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Impact of CEO compensation and CEO Power on Firms' Innovation Moderating Role of Ownership Structure

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ABSTRACTS

CEO compensation and power have crucial issues in assessing the innovative culture of firms. To address this issue, this study aims to investigate the nexus between CEO compensation and power on firms' innovation under moderating role of ownership structure (measured in terms of ownership concentration, business group affiliation and CEO ownership). Ownership structure (ownership concentration, business group affiliation and CEO ownership) enables shareholders to exercise their statutory rights which play a vital role in the strategic decision-making of a company. To test the aforesaid relationship, data has been extracted from 27 chemicals and pharmaceutical firms listed at the Pakistan Stock Exchange during 2013-2021. The data gathered, thus, has been analyzed using various statistical techniques namely: descriptive analysis, correlation analysis, and multiple regression analysis. Due to presence of various issues in data such as heteroscedasticity, auto-correlation and cross-sectional dependence, researcher has employed Panel Corrected Standard Error Model (PCSE). The findings reveal that CEO compensation has positive effect on firms' innovation. Another interesting finding is that this relationship becomes negative under conditional role of ownership structure (ownership structure, business group affiliation, and CEO ownership) which supports agency theory. However, CEO power has no role in firms' innovation even under moderating role of ownership structure. The findings offer certain implications for practitioners to fix the compensation of CEO in order to resolve type I and II agency issues, which can improve firms' innovation. Findings of this study can help investors, policymakers and creditors to understand the importance of CEO compensation and power towards firm innovation in the presence of ownership structure.

INTRODUCTION

Since the twenty-first century, CG has gotten generous consideration of the analysts and corporate world. Numerous nations have built up their codes of CG which firms need to follow. There are four measurements of Interior governance which are specific; BS, OS AS, and CS (Kostyuk et al., 2011). This investigation principally centers around two significant segments of CG which assists with settling organization issues. The elements of CG incorporate OS and CS which are concentrated regarding firms' innovation.

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In the course of the last two decagons, CEO compensation provided enthusiasm of analysts from different teaches, for example, financial aspects, fund and key administration (Lea,Kim and Bea, 2019 ; Nguyan , 2018). Inspecting the connection between CEO compensation and different hierarchical results an aggregate of in excess of (300) considers have collected including firms' innovation, corporate methodology and all the more as of late CEO hazard taking (Mazouz and Zhao, 2018; Zulfiqar and Huassian,2019; Shahbaz Sheik, 2018). On agency theory remedies the extraordinary number of research here of study has been grounded. Regardless of the consequences of this surge of examination are blended and conflicting (Zulfiqar and Hussian , 2019; Lea and Kim, 2019).

Being innovative is a piece of information to endurance in a serious environmental factors. Detachment of ownership from the executives hosted produced difficulties for both the gatherings. Investors either suspect or trust the exercises of the executives, though the executives may act carefully or in partner degree internal looking way .This convoluted relationship can't be clarified inside the lightweight of one theory. Given the agency theory, the board goes about as a specialist of the investors. Agency theory has been portrayed as" a theory of the OS of the firm" (private investigator). The ideal reaching viewpoint of agency theory portrays the need and significance of a presentation based compensation plan and power at all levels in the association. Stewardship theory, despite what might be expected, clarifies that administrators go about as stewards of their owners and that they demonstration to the greatest advantage of their owners.

In this paper, the researcher estimated hierarchical performance with regards to innovation, given that an innovative association is an all the more well-performing association. Associations are required to put resources into the innovative related undertakings to raise an innovative culture. Interest in the innovation related tasks for the most part had a long restitution period, which can surpass the grip of the chiefs and supervisors now and again. In this circumstance, a steady budgetary and good condition alongside an OS can conquer the issues related with putting resources into the long-run chance bearing undertakings. A powerful venture plan and backing from the key investors can assist the executives with taking these choices. In this manner, OS is taken as a moderating variable to comprehend the relationship.

Statement of the problem

Setting up an innovative culture incorporates key dynamic inside the zones of execution plan, benefits financial specialists, training a hazard supporting natural components and realizing a radical controlling framework to shape sure sensible execution of the plans. Trapped thought between financial specialists, credit managers, chiefs and various accomplices, guaranteeing the benefits of the aggregate of the get-togethers is inevitable (Zulfiqar and Hussian, 2019). Nature of those associations is viewed as a component of sorts of OS (Yi et al. 2017; Hares., 2018), Executive compensation plans and power as such the business type (Mazouz 2018).

Different theories explain this relationship through different settings. Test the associations during a specific speculative framework experts had routinely used a picked set of elements. Notwithstanding the effect of CEO compensation and power on firms' innovation, there's a touch research that has taken a gander at the relationship during a developing country like Pakistan.

Lack of exact proof is found related with the restrictive job of ownership structure (OC, BGA, CEOO) inside the relationship between CEO compensation (R & D) expenditures and power (dominance) with firms' innovation (Zulfiqar and Hussain, 2019). Be that as it may, the discoveries of surviving writing are blended and uncertain which warrants further investigation of the previously mentioned connections. Moreover, the contingent job of OS has been disregarded in Pakistan upheld audit of surviving writing, an examination is needed to conceal the lacks featured by that work in the restrictive job of OS inside the relationship between CEO

compensation and power with firms' innovation in chemicals and pharmaceutical firms listed at PSX during 2013 - 2018.

Objectives of the Study

1. This study has four main objectives that are as follow:
2. To examine the role of CEO compensation on firms' innovation.
3. To examine the role of CEO power on firms' innovation.
4. To check the moderating role of ownership structure in the nexus between CEO compensation and power with firms' innovation.
5. To check the moderating role of ownership structure in the nexus between CEO compensation and CEO power with firms' innovation.

Research Question

1. What is the effect of CEO compensation on firms' innovation?
2. What is the effect of CEO power on firms' innovation?
3. Is ownership structure plays a moderating role in the nexus between CEO compensation and firms' innovation?
4. Is there is moderating role of ownership structure in the nexus between CEO power and firms' innovation?

Significance of Study

Critical of the examination is characterized in light of the fact that the significance of the investigation for different partners (the scholarly world, specialists and society in general) who may exploit considering and utilizing this investigation. The commitment made by this investigation is to see whether CEO compensation and power adds to the firms' innovation of chemicals and pharmaceutical organizations recorded in Pakistan stock exchange (PSX). The discoveries of the investigation would add to writing in 3 different ways. To start with, by looking at CEO compensation regarding the worthy OS nearby the expansion of attributes that is CEO power. The investigation decides the elements that altogether add to the exhibition of firms in a rising nation Pakistan that produce various outcomes as analyzed thereto in created nations. Second, the examination will be the essential of its sort to recognize such OS that directs the association of CEO compensation and CEO power factors with the exhibition of Pakistani firms. Third, the examination recognizes the CEO compensation and CEO power that add to unrivaled firms' innovation. It'll even be generalizable to those nations that have comparative monetary, culture, political and natural conditions.

Delimitation of Study

The sample of this study would be delimited to the companies listed in Pakistan Stock Exchange with different ownership structure (OS). The data collected is delimited to the annual reports of the companies and 'compliance with the code of corporate governance' report. Furthermore, only three aspects of ownership structure (OC, BGA and CEOO) are studied. Firms' innovation is delimited to R&D expenditures. The data collected is delimited to only chemicals and pharmaceutical firms listed at PSX during 2013-2021.

LITERATURE REVIEW

Innovative performance: Importance and measure

In a heightening serious environmental factor, wherein globalization, digitalization and industrialization have compelled organizations to expand new items and strategies or adjust the common product and techniques, the idea of innovation rose. These choices, notwithstanding, are the after effects of the common expertise of a various establishment of people at the board (Ballsmeier, 2017). Innovation is estimated by means of innovative work uses, i.e., publicizing uses. Research and development expenditures add to association's future execution by encourage lease, create mechanical abilities and obtain first-mover advantage. A few examinations have had dissected records and decided a significant positive connection between CEO compensation and authoritative capacity to innovate (Ruiqe, 2017).

Determinants of innovative performance

In this paper, CEO compensation and CEO power are secured as a determinant of firms' innovation.

CEO compensation and firms' innovation

A few examinations inside the writing had investigated the relationship among CEO compensation progressive the overall execution. The proof is blended and uncertain on the grounds that it depends upon on a wreck of factors. Taken, for example, Zavirtiaeva and Smirnnova (2017) found a constructive outcome of CEO compensation on firms' innovation.

Nguyyen (2018) talked about the association between motivating power plans and innovative work venture and found a positive effect by the past on the later. Faela and love (2018) discovered blended proof as they expressed that variable compensation emphatically, though fixed compensation adversely, influences the firm creative exhibition.

Degree writing featured consolidated verification; in this way, an investigation is regulated to secure the impact of CEO compensation on firms' innovation by and large execution in a rising and quickest techno responsive nation.

H1: There is significant impact of CEO compensation on firms' innovation.

CEO power and firm's innovation

It is also important to recognise the CEO's power as the organization's first great individual. CEO power is a complex concept that comes in many forms. CEO power has been hotly debated in financial, board, and administration writing. According to agency theory, increasing CEO power increases administrative entrenchment and skews the interests of administrators and investors. CEOs, board members, and other leaders will unquestionably support this process. Thus, inspiring CEOs can make effective decisions to meet R&D requirements for innovation (Chen, 2015). It's hard to say whether CEO power is good for businesses because it has costs and benefits.

The previous discussion implies that CEO authority can benefit or harm a corporation. Various studies have looked into the relationship between CEO power and firm innovation. The overall proof is hazy and blended. Most of those investigations employ the CEO's origination or board seat to demonstrate CEO relative authority. Recent research by Bebchuck (2011) and Lander et al. (2013) finds a detrimental influence of intensity on company performance and value.

So as to secure the effect of CEO power on businesses' innovation generally execution in a rising and fastest techno open nation, degree writing included mixed proof.

H2: There is significant impact of CEO power on firms' innovation.

The moderating role of ownership structure

Despite the fact that the CEO is the chairmen's pacesetter, many nations' legal bodies like SECP provide systems to protect investor interests. In created nations, organisations are described by dissimilar ownership structure where a private can't assume an energetic duty as an observation chief. They assume their compelling checking job to defend their dominant part enthusiasm inside the achievement of the corporate (Fung, 2017). (Fung, 2017).

Thus, OS can play a big role in determining the impact of CEO salary and power on firms' innovation behaviour. Estimation of ownership structure (OS) on this work is three-crease wherein at first the association is chosen by agonising about ownership concentration (OC), other is business group affiliation (BGA) and third one is CEO ownership (CEOO) (CEOO).

The percentage of shares held by the connected companies is used to estimate BGA. CEO ownership is viewed as a significant wellspring of intensity. So a CEO who loves ownership has more power than a CEO who hates ownership. Ownership power shows itself inside the meeting room where company matters are chosen (expressly or certainly) by vote. To expand investor riches agency scholars have since a long time ago contended that CEOs need noteworthy choices in firms. Estimation of CEO ownership of in this study is determined by percentage of shares held by the CEO of the company.

The theatrical setting of the effect of OS on CEO salary and power with firms' innovation, is shown inside the resulting section. The headed relationship is talked about from two points of view, first, the ideal blend theory that expresses that a free board can enter during an extremely regulated agreement with chiefs for their purchase execution compensation plans. This involves a more grounded board can affect the CEO compensation adversely, and also, the administration power theory, which exudes that with more fragile accentuation by the board, the board can set up frail agreements with the chiefs incorporating CEO which repudiates with the enthusiasm of greater part investors. Estimation of ownership structure (OS) on this work is three-crease wherein at first the association is chosen by agonising about ownership concentration (OC), other is business group affiliation (BGA) and third one is CEO ownership (CEOO) (CEOO).

Albeit many examination have talked about a quick effect of OS on the CEO compensation and power on firms' innovation, we don't locate any verification that tried the interactive impact of OS on the CEO compensation and power with firms' innovation seeking, Therefore, to fill this gap we proposed our following hypothesis.

H3a: Ownership concentration significantly moderates the relationship between CEO compensation and firms' innovation.

H3a1: Ownership concentration significantly moderates the relationship between CEO power and firms' innovation.

H3b: Business group affiliation significantly moderates the relationship between CEO compensation and firms' innovation.

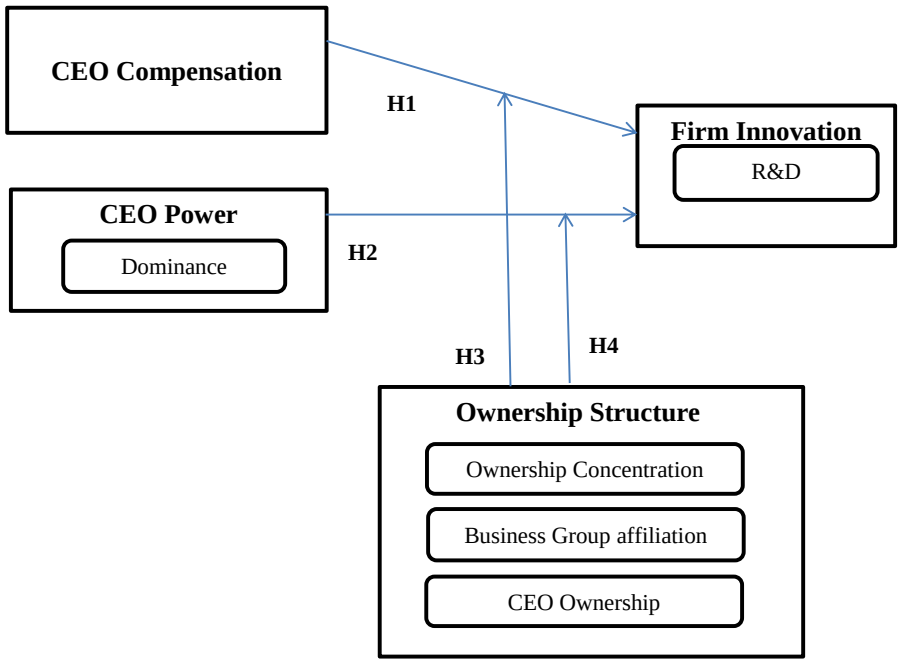
H3b1: Business group affiliation significantly moderates the relationship between CEO and power and firms' innovation.

H3c: CEO ownership significantly moderates the relationship between CEO compensation and firms' innovation.

H3c1: CEO ownership significantly moderates the relationship between CEO power and firms' innovation.

Figure 2.1 Interactive role of ownership structure in the connection among CEO compensation and CEO power with firms' innovation.

Conceptual framework



METHODOLOGY

Research Design

This examination is quantitative in light of the fact that it distinguishes the segments of CEO compensation and CEO power that influence the firms' innovation.

Nature of the data

In this examination the nature of the data is secondary data because this data is collected from annual reports which is already exist.

Time Horizon

Time horizon is described considering the way that the scope of your time during which data is accumulated from the concentrated-on populace. Time horizon of this study is penal because data is collection to same organizations at different points in time.

Population

Population is characterized on the grounds that the whole gathering of articles or occasions of intrigue that the scientist expects to investigate during an examination (Sekaran, 2003). The number of inhabitants in present investigation contained 43 chemicals and pharmaceutical firms recorded at PSX.

Sample technique

Sample is that the subgroup of population which is intended to speaks to the whole populace (Sekaran at al, 2003). There are two kinds of sampling procedures to be specific; probability strategy and non-probability examining method.The examination has utilized

purposive sampling procedure which might be such a non-probability method. In purposive sampling, information is gathered from explicit objective gatherings bolstered a few measures (Adams, 2007).

Sample size

In light of the testing standards and division shrewd conveyance of populace, specialist has gathered information from 27 firms are chosen from 43 chemicals and pharmaceutical organizations based on information accessibility from 2013 to 2018.

Data Analysis Techniques

The examination has investigated the information accumulated utilizing Stata adaptation 14. At introductory level, descriptive investigation has been completed to check the conduct of information. This examination shows mean, standard deviation, least, greatest, kurtosis, and skewness. In the wake of ensuring that information is typical, advance measurable tests have been run so as to draw derivations from the sample. Correlation investigation has been completed to check level of relationship between the factors of the examination. Hausman test for panel information has been utilized to choose the proper regression model (either fixed or irregular impact model) for the examination. Regression examination is directed to check the individual effect of CEO compensation and CEO power on firms' innovation of non-financial related (chemicals and pharmaceutical) foundations recorded in PSX.

Descriptive Summary

Descriptive statistics helps scholars to understand the components of central tendency and to measure the variances associated with variables. It denotes snapshot of variables in the form of average, standard deviation (SD) in addition to minimum and maximum values.

Table 1 Descriptive Summary

Variables	Mean	SD	MIN	MAX
R&D	0.694617	0.387648	0.049554	1.341282
CEO COM	3289.3	2562.962	0	13617.2
CEO PWR	0.222222	0.417029	0	1
OC	66.80302	18.91751	33.69799	91.24773
BGA	38.05376	31.8639	0	87.90611
CEO_O	4.203907	12.22603	0	63.63873
Age	39.96296	16.66584	12	70
Size	6.760146	1.17708	4.992373	10.2966
Leverage	1.598725	0.286989	0.562679	2.363258
BI	74.65843	10.55812	42.85714	92.30769
ROA	8.449267	15.21557	-65.0905	93.55638
Tobin's Q	0.752194	0.267445	0.187982	1.689355

Table 4.1 presents the descriptive summary of selected variables based on sampled data.The value of SD denotes dispersion in dataset of R & D across mean score is 0.38%. The highest and lowest values of R & D are 0.049% and 1.34% correspondingly.

The mean score of CEO compensation is 3289.3 thousand rupees which indicates that chemical and pharmaceutical firms spend a significant amount as compensation to their CEOs.

The value of SD is 2562.962 that indicates deviation in dataset across average value. The minimum value of CEO compensation is 0 and maximum value of CEO compensation is 13617.2 in terms of rupees in thousands. CEO power, measured as dummy variable, has mean score of 0.22. The value of SD is 0.4170 and lowest and highest scores are 0 and 1 correspondingly.

Ownership structure, moderator of this study, has been operationalized by three proxies. The mean score of ownership concentration is 66.80%. The standard deviation of OC is 18.91% The lowest and highest scores of ownership concentration are 33.69% and 91.25% correspondingly.

The average score of business group affiliation is 38.05% which indicates the proportion of stocks owned by associated companies. The value of SD is 18.91% and lowest and highest scores are 0 and 89,90% respectively.

This study has controlled certain variables namely firms' age, size, leverage, board independence, ROA and Tobin's Q.

Correlation Analysis

Correlation analysis gauge the connection between selected variables. The strength of correlation is denoted by correlation coefficient and its value varies between 0 and 1.

Table 2 Correlation Matrix

Serial No.	variables	1	2	3	4	5	6	7	8	9	10	11	12
1	R&D	1											
2	CEO COM	0.108	1										
3	CEO PWR	0.294***	0.143**	1									
4	OC	-0.091	0.079	0.194**	1								
5	BGA	0.267***	0.262***	0.185**	0.694***	1							
6	CEO_O	-0.049	-0.086	-0.080	-0.057	.384* **	1						
7	Age	-0.193**	0.179**	0.221***	0.195**	0.219***	-0.095	1					
8	Size	-0.088	0.625***	0.156**	0.349***	0.447***	0.035	0.145*	1				
9	Leverage	0.098	0.303***	-0.057	0.115	-0.106	0.088	-0.074	0.214***	1			
10	BI	0.103	0.446***	0.146*	0.187**	0.300***	0.223***	0.171**	0.307***	-0.036	1		
11	ROA	-0.035	0.441***	0.258***	-0.056	0.064	-0.106	0.171	0.432***	0.401***	0.192**	1	
12	Tobin's Q	-0.041	0.341***	-0.195**	0.298***	0.237***	0.323***	0.342***	.3545***	0.1311*	-0.125	-0.379**	1

***, **, and * denotes significance at 1%, 5%, and 10% levels

Table 4.2 represents degree and strength of association between selected variables. The association between R & D and CEO power is indirect and substantial at 1% level which shows that powerful CEOs don't prefer to spend money on R & D. The correlation of R & D with age of firms is substantial as well as negative at 5% level. The association between CEO compensation and BGA is substantial positive at 5% level of significance that infers that companies having higher percentage of stocks possessed by associated companies pays more compensation to their CEOs than other firms. The control variables such as firm's age, firms' size, leverage, board independence, ROA and Tobin's Q have substantial connection with CEO compensation.

The connection between CEO power and ownership concentration is found substantial positive which indicates that powerful CEOs prefer that ownership of firms should be concentrated in few hands. The relationship between CEO power and business group affiliation is significant and positive at 5% level which implies that CEOs in those chemical and pharmaceutical firms are more powerful where a significant proportion of shares is owned by associated companies. CEO power also has significant association with control variables i.e.,

firms' age, size, board independence, ROA, as well as Tobin's Q. The rest of variables are found to have no association with R & D Directors, CEO compensation and CEO power at any conventional level of significance (which can be 1%, 5% or 10%).

Multiple Regression Analysis

Regression analysis is an inferential statistics technique which is opted to draw causal connection between outcome and explanatory variables (Kothari, 2013).

Prais-Winsten Regression, Correlated Panels Corrected Standard Errors (PCSEs)

PCSE is suitable when there is existence of heteroscedasticity, auto-correlation, as well as cross sectional dependence in panel data (Hoechle, 2007).

Table 3: Model 1-Ownership concentration

Step	1	2	3
Variables	Coefficient	Coefficient	coefficient
CEO COM	5.96E-06	7.32E-06	0.0001128***
CEO PWR	-0.02502	-0.02095	-0.31757
Age	-.0035473***	-.0030806***	0.000592
Size	-.0361343**	-.029832**	-.0222602***
Leverage	0.012999	-0.0138	-0.07822
BI	-6.7E-05	0.000439	0.000998
ROA	-0.00011	-0.00019	0.000376
Tobin's Q	-0.00483	-0.00351	-0.05792
OC		-0.00182***	0.0026164***
OC*CEO_COM			-1.39e-06***
OC*CEO_PWR			0.003652
Constant	1.009236***	1.081418***	0.6954755***
R Square	0.9276	0.9218	0.8887
Wald Chi Square	103.37***	103.68***	202.25***

Table 4.9 is about the results of PCSE model in case of ownership concentration as moderator. The results presents that in step 1, only firms' age and size have substantial negative influence on R & D of chemical and pharmaceutical sector firms. In step 2, after adding moderator as control variable, ownership concentration has substantial negative influence on R & D of firms. In step 3, final model after adding interaction terms, the results state that compensation of CEO has significant affirmative influence on firms' R & D at 1% level.CEO power, another explanatory variable, has no impact on firms' R & D of firms which infers that existence of CEO in various committees of board does not matter for R & D of firms.The interaction term OC*CEO_COM shows significant negative influence on R & D of firms which infers that OC adversely moderates the association between CEO compensation and R & D; therefore, this finding confirms H3. OC does not play conditional role in the association between CEO power and R & D as this relationship is not substantial at given levels. Thus, researcher fails to confirm H3a. R square shows that explanatory power of Model 1 is 88.87% and overall model is of good fit at 1% level of significance.

Table 4: Model 2-Business group affiliation

Step	1	2	3
Variables	Coefficient	Coefficient	Coefficient
CEO COM	5.96E-06	0.000023**	0.0000522***
CEO PWR	-0.02502	-0.01949	-0.06643
age	-.0035473***	-0.0016437***	8.77E-05
size	-.0361343**	-.0494026***	-.0312599**
leverage	0.012999	-0.1127492**	-.1527919***
BI	-6.7E-05	0.0016429*	0.0015618*
ROA	-0.00011	-0.00022	7.49E-05
Tobin's Q	-0.00483	-0.06949	-0.0842667***
BGA		-.0030803***	-0.00015
BGA*CEO_COM			-5.64e-07***
BGA*CEO_PWR			0.000791
constant	1.009236***	1.224664***	1.003283***
R Square	0.9276	0.8991	0.9248
Wald Chi Square	103.37***	71.27***	136.48***

Table 4.10 reports the results Model 2 in case of business group affiliation as moderator. The results presents that in step 1, only firms' age and size have substantial negative influence on firms' R & D. In step 2, after adding moderator as control variable, business group affiliation has substantial negative influence on R & D of firms which infers that firms in which associated companies own majority of shares; such firms tend to spend a significant amount on R & D. In step 3, the results state that CEO compensation has significant positive influence on R & D of firms at 1% level which implies that those firms which pay significant amount as salary to their CEO tend to invest more on R & D. This finding confirms H1.CEO power, another explanatory variable, has no effect on firms' R & D which infers that existence of CEO in various committees of board does not matter for R & D of firms. This finding does not confirm H2. The interaction term BGA*CEO_COM shows significant negative influence on R & D of firms which confirms H3b.Business group affiliation does not play conditional role in the association between CEO power and R & D as this relationship is not substantial at given levels Which does not confirm H3b1. R square shows that explanatory power of Model 1 is 92.48% and overall model is of good fit at 1% level of significance.

Table 5: Model 3-CEO Ownership

Step	1	2	3
	Coefficient	Coefficient	Coefficient
CEO COM	5.96E-06	6.18E-06	7.46E-06
CEO PWR	-0.02502	-0.02558	-0.02672
Age	-.0035473***	-.0033718***	-.0032796***

Size	-.0361343**	-.0408767**	-.0477514**
leverage	0.012999	0.009565	0.003887
BI	-6.7E-05	0.000128	0.000244
ROA	-0.00011	-0.00012	-5.7E-05
Tobin's Q	-0.00483	-0.01262	-0.00632
CEO_O		0.000384	-0.00194
CEO_O*CEO_COM			0.000000762*
CEO_O*CEO_PWR			-0.00048
constant	1.009236***	1.023385***	1.051576***
R Square	0.9276	0.9352	0.9347
Wald Chi Square	103.37***	122.68***	198.27***

Table 4.11 reports the results Model 3 in case of CEO ownership as moderator. The results presents that in step 1, only firms' age and size have substantial negative influence on firms' R & D. In step 2, after adding moderator as control variable, CEO ownership has no influence on firms' R & D which implies that firms having significant proportion of shares owned by CEO don't prefer to invest on R & D. In step 3, the results state that CEO compensation has no effect on firms' R & D at This finding fails to confirm H1.CEO power, another explanatory variable, has no role in firms' R & D which infers that existence of CEO in various committees of board does not matter for R & D of firms. This finding does not confirm H2 and is in line with extant literature.

The interaction term CEO_O*CEO_COM shows substantial positive effect on firms' R & D which implies that CEO ownership favorably plays conditional role in the association between CEO compensation and R & D. This finding confirms H3. As scarce empirical evidence is found to use CEO ownership as moderator in aforesaid relationship; thus this finding is not supported by existing literature which warrants further investigation in future. CEO ownership does not play conditional role in the association between CEO power and R & D as this relationship is not substantial at given levels. Thus, researcher fails to confirm H3c. R square shows that explanatory power of Model 1 is 93.47% and overall model is of good fit at 1% level of significance.

CONCLUSION

The findings imply that CEO compensation has substantial positive effect on R & D which implies that increase in compensation of CEO boost the confidence and satisfaction of CEO which result in favorable influence on research and development. This finding support resource dependence theory as increase in CEO compensation can have favorable consequences in the form of optimal utilization of available resources. CEO power, another explanatory variable, has no relationship with R & D which implies that presence of CEO in various committees of board does not matter for R & D of firms. In addition of CEO characteristics, this study has controlled various firms' characteristics i.e., age, size, leverage, board independence, ROA, and Tobin's Q and the findings reveal that all the control variables except size have no relationship with R & D. Firm size has substantial negative nexus with R & D which implies that small firms invest more despite limited resources than larger firms.

This study has employed ownership structure (OS) as moderator in the relationship among CEO compensation, CEO power and firms' innovation. The findings reveal that ownership structure (OS) measured in terms of ownership concentration and business group affiliation negatively moderates the nexus between CEO compensation and R & D. This suggests ownership concentrated (OC) in scarcely any hands brings about misuse of minority

investors which put negative impact on the connection between CEO compensation and R & D. Moreover, CEO ownership (CEOO) significantly and positively moderates the nexus between CEO compensation and R & D which implies that when CEO has substantial proportion in firms' ownership, increase in CEO compensation can result in higher investment on R & D which supports resource dependence theory. Ownership structure (OS) does not moderate the relationship between CEO power and firms' R & D which implies that ownership dispersed on various categories of shareholders along with presence of CEO in various committees of board do not matter for R & D.

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