

CAN BOARD MECHANISM AFFECT THE FIRM VALUE IN PAKISTAN?

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Abstract

Corporate governance is, undoubtedly, extremely essential for the performance of the organizations. The structure of corporate ownership has significant impact on the external as well as internal performance factors of firms. The relationship between corporate governance indicators and firm performance has been extensively investigated; however, a little work has been done on how the structure of board can add value to the firm. This paper sheds light on the relationship of some aspects of board structure like board size, board composition, and CEO duality with the performance variables Tobin's Q and Return on Assets (ROA) by using a sample of 53 firms of cement and sugar sectors of Pakistan for a period of 2005-2007. The results indicate that the firms perform better with moderate board size and the performance is adversely affected if CEO also acts as chairperson of board of directors whereas the external directors can play a positive role for firm performance in Pakistan.

Keywords: Board size, Board composition, CEO duality, Firm performance, Tobin's Q

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1. Introduction

The modern corporation structure is based on the traditional theory of separation of ownership from its management. After the publication of "The Modern Corporation and Private Property" by Berle and Means in 1932, immense literature has been engendered on ownership separation theory of principal and agent. Since then, the researchers have tried to explore the potential adverse consequences of concentrated control of the managers. A considerable debate has been generated on the issue of whether the managers maximize the shareholders' wealth or they look for their personal objectives instead (Hubbard and Palia, 1995), through consumption of perquisites (Jensen and Meckling, 1976), or by investment in less risky projects (Amihud and Lev, 1981).

The role of board composition (Baysinger and Butler, 1985; Rechner and Dalton, 1991; Yermak, 1996; Eisenberg et al., 1998, and Bhagat and Black, 2002) and the structure of ownership (Morck et al., 1988; and McConnell and Servaes, 1995) in monitoring the management and, hence; enhancing the performance of corporation has been widely investigated in corporate governance literature. This role is of more important nature in emerging economies (La Porta et al., 1999), perhaps more than in the developed economies (Kim et al., 2004). Although the findings of these studies produced mixed results, the approach used by the researchers to investigate the relationship between governance mechanism and performance is more or less the same. The assumption underlying all these studies is that an optimal board and ownership structure that is

common to all, and low performance will be experienced by the firms which stray from the optimal level of these firm-related characteristics (Belkhir, 2005).

Does CEO duality matter? Whether the person who is serving as the chairman of the board and the CEO of the firm at the same time can contribute to the better performance of the firm? This is, perhaps, one of the most critical, controversial, and important questions raised by corporate governance researchers (Finkelstein and D'Aveni, 1994). The Agency Theory suggests that more effective monitoring can be done by splitting the positions of the board chair and CEO, and firms can earn higher returns by doing so (Rechner and Dalton, 1991). Contrary to this agency theory, the stewardship theory argues that CEO duality may create strong and visionary leadership by having unity of command and hence, leads to superior performance. There is a third school of thoughts as well which ends up with no significant relationship between CEO duality and the firm performance (Baliga et al., 1996; Dalton et al., 1998).

These mixed results on board composition and CEO duality with corporate performance tempted the need to investigate this issue in the emerging market of Pakistan. The current study explores the relationship of the board structure and CEO duality with the corporate performance in Pakistan. The objective of the current study is to shed light on some empirical evidence on these corporate governance issues and to provide a useful base for future researchers in this area. The present study reexamines and extends the findings of previous researches by investigating the relationship between corporate

governance structure of firms and firm performance based on book data as well as market rate of returns (i.e. Tobin's Q). The remaining sections of the study are organized as follows: Section 2 deals with some related literature on board mechanism, CEO duality and its relationship with corporate performance. Section 3 describes some legislative work on corporate governance in Pakistan. Theoretical framework is discussed in section 4 followed by analysis and results in section 5, whereas final section concludes the study.

2. Literature Review

There is no denying the fact that corporate governance has a very strong and positive impact on the performance of firms. The researchers in finance as well as the policy makers agree on the notion that corporate governance is a pillar for wealth creation for stakeholders and a fundamental aspect of corporate finance which can be further used not only to increase the value of firms but also to reduce agency cost (Becht et al., 2002). Majority of the work done in corporate governance literature for finding its relationship with the firm performance is done for single jurisdiction. Brown and Caylor (2006) found better governed firms with increased profitability, high payouts and more valuable in the market. Earlier, Gompers et al. (2003) also explored that firms can be more profitable with better sales growth, higher firm value, and made fewer acquisitions.

There are several governance mechanisms, including board structure and ownership structure, simultaneously available to the firms and selection of any of these mechanisms is endogenous, determined on the basis of cost and benefits analysis of each of them. The attractions of any governance mechanism may vary by firm to firm as cost and benefits of each mechanism may vary from one firm to another. The optimal governance structure differs across firms by producing equally good performance results. This approach raises the possibility that there may be no empirical relationship between board mechanism and firm performance. Some studies which follow this approach included Demsetz and Lehn's (1985) study of ownership concentration determinants, Hermalin and Weisbach's (1991) research on board composition, insider ownership and its impact on firm performance, study of Cho (1998) of investigation of relationship between managerial ownership, investment and corporate value, and Himmerberg et al.'s (1999) investigation of managerial ownership determinants produced similar results. In a study by Booth et al. (2002), the results indicated that the relationship between corporate governance mechanisms are stronger in the manufacturing sector that the regulated sector like banks which may be result of the notion that regulators may act as the monitoring device for the financial sector.

2.1. Board Size and Firm Value

Generally, the larger board sizes are associated with the lesser performance. The idea comes through the approach that smaller groups of people (directors) can communicate, coordinate and make decisions more effectively as compared to the larger boards (Belkhair, 2005). Jensen (1993) states that "keeping boards small can help improve firm performance. When boards get beyond seven or eight people, they are less likely to function effectively and are easier for the CEO to control." Lipton and Lorsch (1992) also suggested that board size should be small and may range from seven to eight members. In empirical research, the board size has mixed results with the performance. Yermack's (1996) study has documented a negative relationship between the board size and profitability, Tobin's Q and assets utilization whereas similar results were found by Eisenberg et al. in 1998. Adding to these, Brown and Caylor (2006) has concluded that firms with board of directors between 6 to 15 showed greater performance on ROA and ROE.

On the other hand, there are also some studies which indicated a positive relationship of performance with larger board sizes. Anderson et al. (2004) found that firms having larger boards enjoy low cost of debt as creditors believe that these firms would have more effective monitors. Kyereboah-Coleman and Biekpe (2006) showed that board size is positively affecting the firm performance (Tobin's q and ROA) but negatively associated with sales growth. These studies confirm the debate on inconclusive results of the relationship of optimal board size and corporate performance.

2.2. Board Composition and Firm Value

The board of directors is elected by the shareholders to effectively monitor the management performance and for strategic planning. Furthermore, it would be essential for the firm that it should have a board that is independent from the influence of the management for effective monitoring. For the autonomy of the board, it has been argued by the professionals and academic researchers the presence of outside/non-executive directors on the board which would help in value creation for firm (Belkhair, 2005). The rationale behind this belief is that the interests of outside shareholders are better defended by outside directors. Weisbach (1988) explored that replacement of CEO due to poor performance is easier in outside-dominated boards than other ones. However, the relationship between the ratio of outside directors to the board and performance is again found to be inconclusive. Fosberg (1989) finds no significant relationship between performance measures and the ratio of outside directors. The results were further supported by Hermalin and Weisbach (1991), Pi and Timme (1993), and Bhagat and Black (2002) who found similar results.

In contrast, the positive role of outside directors is also documented in corporate governance literature. Baysinger and Butler (1985) and Rosenstein and Wyatt (1990) found that firms having outside directors in the board, market react positively to those firms. Similar conclusions were drawn by Brickly et al. (1994). However, Brown and Caylor (2006) indicated that independent boards may have higher ROE, greater profit margins, larger payouts, and greater repurchases of stocks, arguing that there are some other important performance measures associated with the independence of board other than Tobin's Q.

2.3. CEO Duality and Firm Value

The researchers in corporate governance literature believe that performance can be improved and agency cost can be reduced by separating the titles of CEO and chairman of the board (Jensen and Ruback, 1983). The decision making power will be concentrated in one hand if one person is serving as CEO and chairman of the board. The board will be working less effectively which would further lead to lower firm performance. While studying a sample from banking industry, Pi and Timme (1993) concluded that higher return on assets was achieved by banks where two different persons were serving as CEO and Chairman. Yermack (1996) analyzed 452 US firms and found that market would be gaining value to firms where CEO duality did not exist. Botosan and Plumlee (2001), Brown and Caylor (2006), Belkhair (2005), and Kyereboah-Coleman and Biekpe (2006) also came up with similar findings that CEO duality does matter for firm performance and separating these two titles will lead to greater performance of firms.

In the last few years, the corporate governance has become an important research area in Pakistan after the implementation of code of corporate governance by Security Exchange Commission of Pakistan in 2002. Cheema (2003) said that for the economic development of Pakistan, corporate governance can play pivotal role. The main area of corporate governance research in Pakistan remained the legislative impact of code of corporate governance and its enforcement (Rais and Saeed, 2005), role of business groups in corporate governance and factors influencing accounting practices and disclosure requirements (Ashraf and Ghani, 2005). Although there are some studies investigating ownership structure's impact on performance of firms (Afza and Salahudin, 2007a, b), however, these studies did not take into consideration the board mechanism (composition and size) and CEO duality and did not relate it with the firm performance. These uncovered areas of corporate governance research include interests to apply these corporate governance mechanisms to check the corporate performance and needs in depth research. In this regard, the present study aims to explore the potential effect of board

size, board independency and CEO duality on firm performance and, hence, make some fruitful contribution to the existing literature of corporate governance in Pakistan.

3. Corporate Governance in Pakistan

For more than a decade, the corporate governance promotion has been in public eye globally. The investors' concerns regarding financial reporting standards, more effective accountability and transparent conduct and management control of business by the managers were increasing. People and regulatory bodies have encouraged the voluntary compliance with codes and disclosure requirements. The required high standards of corporate behavior were said to be achieved by adherence to non-binding codes of recognized best practices of business (Cadbury, 1992). In this regard, a legislative milestone in formative history of corporate governance was achieved by the implementation of the Sarbanes-Oxley Act in USA in 2002.

The awareness of corporate governance is not very old in Pakistan. The Institute of Chartered Accountants of Pakistan (ICAP) was the pioneer in taking the initiative to develop a framework of good corporate governance in Pakistan in 1998. By the year 2002, with the collaboration of ICAP, the Securities and Exchange Commission of Pakistan (SECP) has introduced the code of corporate governance for the firms operating in Pakistani economy for developing good governance culture in Pakistan. The main legislation of the code of corporate governance includes Securities and Exchange Ordinance 1969, Companies Ordinance 1984, and Securities and Exchange Act 1997 that establishes the Securities and Exchange Commission of Pakistan as the principal regulator of capital markets and non-banking companies as well as non-listed registered corporations.

Following the enforcement of the code of corporate governance in March 2002, the firms were hesitant to implement the code because of its expensive nature as well as its difficulty to implement. However, on the other hand, there was pressure by the regulatory bodies to enforce the code. As a result, the provisions of code of corporate governance were incorporated into the listing requirements of firms in all stock exchanges (i.e. Karachi, Lahore, and Islamabad) in Pakistan. The companies failing to comply with the provisions of the code may be penalized or de-listed from the stock exchange. Definitely, successful implementation of the code of corporate governance heavily depends upon effective enforcement of the code by the stock exchanges and SECP as well as the companies and stakeholders who are aware of advantages of compliance with the code. In order to make Pakistani markets more attractive for foreign direct investment, Pakistan is in process of implementing capital market reforms with the collaboration of Asian Development

Bank and United Nations Development Program. The substantial revisions of the code of corporate governance are in process in this regard (Ibrahim, 2007).

4. Research Design

The objective of the present study is to investigate the impact of various corporate governance variables on the performance of the firms operating in Pakistan as well as to look into the fact that whether these corporate governance mechanisms vary across the different manufacturing industries in Pakistan or firms in these industries are opting for the same corporate governance practices as firms in other industries. The current study uses Board Size (BOS), Board Composition (BOC) and CEO Duality as the measures of corporate governance mechanism variables. As mentioned in the literature, size of the board and composition of the board, as a proxy for the board transparency, significantly affect the internal and external performance of the firms (Pi and Timme, 1993; Brickly et al. 1994; Yermack, 1996; Bhagat and Black, 2002; and Brown and Caylor, 2006). Moreover, if CEO is also working as the chairman of the board, he may lead to negative performance of the firm (Botosen and Plumlee, 2001; Belkhair, 2005). So, the investigation of impact of these corporate governance variables on the firm performance is of crucial nature. We have measured the Board Size (BOS) as the total number of the directors working on the board and ratio of non-executive directors to the board size is taken as a measure of Board Composition (BOC). A dummy variable is used to measure CEO duality which takes the value of '1' if CEO is also working as the chairman of the board (CEO duality is present) and '0' otherwise.

There is no controversy on the issue that performance of firms is a fundamental element of the literature in finance and its measurement is more problematic (Severin 2001). According to Charreaux (1997, p. 32): "An adequate performance measurement should be able to give into account all the consequences on the wealth of stakeholders". Return on Assets (ROA) and Tobin's Q are the two performance variables that are most frequently used by the finance researchers. Two different aspects cover these two performance variables: one of which is time perspective, looking back for accounting profits (ROA), and the other one is Tobin's q, a forward-looking perspective. While assessing the impact of corporate governance performance, it is sagacious approach to have a glance on what management has accomplished and/or what will be accomplished in future? On the one hand, ROA investors' psychology is not going to effect accounting profits and it involves only a partial estimation of future events. Whereas, on the other hand, Tobin's q is affected by the investors' perceptions and behaviors pertaining how they gaze the various corporate business strategies and market

events. Although, both the performance variables (i.e. ROA and Tobin's q) have their own pros and cons, however, these have proved to be better than all other performance variables, and hence, have been incorporated in the present study (Afza and Salahudin, 2007a,b).

First performance variable of ROA is used for analyzing the historical performance of the firm under professional accounting regulations. This has simply been calculated as ration of net profits to the total assets. Moreover, Tobin's q, which compares the value of a company given by investors in financial markets with the value of a company's assets, has been calculated as ration of market value of firm to the book value of its assets. A q value greater than 1 means that investors are giving more value to the assets of the firms than its book value and vice versa.

In corporate governance literature, various studies have used the control variables along with the main independent variables of the study in order to have a pertinent analysis of corporate governance mechanisms on the profitability of firms (Myers, 1977; McConnell and Servaes, 1995; Charreaux, 1997; Short and Keasey, 1999; Datta and Iskandar 2000; Khanna and Palepu 2000; Beck et al. 2005; Afza and Salauhdin 2007a). On the same lines, along with corporate governance variables, the present study has taken into consideration some control variables relating to firms like the size of the firm and its financial leverage. The size of the firm (SIZE) has been measured as the logarithm of its total assets as the original value of total assets may perturb the analysis whereas the financial leverage (LVRG) has been taken as the debt to total assets ratio of each firm for the whole of sample period. The model to be estimated based on the variables discussed above is:

$$ROA_i = \alpha + \beta_1 BOS_i + \beta_2 BOC_i + \beta_3 Duality_i + \beta_4 LVRG_i + \beta_5 SIZE_i + \varepsilon_i \dots\dots (i)$$

$$q_i = \alpha + \beta_1 BOS_i + \beta_2 BOC_i + \beta_3 Duality_i + \beta_4 LVRG_i + \beta_5 SIZE_i + \varepsilon_i \dots\dots (ii)$$

Where:

BOS_i = Board Size of Firm *i* averaged for the period of 2005-2007

BOC_i = Board Composition of Firm *i* averaged for the period of 2005-2007

$Duality_i$ = CEO Duality of Firm *i* for the period of 2005-2007

$LVRG_i$ = Leverage Ratio of Firm *i* averaged for the period of 2005-2007

$SIZE_i$ = Natural Log of Total Assets of Firm *i* averaged for the period of 2005-2007

ROA_i = Return on Assets of Firm *i* averaged for the period of 2005-2007

q = Tobin's q of Firm *i* averaged for the period of 2005-2007

ε_i = error term

The sample consists of 19 firms from cement sector and 34 firms from sugar and allied sector listed at Karachi Stock Exchange (KSE) formulating to a total of 53 firms as final sample. The annual financial

data of these 53 firms from cement and sugar industries has been collected for the period of 2005-2007 from published annual financial statements after the audit whereas the data regarding market prices to calculate Tobin's q was obtained from the bulletins of Karachi Stock Exchange (KSE). The computations and analysis has been done with the help of a statistical package, namely, STATA.

5. Results and Discussions

The descriptive statistics regarding the variables of the study have been reported in Table 1. It is evident from the table that both the sectors have approximately similar and moderate board size which is on average 8 members on the board. Low standard deviation of board size variable also indicating that,

more or less, this moderate board size is prevalent across all the firms in both of the industrial sectors. Board composition, as the ratio of non-executive directors to the total board, is also not much different in both the industries. On average, more than half of the total directors consist of executive and non-executive members, which is clear sign of the board transparency in cement and sugar industries of Pakistan. The board decisions of firms in these industries are made through the mutual endorsement of internal and external stakeholders. Moreover, this is in-line to the requirements of Security and Exchange Commission of Pakistan (SECP) that total board of public limited companies in Pakistan must represent at least one-third non-executive members as directors.

Table 1. Descriptive Statistics

Variables	Cement Sector				Sugar & Allied Sector			
	Min.	Max.	Mean	S.D.	Min.	Max.	Mean	S.D.
Board Size	7	11	8 ⁴³	1.20	7	10	8 ¹	0.91
Board Composition	28.6%	90%	63.55%	18.54%	12.5%	87.5%	57.32%	22.52%
CEO Duality	0	1	0.21	0.42	0	1	0.59	0.50
Leverage	27%	80.99%	55.30%	14.57%	6.96%	343.8%	92.62%	79.50%
Firm Size (In Million Rs.)	1847.5	34688.5	6115.3	2.4	255.7	10920.1	1180.3	2.4
Return on Assets	-9.58%	18.44%	4.54%	6.84%	-17.11%	20.05%	1.56%	7.26%
Tobin's Q	0.31	0.84	0.58	0.14	0.07	3.48	0.94	0.79

However, CEO duality factor seems to be different between cement and sugar industries. In cement industry, 21% firms are having same position for CEO and chairman which reflects CEO duality, whereas, 60% of sugar firms do have CEO duality prevailing in industry. As per theoretical literature (Jensen and Ruback, 1983; Belkhaier, 2005; and Kyereboach-Colamen and Biekpe, 2006), CEO duality leads to lower performance and this fact is also visible in sugar industry where average profitability is lesser as compared to cement as shown by Returns on Assets (ROA). Firms in cement sectors are larger in size and having, on average, high accounting profitability. However, in terms of Tobin's q, sugar firms are ahead of their counterpart firms in cement industry which showing investors' confidence in sugar & allied firms, and hence, giving a higher value of q to those firms.

The effect of corporate governance may vary in different sectors as per sector tendency. The norms of

each industry will determine the common corporate governance practices and mechanism to be followed by firms in that industry. In order to check, whether these practices vary in both of the two selected industries, this study employs independent sample t-test and results have been reported in Table 2. The corporate governance variables i.e. Board Size, Board Composition and CEO duality have been grouped with the cement and sugar sectors than the t-test has been done. It is evident from this results reported that only CEO duality is the factor which has been found statistically different in both of the study sectors. It is also inline with our descriptive analysis that choice of firms for having same position of CEO and chairman of the board is different in both of the industries. Moreover, the study does not find any statistical support for other two corporate governance variables of BOS and BOC which are found statistically insignificant by independent sample t-test.

⁴³ The value is rounded to its nearest whole number as human beings can't be in fractions.

Table 2. Independent Sample T-Test of CG Practices between Cement and Sugar Sector

Variables	t-statistic	Significance
Board Size	0.260	0.797
Board Composition	1.085	0.284
CEO Duality	-2.934	0.005

The impact of corporate governance on the value of firms has been tested through Ordinary Least Square (OLS) regression. Corporate governance variables i.e. BOS, BOC and duality along with control variables of LVRG and SIZE have been regressed on performance variables of Return on Assets (ROA) and Tobin's q respectively and results have been reported in Table 3. The second column of

the table 3 reports results of regression of all 53 firms from cement and sugar industries. The model F-value is highly significant at 1% level, whereas, adjusted-R² of 50% indicating the relatively strong regression model. Almost half of the variations in dependent variable, ROA are caused by the selected variable of study BOS, BOC Duality, LVRG and Size.

Table 3. Regression Analysis of Corporate Governance and Firm Performance

Panel A: Dependant Variable is ROA						
Independent Variables	All Firms		Dual CEO		No CEO Duality	
	Coefficients	t-value	Coefficients	t-value	Coefficients	t-value
BOS	0.024	3.29***	0.017	2.76***	0.031	2.34**
BOC	0.008	0.24	-0.098	-2.53**	0.023	0.44
Duality	-0.038	-2.40**	Dropped		Dropped	
LVRG	-0.066	-5.21***	-0.077	-7.75***	-0.139	-2.46***
SIZE	-0.006	-0.90	-0.017	-2.23**	0.005	0.46
N	53		24		29	
F-Value	11.31***		19.13***		3.48**	
Adj-R²	49.79%		75.93%		26.15%	
Panel B: Dependant Variable is Tobin's q						
BOS	0.002	0.70	0.002	0.73	-0.002	-0.34
BOC	0.010	0.87	-0.001	-0.07	0.023	1.31
Duality	-0.001	-0.02	Dropped		Dropped	
LVRG	0.999	233.38***	1.004	236.61***	0.980	51.74***
SIZE	-0.001	-0.32	0.004	1.14	-0.002	-0.45
N	53		24		29	
F-Value	15287***		28394***		771.2***	
Adj-R²	99.99%		99.98%		99.10%	

*** and ** represent level of significance of 1% and 5% respectively

So far as the impact of corporate governance on ROA is concerned, the board size is strongly affecting the accounting performance of the firm. The positive relationship between BOS and ROA confirms the notion that larger the board size the greater the accounting profitability. As the board size increases, the firm decision would be more generalized and being made with the greater endorsement of internal

and external stockholders. Thus, this fact leads to greater performance of the firm. Moreover, the statistical significance of this relationship at 1% level confirms the finding of Anderson et al (2004) that firms having larger boards enjoy low cost of debt at the creditors believe that these firms would have more effective monitors. This availability of low cost debt enables the firms to avail the future profitable

opportunities which further lead to increased profitability. The board composition (BOC) is found to be positively related to ROA reflecting that presence of external and non-executive members of the board enhances the firm's profits; however, this relationship is not statistically proved. Our result regarding BOC are inline with Fosberg (1989), Hermalin and Weisbach (1991), Pi and Timme (1993), and Bhagat and Black (2002) who were also of the view that no statistically significant relationship exists between financial performance and the composition of the board.

Does CEO duality matter for firm performance? Would separating the positions of CEO and board chairman enhance profitability of firm? These research questions remain very important in corporate governance literature and the present study also provides some conclusive answers to these questions relating to CG in Pakistan. As per the theories, (Jensen and Ruback, 1983) and empirical literature (Pi and Timme, 1993; Botosan and Plumlee, 2001; Brown and Caylor, 2006; Belkhair, 2005; and Kyereboach-Coleman and Biekpe, 2006), the present study also supports the notion that CEO duality is injurious to firm's health. A negative and significant relation exists between the CEO duality and firm performance which is also statistically significant at 5% level. Firms holding two different positions for CEO and board chairman would be enjoying greater profits as compared to those having dual CEO.

Panel B of the Table 3 reports the result of regression model (ii) taking Tobin's q as dependent variable and same independent variables of Model (i). The results are in accordance with the expectations and to the previous results of ROA, board size and board composition are positively related to the market performance of firms. CEO duality has also produced expected negative relation with Tobin's q indicating that separation of the positions of CEO and board chairman would increase investors' confidence in stock markets which would further lead to higher market performance of firm in terms of greater value of q. Despite the higher and significant value of model F-value and very strong adjusted-R², the present study is unable to find these relationships of corporate governance variables and Tobin's q statistically significant at any level.

In addition to the simple regression of corporate governance variables on the firm performance, the robustness of these results has also been tested. The only dummy variable of the model (i) and (ii) i.e. CEO duality has been controlled and two further models have been formulated for the firms having dual CEO and the firms having no CEO duality, respectively. The results have been reported in the 2nd and 3rd columns of panel A and B of table 3. Now the picture has been changed a little bit and we got somehow different results regarding corporate governance and firm performance. In case of board

size (BOS), there is no change in previously established results and firms, having dual CEO as well as without duality, are getting positive and increased accounting returns from moderate board size, however, this relationship is stronger for the firm having dual CEO. This is in accordance with the general expectations that the impact of concentrated powers of dual CEO can be compensated with a larger board. As the firms tend to increase the board size, the dual CEO would be less effective and firm performance will be increased.

Board composition (BOC), which has been used as the proxy for the transparency of board of directors, was found positively related to ROA in our previous results. However, after controlling the effect of CEO duality, this relationship has been changed. If the CEO is separate from the chairmanship, the same positive relationship exists between ROA and board composition. But, if the firms are following the duality phenomenon, then relationship between BOC and ROA becomes negative and statistically significant at 5% level. If CEO also possesses the position of chairman of the board, he would definitely prefer inside directors instead of having more neutral outside non-executive directors on the board in order to make the decision powers concentrated into his own hands. This will surely lead to decreased accounting performance of the firms as one individual can not make accurate decisions as a group of experts can make. Along with this possible scenario, another explanation of this negative relationship is the prevalence of the agency theory. The more external and non-executive directors on the board would be, the greater the conflict of interest will exist among them and a more powerful dual CEO. The ultimate outcome would be the reduced performance of firms in the cement and sugar sectors of Pakistan.

The robustness of results has also been tested for the dependent variable of Tobin's q in model (ii). The study found some interesting findings reported in panel B of Table 3. The conflict of interest and agency phenomena have also been given weightage by the investors in stock market where board composition produced negative relationship as in case of ROA. However, investors also believe that if the firm doesn't have dual CEO, then it should reduce the firm size in order to improve the market performance. This is contrary to our previous findings of the corporate governance and its impact on firm value. The firms don't need large boards if the CEO is not dual and the profitable decisions can be made even with mutual endorsement of small boards of directors. Finally, all these findings on impact of corporate governance on the value of firms in cement and sugar sectors have been summarized in table 4 for all firms, firms with dual CEO and firms having CEO and chairman as two different persons where signs represent relationship and asterisks represent the respective significance.

Table 4. Summary Results for CG and Firm Performance

Dependant Variable	Independent Variable	All Firms	CEO Duality	No CEO Duality
ROA	BOS	+ *	+ *	+ *
	BOC	+	- *	+
Tobin's Q	BOS	+	+	-
	BOC	+	-	+

* Represents the significant relationship

6. Conclusion

The role of corporate governance is very important as it helps the firms to improve performance as well as the internal structure of the organization. The structure of ownership has been widely investigated in finance literature after the theory by Berle & Means (1932). The present study is one of the pioneering efforts to explore the impact of board size, board composition and value of firms in Pakistan by taking sample of 53 firms from the cement and sugar industries. Independent sample t-test has been applied to check the industrial differences for the corporate governance practice relating board mechanism and CEO duality whereas regression model has been used to enhance the firm performance for accounting returns as well as market measure of returns.

The results reported that firms in cement and sugar industries have significantly different practices regarding the decision of having two separate positions for CEO and board chairman as 21% cement firms and 59% sugar firms do have dual CEO. Moreover, regression results indicated a positive relationship of board size and board composition with ROA and Tobin's q. The board size leads to enhanced performance as well as more outside directors play their role to increase profitability. As per literature and the expectations CEO duality produced negative results and a person having two powerful positions in the firm (dual CEO) will reduce its performance. As both positions are held by one person, the conflicts between management and shareholders rise, agency problems will play its role and firms will perform less.

The robustness of above results has also been checked by controlling the effect of dual CEO. The total sample was divided in two sub sections, one with firms having dual CEO and the other with no CEO duality. This has produced, somehow, different results for board size and board composition. The more non-executive directors on the board of firm where CEO is dual, the conflicts of interests are greater and that will lead to negative accounting performance. Whereas, the market participants believe that if duality does not exist in the firm, then it should not have the larger board size. If still board size is greater, the investor

gives lesser value to such firms producing a lower Tobin's q which is the indication of lower performance.

The study has some important implications for the practitioners and managers of firms in Pakistani market. As results have shown, performance is positively related to the moderate board size, so the firms, with few members of board, should increase board size upto the moderate level. Moreover, more outside non-executive directors are providing a room for firms to operate independently and valuably, there must be sufficient representation of external directors on the board in the other industries as well. However, to avoid conflicts of interest and agency problem, presence of duality of CEO and board chairman should be evaded as it leads to negative performance even if there is sufficient number of external independent directors present on the board. Finally, further research may be undertaken to examine the implications of this study on the other industries of Pakistani market.

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