Full Length Research Paper

Corporate governance and performance: An empirical evidence from textile sector of Pakistan


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In developed countries a lot of work has been done on the subject “Corporate Governance” but on the other hand developing countries are still lacking in this area especially, Pakistan which has observed rare interest in research associated with corporate governance. Present research has explored the actual effect associated with corporate governance measures and financial performance. This research paper is developed by utilizing publicly available data from the website of Karachi stock exchange and financial statements of sample of listed companies for a period of 2007 to 2011 by applying regression analysis. The empirical findings of research unveiled a positive association between board size and firm performance, while non executive director’s percentage and Chief Executive Officer duality have negative association with firm performance. Current study is different in nature as compare to prior research because it considers both accounting based and market based performance measure.

Key words: Non executive directors, Chief Executive Officer duality, board size, Karachi stock exchange.

INTRODUCTION

Corporate governance characteristics are statutory requirements that shield’s outside shareholders from opportunistic habit of administrators, insiders or managing shareholders. In non existence of such mechanism, difficulties of monitoring are suffered by outside investors while administrators are opportune to misuse organizational assets, usually at the expense of small shareholders and long run performance of firm (Rezaee, 2009).

Corporate governance is a mechanism through which management takes necessary steps to safeguard the interests of stakeholders. Corporate governance practices are required to make sure that ownership and control are in separate hands, and this most of the times results in agency problems or principal-agent problems (Jenson and Meckling, 1976). Agency theory describes the difference of interests between insiders or managers and outsiders or shareholders. Separation of control and ownership are both very strong subjects of corporate (Berle and Means, 1932).

Academics of corporate governance (Ross, 1973; Fama, 1980) were actually curious to find out the perfect solution of principal-agent problem that resulted from split ups associated with control and ownership. Due to financial agitation in America, The Europe, Asia and high profile issues in organization like World Com, Enron and other big corporations has regained the attention of strategists, investors and other key stakeholders in public as well as private sector to focus on the need of good corporate governance structure.

Corporate governance mechanisms include ownership structure, like percentage of institutional shareholders, foreign, external and internal shareholders. It is also concerned with formation of board of directors, like the size of board, percentage of the directors which are non-executive and leadership structure of board. Leadership
structure means the difference between Chief Executive Officer’s duties and authority from that of Chairman of Board (Butt, 2011).

In March 2007, 754 companies were listed at this stock exchange having listed capital of Rs. 495.968 billion, with market capitalization of Rs. 3,200.182 billion out of which 183 firms were related to textile. Obviously, textile sector of Pakistan participate an active role for the economic development of Pakistan. Pakistan is at 8th position in Asian countries for the export of textile merchandise. The contribution in GDP of textile sector is 9.5% in 2012 and 15 million population availing employment opportunities from this particular sector which is 30% of the total employed people of Pakistan. Textile sector is the highest revenue producing sector in the country after agriculture sector. On the basis of these facts, this research focus on textile sector.

Problem statement

Issues regarding corporate governance are an inherent weakness in the industrial sector of many developing countries including Pakistan. Better governance enables efficient and effective working environment and it also ensure high levels of accountability and transparency. One of the major challenges in the industrial sector of Pakistan is that of corporate governance.

Aim of the study

The aim of this research is to examine the relationship between corporate governance components and firm financial performance.

Scope of research

Prior research has mostly focused on developed countries, even though several current studies are associated with developing countries. With this framework, the particular objective of this research is to give experiential proof about dependence of firm performance behavior and corporate governance in Pakistan’s textile sector by utilizing data from Karachi Stock Exchange and different reliable sources for the period of five years from 2007 to 2011.

LITERATURE REVIEW

Corporate governance features tend to be statutory requirements which secure outdoor financers from opportunistic conduct associated with supervisors, insiders or even managing investors. In the absence of this mechanism, outside investors tends to find difficulties in monitoring their investment while individuals related with management are opportune to misuse organizational assets, usually at the expense of minor shareholders and firm performance. Sami et al. (2011) found a strong link between firm performance and corporate governance.

Shaheen and Nishat (2005) suggested that those firms that do not follow good governance do not get higher profits. Effective and strong corporate governance practices pave way for success whilst the organization with week governance practices get less financial benefits. Organizations having poor governance systems delivered less value to investors, on the other hand firms with efficient governance procedures gave much (Nandelstadh and Rosenberg, 2003). Gompers et al. (2003) found that during 1990s stock returns of corporations, where rights of shareholders were protected more efficiently had outperformed the firms with less protection of rights of investors approximately by 8.5% per year during this decade.

Guo and Kumara (2012) carried out a research to test the link between performance and corporate governance characteristics of listed companies on Colombo stock exchange in Sri Lanka. Their findings suggested a marginal negative association between board size and value of the firm, while a negative impact of proportion of outside directors on operating performance of company.

Sami et al. (2011) had written a research paper to explore the association between operating performance and corporate governance of Chinese listed companies. They found a favorable relationship between different measures of firm governance and performance.

Ehikioya (2009) found a negative impact of CEO duality on performance, while positive association between performance and ownership concentration. He was unable to generate any evidence regarding board composition and performance; however, he suggested that family members more than one in a board have an unfavorable effect on performance.

Lam and Lee (2008) suggested that combination of both agency theory and stewardship theory only can better explain duality and performance relationship. Their empirical findings proposed favorable impact of duality on performance for non family companies, while a negative impact on family firms.

Hermalin and Weisbach (1998) demonstrated that performance of board is dependent upon formation of board and is partly managed by Chief Executive Officer. Ehikioya (2009) reveals that no relationship exist between board composition and firm performance. Ujunwa (2012) suggested that there is no positive effect of board size on the performance of the organization.

Kesner (1987) suggested an adverse as well as substantial association about the portion of outdoor directors and return to shareholders. Li et al. (2008) suggested a favorable link between independent directors and financial performance. Independent directors perform the duty of evaluation and monitoring of management
(Jensen and Meckling, 1976).


Eloumi (2009) found the evidence that CEO duality and performance of the firm have a negative relationship. Lam and Lee (2008) reveals that CEO duality and accounting performance of non-family firms have positive relationship, while CEO duality leads to performance decline of family-controlled firms. Rechner and Dalton (1991) and Daily and Dalton (1994a, 1994b) and Chen et al. (2005) found positive impact of separation of CEO and chair person. Donaldson and Davis (1991) and Brickley et al. (1997) and Coles et al. (2001) reveal that combination of both roles is preferable.

Ujunwa (2012) found the evidence that CEO duality is adversely connected with performance of Nigerian quoted firms but using the similar characteristics of board for small companies found a positive impact of duality on performance. Kang and Zardkoohi (2005) and Dailly and Dalton (1997a, 1997b) demonstrates that association between CEO duality and performance is still mixed and indecisive. Fama and Jensen (1983) found that duality can easily hamper board’s power to keep an eye on management and will result in an increase of agency cost. Laing and Weir (1999) said that companies with combined leadership structure might have a person who has the authority and able to make decisions that are not value maximizing for shareholders.

There is abundance of research work that has investigated the relationship of different Corporate Governance system and performance measures but the results, however, are not uniformly in agreement. Hence, this issue is still unresolved. In order to find the solution of this issue, in the current work, we just consider the relationship of corporate governance and performance within the sample of Pakistani listed companies of textile sector, hoping to find useful results.

RESEARCH METHODOLOGY

In order to discover the actual influence associated with governance features upon performance of Pakistani firms, this research adopted the methodologies in earlier research work on this issue. As other studies have discussed these relationships, for analysis of data collected from secondary sources, quantitative techniques were employed. Descriptive statistics, correlation and regression models were used for analysis of data.

Data collection

By the end of 2007, 183 firms were listed at KSE in textile sector out of which 160 companies were selected as sample for the purpose of this study, 23 firms were excluded from sample due to non availability or incomplete data. Data was gathered through secondary sources such as annual reports, Karachi Stock Exchange publications and different websites over the period of five years 2007 to 2011. Data regarding corporate governance measures were collected from annual reports of listed firms. The collected data were rechecked with the website of Karachi Stock Exchange for verification.

In Pakistan, Karachi Stock Exchange is the main as well as highly liquid stock market. It was announced as the “best performing stock market in the world in 2002” by “Business Week”. Our study will check the impact of corporate governance practices on performance of listed firms at Karachi Stock Exchange in textile sector.

Variables definition

Dependent variables

Research by Tian and Twite (2011), Sami et al. (2011), Hermalin and Weisbach (1991), Lam and Lee (2008), Yarmack (1996), Bhagat and Bolton (2008), Guo and Kumara (2012), Reddy et al. (2010) and Mollah et al. (2012) used Tobin’s Q as market based performance measure and it is calculated as follows in this research:

\[
Tobin's \quad Q = \frac{MVE + BVLTD + NSTD}{BVTA}
\]


Bhagat and Bolton (2008), Guo and Kumara (2012) and Reddy et al. (2010) made used of Market to Book value as a market based performance measure and it is estimated as follows in this study.

\[
\text{Market to Book Value} = \frac{\text{Market Value of ordinary shares}}{\text{Book value of ordinary shares}}
\]

Tian and Twite (2011), Sami et al. (2011), Hermalin and Weisbach (1991), Lam and Lee (2008), Yarmack (1996), Bhagat and Bolton (2008), Guo and Kumara (2012), Reddy et al. (2010) and Mollah et al. (2012) in their study made used of Return on Assets as accounting based performance measure and it is calculated as follows:

\[
\text{Return on Assets} = \frac{\text{Net Profit attributed to shareholders}}{\text{Total Shareholders Equity}} \times 100
\]

Also, Tian and Twite (2011), Sami et al. (2011), Hermalin and Weisbach (1991), Lam and Lee (2008), Yarmack (1996) and Mollah et al. (2012) made used of Return on Equity as accounting base performance measure and it is calculated using the following formula

\[
\text{Return on Equity} = \frac{\text{Net Profit attributed to shareholders}}{\text{Total Shareholders Equity}} \times 100
\]
Independent variables

The board size (BDS) is the sum of board members of a particular firm. Board size (BDS) is calculated by taking the natural log of total number of directors.

Non executive directors (NED) are the portion of the outside directors present on board of respective organization.

CEO duality is a style of corporate leadership which combines the authorities of Chairman and Chief Executive Officer. To investigate the impact of duality (DUAL) on performance a dummy variable is created. CEO Duality (DUAL) is dummy variable that is, 1 for corporations that had merged both positions, if not 0.

Controlling variables

Firm age is the time period in term of number of years from which a firm is operating, starting from the day of incorporation. Berger and Udell (1998) demonstrated that financial growth of firms depends upon age of firm and also capital structure varies with age factor. At start firms are expected to have more expenses, have less experience of market and trying to build a market position, that is why new firms have higher cost structure as compare to old firms. Older firms may be approaching towards last stage of their life cycle. Therefore, complexities increase with age of firms. Number of years since incorporation of firm is used as firm age.

In this study firm size is used as controlling variable. Firm size is taken as the natural log of annual average assets. If the dependent variable is return on assets, then firm size will be taken as natural log of net sales. Many researchers have explained the link in between firm size and performance in a number of ways.

Empirical models

Multiple regression models are used to explain the association between corporate governance characteristics and performance of firms in context of Pakistan. Four models of regression are devised to check the association between corporate governance and performance. Our base model takes the following form:

Firm performance = f (corporate governance characteristics)

Where firm performance is measured by Return on Assets (ROA), Return on Equity (ROE), Market to book value (MB) and Tobin’s Q (TQ). Corporate governance characteristics and control variables are board size (BS), number of outside directors (NED), CEO duality (CD), age of firm (FA), and size of firm (FS).

Performance = f (board size, number of outside directors, board size, age and firm size)

Y_t = β_0 + β_1X_{it} + μ_{it} \quad i = 1, 2, 3, \ldots, 160 \quad \text{and} \quad t = 1, 2, \ldots, 5

Where: Y_t is called dependent variable; β_0 represents the intercept; X_{it} is independent variable; μ_{it} are the error terms; i is number of companies and t is number of years.

Therefore, we can write our main equation as:

ROA = β_0 + β_1BS_t + β_2NED_t + β_3CD_t + β_4FA_t + β_5FS_t + μ_t

ROE = β_0 + β_1BS_t + β_2NED_t + β_3CD_t + β_4FA_t + β_5FS_t + μ_t

MB = β_0 + β_1BS_t + β_2NED_t + β_3CD_t + β_4FA_t + β_5FS_t + μ_t

TQ = β_0 + β_1BS_t + β_2NED_t + β_3CD_t + β_4FA_t + β_5FS_t + μ_t

RESULTS AND DISCUSSION

Descriptive statistics

Tables 1 represent 5 years summary of mean, median and standard deviation of dependent, control and independent variables of textile sector calculated from 2007 to 2011 in this research. CD is a dummy variable that is why it is not included in table of descriptive statistics, because dummies have a bad impact on overall fitness of model. FS is also not included in descriptive statistics because; it is taken as natural log of total sales.

Correlation matrix

Table 2 exhibits correlation matrix, which explains the
Table 3. Regression Analysis (ROA)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.11347</td>
<td>2.43572</td>
</tr>
<tr>
<td>BS</td>
<td>0.03958</td>
<td>2.95324*</td>
</tr>
<tr>
<td>NED</td>
<td>-0.00743</td>
<td>-3.73458*</td>
</tr>
<tr>
<td>CD</td>
<td>-0.04378</td>
<td>-4.68543*</td>
</tr>
<tr>
<td>FA</td>
<td>0.00234</td>
<td>7.32658*</td>
</tr>
<tr>
<td>FS</td>
<td>0.00746</td>
<td>1.32506</td>
</tr>
</tbody>
</table>

R²: 0.73457; F-statistics: 33.68539; *Significant at level of 5%.

Table 4. Regression Analysis (ROE)

<table>
<thead>
<tr>
<th>Variable</th>
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<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.15072</td>
<td>7.37628</td>
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<tr>
<td>BS</td>
<td>0.01025</td>
<td>4.50246*</td>
</tr>
<tr>
<td>NED</td>
<td>0.17257</td>
<td>5.05697*</td>
</tr>
<tr>
<td>CD</td>
<td>-0.08463</td>
<td>-8.25673*</td>
</tr>
<tr>
<td>FA</td>
<td>0.00348</td>
<td>1.24635</td>
</tr>
<tr>
<td>FS</td>
<td>0.01764</td>
<td>2.56982*</td>
</tr>
</tbody>
</table>

R²: 0.57258; F-statistics: 20.48973; *Significant at level of 5%.

Table 5. Regression Analysis (MB)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
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</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.14431</td>
<td>4.56235</td>
</tr>
<tr>
<td>BS</td>
<td>0.13246</td>
<td>6.23549*</td>
</tr>
<tr>
<td>NED</td>
<td>-0.00234</td>
<td>-3.25954*</td>
</tr>
<tr>
<td>CD</td>
<td>-0.03275</td>
<td>-9.25723*</td>
</tr>
<tr>
<td>FA</td>
<td>-0.07561</td>
<td>-1.98235*</td>
</tr>
<tr>
<td>FS</td>
<td>0.00726</td>
<td>4.73548*</td>
</tr>
</tbody>
</table>

R²: 0.64253; F-statistics: 46.78239; *Significant at level of 5%.

Table 6. Regression Analysis (TQ)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.42364</td>
<td>9.23624</td>
</tr>
<tr>
<td>BS</td>
<td>0.12572</td>
<td>12.89256*</td>
</tr>
<tr>
<td>NED</td>
<td>-0.09248</td>
<td>-8.45627*</td>
</tr>
<tr>
<td>CD</td>
<td>-0.24537</td>
<td>-10.92573*</td>
</tr>
<tr>
<td>FA</td>
<td>-0.11468</td>
<td>-1.02452</td>
</tr>
<tr>
<td>FS</td>
<td>0.23581</td>
<td>5.13576*</td>
</tr>
</tbody>
</table>

R²: 0.82491; F-statistics: 58.24931; *Significant at level of 5%.

Correlation of parameters related to this study. It is also defined as dependence of one variable upon other variable. The diagonal elements, which are the particular correlations regarding factors together with themselves, are constantly corresponding to 1. For the purpose of this particular research, we have checked the correlation of independent variables to see the multicollinearity among variables. BS features a negative correlation together with NED as well as CD, but positively correlated with FA and FS. NED is negatively correlated with CD, FA and FS. FA and FS are positively correlated with each other.

Regression analysis

Table 3 shows the regression results for ROA. The first column represents the coefficient for each independent variable which shows the strength of influence between the performance and the corporate governance measures and firm specific variables. Column two represents the t-value which indicates the significance of the regression results. The R square tells us the degree or percentage up to which the sample describes the dependent variables and F statistics tells us the overall significance of the model. BS and FA have a positive significant impact on ROA, on the other hand, CD and NED’s are having a strong negative association with return on assets and FS is not affected by ROA. R square and F - statistics of this model are 73% and 33.68 respectively. Regression results of ROE are stated in Table 4. Except CD all other variables were found to have a positive significant relationship with firm performance as measured by ROE. Value of R square is 57% which means sample defines the dependent variables up to 57%. F statistic for ROE is 20.4873. Table 5 represents the regression analysis for market to book value. NED, CD and FA are having a negative significant connection with MB. There is a strong and favorable link between BS, FS and performance as depicted by MB. R square for MB is 0.6425, which means 64% of the sample describes MB and F statistic is 46.78239. Table 6 explain the regression outcomes of Tobin’s Q. Except BS and FS, all other variables namely NED, CD and FA have a negative relationship with firm performance unveiled by regression analysis of TQ. R square for TQ is 0.82491, which means 82% of the sample describes TQ. F statistic for TQ is 58.24931 and its constant coefficient is a positive value, which is 0.42364. This model generates the highest R square and F-value as compare to other models used in this research.

Conclusions

Purpose of the research was to analyze the impact of current corporate governance structure on firm performance of textile sector in Pakistan over the period of five years from 2007 to 2011. This study has unveiled an optimistic connection between board size and all performance related variables. Except return on equity
NED’s are found to have an unfavorable relationship with other dependent variables. Empirical findings regarding duality are similar to prior researchers, unveiling a negative impact of duality on performance measured by all performance components.

Hence, we can say overall there is a positive relationship between corporate governance mechanism and firm performance in textile sector of Pakistan. The specific concern quit unanswered is the reason why the actual empirical results with regard to having outside directors aren’t favorably related to organization overall performance. The main reason might be that companies have already followed the code of corporate governance issued by Securities and Exchange Commission of Pakistan and restrictions imposed by stock exchanges, so having non-executive directors does not make any difference in overall performance of corporations. On the other hand may be non-executive directors are hired in order to fulfill the requirements of Securities and Exchange Commission of Pakistan and they do not have the knowledge about the firm or industry and therefore, does not make any difference in the well being of company.

**Recommendations**

Our findings have ramifications for strategists, managers, scholars, investors and regulators in developing countries like Pakistan. Our findings about the associations between corporate governance characteristics and performance of the firm might assist strategists and government bodies in developing new guidelines to ascertain a lawful as well as regulating infrastructure in order to persuade international investors. Our research has suggestions for the managers of public as well as private companies. Managers and directors of large corporations should follow high standards of corporate governance mechanism. Our findings unveil to investors that, in Pakistani firms there is a strong association between corporate governance characteristics and performance of the firm. So, the investor should know the governance metrics of the company within Pakistan before investing in that company.

**Limitations**

Even though this particular research adds many things to the literature in numerous ways, the outcomes are still indecisive. Observations covering a period of five years only in one country may not be representative and the results may not be applicable all over the world. The sample and selection of statistical analysis might also have some flaws. The sample in this research was selected by the availability of data and the selection of statistical techniques was determined by the time period and industry covered. It might consequently, end up by suggesting improving the current research work through matching this along with research utilizing other statistical techniques and a large sample size. The addition of some other corporate governance measures may enhance the quality of research.

**Table of definitions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>β?</td>
<td>Intercept</td>
</tr>
<tr>
<td>µ</td>
<td>Error term</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on assets (net profit attributed to share holders/total assets)</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on equity (net profit attributed to shareholders/equity)</td>
</tr>
<tr>
<td>MB</td>
<td>Market-to-book value of equity (market value of ordinary Shares/book value of ordinary shares)</td>
</tr>
<tr>
<td>TQ</td>
<td>Tobin’s Q (market value of equity+ book value of long term debt+ net short term debt/ book value of total assets)</td>
</tr>
<tr>
<td>BS</td>
<td>Board size total no of board members)</td>
</tr>
<tr>
<td>CD</td>
<td>CEO Duality dummy (equals to 1 if CEO is also chairperson of the board, otherwise 0)</td>
</tr>
<tr>
<td>NED</td>
<td>Non-executive directors (proportion of outside directors on the board)</td>
</tr>
<tr>
<td>FA</td>
<td>Firm age (No of incorporation years)</td>
</tr>
<tr>
<td>FS</td>
<td>Firm size (Natural log of net sales)</td>
</tr>
</tbody>
</table>

**REFERENCES**


