The Impact of Corporate Governance on Firm’s Performance: Evidence from Oil and Gas Sector of Pakistan

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Abstract: The purpose of this study is to examine the impact of corporate governance on firm’s performance. A sample of 14 oil and gas related firms has been taken for the period of 2005 to 2010 (N=14*6). Canonical regression analysis has been done to analyze the impact of corporate governance on firm’s performance. The present study focused on the three variables for measuring the firm’s performance such as Return on assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM). The obtained results report that corporate governance has significant and positive impact on firm’s performance and it shows that firm’s performance can be increased by improving the corporate governance structure.

Key words: Corporate Governance, Firm’s Performance, and Oil & Gas sector.

INTRODUCTION

In today’s business and corporate world, corporate governance is being paid central attention and for decades corporate accountability and financial reporting standards have been focused on international level. It is primarily due to a large number of stakeholders whose interests and wealth are at stake in the corporate businesses / firms. The growing influence and awareness of stakeholders in general and stockholders in particular has further drawn attention to the significance of corporate governance and it has recognized that firm’s performance will be at risk until / unless we comply fully with code of corporate governance. Corporate governance in Pakistan is still at evolving stage and State Bank of Pakistan (SBP) & the Securities & Exchange Commission of Pakistan (SECP) are the chief regulating bodies being constantly engaged in framing and governing an optimal governance structure in Pakistan. For this purpose, an institute of corporate governance has been established that will not only help avoid fraudulent and malpractices and but also uphold best corporate practices in the corporate sector.

Reasons for poor corporate governance are found throughout the world, which are mostly coupled with fraudulent acts and other major malpractices. They include irregularities in accounts, non-compliance with law, nepotism, non-merit based system and exploitation of minority shareholders. Pakistan has also had its share in corporate frauds and scandals. However, the Government has taken strides to reduce such malpractices and their effects on corporate environment. Governance is all about encouraging corporate sector to be accountable, fair and transparent and responsible as spelled out by the World Bank president. Corporate governance just not speaks concerning core business activities of the firm but also good corporate governance deals with the various concerns prevailing in the society. Companies today have established the concept of Corporate Social Responsibility (CSR) to which they strictly adhere to. The corporate governance is characterized by major components that include company policies, rules and regulations, board of directors, role of CEO & chairman, stockholders, creditors, institutional investors and regulators reporting and maintaining overall transparency, fairness and accountability about the business operations.

The code of corporate governance was developed and issued by the securities & exchange commission of Pakistan (SECP) in March 2002 for developing a frame work of good governance for the companies listed on stock exchanges of Pakistan. The code provides a frame work to facilitate SECP to control, govern and administer the companies duly listed on stock exchanges and ensure compliance of the best practices of corporate governance. The strict compliance of code makes certain the protection of all stakeholders and hence developing market & investor confidence. Corporate governance includes and deals with the association among many stakeholders of listed companies and helps protect the interests of stakeholders. It implies a set of laws, customs, processes, policies, and regulating bodies, that regulate the way of directing, administering and controlling of listed companies. The board of directors, stockholders and company’s management are the principal stakeholders, while other includes suppliers, banks, employees, creditors, customers, regulators, community and the environment. Vishny and Shleifer (1997) say that “Corporate governance concerns with the framework wherein finance providers are reasonably assured to get the return on their investments made in the companies”.

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The oil & gas segment of Pakistan have been selected for this study due to its size and significance to Pakistan’s economy. The both industry is a fair blend of multinational and national companies, which may become good example of generalizing the findings over the entire industrial sector in Pakistan.

**Problem Identification:**
Khurram, Ali Raza, & Moazzam (2011) investigated how corporate governance affects firm’s performance of Tobacco Industry of Pakistan. There are other industrial sectors too, that need to be critically analyzed on the enlarged facets of corporate governance in order to see how it impacts firm’s performance. Although, they found strong and positive impact between corporate governance and firm’s performance of Tobacco Industry but this finding cannot be generalized because of focus only on one industry. In order to validate the research of tobacco industry, this study attempts to expand its scope to other industries such as Oil & Gas sector of Pakistan for better understanding and generalizing the finding over the entire industrial sector in Pakistan. We have added another independent variable i.e. Effective audit committee as one of corporate governance determinants because of its role to oversee the corporate financial reporting process. While in the measurement of the firm performance, net profit margin variable introduced as key performance indicator (KPI) in addition to return on assets and equity.

**Literature Review:**

**Theoretical Framework:**
The above model depicts the relationship of variables with one another and this model takes an assumption that corporate governance is affected by CEO duality, ownership concentration, and effective audit committee and board independence having impact on firm’s performance. Moreover, the firm’s performance has been determined by net profit margin, return on equity and return on assets in this model. The literature supports that the more the ownership concentration is, the less would be corporate governance ultimately affecting firm’s performance. The more independent directors in the board lead to better corporate governance impacting positively the firm’s performance. In order to be effective and independent Audit committee, it should comprise five members including the chairman of the committee. All members should be non-executive directors and majority of whom should be independent directors. Moreover, at least one member of audit committee should come from financial background.

**Empirical Findings:**
Khurram Khan, Ali Raza Nemati & Moazzam Iftikar, (2011) investigate the effect of corporate governance on firm’s performance of the Tobacco Industry of Pakistan using data from 2004 to 2008. Multiple regression statistical technique was used to measure the relationships between dependent and independent variables. Return on equity (ROE) & Return on assets (ROA) are dependent variables and ownership concentration, CEO duality & Board’s Independence are independent variables. The results show that there is a strong and positive impact of the corporate governance on firm’s performance.

Cyril H. Ponnu, (2008) examines the effect of corporate governance on company’s performance of the Malaysian Public Listed Companies using data for the years 1999 and 2005. Performance of the companies was compared with duality and board’s independence with those without duality and board’s independence. Multiple regression statistical technique was used to measure the relationships between dependent and independent variables. Return on equity (ROE) & Return on assets (ROA) are dependent variables and CEO duality & Board’s Independence are independent variables. The results show that there is no significant relationship between corporate governance structures and company’s performance. However, this finding cannot be generalized, as other studies show otherwise.
Catherine M. Daily and Dan R. Dalton (1994) examine the relationships among corporate governance structures and corporate bankruptcy using data from 1972 to 1982. Logistic regression statistical technique was used to measure the relationship between dependent and independent variables. Profitability, Liquidity and, leverage are dependent variables and CEO duality and proportion of affiliated directors are independent variables. The results show that there is a significant relationship between corporate governance structures and corporate bankruptcy.

Ronald, John M. Bizjak, Thomas and Lemmon (2000) investigate empirically whether corporate governance structure is same or different between undiversified and diversified firms. They also concluded whether any differences in the structure of corporate governance are linked with the loss in value from diversification using data from 1984 to 1985. OLS Regression statistical technique was used to determine the role of corporate governance structure in decision to diversify. While, diversified firms have no difference in independent block holdings, no sensitivity to CEO turnover to performance and have more outside directors similar to have in single-line business firms. In relation to focused firms, we determine that in diversified companies CEOs have lower compensation for performance and stock holding. No strong evidence is found that internal governance failures have connection with the decision to diversify.

Biao Xie, Wallace & Peter J. DaDalt (2001) determine the role of audit committee, the board of directors, and the executive management to stop earnings management using data for each of the years 1992, 1994 and 1996. Ordinary least square regression statistical technique was used to measure the relationship between independent and dependent variables. Number of board meetings, board composition, CEO duality, audit committee and executive committee are independent variables and current accruals are dependent variable. The results denote that earnings management is less prone to happen or happens less often in companies the boards of which include both more outside and independent directors. It is also found that to a lesser extent executive committee and the composition of the audit committee has association with the level of earnings management. Hence, it may let a committee to perform better oversight function.

Paul Gompers, Joy and, Andrew (2003) examine the relationships between stock returns and corporate governance using data from 1990 to 1999. Regression statistical technique was used to measure the relationship between independent and dependent variables. The democracy and dictatorship portfolio are independent variables and stock return is dependent variable. The results show that corporate governance structures have strong association with stock returns.

Sung Wook Joh (2003) examines the effect of corporate governance on firm’s profitability using data from 1993 to 1997. Regression statistical technique was used to measure the relationship between independent and dependent variables. Profitability is dependent variable and ownership concentration is independent variable. The firms with low ownership concentration show low profitability.

Rafael La, Florencio Silanes, Shleifer and Vishny (2000) determine the association between investor protection and corporate governance. This paper empirically finds that effective corporate governance has strong investor protection.

April Klein (1998) investigates the linkage between board committee structure and firm’s performance using data from 1992 to 1993. OLS regression statistical technique was used to find the association between dependent and independent variables. Return on assets, profitability and book value of firm assets are dependent variables and percentage of insiders and outsiders on the entire board and percentage of director shareholdings are independent variables. Though, result finds no systematic association between two measures if directors are categorized into insiders, outsiders and affiliates. However, the main result of this study is that inside directors can be valuable board members if properly utilized.

Steven N. Kaplan (1994) examines the effects of executive turnover for both supervisory boards and management upon firm performance of the largest companies in Germany using data for 1980s. Percentage turnover of management board is independent variable and stock return and earning is dependent variable. The results show that turnover of chairman and the management board has significant relation to earning losses and stock returns but this is unrelated to earnings growth and sales growth.

John E. Core, Robert W. Holthausen, David F. Larcker (1999) examines a connection between quality of corporate governance and level of CEO compensation package. They also investigate that the poorer future performance is associated with weaker governance structures using three-year data. Multiple regression statistical technique was used to measure an association between dependent and independent variables. The ownership structure and board structure are independent variables and CEO compensation is dependent variable. The study shows that CEO compensation has relation with the ownership and board structure and also reveals firms results poor future performance in case the firms have weaker governance structure.

Todd Mitton (2002) makes a cross sectional analysis of firms to see the impact of corporate governance upon the firm performance during the crisis of East Asian Financial from 1997 to 1998. Multiple regression statistical technique was used to measure an association between independent and dependent variables. Disclosure quality, ownership structure, and corporate diversification are independent variables and stock returns are dependent variables. The results suggest that higher disclosure quality and ownership concentration
is associated with significant better stock price performance and during crisis corporate diversification is related with significantly worse stock price performance.

Vidhi Chhaochharia and Yaniv Grinstein (2007) analyze the effect of the 2002 governance rules on firms’ value using data during 2001-2002. Ordinary least square regressions statistical technique was used to see the impact between dependent and independent variables. The related party transaction provisions, and director independence provisions, financial reporting provisions, internal control provisions and insider trading provisions are independent variable and firm returns are dependent variable. We discover that the publication of corporate governance rules are significantly affected the firm’s value.

Sanjai Bhagat and Bernard Black (1999) review the facts upon the association between firm performance and board composition using data from 1988 to 1991. Ordinary least square regressions statistical technique was used to discover relationship between dependent and independent variables. Board size, firm size and controls for industry are independent variables and firm performance measures are turnover ratio, return on assets, operating margin are dependent variables. The results show that there is different evidence on the relationship of board composition and firm performance.

**Methodology:**

The secondary source of data for oil & gas sector is used for the purpose of this study. The data is reliable collected from the official websites of the State Bank of Pakistan, Karachi Stock Exchange and selected companies. The required data for oil & gas sector has been extracted online from company’s annual reports including federal bureau of statistics, State Bank of Pakistan and Karachi Stock of Exchange. Data have been collected from the website of Karachi Stock Exchange (KSE), State Bank of Pakistan (SBP) and annual reports of selected companies where values are accurate and precise. The reason of extracting data online from the annual reports is to make sure that data collected is of exact and true nature. Data of six years (annual) from 2005-2010 has been taken into account via official website of Karachi Stock Exchange, State Bank of Pakistan and official websites of selected companies.

**Canonical Regression Model:**

\[
\text{ROA} + \text{ROE} + \text{NPM} = \text{CD} + \text{OC} + \text{BI} + \text{EAC}
\]

Where;

\[
\text{CD} = \text{CEO Duality}, \quad \text{OC} = \text{Ownership Concentration}, \quad \text{BI} = \text{Board’s Independence}, \quad \text{EAC} = \text{Effective Audit Committee}
\]

**Independent Variables:**

CEO duality, Ownership Concentration, Board’s Independence, Effective Audit Committee

**Dependent Variables:**

Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM)

**Data Analysis:**

The above table 4.1 shows the results of summary statistics of all the taken variables in this analysis, which provides the information about number of observations taken and means, its dispersion and variability in the data.

The statistics shows in the table 4.2 that that strongly three variables are co-vary, it can vary from -1(perfect negatively correlation through 0(no correlation) to +1 (perfect positive correlation) depicting that first dependent variable return on equity (ROE) is moderately positively correlated with independent variables at value 0.3681 and the remaining correlation with second dependent variable Return on Assets showing value at 0.1954. The adjusted canonical correlation is the value which is obtained after the subtraction of the approximate standard error. The value after deduction of the standard error gives the more accurate information about the model.
fitness if one can further adjust the model at his own. The values of adjusted canonical in this table are 0.3180 and 0.1870 respectively. The values of squared canonical correlation are 0.1355 and 0.0382, which depicts that how much model is representing the accuracy of data. The table given above also tells about Eigen values and it actually represents the amount of variance that is captured by the component. The column of Eigen value shows 0.1568, which is more than of other Eigen value that is 0.0397 given in second row.

Further likelihood ratios are 0.8315 and 0.9618 respectively. The F-value in the first column shows the value 2.550 and the p-value is given by 0.0222, which is less than 0.05 and similarly in the second column F-value is 1.599, which is also less than 0.05. So we reject our null hypothesis.

**Table 4.2: Canonical Correlation Analysis (Test of H0).**

<table>
<thead>
<tr>
<th>Eigen values of Inv(E)*H</th>
<th>Difference</th>
<th>Proportion</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1568</td>
<td>0.1171</td>
<td>0.7979</td>
<td>0.7979</td>
</tr>
<tr>
<td>0.0397</td>
<td></td>
<td>0.2021</td>
<td>1</td>
</tr>
</tbody>
</table>

Test of H0: The canonical correlations in the current row and all that follow are zero

<table>
<thead>
<tr>
<th>Likelihood Ratio</th>
<th>Approximate F Value</th>
<th>Num DF</th>
<th>Den DF</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8315</td>
<td>2.5500</td>
<td>6</td>
<td>158</td>
<td>0.0222</td>
</tr>
<tr>
<td>0.9618</td>
<td>1.5900</td>
<td>2</td>
<td>80</td>
<td>0.2106</td>
</tr>
</tbody>
</table>

**Table 4.3: Multivariate Statistics and F Approximation.**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>F Value</th>
<th>Num DF</th>
<th>Den DF</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks' Lambda</td>
<td>0.8314619*</td>
<td>2.55</td>
<td>6</td>
<td>158</td>
<td>0.0222</td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>0.737143*</td>
<td>2.54</td>
<td>6</td>
<td>160</td>
<td>0.0226</td>
</tr>
<tr>
<td>Hotelling-Lawley Trace</td>
<td>0.1964756*</td>
<td>2.57</td>
<td>6</td>
<td>103.57</td>
<td>0.0231</td>
</tr>
<tr>
<td>Roy's Greatest Root</td>
<td>0.1567636*</td>
<td>4.18</td>
<td>3</td>
<td>80</td>
<td>0.0084</td>
</tr>
</tbody>
</table>

The table 4.3 shows the four multivariate statistical test information for all independent variables. The fours tests are numbered on top of the output table. For each of the four test statistics, F statistics and related p-value are also demonstrated.

Wilks’ Lambda is first of the four multivariate statistics to test the null hypothesis that the canonical correlations are zero (which, in turn, mean there is not linear relationship between two specified groups of variables. The F value of this test is 2.55 and the p-value is 0.0222, which is less than 0.05, so this value assures that our null hypothesis is rejected showing that canonical correlation is not zero and there is a significant relationship between two specific groups.

The second test in this table is Pillai’s trace, which is the sum of their squared canonical like 0.36812 + 0.19542, that is equal to 0.1737 with the F-value of 2.54 and the p-value is 0.0226 becoming smaller than 0.05, hence rejecting our null hypothesis.

The third test to test the null hypothesis is Hotelling Lawley Trace. It is the sum of the value of (canonical correlation 2 / (1 - canonical correlation 2). The value of this test is calculated by 0.36812 / (1 - 0.36812) + 0.19542/ (1 - 0.19542) resulted in 0.19647 with the F-value of 2.57 along with p-value 0.0231. Thus, we are rejecting our null hypothesis because p-value is less than 0.05.

The fourth test of Roy’s Greatest Root is based on the largest Eigen Value. The value of test is 0.15676 and F value is 4.18 and p-value is 0.0084 that shows that it is less than 0.05, hence rejecting our null hypothesis.

The entire tests are rejecting our null hypothesis and based on this we conclude that there is a significant impact of Corporate Governance on firm’s performance.

**Conclusion and Recommendations:**

This study attempts to examine the impact of Corporate Governance on firm’s performance. The research has been undertaken oil and gas sector of Pakistan for panel financial and non-financial data from a sample of 14 companies has been taken for six year (2005-2010). The results have been obtained through using canonical regression analysis as statistical technique for examining the impact of four independent variables of Corporate Governance on three dependent variables of firm’s performance. There are several aspects and dimensions of corporate governance, which may impact a firm’s performance but our study has focused only on four variables namely CEO duality, Effective Audit Committee, Board independence and ownership concentration. While we have taken three variables for measuring firm’s performance such as Return on assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM). The findings show that corporate governance has significant and positive impact on firm’s performance and it is concluded that firm’s performance can be increased by improving the corporate governance structure.
On the basis of research conducted, it is recommended that organization should have an optimal corporate governance structure in the organization and ensure that it is fully complied with in all aspects. The organization should encourage separation of ownership and control, board’s independence, effective audit committee and assumption of CEO and Chairman Position by a different person in order to increase firm’s performance. We have taken only three variables in order to measure firm’s performance. Likewise, there are other performance measures too, which may be included in conducting future research. In order to conduct future research, it is recommended for future researchers to extend its scope to other industries of Pakistan by adding more variables in corporate governance and firm performance to see the impact on all round firm’s performance for better understanding and generalizing the findings.

REFERENCES


Vidhi Chhaochharia and Yaniv Grinstein, 2007. “Corporate Governance and Firm Value: