The table of Coefficients' shows the factors of regression model and defines the significance of the independent variables in explanation with the dependent variable. The un-standardized coefficient (Beta) value proves that there is the relationship between dependent variable "Return on Assets (ROA)" and independent variables "Short term debt ratio, Long term debt ratio, Board size and No. of shareholders". If the value of beta is positive which means that a positive relationship subsists between dependent and independent variables and if beta value is negative it means there is a negative relationship subsists between dependent and independent variables. The un-standardized beta with negative values shows if there is one percent increase in Short term debt ratio of the firm will lead to decrease the ROA of the firm by 60.9 percent. If there is one percent increase in Long term debt ratio of the firm will lead to decrease the ROA of the firm by 63.7 percent. Thus the t-test statistic value is highly significant at 5% level of significance which means the coefficient values vary considerably from zero and these independent variables are making significant involvement in the model. Although the value shows that ROA has negative but insignificant relationship with Board size and Shareholders.

Table 5: Analysis of Coefficientst

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.619	.186		3.339	.002
	STD	-.609	.075	-.785	-8.073	.000
	LTD	-.637	.142	-.406	-4.494	.000
	B.SIZE	-.008	.017	-.044	-.469	.642
	SHAREHOLDERS	-7.267E-7	.000	-.026	-.278	.782

Following tables demonstrate the test results of the firms' financial performance measured by ***ROE*** to prove it statistically:

Correlation Analysis

The correlation statistics are presented in table 6 shows insignificant correlations between all the independent and dependent variables. Due to the fact significance levels which are greater than 0.05, there is a sufficient evidence that we fail reject the null hypotheses Ho5, Ho6, Ho7 & Ho8 and state all the independent variables are insignificantly correlated with ROE.

Table 6: Correlation Analysis of Factors

		ROE	B.SIZE	SHAREHOLDERS	STD	LTD
Pearson Correlation	ROE	1.000	.088	-.107	-.053	-.320
	B.SIZE	.088	1.000	-.046	-.356	-.134
	SHAREHOLDERS	-.107	-.046	1.000	-.302	.301
	STD	-.053	-.356	-.302	1.000	-.061
	LTD	-.320	-.134	.301	-.061	1.000
Sig. (1-tailed)	ROE	.	.283	.243	.366	.016
	B.SIZE	.283	.	.381	.008	.190
	SHAREHOLDERS	.243	.381	.	.022	.022
	STD	.366	.008	.022	.	.344
	LTD	.016	.190	.022	.344	.
N	ROE	45	45	45	45	45
	B.SIZE	45	45	45	45	45
	SHAREHOLDERS	45	45	45	45	45
	STD	45	45	45	45	45
	LTD	45	45	45	45	45

Model Summary Analysis

The model summary table describes the total variation in the dependent variable explicated by the independent variable. The value of Adjusted R square is 0.020 which shows about 2.00% of the variation in dependent variable "ROE" is explained by the independent variables "Short term debt ratio, Long term debt ratio, Board size and No. of shareholders" and remaining of the variance is inexplicable.

Table 7: Model Summary Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330[a]	.109	.020	1.35424

Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) obtained to find whether the regression model is applicable or not. F-statistics is 1.222 which is very low and the significance value of 0.317 describes that there lies strong insignificance between our tested parameterswhich is less than 5% level of significance.

Table 8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.966	4	2.241	1.222	.317[a]
	Residual	73.359	40	1.834		
	Total	82.324	44			

Analysis of Coefficient

The un-standardized coefficient (Beta) value explains the relationship between dependent variable "Return on Equity (ROE)" and independent variables "Board size, No. of shareholders, Short term debt ratio and Long term debt ratio". Thus the t-test statistic value is highly insignificant at 5% level of significance which means the coefficient values do not vary significantly from zero and all these independent variables do not have any involvement in the model. Therefore the result shows that ROE has positive insignificant relationship with board size and negative insignificant relationship with all other independent variables.

Table 9: Analysis of Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.679	2.343		.290	.774
	B.SIZE	.024	.219	.018	.107	.915
	SHAREHOLDERS	-7.010E-6	.000	-.035	-.212	.833
	STD	-.427	.954	-.076	-.448	.656
	LTD	-3.535	1.791	-.312	-1.974	.055

CONCLUSION AND RECOMMENDATIONS

This study evaluated the relationship between corporate governance and capital structure with firms' financial performance belonging to petroleum sector of Pakistan. The empirical results investigated that Short term debt ratio and Long term debt ratio has significantly negative correlation with ROA. For the long term and continuing survivability of the companies, the correlation between capital structure and profitability of firms cannot be overlooked as the progress in the productivity is essential. Consequently, board size and no. of shareholders has insignificant relationship with ROA. Furthermore, the study investigated that ROE has insignificant either negative or positive relationship with all the independent variables namely Board size, No. of shareholders, Short-term debt ratio and Long-term debt ratio.

The variables which are found statistally 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 ratio lead to higher financial performance. According to Umar, Tanveer, Aslam, & Sajid, (2012), ROE has insignificant either negative or positive relationship 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, Niazi, & 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 correlation.

The study is subject to various limitations. Initially, increasing the data size of sample might have different impact on statistics. The current economic condition of the country might vary in future. There are more companies in petroleum sector that are also listed on Pakistan Stock Exchange (PSX). Data of five firms has been taken to examine the study which can also be conducted by including data of the remaining firms listed on 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.

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