Effect of Corporate Governance on Firm Performance of Oil & Gas Exploration Sector of Pakistan

Author’s Details:
(1) Zubair Aslam-School of Accounting & Finance, University of Central Punjab, Lahore, Pakistan
(2) Saima Naseer-School of Accounting & Finance, University of Central Punjab, Lahore, Pakistan

Abstract:
Oil and gas exploration sector are important for Pakistan. However, its effect on the economy is often overlooked. The main objective of this study is to check the effect of corporate practice on firm performance of oil and gas exploration sector of Pakistan. For this purpose, quantitative study technique is used, secondary data is used and taken from the 4 registered companies of Pakistan stock exchanges. Data used in this study collected from the period of 2013 to 2017. Finding of this study shows that board size and CEO Duality have a positive effect on return on asset and return on equity and No. of committees have a negative effect on return on assets and return on equity, but board size positively effect on profit margin, but No. of committees and CEO Duality have a negative effect on profit margin.

Keywords: Board size, Non-Executive directors, CEO Duality, Board Committees

INTRODUCTION:
Corporate Board plays a vital role in the corporate governance system, strategic structure and financial structure of the company (OS. Agyemang E. A., 2014). Board size is a significant tool regarding the board effectiveness (C. Ponnu, 2010). Although, no consensus exists for the best possible board size in the corporation (OS. Agyemang M. C., 2013). The model of board composition or size is mainly essential for the shareholders of the company (C.R Anderson, 2004). A bit controversy exists in the composition of board structure whether it should be inside or outside board for the company (G.J. Nicholson, 2007). Outside board structure supporters believe that independent board is necessary if for effective management team (S. Heravia, 2011) while inside board structure supporters argue that inside board is highly effective as it has sufficient knowledge and experience of the company as well as the industry (Z.P Zhang, 2013). Further, the pressure of the management on the board can be decreased if the size is large enough (Qaiser Rafique, 2017).

The purpose of this research is to enhance the research on corporate governance in terms of factors influencing the firm’s performance, e.g., the impact of the board size on the firm performance for listed companies of oil & gas sector in Pakistan and whether there exists any relationship between board size and firm performance. This research particularly investigates whether board size can affect the financial performance as well as the financial position of oil & gas sector of Pakistan. The basic input of this research is to give experimental evidence for the optimal corporate governance structure. Therefore, the main question would be whether the board size influences the performance of oil & gas sector companies listed on Karachi Stock Exchange.

Using sample date form listed firms in the PSX the results of this study shows that board size significantly affect the performance of the firm while the remaining research is organized in the following manner; 2nd section relates to literature of this research containing the structure and size of corporate board and its impact on firm’s performance, 3rd section include theoretical and hypotheses development, 4th section consists of methodology and data analysis. 5th section consults empirical result while the last 6th section explains the limitations of this research.

LITERATURE REVIEW
The board size is important factor towards board effectiveness, the large size of board leads to better firm performance because of better collective information from the board size further large board size leads to the board diversity i.e. experience and skills of the board however the performance of listed companies is not so much influenced by the role of outside directors (C. Ponnu, 2010). Board is the agent of shareholders with a responsibility to protect the interest of shareholders (Muhammad Usman, 2015). Its basic function is to monitor the top management actions and performance (M. Ezzamel, 1998). Large board size can monitor the top management ineffective way as they have more experience as well as knowledge of the firm as...
compared to a board with a small size (M. Lipton, 1992). While a study carried out by Yermack revealed that small size board is effective in terms of better communication if it is compared with large size board, further board size has a significant impact on the total compensation (Ozkan, 2007). Large board size may also lead to agency problem as well as weak communication within the firm (Maziar Ghasemi, 2016). Studies from Malaysia concluded that no relationship exists between board size and performance (E. Dogan, 2002). A firm with the small size of the board is well informed about the performance, i.e., earnings and therefore has the greater monitoring capabilities (Vafeas, 1999). A study conducted by Wintoki revealed that no relation exists between board size and performance & profitability of the firm. A study from banking sector of Pakistan revealed that board size links negative with the firm’s performance (Muhammad Usman, 2015).

Executive officers are expected to perform dual role by protecting the interest of shareholders and by performing contractual relation between the board and the firm, they are also expected to present the firm’s necessary information to the other directors (Anwar S. Boumosleh, 2005). While on the other side, executive officers would not be capable of performing their supervisory role as they have relations with management and are junior to the chief executive, so are unable to monitor the board and chief executive (C.M Daily, 1993). A firm’s financial performance is consistent over time as firm’s characteristics may influence the persistent profitability (Maziar Ghasemi, 2016). Besides board performance, the age of firm is also an important factor in the profitability of the firm because older firms have more profitability than newly established companies (Hopenhayn, 1992), however, a study by Malik in 2011 revealed that older firms are rigid which results in slow growth. Therefore, the age of the firm is not necessary to earn the profits during a specific period in context to Pakistan. Another study in Pakistan concluded that there is an inverse relationship between the age of firm and profitability of the firm.

High flexibility in sales results in additional profits for the business firm, moreover, the flexibility is caused by liquidity. Therefore, a flexible firm can easily meet its payment commitments (M. Bolek, 2012). Cash flow is another important determinant which can enhance the firms performance, a study concluded that direct relationship exists between the firm’s performance and the level of debt, higher the level of debt results in higher firm’s performance (C.J Hadlock, 2002) while alternatively, study conducted by Myers concluded that internal resources are utilized to finance new firms, if internal earnings are insufficient to finance new projects then external debt is obtained by the firm (Myers, 1984). During 2013, a study by Sulong, etc. revealed that negative relationship exists between the level of debt and firm’s performance.

This research examined the effect of the size of the board on the performance of the oil sector companies in terms of return on assets, return on equity and profit margin. Many corporate governance theories discussed the dynamics of association between diverse features of the firm’s board. The firm’s accepted the primary role of good corporate governance in increasing the corporate growth (Bathula, 2008). Two most important theories of corporate governance related to the board are agency theory and stewardship theory (M.C. Jensen, 1976). Agency theory is separation of management (agent) responsibilities from the ownership to protect the interest of owners that are shareholders (Eisenhardt, 1989) while stewardship theory believes that director, i.e., agents are a trust-worthy steward to work for the better of the firm’s interest (J.H Davis, 1997). In the context of stewardship perspective, the incentives for directors are based on the performance of the firm. Therefore, the board tries to maximize the profits of the company (Muzhar Javed, 2013).

**Board Size:**

Most studies concluded that board size plays a vital role in the working and performance of the corporation (Abdullah, 2004). A study conducted by Brennan concluded that board size is an important element of corporate governance mechanisms (Brennan, 2006). Studies also concluded that significant relation exists between board size and firm’s operating performance as knowledge and skills of non-executive directors improve the performance (Bonn, 2004). Board composition significantly affects the financial performance, i.e., profits as well as the financial position of the firm (B.D. Baysinger, 1990). A study from Nigeria revealed that board size and operating performance of the firm positively correlated (Edem Okon Akpan, 2014). Large size board is recommended as it has experience and builds value for owners of the organization (R.K. Sah, 1991). Similarly, small size board is recommended by the results of some empirical studies to prevent loafing and free-riding, small size board also leads to the greater earnings of the firm as compared to the large size board (Yermack, 2006). Another study revealed that small size
Board is helpful in quick decision making process which leads to a reduction in the communication gap within the firm (Jensen, 1990). An empirical study in the context of Pakistan revealed that large board size and firm’s operating performance is positively correlated (Rodrigs, 2017).

**Board Size & CEO Compensation:**

Board leadership either a CEO or chairman is a significant element of board composition while in separate leadership structure, ECO or chairman is separate from the board composition. Studies also recommended separating the CEO form board for better operating. Corporate Governance Code of Pakistan also avoided the combined leadership structure (Muzhar Javed, 2013).

The Studies also carried out the relationship between board size and ECO compensation package and these studies resulted that board size has a significant relationship with CEO pay. Empirical research from banking sector of Pakistan was conducted to determine the relationship between board effectiveness and CEO pay results revealed that board is board is ineffective to link the firm’s performance with CEO compensation (Muhammad Usman, 2015). Another study concluded that board size has a direct relationship with CEO total compensation and vice versa while it has an inverse relationship with CEO performance (Fahlenbrach, 2009).

**Board Committee**

The economic case for a diverse board is that board diversity causes a business to be more profitable and creates value for shareholders. Committee deals with the specific task but does not give enough time and resource commonly there are three types of the committee. The audit committee, Nomination committee, and Remuneration committee

The main task of the Audit committee is to see the progress of external auditor to ensure the financial statements quality. The Nomination committee is responsible for the recruitment process for the company. It is the duty of executive, and non-executive director of the company Remuneration package is considered the most problematic area for the shareholder and stakeholder. The obligation of the committee is to provide the independent, transparent, conflict free process which leads to long term success of the company.

In this research paper, we can check there is any effect on the number of committee with respect to profit margin and firm performance

**CONCEPTUAL FRAMWORK**

The relationship between Board Characteristics & Firm’s Financial Performance

![Diagram showing the relationship between board size i.e. no. of directors, CEO Duality, No. of board committees and ROA, ROE, Profit Margin]

**Board Size & Firm’s ROA:**

A study from Pakistan concluded that positive relationship exists between board size and firm’s operating performance which leads to increase in the ROA (Hussain Muhammad, 2016). Another study from Pakistan resulted that board size has a significant and direct impact on return on ROA (Bilal Latif, 2013). The study was conducted in emerging economic sector which revealed that ROA has a positive correlation with a board size of the firm (Qaiser Rafique, 2017). Another study revealed that ROA is positively affected by board characteristics (Al-Swidi, 2012).

**Board Size & Firm’s ROE:**
Study on oil & gas sector of Pakistan concluded that board size has a significant and direct impact on the ROE (Laib A Dar, 2011). Another study on the non-financial sector of Pakistan revealed that ROE has a direct relation to the size of the board (Hussain Muhammad, 2016). An empirical study form the textile sector of Pakistan resulted that small board size has a significant positive link on ROE (Akbar, 2015).

**Board Size & Firm’s Profit Margin:**
In Malaysia, the study was conducted to determine whether board size affect the firm’s profitability and the results showed that board size positively influences the profit margin (Maziar Ghasemi, 2016). An empirical study was conducted on 30 listed companies of KSE which concluded that corporate governance model, i.e., board size and audit committee positively affect the profit margin (Qaiser Rafique Yasser, 2011). A positive relationship exists between board size and firm operating performance, i.e., profit margin (Laib A Dar, 2011).

**HYPOTHESIS DEVELOPMENT**

**H1:** Board size has an influence of return on the asset on oil and gas exploration sector of Pakistan.

**H2:** Board size has an influence of return on equity on oil and gas exploration sector of Pakistan.

**H3:** Board size has an influence of profit margin on oil and gas exploration sector of Pakistan.

**H4:** CEO Duality has an influence of return on the asset on oil and gas exploration sector of Pakistan.

**H5:** CEO Duality has an influence of return on equity on oil and gas exploration sector of Pakistan.

**H6:** CEO Duality has an influence of profit margin on oil and gas exploration sector of Pakistan.

**H7:** No of board committees has an influence of return on the asset on oil and gas exploration sector of Pakistan.

**H8:** No of board committees has an influence of return on equity on oil and gas exploration sector of Pakistan.

**H9:** No of Board Committees has an influence of profit margin on oil and gas exploration sector of Pakistan.

**Methodology**
The main objective of this study is to check the firm performance of listed oil and gas exploration companies of Pakistan. The data used for this study is taken from the Pakistan Stock Exchange and State Bank of Pakistan (2013 to 2017). Total 4 companies of oil and gas exploration sector are listed in Pakistan Stock Exchange. Quantitative data analysis technique is used to check the relationship between variables. Panel Data analysis is used for the study, and the data is taken from the annual reports of the companies.

**Basic Model** used in this study is\[ Y = \alpha + \beta x \]

\[ Y = \text{Dependent Variable} \]
\[ \beta = \text{constant variable} \]
\[ x = \text{independent Variable} \]

So, the main model used in this study to the effect of board size of firm performance is

**RESEARCH MODELS:**

\[ \text{ROA} = \beta_0 + \beta_1(B.S) + \beta_2(C.D) + \beta_3(N.C) \]
\[ \text{ROE} = \beta_0 + \beta_1(B.S) + \beta_2(C.D) + \beta_3(N.C) \]
\[ \text{P.M} = \beta_0 + \beta_1(B.S) + \beta_2(C.D) + \beta_3(N.C) \]

Here Variables are mentioned below along with their measurements.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>P.M</td>
<td>Profit Margin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S</td>
<td>Board Size</td>
</tr>
<tr>
<td>C.D</td>
<td>CEO Duality</td>
</tr>
<tr>
<td>N.C</td>
<td>No. of Committees</td>
</tr>
</tbody>
</table>

**Data Analysis**
Descriptive statistics analysis is used to check the goodness of the data collected.

**TABLE 1: Descriptive statistics**

http://www.ijmsbr.com
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size</td>
<td>7.75</td>
<td>2.267</td>
<td>0.413</td>
<td>0.019</td>
</tr>
<tr>
<td>No. of committee</td>
<td>4.75</td>
<td>1.679</td>
<td>2.123</td>
<td>0.291</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>0.25</td>
<td>0.31</td>
<td>2.87</td>
<td>3.89</td>
</tr>
<tr>
<td>ROA</td>
<td>0.1372</td>
<td>1.213</td>
<td>0.376</td>
<td>0.982</td>
</tr>
<tr>
<td>ROE</td>
<td>0.2615</td>
<td>59.125</td>
<td>1.768</td>
<td>3.012</td>
</tr>
<tr>
<td>PM</td>
<td>0.3284</td>
<td>21.96</td>
<td>0.479</td>
<td>0.952</td>
</tr>
</tbody>
</table>

Above descriptive statistics, the table shows board size mean value 7.75 which if the good of an ideal board size as effective board size should be 7 to 8 is recommended (Jensen & Ruback, 1983). Whereas the mean of a number of committees is 4.75 which is fine. As much as the greater number of committees, increase the performance. However, the CEO duality mean value is 0.25. ROA mean value is 0.1372 which is 13.72%, and ROE mean value is 0.2615 which is 26.15%, whereas the mean value of profit margin is 0.3284 which is 32.84%.

**Table 2: Regression ROA**

<table>
<thead>
<tr>
<th>Path coefficient</th>
<th>Beta Value</th>
<th>T-statistics</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S-&gt; ROA</td>
<td>0.016</td>
<td>2.675</td>
<td>0.021</td>
</tr>
<tr>
<td>N.C-&gt;ROA</td>
<td>-0.031</td>
<td>-3.089</td>
<td>0.131</td>
</tr>
<tr>
<td>C.D-&gt;ROA</td>
<td>0.094</td>
<td>4.394</td>
<td>0.046</td>
</tr>
</tbody>
</table>

Table 2 shows the regression analysis results of corporate governance variables on ROA. Beta values show that board size and CEO duality positively affect ROA. By increasing the value of board size by 1 will increase the ROA by 0.016 which is 1.6% and increasing the value of CEO duality by 1 will increase the ROA by 0.094 which is 9.4%. Whereas the number of committees is negatively affecting the ROA. By increasing the committee by 1 will decrease the ROA by 0.031 which is 3.1%.

**Table 3: Regression ROE**

<table>
<thead>
<tr>
<th>Path coefficient</th>
<th>Beta Value</th>
<th>T-statistics</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S-&gt;ROE</td>
<td>0.024</td>
<td>0.297</td>
<td>0.031</td>
</tr>
<tr>
<td>N.C-&gt;ROE</td>
<td>-0.241</td>
<td>-1.192</td>
<td>0.062</td>
</tr>
<tr>
<td>C.D-&gt;ROE</td>
<td>0.157</td>
<td>1.059</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Table 3 shows the regression analysis results of corporate governance variables on ROE. Beta values show that board size and CEO duality positively affect ROE. By increasing the value of board size by 1 will
increase the ROE by 0.024 which is 2.4% and increasing the value of CEO duality by 1 will increase the ROE by 0.157 which is 15.7%. Whereas the number of committees is negatively affecting the ROE. By increasing the committee by 1 will decrease the ROE by 0.241 which is 24.1%.

Table 4: Regression P.M

<table>
<thead>
<tr>
<th>Path coefficient</th>
<th>Beta Value</th>
<th>T-Values</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S-&gt;P.M</td>
<td>0.075</td>
<td>-0.721</td>
<td>0.324</td>
</tr>
<tr>
<td>N.C-&gt;P.M</td>
<td>-0.690</td>
<td>-3.219</td>
<td>0.431</td>
</tr>
<tr>
<td>C.D -&gt;P.M</td>
<td>-0.060</td>
<td>-1.96</td>
<td>0.623</td>
</tr>
<tr>
<td>R-square</td>
<td>0.095</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows the regression analysis results of corporate governance variables on profit margin. Beta values show that board size positively affects profit margin. By increasing the value of board size by 1 will increase the profit margin by 0.075 which is 7.5%. Whereas the number of committees and CEO duality is negatively affecting the profit margin. By increasing the committee by 1 will decrease the profit margin by 0.690 which is 69% however by increasing the value of CEO duality by 1 will decreases the profit margin by 0.060 which is 6%.

CONCLUSION

The main motivation to conduct this study is to examine the effect of board size on the firm performance of oil and gas exploration sector of Pakistan. The findings of this study show that corporate governance practices used in this study (board size, CEO duality and a number of committees) have a significant effect on the oil and gas exploration sector of Pakistan. While the board size and CEO duality have an effect on return on assets and return on equity where the board committees have a negative effect on return on assets and return on equity. The board size has a positive effect on profit margin, but no of board committees and CEO duality has a negative effect on profit margin. To improve the performance of the exploration sector, the companies should focus on their board size so that the work of the company goes smooth. The management should also keep corporate governance practices while making there company’s policies because the oil and gas exploration sector has a great potential to grow further and work for the progress of Pakistan.

Further studies may be conducted by adding other corporate governance related variables. As this study is quantitative studies future researcher are highly motivated to conduct qualitative studies. As this study is limited to the oil and gas exploration sector of Pakistan future researchers should conduct research on other sectors by adding moderating or mediating variables.

Bibliography


