

CEO COMPENSATION AND OWNER'S PREFERENCE: A SECTORAL ANALYSIS

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ABSTRACT

Globalization is accompanied with rapid development in capital markets resulting in heterogeneity of the ownership structure of the organizations. In the presence of such a diverse portfolio of owners and considering each one's involvement in governance, this paper aims to investigate whether ownership structure (i.e., managerial ownership, foreign ownership, institutional ownership and blockholders ownership) affects remuneration/compensation offered to CEOs (Chief Executive Officers) working in different industries in a similar pattern or there exists a difference. Using financial information taken from annual reports of non-financial companies listed on Pakistan Stock Exchange (PSX) during 2012-2018 researchers have observed that ownership structure has material effects on CEO compensation. Notably, impact of ownership structure on CEO compensation depends on industry dynamics. For instance, managerial ownership is positively related to CEO compensation in glass & ceramics and chemical sectors whereas negatively related to CEO compensation in automobile and food & personal care products sectors. Foreign ownership is positively related to CEO compensation in engineering, food & personal care products, technology & telecommunications and textile sectors. In contrast, foreign ownership is negatively related to CEO compensation in automobile, pharmaceuticals, and power generation & distribution sectors. Institutional ownership affects negatively only in pharmaceutical sector. Blockholders ownership affects negatively almost in all sectors except cement sector where it affects positively. In sum, results suggest that ownership structure does matter while determining the CEO compensation. This study provides evidence that ownership structure affect CEO compensation across various sectors. It provides empirical support on the argument that each ownership group has its own interests, and how their interests affect CEO pay-slice. Results indicate that impact of various ownership groups on CEO compensation can be explained with the help of managerial power theory, human capital theory and efficient monitoring hypothesis. This study provides support to corporate boards to understand how different ownership groups affects pay-setting process of CEOs working in different industries.

Keywords: CEO compensation, Managerial Ownership, Institutional Ownership, Blockholders Ownership, Foreign Ownership

INTRODUCTION

Remuneration is under severe debate now-a-days despite the presence of extensive literature.

Academics and policy makers are still interested in knowing whether ownership structure can be a

possible determinant of CEO compensation (Ullah, Jiang, Shahab, Li, & Xu, 2019). Separation of ownership and management has created a challenging position for both of the parties i.e., shareholders and managers. Shareholders may or may not entrust the managers; on the other hand, managers may prove themselves cautious or self-loving. To protect the interest of the shareholders, regulatory bodies are playing their role in formulating the policies that may mitigate the agency problem and improve the level of corporate governance (Crocì, Gonenc, & Ozkan, 2012). Considering these policies various investors play significant role in defining CEO compensation through their right to vote. Limited guidance is available in the literature that how CEO compensation is affected by different investors based on their proportion of ownership in emerging economies. Organizations in emerging economies are characterized by concentrated ownership, pyramidal ownership structures (Armitage et al., 2017). Due to tremendous development of financial markets in emerging economies in recent decades resulting in a major change in ownership structure thus raising a question that how and to what extent various investors are affecting the compensation package offered to CEOs (Zulfiqar & Hussain, 2019).

According to agency theory, pay-performance link may be affected by the ownership structure (Mazumder, 2017). Does ownership structure really affect the CEO compensation is an important research question that needs to be explored, in particular, in the context of firms in developing countries like Pakistan? Several researchers have analyzed the data of firms in developed and developing countries to investigate the impact of ownership structure on CEO compensation but unluckily findings are not only mixed but also unclear. For instance, Banerjee and Homroy (2018) have analyzed the data of Indian firms and observed that CEO turnover and CEO pay differ significantly across group affiliated companies and stand-alone companies. Moreover, they argued that ownership structure and managerial incentives can be adjusted to optimize strategic choices and firm performance. Mazumder (2017) has analyzed the data of 401 firms listed on Tokyo Stock Exchange during 2001-2011 to investigate the impact of ownership structure on

compensation offered to top executives. Results show that institutional ownership is negatively while managerial ownership is positively related to executive compensation. The inverse relation confirms the predictions of efficient managerial hypothesis while direct relation confirms the predictions of managerial power theory. Frydman and Jenter (2010) suggests that competitive market forces and managerial power are important determinants of CEO compensation but neither approach is fully consistent with available evidence. In sum, mixed findings, and a little research on impact of ownership structure on CEO compensation in Pakistan are two important reasons that have suggested the need for this study. This study is unique in two perspectives. First, this study analyzes the impact of different variables of ownership structure (e.g., managerial ownership, foreign ownership, institutional ownership, and blockholders ownership) on CEO compensation. Moreover, this study not only estimates the relation using data of all firms but also estimates the relation using data of different industries such as automobile, cement, chemical, engineering, food & personal care products, glass & ceramics, pharmaceuticals, power generation & distribution, sugar, technology & telecom, textile and miscellaneous.

Rest of the paper is organized as follow. Section 2 presents the literature review. Section 3 presents data & methodology. Section 4 presents results and discussion on empirical findings. Finally, Section 5 provides the conclusion of the study.

LITERATURE REVIEW

The issue between investors and directors can be managed efficiently by using the compensation agreements of executives. Literature has identified various elements that can play significant role in mitigating agency conflict between the owners and managers of the organizations e.g., ownership structure, board composition, CEO incentives etc. However, it is difficult to suggest that one shoe fit for all particularly in case of applying corporate governance models developed in western economies like American or German models to emerging markets (Beatson & Chen, 2018).

Ownership structure of the firm has been identified by prior literature as a key factor in determining good practices of corporate governance. On the basis of

prior studies, we can divide ownership structure into four broad categories i.e., proportion of ownership held by managers, proportion of shares held by foreign investors, proportion of shares owned by the institutions and blockholders individually (Rao, 2018).

Managerial Ownership:

Generally, separation of ownership and management is considered as the root cause of agency problem. Agency problem originates when managers give priority to their personal goals over the goals of the organization. Many ways are available to mitigate the agency problem. For instance, one way is to offer shares to the managers. When managers owned shares then they can abstain themselves from self-opportunistic behavior hence becoming the stewards for the corporations as suggested by Jensen (1993). This reduces the agency cost (Navissi & Naiker, 2006). In an empirical study conducted by Rashid (2016) on 110 non-financial companies listed on Dhaka Stock Exchange during 2001-2011 show that existence of managerial ownership reduces the agency problem as well as agency cost. Benkraiem, Hamrouni, Lakhal, and Toumi (2017) have analyzed the data of 107 French firms listed on SBF120 Index during 2008-2012 to investigate the effects of board composition and gender diversity on CEO compensation. They have used ownership concentration, managerial ownership and family control as control variables. Results show a positive association between managerial ownership and CEO compensation. They found their results consistent with the predictions of managerial entrenchment hypothesis which suggests that increase in managerial ownership also increase the CEO power and provokes to take advantage of loopholes or neutralize controls. This context encourages managers to engage in self-serving activities, such as the transfer of wealth from shareholders in favor of managers, particularly in the form of wages.

Blockholders ownership:

Corporations have dispersed ownership; this dispersion can be to the extent that no shareholder would have an incentive to monitor management of the organization. If this is considered true, then it would be difficult for public owned firms to survive. As private owned firms working as their competitor will outperform public owned firms because private owned firms have concentrated ownership and their

concentrated owners ensures value maximization of the firms (Berle & Means, 1935). However, being a public organization does not mean that it will essentially result in 100% diffused ownership. Though a public firm has a million shareholders it may have one shareholder who have such a large ownership stake in the firm that can provide a reasonable incentive to monitor the firm. Literature identifies this large shareholder as a blockholder (Alex Edmans & Holderness, 2016)

Blockholders can intervene in reducing agency cost using a traditional channel of direct intervention known as “voice” i.e., direct controlling firm’s corporate decisions or through a recent channel known as “exit” i.e. just selling the shares of their ownership stake. Blockholders carry more information about their firms as compared to individual investors. Hence, they shape compensation packages that are less sensitive to the factors which are not under the control of managers and reflecting the actual performance shown by the managers by using voice or exit strategy (Galpin, Jung, Moore, & Volkova, 2019). In a study of unbalanced panel of S&P 1500 firms from fiscal years 1996 to 2005 researchers revealed that blockholders are more likely to be associated with active monitoring and show that firms targeted by such blockholders are more likely to link CEO pay with the equity (Clifford & Lindsey, 2016). However, in a study of 123 French firms covering the time period between 2003 to 2012 Almeida (2015) suggests that it’s the degree and seniority of control of the blockholders which decide that how they will intervene the pay setting process. Researcher has categorized degree of control based on proportion of ownership into influential, dominant and majority control and revealed that when blockholders have majority control then they negatively impact CEO compensation. Moreover, researcher also claims that seniority of control measured as number of years of control also affects the level of intervention by blockholders in pay setting process. In this way blockholders can restrict levels of CEO pay and they do not need other mechanisms of pay components. CEOs of those organizations which perform better than the other organizations in the portfolio of the blockholders are paid higher suggesting that the blockholders tie the CEO compensation with firm performance.

Institutional ownership:

Agency theory predicts that institutional investors based on their extensive expertise and their professional responsibility of the money which belongs to other people has more capacity to monitor the managers in which they invest (Rao, 2018). There is mixed evidence about the position of institutions as investors in setting compensation of CEO. Some suggest that they can enhance CEO expectation about the pay. Like in a study based on A-Share firms listed on the Shenzhen and Shanghai Stock Exchanges during the 2008–2014 period it has been uncovered that institutional ownership positively affects CEO compensation (Ullah et al., 2019). On the other hand, literature also suggests that institutional ownership can deteriorates the level of CEO compensation (Ozkan, 2011). Using a sample of 401 firms for the 11-years period from 2001 to 2011 for Japanese non-financial firms listed on Tokyo Stock Exchange Mazumder (2017) demonstrates that institutional ownership is negatively related to executives' compensation. Researchers argue that such findings are in line with efficient monitoring hypothesis which claims that the presence of institutional shareholders provides direct monitoring over managers, limits managerial self-dealing and curbs the increase in top-executives' pay. Similarly, in a study based on 279 Malaysian firms from 2010 to 2014 revealed that institutional investors whether they are foreign or domestic negatively impacts CEO remuneration (Jong & Ho, 2018). However, (Jiang & Kim, 2015; Wen, Xu, Chen, Xia, & Li, 2019) argued that institutional investors do not play any considerable role in deciding CEO compensation especially in the case of emerging markets due to their short-term interest or due to geographic proximity. A study of US firms based on 15757 observations covering the time period from 1992 to 2006 revealed that intensity of involvement of institutional investor in pay setting process depends on geographic distance. Researchers concluded that when the institutional investors are geographically distant, they coordinate less, and thus they have negligible influence on firms (Mazur & Salganik-Shoshan, 2017).

Foreign ownership:

The presence of global organizational owners resulted in increased tension among managers and owners of the organization. Foreign owners in the

corporations' value firm size, its market position, complexity and economic situation of the economy while deciding about compensation packages (Braje & Galetić, 2019). Even though foreign owners have very low voting rights in the companies their presence is significant (Beatson & Chen, 2018). Choi and Park (2019) claims in a study of 663 Korean firms covering the time period from 2001 to 2017 that foreign investors are supposed to offer executives with an incentive that can be a motivational force to strive for long-term value of the firm for shareholders by supervising and regulating managers.

RESEARCH METHODOLOGY

To estimate the relation between ownership structure and CEO compensation the financial information was taken from the annual reports of non-financial firms listed on PSX during 2012-2018. Initially, all non-financial firms listed on PSX were included in the study. However, firms with incomplete information were deleted from analysis. The final sample consists of 207 firms over a period of 7 years (i.e., 1,449 firm-year observations). Firms included in the final data set belongs to 12 different industrial groups. The detail of industrial groups along with number of observations is provided as follow. 84 observations pertains to automobile sector, 105 observations form cement sector, 106 observations from chemical sector, 77 observations from engineering sector, 42 observations from food & personal care products, 42 observations from glass & ceramics sector, 42 observations from pharmaceuticals sector, 56 observations from power generation & distribution sector, 140 observations from sugar sector, 42 observations from technology & telecom sector, 469 observations from textile sector and 189 observations from miscellaneous sector.

Measurement of Key Variables:

Table 1 presents the operational definitions of variables under consideration. In Pakistan CEOs are remunerated using base salary, housing allowance, utility allowance, conveyance allowance, bonus, retirement benefits, leave encashment and insurance etc. Long term incentive plans like stock options are not used in Pakistan. Literature classifies compensation into two broad categories i.e., cash compensation and non-cash compensation

(Abdalkrim, 2019). However, both types of compensation produce the same results (Sheikh, Bhutta, & Sultan, 2019). So, this study used total remuneration offered to CEOs as a measure of CEO remuneration. As the distribution of the total compensation offered to CEOs is highly skewed that is why this study is using log transformation of total compensation as done by Zulfiqar & Hussain (2019). Literature has identified managerial ownership as a key determinant of CEO compensation. In this study, managerial ownership is defined as the ratio of shares held by the directors, CEOs, their spouse and children to outstanding common stocks (Florackis, Kanas, Kostakis, & Sainani, 2020; Rashid, 2016). The presence of foreign investors seems to be associated with better governance mechanism, hence increasing performance of the firm. Foreign ownership is measured as ratio of shares held by foreign investors to outstanding common stocks (Beatson & Chen, 2018). In their phenomenal study Jensen and Meckling (1976) argued that institutional investors efficiently supervise the managers because they have requisite expertise and have better capacity to analyze the dynamics of the firms (Federo et al., 2020). Institutional ownership is measured as shares held by institutional investors (i.e., NIT & ICP, Banks & DFIs, Insurance companies, investment companies, leasing companies, joint stock companies, modarabas and mutual funds etc.) to outstanding common stocks (Paniagua, Rivelles, & Sapena, 2018). Blockholders ownership is the measure of ownership concentration, and it is computed as the shares held by five individual largest shareholders to outstanding common stocks (Zulfiqar & Hussain, 2019). Finally, firm size is measured as natural log of market capitalization (Page, 2018).

Institutional Ownership	$IOWN_{it}$	Ratio of shares held by institutional investors to outstanding common stocks
Blockholders Ownership	$BOWN_{it}$	Ratio of shares held by five individual largest shareholders to outstanding commons stocks
Firm Size	$FSIZ_{it}$	Natural log of market capitalization

Measurement Model

Pooled ordinary least squares method (OLS) is the best method of estimation because of its lowest variance property amongst other unbiased methods of estimation. Panel data procedures employed in this study due to the reason that different firms during different time period are included in the study. Following is the basic regression model.

$$Y_{it} = \alpha + X'_{it}\beta + \mu_{it} \quad i = 1, \dots, 207; \quad t = 1, \dots, 7$$

In this equation i represents number of firms and t determines various time dimensions. X'_{it} denotes $1 \times k$ number of observations on four explanatory variables of ownership structure for the i_{th} organization in the t_{th} time period. μ_{it} is the error term.

As discussed earlier this study primarily focuses on evaluating the fact that how ownership structure affects remuneration of CEOs. For estimation purpose OLS method has been used following (Clifford & Lindsey, 2016; Edmans, Gabaix, & Jenter, 2017). Description of the model is presented below.

$$COMP_{it} = \beta_0 + \beta_1 MOWN_{it} + \beta_2 FOWN_{it} + \beta_3 IOWN_{it} + \beta_4 BOWN_{it} + \beta_5 FSIZ_{it} + \varepsilon_{it}$$

where $COMP_{it}$ is the total compensation offered to CEO working in firm i at time t , β_0 is y-intercept, $MOWN_{it}$ is managerial ownership of firm i at time t , $FOWN_{it}$ is foreign ownership of firm i at time t , $IOWN_{it}$ is institutional ownership of firm i at time t , $BOWN_{it}$ is blockholders ownership of firm i at time t , $FSIZ_{it}$ is market capitalization of firm i at time t , $\beta_1 - \beta_5$ coefficients of concerned explanatory variables, ε_{it} is error term.

Table 1: Definitions of Variables

Name	Symbol	Definition
Compensation	$COMP_{it}$	Natural log of total compensation
Managerial Ownership	$MOWN_{it}$	Ratio of shares held by directors, CEOs their spouse and children to outstanding common stocks
Foreign Ownership	$FOWN_{it}$	Ratio of shares held by foreign investors to

DATA ANALYSIS

Summary Statistics:

Table 2 presents summary statistics of all variables used in this study for overall sample and sector wise. The mean value of CEO compensation, measured as natural log of total compensation, in the sample of all firms is 15.79. However, if we look at the average values of compensation on sector wise it ranges from 15.09 (in textile sector) to 16.99 (in power generation & distribution sector). The compensation paid to CEOs in all sectors is more than the average compensation paid to CEOs in the sample of all firms except in sugar and textile sectors. Managerial ownership has mean value of 29.85% in overall sample. Sector wise mean value of managerial ownership ranges from 6.88% (in pharmaceutical sector) to 42.84% (in glass & ceramics sector). The mean percentage of managerial ownership in automobile, cement, chemical, engineering, pharmaceutical, power generation & distribution, technology & telecommunication and miscellaneous sector is less than the mean value of 29.85% for overall sample. However, it is higher in food & personal care products, glass & ceramics, sugar and textile sectors. The average value of foreign ownership for overall sample is 3.92%. Sector wise mean value of foreign ownership ranges from 0.5% (in sugar sector) to 10.68% (in automobile sector). The mean percentage of foreign ownership is less than the mean value in overall sample i.e., 0.5% in engineering, food & personal care products, pharmaceutical, power generation & distribution, sugar, technology & telecommunication and textile sectors. While it is higher in automobile, cement, chemical, glass & ceramics and miscellaneous sectors than the mean value of 0.5% in the sample of all firms. The mean value of institutional ownership is 10.44% in overall sample while the sector wise mean values range from 4.62% (in food & personal care products) to 17.56% the highest percentage in power generation & distribution. The average value of institutional ownership is higher in automobile, engineering, glass & ceramics, power generation & distribution, sugar, and technology & telecommunication sectors than the mean value 10.44% in the sample of all firms. However, it is lower in cement, chemical, food & personal care products, pharmaceuticals, textile and in miscellaneous sectors than the mean value of 10.44%

for overall sample. The average value of blockholders ownership in overall sample is 65.34%. This average indicates prevalence of weak governance in the country because only five individuals hold more than 65% of outstanding stocks. In other words, majority shareholders are determining the fate of the minority shareholders. The average value of blockholders ownership for sectors ranges from 57.24% (in sugar sector) to 80.34% (in food & personal care product sector). At sector level the automobile, cement, glass & ceramics, power generation & distribution, sugar and textile sectors have lower mean value of blockholders ownership as compared to the mean value of overall sample i.e., 65.34%. Food & personal care product, engineering, pharmaceuticals and technology & telecommunication sectors where mean value of blockholders is more than the mean value of all firms i.e., 65.34%. The mean value of firm size, measured as natural log of market capitalization, is 21.28 in overall sample. The mean value of size in sectors ranges from 20.02 (in textile sector) to 23.19 (in power generation & distribution).

Correlation Results:

Table 3 describes correlation matrix. Managerial ownership is statistically significant and negatively related to CEO compensation. Foreign ownership, institutional ownership and firm size are positively related to CEO compensation. In contrast, foreign ownership, institutional ownership and firm size are negatively related to managerial ownership. Blockholders ownership is positively related to managerial ownership while negatively related to foreign ownership and institutional ownership. Firm size is positively related to foreign ownership and blockholders ownership.

Table 3: Correlation Matrix

	$COMP_{it}$	$MOWN_{it}$	$FOWN_{it}$	$IOWN_{it}$	$BOWN_{it}$	$FSIZ_{it}$
$COMP_{it}$	1					
$MOWN_{it}$	-.25***	1				
$FOWN_{it}$	.13***	-.19***	1			
$IOWN_{it}$	.07***	-.23***	.02	1		
$BOWN_{it}$	-.03	.11***	-.04*	-.16***	1	
$FSIZ_{it}$	.67***	-.28***	.17***	.01	.10***	1

***, **, * show the significance level at 1%, 5% and 10% respectively

$COMP_{it}$ = total CEO compensation, $MOWN_{it}$ = managerial ownership, $FOWN_{it}$ = foreign

ownership, $IOWN_{it}$ = institutional ownership, $BOWN_{it}$ = blockholders ownership, $FSIZ_{it}$ = firm size

4.3 Regression results

Table 4 describes the regression results. Managerial ownership and blockholders ownership are significant and negatively related to CEO compensation. The inverse relation confirms findings of Rashid (2016) and Almeida (2015). Institutional ownership is significant and positively related to CEO compensation. The positive relation confirms the findings of Aslam, Haron, & Tahir (2019) and Croci et al. (2012). Although foreign ownership is negatively related to CEO compensation, but the relation is statistically insignificant.

Automobile:

In automobile sector amongst the determinants of CEO compensation based on ownership structure, managerial ownership and foreign ownership are significant and negatively related to CEO compensation. This inverse relation confirms the findings of Rashid (2016). Institutional ownership and blockholders ownership are positively related to CEO compensation. However, the relationship is insignificant.

Cement:

In cement sector, institutional ownership and blockholders ownership are two important variables that are positively related to CEO compensation. The positive relation confirms the findings of Croci et al. (2012). Managerial ownership and foreign ownership are positively related to CEO compensation. However, the relationship is insignificant.

Chemical:

Managerial ownership is positively while blockholders ownership is negatively related to CEO compensation. These relations confirm the findings of Almeida (2015). Foreign ownership and institutional ownership are positively related to CEO compensation. however, the relationship is insignificant.

Engineering:

Foreign ownership is significant and positively related to CEO compensation. Positive relation confirms the findings of Braje & Galetić (2019). However, blockholders ownership is negatively related to CEO compensation. The inverse relation

confirms the findings of Almeida (2015). Managerial ownership and institutional ownership are negatively related to CEO compensation. However, the relationship is insignificant.

Food & personal care products:

Managerial ownership and blockholders ownership are inversely related to CEO compensation. The inverse relation confirms the findings of Almeida (2015) and Rashid (2016). On the other hand, foreign ownership is positively related to CEO compensation. The positive relation confirms the findings of Braje & Galetić (2019). Institutional ownership is positively related to CEO compensation. However, the relationship is insignificant.

Glass & ceramics:

Managerial ownership is significant and positively related to CEO compensation. In contrast, blockholders ownership is significant and negatively related to compensation. This inverse relation confirms the findings of Almeida (2015). The other two determinants i.e., foreign ownership and institutional ownership have insignificant effect on CEO compensation.

Pharmaceuticals:

Foreign ownership and institutional ownership are significant and inversely related to CEO compensation. The inverse relation confirms the findings of Mo, Park, & Kim (2019). Managerial ownership and blockholders ownership have no significant impact on CEO remuneration.

Power generation & distribution:

Foreign ownership is significant and negatively to CEO compensation. Other variables of ownership structure i.e., managerial ownership, institutional ownership and blockholders ownership have no significant impact on CEO compensation.

Sugar:

Blockholders ownership is significant and negatively related to CEO compensation. Other variables of ownership structure i.e., managerial ownership, foreign ownership and institutional ownership have no significant impact on CEO compensation.

Technology & telecommunication:

Foreign ownership is significant and positively related to CEO remuneration. The positive relation confirms the findings of Braje & Galetić (2019). Other variables i.e., managerial ownership,

institutional ownership and blockholders ownership have insignificant impact on CEO compensation.

Textile:

Foreign ownership is significant and positively related to CEO compensation. The positive relation confirms the findings of Braje & Galetić (2019). In contrast, blockholders ownership is significant and inversely related to CEO compensation. The inverse relation confirms the findings of Almeida (2015). Managerial ownership and Institutional ownership do not maintain significant relation with CEO compensation.

Miscellaneous:

Institutional ownership and CEO compensation have significant and positive relation. This positive relation confirms the findings of Croci et al. (2012). Blockholders ownership has significant negative relation with CEO compensation. The negative relation confirms the findings of Almeida (2015). Finally, foreign ownership and managerial ownership have no significant effect on CEO compensation.

5. DISCUSSION AND IMPLICATIONS

Regression results show that managerial ownership is negatively related to CEO compensation in automobiles and food & personal care products as well as in overall sample of firms. The negative relation indicates that when managers own shares then their attitude towards opportunistic behavior tend to decline, and they prefer to receive remuneration commensurate with their qualifications. Alternatively, managerial ownership is significant and positively related to compensation in glass & ceramics and chemical sectors. The positive relation confirms the predictions of managerial power theory which suggests that when managers hold significant proportion of ownership then they use their power to determine the size of their pay slice. Foreign ownership is another important factor that affects CEO compensation significantly. It impacts negatively in automobile, pharmaceuticals, and power generation & distribution sectors. The inverse relation shows that foreign investors do not consider these sectors either complex or bigger in size compared to other sectors and consequently recommend low pay & perks for CEOs. On the other hand, foreign ownership is positively linked with CEO compensation in

engineering, food & personal care products, technology & telecommunications, and textile sectors. The positive relation confirms the prophecy of human capital theory. Since all these sectors have a significant role in country's GDP thus requiring the services of experts having technical qualification to handle the affairs of the organizations efficiently and effectively. Consequently, foreign investors recommend that firms should hire talented CEOs and offer lucrative compensation package. Institutional ownership is significant and inversely related to CEO compensation in pharmaceutical sector. The negative relation confirms the predictions of efficient monitoring hypothesis which suggests that institutional investors are responsible to monitor the actions of the managers and if they think that managers are not performing well then they may stop proliferation in top executives' pay. In contrast, institutional ownership is positively linked with CEO compensation in two sectors namely cement and miscellaneous, as well as in overall sample of firms. The positive relation suggests that satisfaction of institutional investors leads to rise in pay & perks offered to CEOs. Finally, blockholders ownership is negatively related to CEO compensation in most of the sectors and in overall sample. The inverse relation suggests that blockholders tend to recommend low pay & perks for CEOs if they are unable to perform well. Cement sector is the only sector where blockholders ownership is significant and positively related to CEO compensation. As explained before that blockholders act as strong monitors and tend to compensate well to their CEOs if they are satisfied with their performance. In sum, findings of this study indicates that blockholders ownership and foreign ownership are two important factors that affect CEO compensation almost in all sectors. However, managerial ownership and institutional ownership effects CEO compensation in a few sectors. Thus, results suggest that ownership structure does matter while determining the CEO compensation in an emerging economy Pakistan.

6. CONCLUSION AND LIMITATIONS

Conclusion:

The aim of this study is to investigate whether ownership structure affects compensation/remuneration offered to CEOs

working in different industries of Pakistan. Results show that effect of different measures of ownership structure on CEO compensation vary from industry to industry. For instance, managerial ownership affects CEO compensation negatively in automobile and food & personal care products sectors. However, it affects positively in glass & ceramics and chemical sectors. Foreign ownership negatively affects CEO compensation in automobile, pharmaceuticals, and power generator & distribution sectors. While it has a positive impact on CEO compensation in engineering, food & personal care products, technology & telecommunications, and textile sectors. Institutional ownership affects negatively only in pharmaceutical sector. Blockholders ownership affects CEO compensation negatively in all sectors except cement sector where it is positively associated. In sum, findings of this study show that although different elements of ownership structure affect CEO compensation differently in different industries but have some material effects. Thus, shareholders, prospective investors and the management must take care of these factors while determining the CEOs' pay slice.

Findings of this study will not only fill a gap in the literature with reference to the sector wise impact of ownership structure on CEO compensation but also provide some support to the top management to understand that how elements of ownership structure affect CEO compensation differently in different industries. Moreover, findings of this study clearly show that "one shoe doesn't fit all".

Limitations:

Though this study contributes significantly in explaining CEO compensation and the role of owners in setting a rationale compensation package for CEOs but it has some limitations like asymmetric behavior of different institutional investors may be incorporated in forthcoming investigations to get a detailed insight regarding the role of institutional investors. Future studies may also include the presence of blockholders on board to access their active role in deciding CEO compensation.

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Table 2: Summary Statistics

		$COMP_{it}$	$MOWN_{it}$	$FOWN_{it}$	$IOWN_{it}$	$BOWN_{it}$	$FSIZ_{it}$
Automobile	<i>N</i>	84	84	84	84	84	84
	Mean	16.39	.22	.10	.12	.64	22.11
	SD	1.11	.29	.19	.10	.20	1.68
	Min	14.55	.00	.00	.00	.11	18.11
	Max	18.42	.75	.51	.41	.91	25.34
Cement	<i>N</i>	105	105	105	105	105	105
	Mean	16.14	.20	.05	.10	.64	22.72
	SD	1.37	.25	.11	.09	.18	1.71
	Min	13.56	.00	.00	.00	.06	18.71
	Max	18.51	.92	.53	.42	.98	26.17
Chemical	<i>N</i>	161	161	161	161	161	161
	Mean	15.81	.20	.07	.10	.65	21.62
	SD	1.34	.24	.16	.08	.18	2.47
	Min	13.08	.00	.00	.00	.01	16.51
	Max	18.78	.76	.66	.43	.99	25.96
Engineering	<i>N</i>	77	77	77	77	77	77
	Mean	16.29	.29	.01	.11	.66	21.74
	SD	.87	.29	.01	.10	.20	1.58
	Min	14.59	.01	.00	.00	.30	18.43
	Max	18.14	.76	.07	.44	.89	24.73
Food& personal Care	<i>N</i>	42	42	42	42	42	42
	Mean	16.53	.34	.03	.04	.80	22.87
	SD	.78	.34	.05	.05	.14	1.62
	Min	14.99	.00	.00	.00	.50	19.14
	Max	17.69	.98	.16	.18	.96	25.26
Glass & Ceramics	<i>N</i>	42	42	42	42	42	42
	Mean	15.82	.42	.07	.13	.60	21.13
	SD	1.29	.24	.18	.11	.20	1.53
	Min	14.28	.04	.00	.00	.34	18.43
	Max	18.43	.91	.54	.44	.90	23.99
Pharmaceutical	<i>N</i>	42	42	42	42	42	42
	Mean	16.93	.06	.03	.09	.76	23.43
	SD	.73	.09	.04	.07	.17	1.43
	Min	14.90	.00	.00	.00	.36	20.38
	Max	18.01	.27	.12	.23	.91	26.64
Power Gen. & Distribution	<i>N</i>	56	56	56	56	56	56
	Mean	16.99	.08	.02	.17	.64	23.19
	SD	.88	.12	.05	.12	.13	1.44
	Min	15.45	.00	.00	.00	.36	19.83
	Max	19.22	.40	.27	.45	.90	25.63
Sugar	<i>N</i>	140	140	140	140	140	140
	Mean	15.52	.34	.00	.12	.57	20.59
	SD	1.48	.22	.02	.10	.18	1.20
	Min	10.49	.00	.00	.00	.06	18.06

	Max	18.49	.78	.22	.42	.93	24.07
Technology & telecom.	<i>N</i>	42	42	42	42	42	42
	Mean	16.82	.14	.04	.13	.66	21.63
	SD	1.10	.16	.12	.09	.17	1.09
	Min	14.51	.00	.00	.01	.06	20.04
	Max	19.84	.48	.56	.44	.89	25.23
Textile	<i>N</i>	469	469	469	469	469	469
	Mean	15.09	.41	.01	.09	.65	20.01
	SD	1.14	.27	.06	.11	.19	1.62
	Min	10.59	.00	.00	.00	.16	15.47
	Max	18.09	.97	.52	.79	.97	25.28
Miscellaneous	<i>N</i>	189	189	189	189	189	189
	Mean	16.07	.28	.07	.08	.66	21.64
	SD	1.17	.67	.68	.10	.21	1.83
	Min	12.50	.00	.00	.00	.03	16.56
	Max	18.43	8.60	.79	.84	.99	25.91
Cumulative	<i>N</i>	1449	1449	1449	1449	1449	1449
	Mean	15.79	.29	.04	.10	.65	21.27
	SD	1.32	.28	.12	.11	.19	2.01
	Min	10.49	.00	.00	.00	.02	15.47
	Max	19.844	.98	.79	.84	.10	26.64

Note: *N* = Number of observations, *SD* = Standard Deviation, *Min* = Minimum, *Max* = Maximum
COMP_{it} = CEO compensation, *MOWN_{it}* = Managerial ownership, *FOWN_{it}* = Foreign ownership,
IOWN_{it} = Institutional ownership, *BOWN_{it}* = Blockholders ownership, *FSIZ_{it}* = Firm size



Table 4: Estimation Results

	automobile	Cement	Chemical	Engineering	Food & personal Care	Glass & Ceramics	Pharmaceuticals	Power Gen.& Dist.	Sugar	Technology & telecom.	Textile	Miscellaneous	Overall
C	14.67*** (1.48)	.66 1.48	5.60*** (.58)	13.74*** (1.22)	14.11*** (2.24)	6.93*** (1.84)	12.13** * (1.88)	7.08 (4.62)	11.35*** (2.35)	4.35 (3.21)	6.59*** (.53)	7.39*** (.81)	6.73** (.29)
$MOWN_{it}$	-2.65*** (.37)	.21 (.36)	.43* (.24)	-.15 (.29)	-.96*** (.24)	1.47* (.82)	1.26 (1.13)	1.17 (2.13)	.76 (.62)	.59 (.74)	-.02 (.17)	-.10 (.10)	-.23** (.09)
$FOWN_{it}$	-1.79** (.69)	.95 (.95)	.45 (.37)	19.47*** (4.85)	3.19* (1.86)	1.27 (.86)	-8.82** (4.20)	-3.57* (1.79)	4.76 (5.52)	2.76*** (.95)	1.17* (.63)	-.62 (.42)	-.01 (.22)
$IOWN_{it}$	1.45 (1.00)	2.74*** (1.01)	.09 (.71)	-.28 (.88)	1.49 (2.52)	1.38 (1.29)	- 3.52*** (1.17)	.66 (1.22)	.34 (1.32)	-.51 (1.38)	.07 (.37)	1.46** (.68)	.50** (.24)
$BOWN_{it}$	.44 (.52)	1.77*** (.51)	-.72** (.33)	-1.69*** (.05)	-1.78* (.90)	-3.66*** (.77)	-.86 (1.40)	.39 (.92)	-1.30* (.75)	-.09 (.68)	-.52** (.22)	-1.19*** (.34)	-.60*** (.13)
$FSIZ_{it}$	.09 (.07)	.61*** (.06)	.48*** (.02)	.16*** (.05)	.17* (2.24)	.48*** (.07)	0.25*** (.06)	.41** (.19)	.22** (.10)	.57*** (.13)	.44*** (.02)	.43*** (.04)	.44*** (.01)
R ²	.49	.60	.72	.49	.65	.73	.68	.39	.06	.66	.42	.41	.47
Adj R ²	.46	.58	.71	.46	.60	.69	.63	.33	.03	.61	.42	.40	.47
RMSE	.81	.88	.71	.64	.49	.71	.44	.72	1.45	.68	.87	.90	.96
F statistic	15.50***	30.24***	83.03***	14.04***	13.53***	19.72***	15.34** *	6.45***	1.95*	14.25***	69.35***	26.30***	262.57***

Note: ***, **, * Significance level at 1%, 5% and 10% respectively, $MOWN_{it}$ = Managerial ownership, $FOWN_{it}$ = Foreign ownership, $IOWN_{it}$ = Institutional ownership, $BOWN_{it}$ = Blockholders ownership, $FSIZ_{it}$ = Firm size Values given in parenthesis show standard error