European Online Journal of Natural and Social Sciences 2019; www.european-science.com
Vol.8, No 4 (s) Special Issue: Perspectives of Economics and Management in Developing Countries
ISSN 1805-3602

Corporate Governance and Its Impact on Profitability of the Oil and Gas Sector of Pakistan

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Abstract

The aim of this study is to explore the impact of corporate governance on the profitability of the Oil and Gas sector of Pakistan. This research is done by using secondary data that has been collected from annual reports for a period of 5 years, from 2011 to 2015. To study the association between Corporate Governance and firm profitability, Co-integration, Unit root, Vector Error Correction estimates and unit Granger Causality test were used. Independent variables of the study are the board of independent director, the board size, board remuneration and size of the firm whereas the dependent variables are the return on assets and return on sales. The findings show the significant relationship among all variables included in this study. Improved standards on the qualification of the board members are recommended to the regulators. The research can further investigate the Corporate Governance impact on firm profitability in different sectors of the economy.

Keywords: Corporate Governance, Profitability, ROA, ROE, Oil and Gas sector**.**

Introduction

There is more than one definition of the term Corporate Governance(CG). Corporate Governance is a set of systems by which a company structures, controls and operates in order to achieve its long-term goals and to satisfy its shareholders and stakeholders (Das, 2009). It consists of both hard law (Statutes etc) and the Soft law (codes of corporate governance) (Haxhi and Aguilera, 2015). Regardless of the definition and approach adopted, CG plays a vital role in improving the performance of the firm **(**Bauer,Guenster, & Otten, 2004**;** Fooladi & Chaleshtori 2011; Narwal & Jindal, 2015).Performance improvement leads to achieving the long term goals of the firms. This is in accordance with the agency theory in which shareholders are principles and Board of Directors(BoD) are agents. One of the major duty of the agents is to protect the shareholders' wealth. Needless to say, that growth comes later than protection. This protection fo wealth is the crux of most corporate laws and codes around the globe. However, the CG laws and codes are not limited to shareholder's protection but also extend to other stakeholders. (La Porta et al 1997, Julien and Rieger 2003)

Pakistan is a developing country. It got its independence in August 1947 from Britain. Like India, Malaysia, and other commonwealth countries, Pakistan follows the Common Law regime. Common law regime or system works differently from the other systems e.g Civil Law. The regime also affects the approach that a country follows. Naturally, Pakistan follows the CG systems which were introduced and implemented in the United Kingdom (UK). The world has seen numerous financial disasters in recent times. Enron and WorldCom were some of the many. Earlier than that, BCCI and Barings bank scandal shook the financial world. As a result, the UK government, in an attempt to regain the confidence of the investors and the general public in financial systems and market, introduced the Cadbury Report in 1992. It was soon followed by other reports (Greenbury, Hempel, Trumbull, Smith, Kings, etc). The UK has produced 32 codes since the one came in 1992. (Zattoni 2016).Pakistan has produced only 3 so far.

Pakistan Corporate law and CG package include the Companies Act 2017, Securities and Exchange Commission of Pakistan Act 1997 and Code of Corporate Governance Act 1997(SECP Act 1997). The code defines the way for developing good corporate governance structure of governance for the companies listed on the stock exchange of Pakistan. In the latest 2017 code, the Audit Committee must be chaired by an independent director. Similar new controls are introduced in the new code. In addition, SECP on its website declares that it will adopt any law from other jurisdictions which it will see fit to regulate the companies and make them secure and profitable for the shareholders and stakeholders alike.

Problem Statement

If the investments to the shareholder managed by the BoD well then it will tend to grow. In other words, a company that is well-governed is a better company performance-wise. That is the theory of governance. Will it pass the real test? This research tends to see the impact on performance in the presence of good corporate governance practices in the Oil and Gas sector of Pakistan.

Research Objectives

- To examine the impact of corporate governance on firm profitability.
- To assess the dimension of corporate governance in term of board size, independent directors, board remuneration and firm size.

Research Hypotheses

- There are significant positive relationships among profitability and board size.
- There is a significant positive relationship between profitability and independent directors.
- There is a significant positive relationship between profitability and board remuneration.
- There is a significant positive relationship between profitability and firm size.

Main hypotheses

- To explore the relationship between corporate governance and profitability of the Oil & Gas sector.

Literature Review

It was observed that when the firm complies with the CG philosophy, there is an increase of the organization profitability what improves its competitiveness. It also helps to excel in its relationship with investors, employees, business partners, and customers, etc. (Todorovic, 2013). Yasser, Entebang, and Mansor (2011), in their study, concluded that CG attributes (CEO duality, Audit Committee independence, and Board size) are positively linked to the firms' performance in Pakistan. In his study of Saudi Listed companies, Ghabayen (2012) found that board characteristics had a significant effect on the firm's performance. The researcher concluded that improved CG improves the performance of the company.

According to Prabhakar, (2006) corporate governance is considered as a mirror which has the same sight as the corporate sector itself is governed. However, the limitation exists as there are considerable variations are always present. Julien and Rieger (2003) have given the considerations to the stakeholder model of corporate governance through mentioning that, corporate governance system is the main contributor in the corporation to maintain and protect the interest of various stockholders.

Khan, Nemati, and Ifthikar, (2011) study the impact of corporate governance on the performance on Indian banks and find that the board of directors plays a vital role in the performance of banks. Latif, (2013) conducted a study to know the impact of corporate governance on firm performance and concluded that there was a significant relationship between board size and firm performance. Abdullah (2006) investigated the relationship between the director's remuneration, firm performance and corporate governance in Malaysia. According to the findings of his study director remuneration was not linked with firm whereas the board of independent directors and the extent of non-executive director welfare negatively manipulate the director's remuneration and also strong negative relation among return on assets and director's remuneration. (Olagunju, 2013) another study in the context of developing Asian countries and taking Indian companies sample data. Arora and Sharma (2016) concluded that not all the attributes of the CG are directly linked to the performance of the firm. One example was the duality if the CEO, researcher did not find any relation between that and the performance. In another Asian developing country study, Azeez 2015 found the negative relationship between firm performance and the board size. It was concluded that the smaller board size worked more effectively due to a closed management style. This was in line with the earlier study in Sri Lankan context which concluded that smaller board size and independence had positively influenced firm performance (Dharmadasa, Gamage, and Herath (2014). Hodo, (2012). Emmanuel and Hodo (2012) investigated the impact of corporate governance on Nigerian banks profitability and found that there is the significant positive relationship among the board size and the number of shareholders, return on assets and return on equity. According to their study the quality of assets, equity providers and managers also have an effect on the bank performance. Muhammad Azam, (2011) Look at the impact of corporate governance on firm performance. Use Canonical regression analysis to explore the relationship between corporate governance and firm performance, sample size 14 oil and gas sector firms, for the time period 2005 to 2010. In this study include three variables to measure the firm performance suck as return on assets, return on equity and net profit margin. They found that there is a significant positive relationship between corporate governance and firm performance. By better corporate governance structure firms can improve their profitability.

According to the study of Dar, (2011) on corporate governance and firm performance for the period, 2001 to 2010 it is defined that the major causes of the firm's failure in Pakistan are lack of corporate governance. Regression analysis was used to see the impact of corporate governance on firm performance and it showed that there was a significant relationship between board size and profit margin of the firms. As larger the board sizes as larger the profit of the firm.

Theoretical Framework

The model shows the association along with the variables, model shows that board size, independent directors, board committees, board remuneration and firm size effects corporate governance and their impact on the firm's profitability. The profitability of the firms is used by return on assets and return on sales. The more independent directors lead to enhanced corporate governance positively impact on the firm profitability and overall performance.

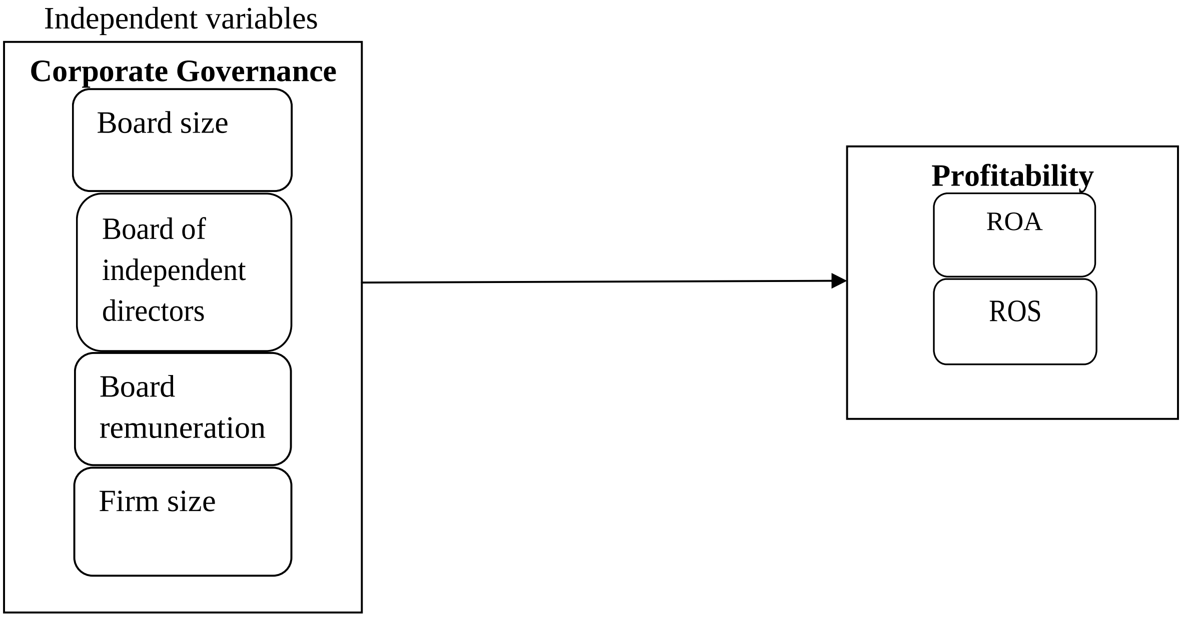

Diagram 1. Thematic diagram

Methodology

To measure the effects of corporate governance on the profitability of Oil and Gas sector of Pakistan over a period 2011-2015, same size 9 firms of Oil and Gas sectors listed on Karachi stock exchange, data is collected from annual reports and the state bank website, uses Co-integration, Unit root, Vector error correction estimates test to investigate the impact of corporate governance on the profitability of the Oil and Gas sector of Pakistan. Independent variables of the study are board-size, the board of independent directors, board remuneration and size of the firm whereas, the dependent variables are a return on assets, return on equity and return on sales. To know the effects of Corporate Governance on Performance of Oil and Gas Sector of Pakistan. Regression models construct for return on assets (ROA) and return on sales (ROS) as be below:

1. $ROA=\beta_0+\beta_1BSIZE_{it}+\beta_2BINDDIRECTOR_{it}+\beta_3BREMUNERATION_{it}+\beta_4FSIZE_{it}+\varepsilon_{it}$
2. $ROS= \beta_0+\beta_1BSIZE_{it} +\beta_2BINDDIRECTOR_{it} +\beta_3BREMUNERATION_{it} +\beta_4FSIZE_{it}+ \varepsilon_{it}$

Where

ROA: return on assets
ROS: return on sales
BSIZE: board size
BINDDIRECTOR: board independent directors
BREMUNERATION: board remuneration
FSIZE: total assets of the firm
i:1 to 9 firms
t:2011 to 2015
u it: Error term

Results

Table 1. Co-integration

Hypothesized No. of CE(s)	Trace Statistic	0.05 Critical Value	Prob.**
None *	513.6773	95.75366	0.0001
At most 1 *	339.6355	69.81889	0.0001
At most 2 *	194.0706	47.85613	0.0000
At most 3 *	77.24102	29.79707	0.0000
At most 4	14.07673	15.49471	0.0809
At most 5	3.321074	3.841466	0.0684

As the likelihood ratio has not exceeded 5% critical value, therefore, Johnson Co-integration rejects any co-integrating relation between corporate governance and firm profitability. The above table reports that variables included in this study do not move simultaneously in the long run and the probability value of all variable is 0.0000 which shows significant relationships among the variables.

Table 2. The Result of Unit Root Investigation

0Variables	Test for a unit root in	Test stat	Probability
Board of Independent Director	1% level	-3.592462	0.0000
	5% level	-2.931404	0.0000
	10% level	-2.603944	0.0000
Board Remuneration	1% level	-3.592462	0.0000
	5% level	-2.931404	0.0000
	10% level	-2.603944	0.0000
Board size	1% level	-3.610453	0.0001
	5% level	-2.938987	0.0000
	10% level	-2.607932	0.0000
Firm size	1% level	-3.592462	0.0000
	5% level	-2.931404	0.0000
	10% level	-2.603944	0.0002
ROA	1% level	-3.592462	0.0000
	5% level	-2.931404	0.0000
	10% level	-2.603944	0.0000
ROS	1% level	-3.592462	0.0000
	5% level	-2.931404	0.0000
	10% level	-2.603944	0.0000

Table 2 tells that if the unit root applies ADF test which shows stationary at first difference, there is a significant positive relationship between the board of independent director, board remuneration, the board size, firm size, return on assets and return on sales. Because the probability value of all variables is 0.0000.

Table 3. Vector Error Correction Estimates

Cointegra-tig Eq:	**ROS(-1)**	**ROA(-1)**	**FSIZE(-1)**	**BSIZE(-1)**	**BREMUNE-RATION(-1)**	**BINDDEC-TOR(-1)**
CointEq1	1.00000	-2.219694 (0.10089) [-22.006]	-4.72E-9 (1.4E-08) [-0.32812]	-3.964766 (0.77395) [-5.12274]	-2.66E-06 (1.1E-06) [-2.45790]	4.321927 (0.56093) [-7.70487]

VECE (Table 3) shows the significant negative association between the return on sales, return on assets, firm size, the board size, board remuneration and board of independent director because of the t value of all variables more than 2.

Table 4. VAR Granger Causality/Block Erogeneity Wald Tests

Dependent variable: BINDDIRECTOR			
Excluded	**Chi-sq**	**Df**	**Prob.**
BREMUNERA TIN	58.40322	4	0.0000
BSIZE	11.66470	4	0.0200
FSIZE	60.09132	4	0.0000
ROA	12.60735	4	0.0134
ROS	18.79669	4	0.0009
All	95.79276	20	0.0000

Results of Table 4 have revealed that all independent variables have significant relationship with board of independent directors. Firm size and board remuneration are independent variables with highest magnitude 60% and 58% respectively. Size of coefficient of other independent variables was not a high side although had significant impact. Impact of board size was 11% whereas return on assets and return on sales have 12% and 18% impact on dependent variable. Overall the model is significant and all independent variables have power to predict change in dependent variable.

Table 5. Dependent variable: BREMUNERATION

Excluded	**Chi-sq**	**Df**	**Prob.**
BINDDIRECTOR	2.036274	4	0.7291
BSIZE	2.599752	4	0.6269
FSIZE	6.605817	4	0.1582
ROA	2.548767	4	0.6359
ROS	1.722738	4	0.7866
All	12.97697	20	0.8784

Results in Table 5 have revealed that all independent variables have insignificant impact on board remuneration. These findings have proved that corporate governance practices have not impact on remuneration of board. Insignificance of return on asset and return on sales have shown that performance of a company have also no impact on remuneration of board. The results affirm that this model is not good fit and unable to explain the relationship between dependent variable (Board remuneration) and independent variables (board independent directors, board size, firm size, return on assets, return on sales).

Table 6. Dependent variable: BSIZE

Excluded	Chi-sq	Df	Prob.
BINDDIRECTOR	5.233995	4	0.2641
BREMUNERATIN	3.203221	4	0.5244
FSIZE	1.612322	4	0.8066
ROA	4.594790	4	0.3315
ROS	4.090340	4	0.3939
All	7.729678	20	0.9935

In table 6, board size was taken as dependent variable and independent variables are tested for significant impact on dependent variable. Results have revealed that all independent variables have insignificant impact, at 5% level of significance, on board size. It means these all our independent variables lack the ability to predict changes in board size. Overall fitness of the model was also not good as probability value is greater than 0.05. Through these results we can say that there may be some other factors which cause changes in board size. Variables included in this study are causing any changes in board size.

Table 7. Dependent Variable FSIZE

Excluded	Chi-sq	Df	Prob.
BINDDIRECTOR	1.731435	4	0.7850
BREMUNERATIN	3.185648	4	0.5273
BSIZE	1.755856	4	0.7805
ROA	2.257766	4	0.6885
ROS	2.141911	4	0.7097
All	6.559509	20	0.9979

In Table 7 firm size was taken as dependent variable and independent variables are tested for significant impact on dependent variable. Results have revealed that all independent variables have insignificant impact, at 5% level of significance, on firm size. This mean these all our independent variables lack the ability to predict changes in firm size. Overall fitness of the model was also not good as probability value is greater than 0.05. Through these results we can say that there may be some other factors which cause changes in firm size. Variables included in this study are causing any significant change in firm size.

Table 8. Dependent variable: ROA

Excluded	Chi-sq	Df	Prob.
BINDDIRECTOR	5.613633	4	0.2299
BREMUNERATIN	13.37830	4	0.0096
BSIZE	9.650840	4	0.0467
FSIZE	10.46436	4	0.0333
ROS	4.501742	4	0.3423
All	34.36729	20	0.0237

In table 8, results have revealed that all independent variables at 5% level of significance have significant impact on return on assets except return on sales. Return on sales has insignificant impact on return on assets. These results have showed that management of a company can improve its performance by properly implanting corporate governance policies. Board remuneration, board of independent directors, and board size are popular corporate governance policies which can impact the return on assets. Size of firm also has significant impact on return on assets. Overall fitness of the model was also good and significant.

Table 9. Dependent Variable: ROS

Excluded	**Chi-sq**	**Df**	**Prob.**
BINDDIRECTOR	15.32807	4	0.0041
BREMUNERATIN	19.70747	4	0.0006
BSIZE	5.179552	4	0.2694
FSIZE	8.826607	4	0.0656
ROA	5.300820	4	0.2578
All	50.81214	20	0.0002

In the last table (table 9) board of independent directors and board remuneration have significant impact on return on sales. All other independent variables which are board size, firm size, and return on assets have insignificant impact on return on sales. However overall model is significant. Results of this model also indicate that corporate governance policies have significant influence on performance of a company

Conclusion and Recommendations

The goal of this study is to analyze the impact of corporate governance on the profitability of the firms. To achieve the objective, co-integration, Granger and unit root test were used to investigate the impact of corporate governance on the profitability of the Oil and Gas sector of Pakistan.

The results of this study agree that Board size, the board of independent directors, board remuneration, firm's size positively associated with return on assets (ROA) and return on sales (ROS). The study also shows that better CG has a stronger impact on profitability in larger firms. The firm can increase its performance by improving corporate governance structure. The research can further look into the corporate governance impact on firm's profitability in different sectors of the economy.

Limitations of the study

This study emphasizes on secondary data.

Variables used in this study based on past studies, no new variable used to measure Corporate Governance and its impact on the profitability of the Oil and Gas sector of Pakistan.

The time period of study is rather short - 2011-2015.

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