# The Relationship among Directors' Pay, Corporate Governance, and Firm Performance: Evidence from Financial Sector of Pakistan

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#### **Abstract**

This research empirically examines the effect of firms' performance and corporate governance attributes on directors' pay. To attain the objective, the data for the period from 2007 to 2014 are retrieved from annual reports of 52 listed financial firms. Return on assets and return on equity are utilized to measure performance. Board size, board independence, board ownership and CEO duality are employed as corporate governance practices. Using the random effect model, the performance has positively related to directors' pay, but level of significance is sensitive across performance proxies. The board independence has negatively significantly influenced the directors' pay. However, board ownership significantly positively influenced the directors' pay. Furthermore, board size and CEO duality both have not significantly associated with directors' pay.

**Keywords:** Corporate Governance, Directors' Pay, Firm Performance, Financial Firm, Pakistan.

#### Introduction

One mechanism to align the interests of the firms' executives among the interest of shareholders is through providing the monetary benefits<sup>1</sup>. Generally the agency theory argues that equity incentive and stock option to the executives could be used to align the incentive of institution's top management with the shareholder's interest (Fama and Jesen, 1983; Jesen and Meckling, 1976). This issue is at the center of interest of many researchers around the globe, whether the compensation paid to the executives is helpful to enhance the role of the board of directors, which improves the firm performance through better corporate governance practices. Today, the labor market of directors has been very competitive due to the fact that the directors are not only accountable to the shareholders about the success or the failure of achievement of firm's goal, but also they are being monitored by the external forces<sup>2</sup>. The success pays the directors through an increase in incentives within the firm or a lucrative contract being offered from the market. Therefore, the question whether the directors' compensation increases the firm performance grasps the attention of many researchers around the globe such as Unite *et al.*, (2008) in Philippines, Duffhues & Kabir, (2008) in Netherlands, Kato & Kubo, (2006) in Japan, Tian & Yang, (2014) in America, Aggarwal & Ghosh (2014) in India, Jaffar *et al.*, (2012) in Malaysia and Firth *et al.*, (2006) in China.

The firms may follow the relation-based agreements rather than the market-based agreements while setting remuneration (Luo & Jockson, 2012b) in countries with weak corporate governance practices. The management can be involved in such activities to enhance their own compensa-

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<sup>&</sup>lt;sup>1</sup> Firms provide them "Perks" which in fact enhance the overall pay of directors.

<sup>&</sup>lt;sup>2</sup> External forces (human resource department of other firms) are always keen to analyze the performance of directors in the market to hire the best incumbent for their firm on attractive pay.

tion by utilizing additional resources at monitory shareholder's cost. For example, the executives/CEO with supreme power may make risky investments (Adams *et al.*, 2005). However, an optimal remuneration agreement is very vital because the level of CEO/executive power not only affect the interest of minority shareholder but also the stability of the national economy. For instance, in the financial crisis of 2008, poor bank CEO/executive incentives are criticized to be one major fundamental reason of financial crisis (Blinder, 2009; Fahlenbrach & Stulz, 2011).

The corporate governance attributes such as board of directors, the composition of the board, compensation committee and compensation of directors have become a research subject for different scholars (Filatotchev & Boyd, 2009). These attributes need to be matched and integrated with institutional policies. For instance, under the element Structure of board context, board size (Mayers & Smith, 2010), board independence (Basu *et al.*, 2007), board ownership (Liang *et al.*, 2013), CEO duality (Dorara & Petra, 2008) and board meetings are needed to establish and review the effectiveness during the implementation.

Based on the agency theory, it has been reasoned that the shareholders' interest and managements' interest can be aligned by linking compensation of the management to the performance. This paper studies the relationship among directors' pay, firm governance, and performance of the Pakistani financial firms because conflict of interest is higher in the financial sector due to issues of asset-liquidity and high debt ratio (Becher et al., 2005). The previous studies (e.g., Hussain *et al.*, 2014; Usman *et al.*, 2015; Lone *et al.*, 2015; Sheikh & Kareem, 2015) focus on CEO pay using the data of the banking sector of Pakistan only. As per the authors' best knowledge, this is a first effort to investigate the impact of performance and corporate governance characteristics on directors' pay on financial sector of Pakistan.

Using the data of listed financial sector firms from 2007 to 2014, this study finds a significant positive effect of performance on pay (using all three proxies to pay such as total directors' pay, executive directors' pay, and CEOs' pay) when pay is measured as ROA while this relationship is only significant for total directors' pay when performance is measured as ROE. Furthermore, firms with higher ratio of independent directors pay lower compensation while board ownership has a significant positive effect on directors' pay. Moreover, this study fails to find a significant impact on board size and the CEO duality of directors' pay.

The structure of the paper is as follows: the next session reviews the previous literature, the 3<sup>rd</sup> session discusses the data and methodology, the 4<sup>th</sup> session explain the results, and the final session provides the conclusion.

## Literature Review Pay and Performance

The significant positive association between pay and performance aligns the interests of shareholders (Fama & Jensen, 1983; Jensen & Murphy, 1990). Prior investigations show inconsistency about the impact of organizational performance on the directors' compensation. Using the book and market measures of performance in different countries, the studies (e.g., Kato & Kubo, 2006; Firth *et al.*, 2006; Jafaar *et al.*, 2012; Shaih-Hou and Cheng, 2012) show that executives of well performing firms are paid more as compared to low performing firms. Using the cross country data, some authors (Conyon and Schwalbach, 2000; Mitsudome *et al.*, 2008) find similar results that executives' compensation is higher in well performing firms. In a study of Philippine firms, using different measures of performing, Unite *et al.* (2008) show significant positive relation between executive directors' pay and the performance, but this relationship is insignificant to the CEOs' pay. Furthermore, they point out the link between pay and performance is less important in the case of

family business groups. Fernandes (2008), Duffhues and Kabir (2008), and Abdullah (2006) do not find any relationship between the remuneration and corporate performance in Portugal, The Netherlands, and Malaysia respectively. The negative association between the remuneration and performance was found by Brick *et al.* (2006), and Tee and Hooy, (2009). In India Aggarwal and Ghosh (2015) document that the remuneration of directors and corporate performance has positive related when considering the accounting prospect, but these results are sensitive to the investor point of view.

Using the financial sector of America, Becher *et al.* (2005) conclude that increase in incentive of bank director also enhance the performance of bank without increasing risk. On the other hand, Doucouliagos *et al.* (2007) find the significant positive relation between the performance of the bank and CEO remuneration in Australia, but they fail to find the significant relationship between overall directors' compensation and bank performance. Similar results were found (Lee and Isa, 2015) in the case of Malaysia, but Luo (2015) found the insignificant results using the data of Chinese's banks. In the context of Pakistan, recently the relationship between CEO compensation and firm performance is starting to examine. Some of these researches conducted on non-financial sector (Kashif and Mustafa, 2012; Hussain *et al.*, 2014; Usman *et al.*, 2015), few studies analyze the banking sector of Pakistan (Iqbal *et al.*, 2012; Sheikh and Kareem, 2015; Lone *et al.*, 2015;). They all find the insignificant relationship between CEO compensation and firm performance expect (Usman *et al.*, 2015) who find the significant negative relation.

This study analyzes the relation between directors' pay and firm performance in the Pakistani financial sector. In the context of this investigation, it assumes that to enhance the wealth of shareholders, a firm needs to offer attractive remuneration packages to encourage directors, which will rise the monitoring efforts of directors.

## H1. The firm performance is positive significantly associated with the directors' pay Pay and Corporate Governance

Corporate governance practices of an institution affect the remuneration of directors (Core *et al.*, 1999). Chen and Al-Najjar (2012) argue that large board size is less organized and participative. Consent on any decision is problematic in large boards. On the other hand, small board size is less costly because few members on board and are also useful to take decision immediately compare to larger boards. The board size is associated with lower top executive compensation. Moreover; the larger boards are lead to lower corporate performance. Board size can influence the director remuneration. The board size influenced the controlling, monitoring and decision-making function in any corporation (Lipton & Lorsch, 1992; Jensen, 1993). The significant negative relation between directors' pay and board size is founded by (Lipton & Lorsch, 1992; Firth *et al.*, 2007; Lee & Isa, 2015). There are some authors (Core *et al.*, 1999; Coe *et al.*, 2011) who document that the remuneration of director's increases when board size increases. But Basu *et al.* (2007) find no relation between board size and directors' pay. According to Firth et al. (2007) argues that large board size is usually related to ineffectiveness and inefficiencies. In Pakistani scenario board size has no significance with CEO's pay (Kashif & Mustafa, 2012). In the light of these arguments, it is expected:

*H2a.* The board size has no significant association with the directors' pay

The board independence is a vital aspect of the corporate governance that ensures the board effectiveness. The independent directors are supposed to be neutral in their decision making and the management can be effectively overseen by the independent directors. Effective management of the board independence is useful in important decision making. It is a general assumption that more the number of independent members on board, might act to control the extra CEO/executive directors' pay and also useful to raise the performance of the firm. The independent directors enlarge the compensation of CEOs. More independent members on the board have increased the level of competen-

cy in board (Firth *et al.*, 1999; Core *et al.*, 1999). Mixed results found in the prior studies, some author's (Brickley et al., 1999; Coe *et al.*, 2011; Lee & Isa 2015) find that increase in board independence is also increase the directors' pay, but some (Fleming & Stellios, 2002; Brick et al., 2006; Abdullah, 2006; Wang & Chen, 2016) authors conclude that increase in board independence decrease remuneration of directors. The insignificant relation finds by (Finkelstein & Hambric, 1989). In Pakistani context board independence does not affect the CEO's pay (Kashif & Mustafa, 2012; Lone *et al.*, 2015). The negative coefficient is expected between directors' pay and board independence.

**H2b.** The board independence is negative significantly related to the directors' pay

The proportion of shares hold by the directors can be beneficial for the corporation. The stakeholder theory suggests a large managerial ownership makes the managers very conscious about firm decisions which are taken after in depth analysis because directors own risk is linked to these decisions. Higher directors' ownership normally provides higher control in the hands of the directors which provide them the opportunity to enhance their pay as the firm grows. In the absence of pay for performance, the owner-managers start tunneling. Some authors (Wei, 2000; Fleming & Stellios, 2002; Doucouliagos *et al.*, 2007; Basu *et al.*, 2007) find a less remuneration in firm with large directors' ownership. Moreover, Cheung *et al.*, (2005) and Wang & Chen, (2016) show higher pay for owner-managers as compared to non-owner managers. Lee and Isa (2015) find an insignificant association between board ownership and directors' pay. In local studies, the significant positive relation between board ownership and CEO's pay (Sheikh & Kareem, 2015). In the light of the above arguments, it is assumed that:

H2c. The Directors' ownership is positive significantly related to directors' pay

The CEO duality or dual designation of chairperson and CEO, provides the extra power to the single person, that power sometime may be reason to exploit the rights of minority shareholders. It is also documented that when in any organization inner ownership arise, the proportion of the outside director decline and the CEO duality have also declined. The agency theories argued that selfinterest directors on board can extract rents by misusing the structure of the board to create favorable remuneration packages. According to managerial power theory the CEO and executive directors hold the extra power that associated to plan compensation contracts. These extra powers can capably to insulate themselves from restriction applied by shareholders and regulators. In the presence of the CEO duality, the executive director gets less remuneration as compared to those firms where CEO duality is not existing (Dorata & Petra, 2008). On the other hand, some researchers (Bebchuk et al., 2002; Luo, 2015) document that in the presence of the CEO duality the executive directors get higher compensation. Some researchers find that CEO duality is not affecting the compensation of directors (Abullah, 2006; Lee & Isa, 2015). In the Pakistani scenario, there is no relation between the CEO duality and CEO's pay (Kashif & Mustafa, 2012). This relationship is due to structure of Pakistani firms where most of executive directors are family members and the majority of family firms are working under the umbrella of the business group (Bhutta and Tahir, 2017). They are more likely involve in tunneling. So, this study also expecting the similar findings to Kashif & Mustafa (2012).

**H2d.** CEO Duality is not significantly related to the directors' pay

#### Methodology

The data of financial firms of Pakistan are hand collected from their annual reports from year 2007 to 2014. After leaving the firms which do have disclosure of directors' pay in their annual report, the final sample consists of 52 financial firms listed on a Pakistan Stock Exchange. The final sample contains 21 banks, 15 insurance companies, and 16 investment companies, banks and securi-

ties companies. To achieve the objective, this study uses three different measures of directors' pay and two different measures of firm performance along with corporate governance variables and firm specific control variables. The table 1 presents the list of variables used to achieve the objective of the study.

**Table 1.Descriptive Statistics** 

Variables	Definition	Previous Authors' used				
Dependent Variables		110 TOUS TIUTIOIS USCU				
Total Directors' pay	Nature Log of total Directors' accumulative pay	Unite et al., (2008) and Isa & Lee, (2015)				
Executive Directors' pay	Nature Log of executive Directors' pay	Duffhues & Kabir (2008 and Wahab & Rahman (2009)				
CEO Pay	Nature log of CEO pay	Kato & Kabo (2006) and Kashif & Mustafa (2012)`				
Variables of interest		, , ,				
Return on Assets (ROA)	Net income to total assets	Kato & Kubo (2006); Mitsudome et al., (2008) and Tian & Yang, 2014)				
Return on Equity (ROE)	Net income to total equity	Jaafar et al., (2012) and Yang & Zhao (2014)				
Board Size	Nature log of total number of directors	Basu et al., (2007); Mayers & Smith, (2010) and Shiah-Hou & Cheng (2012)				
Board Independence	Number of independent directors to total directors	Basu et al., (2007); Minnick et al., (2011) and Liang et al., (2013)				
Baord Ownership	Total shares held by directors to the number of outstanding shares	Doucouliagos et al., (2007); Mayer & Smith, (2010); Byrd et al., (2010) and Luo (2015)				
CEO duality	A dummy variable equal to one if Chair/CEO is the same person	Brick et al., (2006); Dorata & Petra, (2008); Liang et al. (2013); Luo, (2015)				
Control Variables						
Firm Size	Nature log of total assets					
Ownership Concentra-	Number of shares hold by top five					
tion	shareholders/ Total number of shares					
Capital Ratio	The capital over total assets, but in					
	banking industry, mostly use a capital					
	adequacy ratio that is calculated as					
	capital coverage/ total risk weighted					
CEO Ossar analsia	assets					
CEO Ownership	The share held by CEO over total outstanding shares of the firm.					
Board Meetings	Total number of board meetings held					
Doute Meetings	during the year					
Compensation Com-	A dummy variable 1 if firm has com-					
mittee	pensation committee.					
		ı				

#### Model

The study uses multiple regression models to test the hypothesis. The first equation is defined to test the impact of firm performance on directors' pay, while the second model helps us to capture the impact of different governance variables on directors' pay.

$$Ln \ Pay_{it} = \alpha_{it} + \beta_1 Performance_{it} + \beta_2 SIZE_{it} + \beta_3 CAPRAT_{it} + \beta_4 SHCON_{it} + \beta_5 BDMeet_{it} + \beta_6 CEOOWN_{it} + \beta_7 COMCOMM_{it} + \varepsilon_{it}$$
 (1)

 $Ln PAY_{it}$  is the measure of directors' pay of firm i in year t as defined in table 1.

 $Performance_{it}$  is the measure of performance (ROA and ROE) of firm i in year t as defined in table 1.

 $SIZE_{it}$  is the natural log of total assets of firm i in year t.

*CAPRAT*<sub>it</sub> is capital ratio of firm i in year t as defined in table 1.

 $SHCON_{it}$  is ownership concentration of firm i in year t as defined in table 1.

 $BDMEET_{it}$  is board meeting of firm i in year t as defined in table 1.

 $CEOOWN_{it}$  is CEO ownership of firm i in year t as defined in table 1.

 $COMCOMM_{it}$  is compensation committee dummy of firm i in year t as defined in table 1.  $\varepsilon_{it}$  is the error term of firm i in year t.

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Ln\ Pay_{it} = \alpha_{it} + \beta_1 Performance_{it} + \beta_2 SIZE_{it} + \beta_3 CAPRAT_{it} + \beta_4 SHCON_{it} + \beta_5 BDMeet_{it} + \beta_6 CEOOWN_{it} + \beta_7 COMCOMM_{it} + \beta_8 BDSIZE_{it} + \beta_9 BDIND_{it} + \beta_{10} BDOWN_{it} + \beta_{11} Duality_{it} + \varepsilon_{it}
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(2)

Where,

all variables are defined as per equation 1 except the governance variables below:

 $BDSIZE_{it}$  is the board size of firm i in year t as defined in table 1.

 $BDIND_{it}$  is the ratio of board independent of firm i in year t as defined in table 1.

 $BDOWN_{it}$  is the board size of firm i in year t as defined in table 1.

 $Duality_{it}$  is the dummy variable if firm i has same person as a chariman and CEO in year t.

### **Results and Discussion**

### Descriptive statistics

Table 2 represents a summary of descriptive analysis. Total number of observations is 405. The average logarithm of total CEO pay is 9.48, But ranging is from minimum value 0 to maximum value 12.84. The CEOPAY value of median 9.53 is almost equal to the value of mean, but the value of mode is 7.9 less than value of mean and median. The standard deviation of CEO pay is 1.43 and skewness is almost equal to 1 but skeweness is negative. The mean and median of total pay of all directors are almost equal to each other, the value of mean and median is 10.06 and 10.03 respectively. The mode of directors' pay is 9.8, which is slightly less than the mean and median. The value of skewness is -0.2 less than 1 but the value is negative. The standard deviation of directors' pay is 1.24. The value of all the descriptive statistics of all the executive pay is similar to the CEO pay, because the major portion of the total pay of all executives is covered by the CEO pay. The mean of firm size is highest mean in all the descriptive analysis and smallest mean is ROE mean. The firm size's maximum value is 21.35 and the minimum value is 9.96. The mean value of all the variables are positive expect ROE. The skewness of all the variables are less than 2 expects CEO ownership.

#### **Correlation Matrix**

The table 3 shows correlation matrix. All the three dependent variables such as CEOPAY, DIRPAY and EXEPAY are highly correlated with each other. Because the CEOPAY has a major portion of the total of pay all directors and the total pay all executives. These high correlations will not affect the purpose of this study because these variables will not use simultaneously. The overall correlation matrix shows a very low correlation among all independent variables. It means that there is no issue of multicollinearity in regression analysis. That is also confirmed from the variance inflation factor.

**Table 2.Descriptive statistics** 

Table 2.D	table 2.Descriptive statistics													
	Mean	Stand.	Median	Mode	Stand.	Skewness	Range	Minimum	Maximum	Sum	Count			
		Error			Deviation									
CEOPAY	9.480	0.071	9.526	7.897	1.426	-0.996	12.840	0.000	12.840	3839.399	405			
<b>DIRPAY</b>	10.057	0.062	10.029	9.780	1.241	-0.202	6.928	6.321	13.249	4073.263	405			
<b>EXEPAY</b>	9.526	0.070	9.569	7.897	1.417	-1.016	12.840	0.000	12.840	3858.025	405			
ROA	0.008	0.006	0.011	0.001	0.113	-1.472	1.186	-0.655	0.531	3.150	405			
ROE	-0.016	0.043	0.082	0.003	0.863	-12.548	18.372	-14.743	3.630	-6.581	405			
<b>BDSIZE</b>	2.064	0.007	2.079	1.946	0.143	0.836	0.956	1.609	2.565	835.976	405			
<b>BDIND</b>	0.560	0.014	0.571	0.857	0.275	-0.139	0.909	0.091	1.000	226.791	405			
<b>BDOWN</b>	0.094	0.007	0.022	0.000	0.141	1.909	0.706	0.000	0.706	37.969	405			
SIZE	16.452	0.133	16.398	20.301	2.669	0.013	11.385	9.963	21.348	6662.909	405			
CAPRAT	0.307	0.036	0.219	0.425	0.717	-12.883	14.618	-12.156	2.462	124.249	405			
SHCON	0.653	0.011	0.700	0.600	0.221	-0.629	0.999	0.001	1.000	264.360	405			
<b>CEOOWN</b>	0.012	0.002	0.000	0.000	0.041	5.349	0.314	0.000	0.314	4.854	405			
<b>BDMEET</b>	1.690	0.014	1.609	1.386	0.287	1.013	1.447	1.386	2.833	684.533	405			

**Note:** CEOPAY stands for CEO pay, DIRPAY refers to total pay of all directors and EXEPAY denotes to the total pay of all the executive directors. ROA denotes return on assets. ROE refers to return on equity. BDSIZE refers to the board size. BDIND refers to board independent. BDOWN denotes board shareholder. SIZE stands for total assets. CAPRAT stands for the firm capital ratio. SHCON refers to the shareholder concentration. CEOOWN is the CEO ownership. BDMEET refers to the board meeting. COMCOMM denotes the compensation committee.

## Regression Analysis

Table 4 shows the results of impact of firm performance and corporate governance on directors' pay. The tradition panel data procedure suggests the random effect method (previously used by Becher et al., 2005; Wooi & Ming, 2009) is most appropriate technique to test our hypothesis. The Model 1,3, and 5 test the impact of firm performance (ROA) on executive compensation using three proxies total directors' pay, executive directors' pay, and CEO' pay. The firm performance is positive significantly related to total directors' pay, executive directors' pay, and CEO' pay at significant level less than 5%, 10%, and 10% respectively. These findings are consistent with the findings of Kato & Kubo, (2006) and Shaih-Hou & Cheng, (2012). It means the directors of well performed firms are paying well, which help the firm to reduce the agency problem. Firm size is significantly positively associated with all three proxies of executive compensation at significant level less than 1%. It means that economies of scale help the large firms to pay more of their directors. A negative sign (at significant level less than 1%) between capital ratio and directors' pay suggests that firm with more capital requirements relatively have less money to invest, consequently they pay less to their directors. There is negative significant relation between CEO ownership and all pay proxies at a level less than 1%. It means that a CEO with more cash flow rights is more likely to extract the reward through dividend instead increase his salary. An increase in salary may fall him an undesirable tax

bracket. A number of board meetings are only significantly positively associated with total directors' pay at a significant level less than 5%, because meeting fee is the only compensation most of independent directors received. On the other hand, there is an insignificant relationship between board meetings and executive directors' pay as well as CEO pay. These findings are understandable as fee of board meetings is only an insignificant part of the executive salaries. The existence of the compensation committee is positively related to pay across all three proxies significant at less than 1%. Because, the committee reviews the performance of the directors and compensate them accordingly.

Table 3. Correlation Matrix

I UDIC C	Table 5. Correlation Matrix												
	CEO- PAY	DIR- PAY	EX- EPAY	ROA	ROE	BDS- IZE	BDIN D	BDO WN	SIZE	CA- PRAT	SHCO N	CEOO WN	BD ME ET
CEO-	1												
PAY													
DIR-	0.803	1											
PAY													
EX-	0.994	0.802	1										
<b>EPAY</b>													
ROA	0.073	0.097	0.079	1									
ROE	0.013	0.052	0.014	0.312	1								
BDS-	0.257	0.164	0.269	0.041	0.035	1							
IZE													
<b>BDIND</b>	-0.045	0.004	-0.062	-0.058	0.038	-0.069	1						
BDOW N	-0.172	-0.183	-0.142	0.103	0.042	-0.006	-0.160	1					
SIZE	0.740	0.707	0.737	0.037	0.030	0.360	0.013	-0.158	1				
CA- PRAT	-0.147	-0.149	-0.143	-0.007	0.019	0.004	-0.070	-0.184	-0.117	1			
SHCO N	0.239	0.299	0.215	-0.055	-0.050	-0.115	0.096	-0.258	0.249	-0.059	1		
CEOO WN	-0.353	-0.371	-0.343	-0.011	-0.003	-0.112	0.006	0.181	-0.303	-0.093	-0.219	1	
BDME ET	0.240	0.218	0.250	0.003	-0.120	0.055	-0.122	-0.118	0.287	-0.067	0.170	-0.168	1

**Note:** CEOPAY stands for CEO pay, DIRPAY refers to total pay of all directors and EXEPAY denotes to the total pay of all the executive directors. ROA denotes return on assets. ROE refers to return on equity. BDSIZE refers to the board size. BDIND refers to board independent. BDOWN denotes board shareholder. SIZE stands for total assets. CA-PRAT stands for the firm capital ratio. SHCON refers to the shareholder concentration. CEOOWN is the CEO ownership. BDMEET refers to the board meeting. COMCOMM denotes the compensation committee.

The model 2, 4, and 6 test the impact of corporate governance characteristics on directors' compensation. These models are extension of models (1,3,5) with an introduction of corporate governance variables of interest. Qualitatively, the findings of control variables used in the models (1,3,5) are similar with their expected signs and significance, except proxy of ROA which is sensitive with control of corporate governance variables. The relationship between ROA and Executive directors' pay as well as CEO' pay is insignificant. This is consistent with findings of Sheikh & Kareem (2015). Board size is insignificant across all models. This relationship is similar to the previous findings in Pakistani context using non-financial firms' data (Kashif & Mustafa, 2012). It is well documented (Chen and Al-Najjar, 2012) that large boards are costly, have problem of consensus

which usually cause delays in decision making, consequently firm performance decreases therefore directors pay is under question. An independent board has a negative significantly related to directors' pay across all proxies at significant level less than 1%. These findings are consistent with the previous findings (Brick *et al.*, 2006; Wang & Chen, 2016). It means that an independent board acts in the best interest of minority shareholders and prevent the executive directors to increase their unusual compensation over the years. The board ownership is significantly positively related to directors' pay across all proxies at significant level less than 1%. It is documented that the directors those hold more shares charge extra remuneration compared to those directors who have less shares. The finding is similar to the finding of (Cheung *et al.*, 2005; Wang & Chen, 2016). The CEO duality has no significant relation to directors' pay across all proxies. These results are consistent with previous findings (Abullah, 2006; Lee & Isa, 2015).

Table 4. Impact of Firm Performance and Corporate Governance on Directors' Pay

	4. Impac	t of Fir	m Pertor	mance	and Cor	porate	Governa	ance or	i Directo	ors' Pa	y	
Indepen-	Mod			Model 2		13	Mode		Mode		Model (	
dent Variables	•	t Variable i	is Total Direc	ctor's Pay	Dependent Pay	is Total Ex	Dependent Variable is CEO's Pay					
С	4.935***	(0.000)	5.106***	(0.000)	3.582***	(0.000)	3.323***	(0.000)	3.418***	(0.000)	3.326***	(0.000)
Firm Perf	ormance and	Control V	ariables	1		u .	u .				u .	
ROA	0.618**	(0.015)	0.435*	(0.086)	0.444*	(0.074)	0.234	(0.339)	0.464*	(0.058)	0.275	(0.255)
LnSIZE	0.266***	(0.000)	0.280***	(0.000)	0.340***	(0.000)	0.352***	(0.000)	0.347***	(0.000)	0.359***	(0.000)
CAPRAT	-0.144***	(0.001)	-0.125**	(0.005)	-0.165***	(0.000)	-0.142***	(0.001)	-0.168***	(0.000)	-0.149***	(0.000)
SHA- CON	0.388	(0.194)	0.419	(0.161)	0.095	(0.744)	0.166	(0.566)	0.203	(0.482)	0.258	(0.370)
CEOOW N	-2.832***	(0.003)	-2.530***	(0.007)	-3.528***	(0.000)	-3.161***	(0.001)	-3.477***	(0.000)	-3.118***	(0.001)
LnBDM EET	0.262**	(0.044)	0.215*	(0.094)	0.191	(0.133)	0.128	(0.299)	0.152	(0.224)	0.095	(0.434)
COM- COMM	0.344***	(0.000)	0.262***	(0.000)	0.213***	(0.000)	0.113*	(0.076)	0.215***	(0.000)	0.123**	(0.050)
Firm Gove	rnance Chai	racteristics		II.		1						
LnBDS- IZE			-0.107	(0.750)			0.127	(0.679)			-0.043	(0.894)
BDIND			-0.429***	(0.003)			-0.500***	(0.000)			-0.478***	(0.001)
BDOWN			1.366***	(0.002)			1.613***	(0.000)			1.428***	(0.001)
DUALI- TY			0.118	(0.457)			0.188	(0.213)			0.199	(0.184)
$R^2$	0.639		0.537		0.725		0.650		0.725		0.651	
P-Value	0.000		0.000		0.000		0.000		0.000		0.000	

**Notes:** (a) The results of random effect regression. ROA denotes return on assets. LnSIZE stands for log of total assets. CAPRAT stands for the firm capital ratio. SHCON refers to the shareholder concentration. CEOOWN is the CEO ownership. LnBDMEET refers to the log of board meeting. COMCOMM denotes the compensation committee and give the value 1 if firm has compensation committee, 0 otherwise. LnBDSIZE refers to log of board size. BDIND refers to board independent. BDOWN denotes board shareholder. DUALITY means CEO duality, give 1 if duality exists, 0 otherwise. (b) The results of regression 1 and 2. The frequency in parentheses are p-value.\*, \*\*\*, \*\*\* significant at the 10, 5 and 1 percent levels, respectively.

### Robustness

To validate the results across different proxies of performance, this study uses ROE as alternative measure of performance and retests the hypothesis. Table 5 shows the results of impact of firm performance and corporate governance on directors' pay. The tradition panel data procedure suggests the random effect method (previously used by Becher *et al.*, 2005; Wooi & Ming, 2009) is most appropriate technique to test our hypothesis. The Model 1,3, and 5 test the impact of firm performance (ROE) on executive compensation using three proxies total directors' pay, executive directors' pay, and CEO' pay. The ROE is significantly positively related to total pay of all directors at a level less than10% in model 1. This result is consistent with (Firth *et al.*, 2006; Jafaar *et al.*, 2012). While ROE has positive but insignificant relation to executive directors' pay and CEO' pay in model Openly accessible at http://www.european-science.com

3 & 5. These findings are supported by the previous of studies (Kashif & Mustafa, 2012). One of the reasons of insignificance is that ROE is not an effective proxy of performance in Pakistan because of significant firms with negative equity. This is also suggested by the negative mean of the ROE in table 2. The findings of the control variables are similar to the findings of table 4. Moreover, findings of models 2, 4, 6 are qualitatively same as the findings of these models in table 5. We can say that qualitatively the findings of this study do not change with the change of performance proxy.

Table 5.Imapet of Firm Performance and Corporate Governance on Directors' Pay

Independent	Model 1			Model 2	Model 1		Model 2		Model 1		Model 2	
Variables	Dependen Pav	t Variabl	e is Total I	Director's	Dependent Pay	<sup>t</sup> Variable	is Total Ex	Dependent Variable is of CEO's Pay				
$\overline{C}$	4.901***	(0.000)	5.130***	(0.000)	3.557***	(0.000)	3.46***	(0.000)	3.389***	(0.000)	3.343***	(0.000)
Firm Performa	ince and Co	ntrol Vari	ables									
ROE	0.058*	(0.078)	0.055*	(0.085)	0.045	(0.164)	0.042	(0.183)	0.036	(0.251)	0.033	(0.281)
LnSIZE	0.266***	(0.000)	0.280***	(0.000)	0.340***	(0.000)	0.351***	(0.000)	0.348***	(0.000)	0.360***	(0.000)
CAPRAT	-0.141***	(0.001)	-0.120**	(0.006)	-0.163***	(0.000)	-0.139***	(0.001)	-0.166***	(0.000)	-0.146***	(0.000)
SHACON	0.401	(0.184)	0.426	(0.159)	0.109	(0.710)	0.174	(0.544)	0.112	(0.468)	0.263	(0.364)
CEOOWN	-2.761***	(0.004)	-2.430**	(0.010)	-3.480***	(0.000)	-3.104***	(0.001)	-3.431***	(0.000)	-3.062***	(0.001)
LnBDMEET	0.282**	(0.031)	0.232*	(0.071)	0.205	(0.108)	0.140	(0.258)	0.163	(0.194)	0.104	(0.397)
СОМСОММ	0.334***	(0.000)	0.246***	(0.000)	0.205***	(0.000)	0.104*	(0.097)	0.208***	(0.000)	0.114*	(0.068)
Firm Governa	nce Characte	eristics						I.	I.	ı		ı
LnBDSIZE			-0.131	(0.696)			0.107	(0.742)			0.022	(0.945)
BDIND			-0.465***	(0.001)			-0.519***	(0.000)			-0.449***	(0.000)
BDOWN			1.551***	(0.000)			1.728***	(0.000)			1.550***	(0.000)
DUALITY			0.104	(0.508)			0.184	(0.223)			0.192	(0.198)
$R^2$	0.630		0.517		0.718		0.638		0.719		0.640	
P-Value	0.000		0.000		0.000		0.000		0.000		0.000	

Notes: (a) The results of random fixed regression. ROE denotes return on equity. LnSIZE stands for log of total assets. CAPRAT stands for the firm capital ratio. SHCON refers to the shareholder concentration. CEOOWN is the CEO ownership. LnBDMEET refers to the log of board meeting. COMCOMM denotes the compensation committee and give the value 1 if firm has compensation committee, 0 otherwise. LnBDSIZE refers to log of board size. BDIND refers to board independent. BDOWN denotes board shareholder. DUALITY means CEO duality, give 1 if duality exists, 0 otherwise. (b) The results of regression 3 and 4. The frequency in parentheses are p-value.\*, \*\*, \*\*\* significant at the 10, 5 and 1 percent levels, respectively.

## Conclusion

This research will contribute to the growing literature on directors' pay using the data of the financial sector of Pakistan. The secondary data of 52 listed firms for the period from 2007 to 2014 are collected from the annual reports. Three proxies (total directors' pay, executive directors' pay, and CEO' pay) of compensation have been used to test the hypothesis. Using the random effective method, this study finds that more profitable firms pay more compensation to their directors. This significant positive relationship holds across all proxies of directors' pay. These findings are coherent with the hypothesis 1 and previous studies such as Kato & Kubo, (2006) and Shaih-Hou & Cheng, (2012). Moreover, large firms and firms with compensation committee are paying more of their directors, while firms with high capital ratio and CEO ownership pay less salary to the directors.

Furthermore, the extended version of model tries to capture the impact of four (board size, board independence, board ownership, and CEO Duality) corporate governance elements on directors' pay. The findings also accept the hypothesis from H2a to H2d. Consistent with findings of Kashif & Mustafa (2012), large board does not quickly respond to the issues of firm effectively. This

insignificance association can be caused by the board members do not participate in board meeting or board decision making process. Because most firms only full fill the requirement minimum member on board. Consistent with previous studies (Brick *et al.*, 2006; Wang & Chen, 2016, an independent board acts in the best interest of minority owners and prevents the executive directors to increase their unusual compensation over the years. As the ownership structure of Pakistani firms is different from the other developed courtiers like Japan, America, England etc.. Most of the executive directors of firm have a large portion of shares or any family member of the executive directors have major shareholder of the firm. That is why, they are in a position to control the firm and set director compensation accordingly. The positive relation between board ownership and directors' pay of the financial sectors of Pakistan is consistent with the studies such as (Cheung *et al.*, 2005; Wang & Chen, 2016). The CEO duality has no significant relation to directors' pay across all proxies. These results are consistent with previous findings (Abullah, 2006; Lee & Isa, 2015).

Majority of Pakistani firms is family owned and working under the umbrella of business groups. It would be interesting to extend this study in context of business groups and family firms.

#### References

- Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *Review of financial studies*, *18*(4), 1403-1432.
- Aggarwal, R., & Ghosh, A. (2015). Director's remuneration and correlation on firm's performance: A study from the Indian corporate. *International Journal of Law and Management*, 57(5), 373-399.
- Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of management Review*, 28(3), 447-465.
- Basu, S., Hwang, L. S., Mitsudome, T., & Weintrop, J. (2007). Corporate governance, top executive compensation and firm performance in Japan. *Pacific-Basin Finance Journal*, 15(1), 56-79.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. *National bureau of economic research*, (No. w9068).
- Becher, D. A., Campbell II, T. L., & Frye, M. B. (2005). Incentive compensation for bank directors: The impact of deregulation. *The Journal of Business*, 78(5), 1753-1778.
- Bhutta, A. I., and Suleman, T.,. Capital Structure and Business Groups: Evidence from Pakistan. Journal of Management Sciences, 4(2), 248 (Forthcoming)
- Blinder, A. S. (2009). Crazy compensation and the crisis. *The Wall Street Journal*, 28, A15.
- Bokpin, G. A. (2013). Ownership structure, corporate governance and bank efficiency: an empirical analysis of panel data from the banking industry in Ghana. *Corporate Governance: The international journal of business in society*, 13(3), 274-287.
- Brick, I. E., Palmon, O., & Wald, J. K. (2006). CEO compensation, director compensation, and firm performance: Evidence of cronyism?. *Journal of Corporate Finance*, 12(3), 403-423.
- Byrd, J., Cooperman, E. S., & Wolfe, G. A. (2010). Director tenure and the compensation of bank CEOs. *Managerial Finance*, *36*(2), 86-102.
- Chen, C. H., & Al-Najjar, B. (2012). The determinants of board size and independence: Evidence from China. *International Business Review*, 21(5), 831-846.
- Cheung, Y. L., Stouraitis, A., & Wong, A. W. (2005). Ownership concentration and executive compensation in closely held firms: Evidence from Hong Kong. *Journal of Empirical Finance*, 12(4), 511-532.
- Conyon, M. J., & Peck, S. I. (1998). Board control, remuneration committees, and top management compensation. *Academy of Management Journal*, 41(2), 146-157.

- Conyon, M. J., & Schwalbach, J. (2000). Executive compensation: Evidence from the UK and Germany. *Long Range Planning*, *33*(4), 504-526.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive of-ficer compensation, and firm performance. *Journal of financial economics*, *51*(3), 371-406.
- Dorata, N. T., & Petra, S. T. (2008). CEO duality and compensation in the market for corporate control. *Managerial Finance*, *34*(5), 342-353.
- Doucouliagos, H., Haman, J., & Askary, S. (2007). Directors' remuneration and performance in Australian banking. *Corporate Governance: An International Review*, 15(6), 1363-1383.
- Duffhues, P., & Kabir, R. (2008). Is the pay–performance relationship always positive?: Evidence from the Netherlands. *Journal of multinational financial management*, 18(1), 45-60.
- Fahlenbrach, R., & Stulz, R. M. (2011). Bank CEO incentives and the credit crisis. *Journal of Financial Economics*, 99(1), 11-26.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics*, 26(2), 301-325.
- Fernandes, N. (2008). EC: Board compensation and firm performance: The role of "independent" board members. *Journal of Multinational Financial Management*, 18(1), 30-44.
- Filatotchev, I., & Boyd, B. K. (2009). Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review*, 17(3), 257-265.
- Finkelstein, S., & Hambrick, D. C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*, 10(2), 121-134.
- Firth, M., Fung, P. M., & Rui, O. M. (2006). Corporate performance and CEO compensation in China. *Journal of Corporate Finance*, *12*(4), 693-714.
- Firth, M., Fung, P. M., & Rui, O. M. (2007). How ownership and corporate governance influence chief executive pay in China's listed firms. *Journal of Business Research*, 60(7), 776-785.
- Firth, M., Tam, M., & Tang, M. (1999). The determinants of top management pay. *Omega*, 27(6), 617-635.
- Fleming, G., & Stellios, G. (2002). CEO remuneration, managerial agency and boards of directors in Australia.
- Hermalin, B. E., & Weisbach, M. S. (1991). The effects of board composition and direct incentives on firm performance. *Financial management*, 101-112.
- Hussain, A., Obaid, Z., & Khan, S. (2014). CEO Compensation Determinants:" Is the Size or Performance of the Firm a determinant of CEO Compensation in Pakistan". *Putaj Humanities & Social Sciences*, 21(1).
- Jaafar, S. B., Wahab, E. A. A., & James, K. (2012). Director remuneration and performance in Malaysia family firms: an expropriation matter? *World Review of Business Research*, 2(4), 204-222.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of political economy*, 225-264.
- Kashif, S., & Mustafa, K. (2012). The Determinants of CEO Compensation: Evidence from Family-Owned Listed Corporations in Karachi Stock Exchange. *Middle East Journal of Economics and Finance*, 5(1), 45-61.

- Kato, T., & Kubo, K. (2006). CEO compensation and firm performance in Japan: Evidence from new panel data on individual CEO pay. *Journal of the Japanese and International Economies*, 20(1), 1-19.
- Lasfer, M. A. (2006). The interrelationship between managerial ownership and board structure. *Journal of Business Finance & Accounting*, 33(7-8), 1006-1033.
- Lee, S. P., & Isa, M. (2015). Directors' remuneration, governance and performance: the case of Malaysian banks. *Managerial Finance*, 41(1), 26-44.
- Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristics and Chinese bank performance. *Journal of Banking & Finance*, 37(8), 2953-2968.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The business lawyer*, 59-77.
- Lone, R. R., Hasan, F., & Afzal, (2015). M. Factors Effecting CEO Compensation: Evidence from Listed Banks in Pakistan. *10th Annual London Business Research Conference*
- Luo, Y. (2015). CEO power, ownership structure and pay performance in Chinese banking. *Journal of Economics and Business*, 82, 3-16.
- Luo, Y., & Jackson, D. (2012). Executive compensation, ownership structure and firm performance in Chinese financial corporations. *Global Business and Finance Review*, 17(1), 56-74.
- Mayers, D., & Smith, C. W. (2010). Compensation and board structure: Evidence from the insurance industry. *Journal of Risk and Insurance*, 77(2), 297-327.
- Minnick, K., Unal, H., & Yang, L. (2011). Pay for performance? CEO compensation and acquirer returns in BHCs. *Review of Financial Studies*, 24(2), 439-472.
- Mitsudome, T., Weintrop, J., & Hwang, L. S. (2008). The relation between changes in CEO compensation and firm performance: A Japanese/American comparison. *Journal of the Japanese and International Economies*, 22(4), 605-619.
- Nahar Abdullah, S. (2006). Directors' remuneration, firm's performance and corporate governance in Malaysia among distressed companies. *Corporate Governance: The international journal of business in society*, 6(2), 162-174.
- Sheikh, N. A., & Kareem, S. (2015). The Impact of Board Structure, Ownership Concentration, and CEO Remuneration on Performance of Islamic Commercial Banks in Pakistan. *Pakistan Journal of Islamic Research*, Vol 15.
- Shiah-Hou, S. R., & Cheng, C. W. (2012). Outside director experience, compensation, and performance. *Managerial Finance*, *38*(10), 914-938.
- Tian, G. Y., & Yang, F. (2014). CEO incentive compensation in US financial institutions. *International Review of Financial Analysis*, *34*, 64-75.
- Unite, A. A., Sullivan, M. J., Brookman, J., Majadillas, M. A., & Taningco, A. (2008). Executive pay and firm performance in the Philippines. *Pacific-Basin Finance Journal*, *16*(5), 606-623.
- Usman, M., Akhter, W., & Akhtar, A. (2015). Role of Board and Firm Performance in Determination of CEO Compensation: Evidence from Islamic Republic of Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 9(2), 641-657.
- Wahab, E. A. A., & Rahman, R. A. (2009). Institutional investors and director remuneration: do political connections matter. *Corporate Governance and Firm Performance*, 139-169.
- Wang, D., & Chen, F. (2016). Performance, Governance Structure and Executive Compensation of Listed Commercial Banks. In *Proceedings of the 6th International Asia Conference on Industrial Engineering and Management Innovation* (pp. 279-291). Atlantis Press.
- Wei, G. (2000). Senior Management Incentive and Operation Performance of Listed Companies. *Economic Research*, *3*, 32-39.

Wooi, H. C., & Ming, T. C. (2009). Directors' Pay-Performance: A Study on Malaysian Government Linked Companies. *Centre for Policy Research and International Studies*, 1-19.
Yang, T., & Zhao, S. (2014). CEO duality and firm performance: Evidence from an exogenous shock to the competitive environment. *Journal of Banking & Finance*, 49, 534-552