

Corporate Monitoring Mechanism and Corporate Governance Influence on CEO Compensation Level in Case of Pakistan

by

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Abstract

Managerial compensation to top executives has remained a topic of continuing interest in corporate finance literature. Corporations are required to pay a handsome amount to appeal and motivate qualified people to get their jobs done in a befitting manner for the organization. Accordingly, executives try to grab higher level of compensation for themselves which might be at the cost of affecting firms' value and interests of principles. In this context, various monitoring tools have been used in order to better monitor this opportunistic behavior. Therefore, this paper empirically evaluates the impact of different corporate governance attributes such as institutional shareholders activism, independence of audit committee and board and block holding on level of compensation paid to CEO of Pakistani listed firms for a period of 2007-2013. The results found that independent audit committee and board of director along with dual CEO structure and greater family ownership are helpful in mitigating the higher level of CEO compensation which is in align with agency cost hypothesis. Moreover, higher financial institutional ownership found positively related to CEO compensation which is in accordance with strategic alliance hypothesis.

Keywords: CEO Compensation, Family Ownership, Firm Performance, Board Independence, Institutional Ownership, Audit Committee Independence

1. Introduction

Managerial compensation is considered as an important topic in the mainstream of corporate finance. Corporations are required to pay a handsome amount to appeal and motivate qualified people to get their jobs done in a befitting manner for the organization (Abed et al., 2014). There are two leading issues related to deal with managerial compensation; one is related to magnitude of amount paid while other is how this compensation should be paid (Jensen & Murphy, 1990) as different ingredients/elements of compensation motivate the manager to do work in best interest of shareholders. For example, implementation of innovation strategy is possible through incentive that pursue the innovation in high technology industry (Yanadori & Marler, 2006) so many studies are presented which highlighted the role of cash as well as stock compensation paid to CEO and top executives in enhancing the firm performance (Chalmers et al., 2006).

Consequently, the more and more demand for high compensation fueled many spectacular cases in which managers misleading financial figures to which pay elements is attached. These cases attached with executive compensation that patronage executive involvement in frauds because they get high incentives through this epic act. The study of Johnson et al., (2005) found that during period of frauds, the executive was mostly exercises the large number of vested options and receive high

compensation. So, the likelihood of committing the frauds is high if the compensation is attached with equity based firm performance. Erickson et al. (2003) also support this result by finding out position association between the chances of committing frauds and percentage of equity-based compensation in the preceding year. This is interesting dynamic to review financial fraud in framework of executive compensation. Even though compensation is always study in content of reducing agency problems that heighten due to interest conflict between managers and owners. This positive influence of compensation is only get by legitimate and moral means. But these compensation contracts is also have negative side that highlighted when growing number of cases related to misrepresentation and fraudulent financial data. This wrong picture of firms misleads analysts about evaluation of firms (Johnson et al., 2005, Chesney & Gibson-Asner, 2004). The arising question is based on executive either commit fraud just misinterpretation the stock price or through this means increase their payoffs under stock performance related compensation contract (Johnson et al., 2005).

Compensation system is an important topic in the previously conducted empirical studies because it motivated the personnel of the organizations which at the end increase the productivity of firms. A number of studies found on compensation structure which showed that chief executives receive high incentives, ultimately a big cost born by shareholders. Therefore, it is necessary to introduce a system that has effective control on CEO compensation. This study also help to trace out the way and reason of misrepresentation of firm earnings to which elements of compensation is attached.

All misrepresentation and bad earning management is just controlled through implementation of corporate governance. On this situation, monitoring mechanism of governance is required to reduce the flaws of corporate systems. Some internal mechanism is proportion of independent directors (Jensen, 1986), board monitoring (He et al., 2009) composition of monitoring committees (Cotter & Silvester, 2003), audit fee, audit committee independence (Vafeas & Waagelein, 2007), and external monitoring mechanism based on shareholder activism through institutional investor, larger shareholder ownerships and family ownership. As existing empirical research show that corporate governance implemented through appropriate mechanism is helpful in better monitoring and control the opportunistic behavior of managers. Hence the present research paper also considers the impact of different monitoring mechanism of corporate governance in order to control the level of compensation paid to CEO in Pakistani firms.

2. Theoretical Background

In existing research, various measurement are used to evaluate the monitoring effect of corporate governance mechanisms on the firm such as financial intuitional ownership, board structure, and audit committee independence etc. The evolving topic during the last 15 years in financial markets is shareholder's activism that is also known as relationship investing. The primary objective of shareholder activist is to increase effectiveness of the firms performing poor through tough and proper monitoring. The most important distinction is gained by institutional investor in content of shareholder activism (Gillan & Starks, 2000). The empirical work focused on this issue is limited and the concentration of studies on this topic is covered through different endeavors of institutional investors like california public employees retirement system Huson (1997), Nesbitt (1994); on specific proposal (poison pills) (Bizjak and Marquette, 1998) and effect on executive compensation (Johnson & Shackell, 1997).

The empirical studies shepherded effect of institutions activism on firm performance showed mixed results. Those studies piloted under large sample of pension funds that were more active, disclose firm successfully met performance target (Smith, 1996). Moreover, the announcement belongs to shareholder activism are shake firm performance for short period of time, no long term effect is observed (Wahal, 1996), Del Guercio & Hawkins (1999), and Gillan & Starks (2000). In another strand of the studies like Cornett, Marcus, Saunders, and Tehranian (2004) highlight the issue of institutional activism with the social bonding and findings support the institutional investor that have terms with firm management bear cost in form of bad operating performance. Contrarily, McConnell & Servaes (1990) verdicts support strong relationship of Tobin's q with institutional shareholder ownership specifically with private pension funds Woidtke (2002).

The institutional investor does not only mitigate the agency issue relevant to managers and shareholder but also have effect on compensation through monitoring role. The involvement of institutional in decision making through managerial opportunism is noticeable in prior literature (Smith, 1996; Useem, 1996). Chowdhury & Wang (2009) examined the monitoring role of different type of institutional activism and three apparatus of boards on CEO contingent incentives in Canada. The finding show that independence board, instructional activism increase the compensation level. Oppositely, Hartzell & Starks (2003) reveal influence of investor that is measured through the ownership concentration of institutional investors has negative impact on compensation level. The institutional investors have effect on the executive compensation whereas Executives' compensation has no reverse effect on institutional investors. Another interpretation of these findings may be based on simultaneous effects of institutional investors, monitoring and compensation level. This correlation exists where monitoring is done through stock market (Holmstrom & Tirole, 1993), outside equity holders (Burkart et. al 1997) and institutional investors (Chidambaran & John, 1999). The relationship between monitoring and incentive pay should base on cost and benefit analysis because monitoring through institutional investors has some benefits (Shleifer & Vishny, 1986; Huddart, 1993) as well as some cost effects. The monitoring cost ascends when investors require additional resources for taking managerial actions (Noe, 2002). Likewise, incentive compensation puts burden on shareholders and reduces the agency cost (Hartzell & Starks, 2003)

The relationship of audit committee effectiveness and executive compensation is discussed in literature in content of audit cost. If audit committee plays an effective role, it reduces the need of external auditing and strengthens the internal control. Similarly if compensation incentives reduce the conflicts and deter the managers to provide bad earning, it can reduce the external auditing need (Vafeas & Waagelein, 2007). This is reflection of a well-managed organization. On other side, in feudal organization, the compensation is a reason of earning manipulation which increases the external cost of auditing (Bedard & Johnstone, 2004) and requires more audit efforts (Gordon, 2002). Therefore, this argument shows positive link between compensation and audit efforts.

Another monitoring mechanism which is discussed in the content of independent board has effects on CEO compensation (Hermalin & Weisbach 1998; Almazan & Suarez 2003; Hermalin 2005). Another study also highlights the role of board in which monitoring is a key focus (Adams & Ferreira, 2007). But involvement of CEO in board selection distracts roles that board performed because mostly directors who got selected have the social relationships with the firm. In this way just requirement of independent board is fulfilled but not in actual sense (Klein 1998; Shivdasani & Yermack 1999). Ultimately, such grey directors focus on personal benefits, not on monitoring perceive (Westphal & Zajac, 1995). So the independent board is required for better monitoring of managers and control over the CEO compensation (Laux & Lsux, 2009).

The board independence increases the effectiveness of board but when board is increased in its size, it becomes less capable to take effective decisions and shows low effectiveness (Lipton and Lorsch (1992) and Jensen (1993). These arguments support high power that CEOs gain due to ineffective board. On this premise, Yermack (1996) found negative link between firm performance and board size.

The extant financial literature has typically examined compensation decisions from the perspective of a board of directors who seek to produce an optimal contract to mitigate agency conflicts. Recent researchers, however, suggest that the process of determining compensation is better described as a negotiation between the board and the CEO. For instance, Hermalin & Weisbach (1998) model a bargaining game in which the selection of directors and the CEO's compensation are negotiated between the two parties. Similarly, Bebchuk et al (2002) argue that the CEO's managerial power over the board of directors distorts optimal compensation contracts. Moreover, they suggest that the existing empirical evidence better supports the bargaining model than an optimal contracting paradigm. In light of these arguments the independent boards increase the effectiveness of board, performance in a better way and monitoring role in making decisions of executive compensation.

2. Research Methodology

All 557 companies that are listed on 31st December 2014 at Karachi Stock Exchange are the target population for the present study. Among these, randomly 150 companies were selected for proposed sample based upon the complete data availability for study of 2007-2013. During the initial screening of data for outliers, 18 more companies were dropped due to outliers for ownership and financial variables. The present study focused on 2007 to 2013 which leads to a final year end observations of 924 for a cross section of 132 firms. The data on study variables is obtained from annual reports of sample companies. In order to examine the impact of monitoring mechanism on CEO compensation, following regression models have been estimated:

$$COMP_{it} = \alpha + \beta_1 INST-OS_{it} + \beta_2 AUDIT-IND_{it} + \beta_3 EX-AUDIT_{it} + \beta_4 B-IND_{it} + \beta_5 B-ACT_{it} + \beta_6 B-PART_{it} + \beta_7 CEOD_{it} + \beta_8 FAM-OS_{it} + \beta_9 BLOCK_{it} + \beta_{11} ROA_{it} + \beta_{12} TQ_{it} + \beta_{13} SIZE_{it} + \varepsilon_{it}$$

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Where:

$COMP_{it}$ = CEO compensation measure of log of compensation for firm i at time t

$INST-OS_{it}$ = institutional ownership for firm i at time t .

$INST-ACT_{it}$ = institutional activism for firm i at time t .

$AUDIT-IND_{it}$ = audit committee independence for firm i at time t

$EX-AUDIT_{it}$ = external audit quality for firm i at time t

$B-IND_{it}$ = board independence for firm i at time t .

$B-ACT_{it}$ = board activity measure as board meeting for firm i at time t

$B-PART_{it}$ = board participation for firm i at time t .

$CEOD_{it}$	= CEO duality for firm i at time t .
$FAM-OS_{it}$	= family ownership measure as proportion of family shareholding for firm i at time t
$BLOCK_{it}$	= block holder for firm I at time t .
ROA_{it}	= firm performance measure as return on assets for firm i at time t
TQ_{it}	= firm performance measure as Tobin's Q for firm i at time t .
$SIZE_{it}$	= firm size measure as log of total assets for firm i at time t .
ϵ_{it}	= error term

Variable Description

The executives' remuneration is considered as a significant fact which helps to enlarging motivation level of top management that ultimately influences firm's profitability. The compensation is adhere different elements like salary, bonus, stock option, pension and different allowances. In present study the total CEO compensation is taken by gauging elements of the salary, bonus and all non-financial benefits (Nourayi and Mintz, 2008) then taking log of them.

The independent variable is taken institutional investors as monitoring party that have power to motivate and monitor CEO compensation (Lee & Chen, 2011). Due to better governance of institutional investors became reason of negative relationship with level of compensation (Chen and Firth, 2005). The percentage of shares that are taken by institution invertors is consider as institutional ownership in current study as used by Croci et al. (2012). In second model, analyze the effect of institutional activism on the compensation level. Another variable for corporate monitoring is used as audit committee independence and role of external auditing. Audit committee effectiveness has strong relationship with internal control mechanism of the business (Abbott et al., 2010).

The different control marks of board of director are used like board independence, board participation and board activity. The independent executive directors have monitoring right that left negative effect on the pay packages of CEOs (Chhaochharia and Grin-stein, 2009) as well as positive impact on pay as reported by Fernandes et al. (2012). The family owiership also change the level of compensation especially in those countries where legal corruption is high (La Porta et al., 2000)

The firm performance is independent variable that used measurement of ROA, Tobin's q . In which, ROA is accounting based measurements of firm performance that obtained through dividing the net income of firm by firm assets also used by Wu (2013) The Tobin's q is also taken as market based accounting measurement. It is better way to measure the market valuation of the firms that is based on the use of assets and growth opportunity of firms (Bharadwal et. al, 1999). It also highlights the investors' expectation about the future events of firms, which including the assessment of business strategies impact on business (Demsetz and Villalonga 2001). It is measured by adding the market capitalization and book value of total liabilities divided by total assets. the variable measurement used in current study is provided in appendixA

According to stewardship theory the firm performance increase through CEO duality (Nishat , 2004).

RESULTS AND DISCUSSION

Table 1 below reports the results of some descriptive statistics about the sample data. It is evident from the figures reported in table that the average level of CEO compensation during the study period for sample firms is 11,585.071 million PKR along with standard deviation of 7.277 million. The level of family ownership in sample firms ranges from zero to 93% of total shares with an average of around 19.11%. There are 12.94% shares held by financial institutions in sample companies which include banks, insurance companies, mutual funds and other institutional investors on average. This could be called as a quite a good percentage held by institutional monitors. On average, the foreign investors hold the firm share at 6% in our sample. This amount is much low then other ownership level. The level of board independence is 37.88% for selected companies where almost one-third board members are non-executive directors and not working in the organization on any managerial posts. The maximum number of board meeting is conducted is 35 and on average, sampled firms show just 5 meeting are directed. In these meeting the director participation is 79% on average. This result shows those directors are interested to attending firms meetings also increase board monitoring efficiency. In terms of performance, the sample companies have 5.45 % of returns on total asset during the sample period which might be considered at an appropriate level as indicated by many other earlier studies in their sample. Q was taken as a measure of market performance of firms measured as a ratio of market value of firm to the book value of firm. It is clear from the descriptive statistics that study sample firms have a q ratio of 2.028 which is greater than the benchmark level of 1. So, the sample firms are quite profitable firms.

TABLE 1
DESCRIPTIVE STATISTICS

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	-3.3261	0.7836	0.0545	0.1552
Q	0.4224	7.2679	2.02819	2.1984
Size (in Million PKR)	8.561	26,2673.406	11,585.071	26418.519
AC_IND	0	1	0.8002	0.1854
B-IND	0.0166	0.9333	0.3788	0.3003
B_ACT	2	35	5.53	2.965
B_PART	0.2121	1	0.7978	0.12647
CEO Comp	0	13.2816	7.2779	3.0628
FAM_OS	0	0.9328	0.1958	0.2399
INST_OS	0	0.8855	0.12943	0.12139
Valid N (924)				

Before going for empirical testing of our regression models, it is necessary to validate the issue of multicollinearity between the independent variables of the study. For this purpose, the Pearson correlations between the study variables are obtained using SPSS and reported in Table 2. the return on assets have no association with audit committee but ROA have positive and significant association with external auditing activities with value of 0.186. The family ownership and CEO duality have negative relationship with firm performance. the value of coefficient of correlation ($r = 0.113$) showed that there exists a weak positive relationship between firm size and ROA that is significant but when firm performance is measure as Tobin's q , firm size not show significant relation. The firm size has statistically significant relationship with all variables except foreign ownership.

The audit committee independence has positive and strong association with board independence with coefficient value of 0.54 with 1% significant level. This value represent as highest amount of correlation comparatively in all other values in correlation table. This result is due to high number of independent director in corporate board show reflection in his related committee. The audit committee have negative association with some other variable such as board meeting ($r=-0.14$), board participation ($r=-0.011$), CEO duality ($r=-0.155$), family ownership ($r=-0.322$). The external auditing relationship has negative association with CEO duality with coefficient of -0.29 and with family ownership. The most of values show association with other independent variables at level of 1%.

TABLE 2
CORRELATION ANALYSIS

Variables	ROA	Q	Size	AC_I ND	Ext_AD UI	B- IND	CEOD	B_AC T	B_PAR T	COM P	Fam_O S	Inst_OS
ROA	1											
Q	.010	1										
Size	.113* *	-.027	1									
AC_IND	.036	.055 *	.144* *	1								
EXT- ADUIT	.186* *	-.002	.356* *	.236**	1							
Bod-IND	.018	-.026	.239* *	.543**	.264**	1						
CEOD	- .155* *	.031	- .150* *	- .155**	-.295**	.227* *	1					
B-ACT	-.018	.008	.180* *	- .148**	.000	-.002	-.015	1				
B_PART	.060* *	.037	- .056* *	-.011	.007	-.048	-.018	- .172**	1			
Comp_CEO	.153* *	.009	.359* *	.090**	.385**	.136* *	- .181* *	.002	-.005	1		
Fam_OS	- .095* *	-.027	- .232* *	- .322**	-.334**	-.345* *	.225* *	-.045	.090**	.238* *	1	
Inst_OS	.007	.014	.068* *	.111**	.122**	.135* *	- .105* *	- .111**	-.100**	.130* *	-.189**	1
Block	.109* *	.020	.173* *	.172**	.195**	.194* *	- .163* *	-.007	-.051*	.186* *	-.576**	.12**

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

In model 1 of table 3 shows the impact of monitoring mechanism on compensation contract but in this model use the institutional ownership that differ from model 2 of table 3. The accounting based performance has positive impact on CEO compensation. The one point change in return on assets is upturn the compensation with 1.199 point that is statistical significant. The market based measurement of firm performance is also increase level of executive incentives but this result is not significant. The firm size also has positive impact on firm performance. The large organizations are rewarded more to their manager comparatively small organization because executive put extra effect to manage large organization. The 1% changes in firm size increase the compensation 46%. The presence of independent director in audit committee has negative influence on compensation contract. Its means that internal audit system play monitoring role in effective way to restrain the excess increase of compensation. Along that the external committee have opposite impact. The overall picture shows that the internal controlling management is complement of the external auditing. This finding is supported by (Vafeas & Waagelein, 2007) in which effectiveness of audit committee is analysis through audit fee. This study show that if audit fee is increase the pay level decreased. Along that board independence is also having opposite liaison with firm performance. The 1 % change in reduce the 12% portion of compensation but that value is not significant. The corporate board shows its effectiveness through arranging more board meeting in which focusing on management issue and management activities. so the firm internal controlling and monitoring mechanism is effective and in working condition.

With concentration on the external monitoring mechanism like institutional ownership, the findings reveal the opposite functioning behavior then internal mechanism. The concentration ownership of institutional shareholder increases the level of CEO compensation. The findings of Fernandes et al. (2012) support our results. This positive effect may be because of less circumspect monitoring of investors on level of compensation. This positive impact of institutional investor is partially counterbalance effect of family firm on compensation (Crocì et al., 2012). The findings endorse strategic alliance hypothesis that stimulate the ineffective role of institutional investors, might be due to social interaction with managers or due to have some personal interest (Afza and Nazir, 2015).

In the model 2 of table 3, the result is based on effect of institutional investor's activism on the level of compensation. The finding shows that 1% boosting level of activism increase the proportion of compensation with 58%. The study of Chowdhury and Wang 2009 support this result. The other variables show same influence that have in model 1.

TABLE 3
EFFECT OF CORPORATE MONITORING MECHANISM ON CEO COMPENSATION

Variables	Model 1			Model 2		
	b	t-value	Sig.	b	t-value	Sig.
(Constant)	.091	.100	.920	-.081	-.090	.928
INST-OS	1.583	2.720	.007			
INST-ACT				.582	3.942	.000
ROA	1.199	2.650	.008	1.150	2.551	.011
TQ	.002	.712	.477	.002	.675	.500
SIZE	.462	10.041	.000	.469	10.223	.000
AUDIT-IND	-.846	-1.862	.063	-.793	-1.750	.080
EX-AUDIT	1.535	9.607	.000	1.481	9.239	.000
B-IND	-.121	-.426	.670	-.137	-.483	.629
CEOD	-.289	-1.842	.066	-.329	-2.107	.035
B-ACT	-.046	-1.884	.060	-.044	-1.811	.070
B-PART	.195	.351	.725	.324	.585	.559
FAM_OS	-.853	-2.241	.025	-.909	-2.405	.016
Block	.305	1.669	.095	.273	1.496	.135
F value	38.536*			39.411*		
R Square	0.228			0.232		
Durbin Watson	1.464			1.467		

* denotes the level of significance at 1%

CONCLUSION

This paper tried to build indirect link between monitoring mechanism of corporate governance and CEO Compensation. The executive compensation is middle way through which the executive extract extra benefit for the firm and inappropriately use the income of others. Even corporate executive misrepresent the financial statement to which their equity base compensation is attached. But all these problems are solved, if tough monitoring mechanism is introduced in firm through different ways. Thereby, these strong governance mechanisms help to improve the firm performance. The present model highlight the tracks through which the CEO extract the money. For example, one possibility is that equity based compensation element motive manager to manipulate earning of firms. But if firms increase the audit efforts then effectively detect the earning manipulation (Gordon, 2002). The present study shows that the institutional investor in Pakistan do not perform effective role for controlling the faulting activities. The reason behind may be their social relationship with the managers that restrict them to performing their monitoring duties. In case of Pakistan, the independence of board and board member meeting and their participation in board play effective role to controlling the compensation contract. Moreover, audit committee of Pakistani firms also help to save the interest of shareholders. in future, the different elements of compensation is taken for clear impact of auditing efforts on different variables of equity based compensation.

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APPENDIX A

Independent Variables	Measurement
Board Size	Number of directors on the board
Board independence	Ratio of non-executive directors to the board size
CEO duality	CEO dummy, value of 1, if the CEO also served as board chairman and 0 otherwise
Board activity	Number of meetings held by the board of directors annually
Board Participation rate	Sum of meetings attended by total directors divided by Sum of meetings required to attend by total directors
ROA	Ratio of net profits to total assets of firms
Tobin's q	Market value of firm / book value of firm
Family ownership	The proportions of family shareholding
Institutional ownership	The proportion of institutional shareholding
Institutional Shareholders' activism	Dummy variable and takes the value of 1 if there is nominee director of financial institutions on the board of the underlying company and zero otherwise
Audit committee independence	The proportion of independent director in audit committee of firm.