

Director's Pay and Firm's Performance – Comparative Study of Auto Sector Firms of Two Emerging Markets

Ismail Abbasi¹, Arsalan Qayyum², Syed Muhammad Fahim²

1. Ms. Scholar, Institute of Business Management, Karachi, Sindh, Pakistan

2. Assistant Professor, Institute of Business Management, Karachi, Sindh, Pakistan

Corresponding email: std_25254@iobm.edu.pk

Abstract

This study aims to explore the relationship between Directors' Remuneration (DR) and financial performance (CP) of the Indian and Pakistani automobile firms. This study performed the empirical analysis on the Director's remuneration data and created the link with the firm accounting indicators ROA and ROE. Besides Correlation analysis between DR and ROA, ROE was performed for analysis of the relationship among variables. This study used the Firm size (FZ) as the moderator and found important results. From the accounting indicators of ROA and ROE, this study found a positive relationship between DR and ROA ROE of the firms of two emerging countries. This study found a negative relation between FZ with ROA and ROE of the firms. Future studies can be done by more no of companies' sample or sectors and taking more economies in the sample. Further research can be possible by using non-cash-based compensation, a multivariate analysis technique, or qualitative data collection methods. The present study explained the relationship of DR and ROA, ROE of the automobile sector of two emerging economies by taking FZ as the moderator which is none of the studies in both countries has been so far. This study has also checked the effect of FZ on the intrinsic or accounting basis performance of the companies. This study can be a guide for new investors or policymakers for the automobile sector of both countries.

Keywords: *Directors Remuneration; Financial performance; Firm; Corporate Governance*

Introduction

The debate of “why to pay directors high salaries to take in return high profits for maximization of wealth by shareholders?” has become much common since the origin of agency theory (Mitnick, 2017) (Jensen and Meckling, 1976) According to this theory Company's directors and executives are the agents of the shareholders who should work by keeping vision in their mind of maximization of shareholders wealth, similarly stewardship theory given by (Davis et al., 2018) impose the duty on today's managers to work for the interest of the

shareholders wealth maximization. Most of the companies were working in this mode after 1900, that the management is the sole agent of the shareholders which will manage the company in adequate manner for achieving the organizational goals. Similarly there are many theories like self-determination theory, Contingency theory, Tournament theory and Stakeholders theory which further widen the horizon of understanding about the role of Directors or executive for the success of the organization. After the occurrence of Corporate Governance issues and corporate frauds in all over the world economies particularly Americas and EU formulated the framework for the effective governance of the company's day to day activities for the safeguarding shareholders interest and to make transparent corporate sector nearly, every country adopted the Code of corporate governance (CCG) for the protection of shareholders interest. In Pakistan in 2002 and 2007 GOP issued the CCG with minor amendments, while in 2019 it issued CCG Act 2019 which made compulsory several disclosures for the listed firms.

Similarly in India SEBI has issued the CCG which has made compulsory for Indian corporates to make certain disclosures in their annual accounts. From these disclosures important for us is the directors Remuneration (DR). There are numerous studies which have studied the relationship of DR with the performance of the firms (FP). Increase in studies is due to the inconclusive results of many previous studies which have found different answers but no one is able to solve the issue. (C. Olaniyi, 2019).

The Issues of DR in relation of FP of the firm actually arises from the CG weaknesses and its violations for example there are many companies in emerging markets which have highly paid directors despite of, that these companies are in continuous losses from years (Abdullah, 2006). There are various issues which have highlighted by studies like presence of asymmetric information phenomenon between the DR and FP relationship (C. Olaniyi, 2019). CEO's compensation and their impact on firms performance in special institutional settings and country's cultural context and in family ownership context (Aslam et al., 2019), the linking of the managers salary with performance of the company but also in moderation of the competitors behavior and age of the manager while pay rise (Eriksson and Lausten, 2000). These mentioned and other CG issues which resulted from weak CG environment and loopholes in the governance structure, excessive compensation by the board compensation committees, give rise to high director compensation in spite of firm normal or substandard performance on the expense of shareholders wealth.

Luxurious salary packages with heavy allowances is so compulsory for CEO's that now they impose managerial power and used influence of their position to get such packages approvals from BOD. Also, they use selfish tactics, window dressings in accounts, acquisition of assets at depreciated disposal value and risky decisions in management of the company for their

career growth and selfish motives. Thus, the relationship of DR and FP is itself problematic, particularly in the context of South Asian corporate cultures and institutional settings, where Directors and Executives use their excessive powers due to large firm assets and size for the yearly increment of their bonuses and allowances without showing performance in the financial sense.

This present study investigates the impact of cash compensation of directors on the FP in the moderating effect of Firm size (FZ). As it assumes that in previous studies FZ has significant positive relationship with the DR and FP, thus present study has used it as the moderator for investigating the relations of the DR and FP.

Objective of our study is to compare the reasons behind the relationship of DR and FP of auto sector firms of Pakistan and India when FZ is the moderator variable, thus this study will investigate the difference of CG environment of both countries and its effects on the auto sector DR and FP relationship.

Our research questions are as follows

RQ 1 - What is the magnitude and direction of the DR in relations with FP of the Pakistani Auto Sector firms?

RQ 2 - What is the magnitude and direction of the DR in relations with FP of the Indian Auto Sector firms?

RQ 3 - What Magnitude of Impact and direction of moderating variable FZ on the relationship?

Literature Review

The problem of determination of relationship between Executive Remuneration including CEO and other Directors of the firm, (DR) and the performance of the firm (FP) which they manage is regarded as central issue of the corporate governance (CG) structure. This relation or link, to which many researchers have previously studied, arises due to the agency problem which is the separation of ownership and control in the listed company (C. O. Olaniyi and Olayeni, 2020).

Another theoretical framework which talked about it is stewardship theory, according to which every manager is responsible for the good performance of his/her firm after which the manager will be awarded with the high incentives on achieving organizational goals. Another theory which surrounds to this relationship of DR and FP is related to the managerial power theory (Bebchuk et al., 2011) which discussed the powerful manager who due to asymmetric information gains power of the company and then comes in the position due to his unmatched

control on the firm to negotiate with BOD for this lucrative remuneration and benefits (Rasoava, 2019).

Many researchers have discussed the link of DR and FP with respect of two models. According to first model DR is the exogenesis variable which motivates the executives for good performance and showing better results. In return they receive pay rises and lucrative benefits. According to this group of writers the pay is the input for the motivation of the manager for good performance of the company. While another group which takes the variable DR as the award after the good performance of the company (C. O. Olaniyi and Olayeni, 2020). Very few studies are which have discussed the DR and FP relationship after considering the asymmetric causality. For example (Olaniyi & Olayeni, 2020) have not only discussed the relationship with the asymmetric causality examination but they have also tested the study with the positive and negative shocks and their effect on the relationship in presence of the mutual causation variable which acting as the mediator.

In USA after series of corporate scandals the wave of corporate governance (CG) regulations came in which SEC made rules regarding Board structure and size, CEO remuneration disclosure, Independent and dependent directors and their number were significant.

Numerous studies were conducted for identifying and production of correlation between managerial compensation and various indicators of corporate performance. Seminal work of (Murphy, 1985) and other old researches like (Ross, 1973) (Holmstrom, 1989) (Lazear, 1979) (Leonard, 1990) laid foundation of such investigation in which positive and significant relationship between ER and FP of the US listed firms were found. Murphy utilized two indicators like firm growth sales and shareholders realized return which usually not used by most of studies unlike many studies murphy highlighted the behavior of the Bonus and deferred compensation which was most significant related with DR.

Similarly (Leonard, 1990) examined the link with 439 US firms in time from 1981 to 1985. He found quite unique and important results for the policy that executives who were receiving high pay belonged to the high hierarchal structured companies. While those companies which were flat structured had low pays of their executives. Thus it concluded that for the US firms structure was most important factor for determining DR than the corporate performance in terms of ROE. This hierarchal structure is the basic reason behind the growth in ROE and sales of the firm. This study clearly mentioned that accounting measures of company performance are unrelated to the pay of the executives or any other pay components. Other reason behind good corporate performance is the long term incentive plans along with the Pay of executives after which every MNC has adopt this practice.

Similarly, there are many studies which have focused on the CG weaknesses and problems associated with the DR and FP relationship in Japan, Malaysia and other Far East countries. DR and FP link was the key reason which resulted for the Asian Financial Crises 1997 after which every country introduced the CG framework for the formation of control mechanism and board empowerment (Hassan et al., 2003). Few writers like (Kato & Kubo, 2006) created the link between cash pay of CEO's with firm performance and showed that there is a positive relationship b/w CEO compensation and ROA of the 51 Nikkei listed firms. He created the econometric estimate of the elasticity of the compensation with respect to ROA but it is noted that he didn't incorporate any control variable like CG moderators and theoretical support which plays very important role for the relationship. Similar results were found by (Unite et al., 2008) for Philippines market listed firms but study has mentioned about reasons for taking Firm size as control variable and family group control as intervening variable effects on the managerial goal thus produced impact on the FP.

Similarly (Abdullah, 2006) studied the 162 distressed non-financial listed firms of Malaysia in which he compared the FP of the healthy and distressed companies. He found similar results of the (Hassan et al., 2003) that in spite of deteriorating ROE in the distressed companies the DR was increasing day by day, thus directors were enjoying lucrative benefits on expense of shareholders profits.

Similarly, he found no relationship between ROA and DR in healthy companies and noticed continuous rise in compensation despite if poor performance of the companies. Which again reinforce previous studies like (C. O. Olaniyi and Olayeni, 2020) findings of using exploitation of asymmetric information and politics as highlighted in managerial power theory (Bebchuk et al., 2011). This study also found DR showing positive relation with FZ (Firm size) and Firm turnover. Few studies found positive relationship between FP and ER (Jaafar et al., 2012); (Wu et al., 2018); (Ismail et al., 2014) but (Jaafar et al., 2012) discussed about showing no evidence of moderating variable family firm control in Malaysian listed firms. Similarly (Wu et al., 2018) found the high moderating impact of political connections of the CEO on the FP. However (Dogan and Smyth, 2002) and (Ibrahim et al., 2019) found negative relationship between FP and DR in the listed Malaysian firms. In 2017-18 according to the then survey by the newspaper, DR in Australia was at its maximum level rose by 12.4%. Due to exorbitant rise in compensation of executives' the question about the pay for performance began to attract researchers and policy makers.

(Merhebi et al., 2006) (Kini et al., 2018) (Kanapathippillai et al., 2019) and Several studies like (Cybinski and Windsor, 2013); (Rampling, 2012); (Merhebi et al., 2006); (Doucouliagos et al., 2007) came forward examining the relationship of DR and FP in which every study found

positive and Statistically significant relations between performance and Director's compensation of the listed firms in ASX but very few studies have used moderator and mediator in their models and few like (Scholtz and Smit, 2012) ; (Zhou, 2000) ; (Lee, 2009) have examined impact of CG variables like board size, firm size, stock ownership and CEO duality on FP and found the significant influence of these CG and company structure variables on FP. Studies related to the pay and performance relationship becomes more important when study discusses the economies having different demographic and business cultural characteristics. Previously this study mentioned studies of developed world shown mix of results. In emerging markets like India and Pakistan, there are various studies which have analyzed the relation between two variables in the presence of different control variables either firm related and CG variables.

(Arijit Ghosh, 2006) studied the 462 firms of Indian manufacturing industry found that the DR of directors only is largely dependent on the current year and past year corporate performance while other important but neglected variable in other studies is the diversification of the firm. Those executives who take the company to new height after introducing diversification in the firm business lines gets contingent rewards in form of heavy packages. This study has analyzed the difference in results of directors and CEO, it found that the CEO pay is in link with the current year performance only and not on the past years. The findings of this study are much opposite to the US firm's which highly correlate the education, age and experience of the executives to the DR. Similar results were found by (Ramaswamy et al., 2018) ; (Aggarwal and Ghosh, 2015) ; (Ayan Ghosh et al., 2011) but these also mentioned the negative relationship of the family ownership on the CEO pay of the firm which ignored by the previous few studies.

Studies in Europe also examined the impact of the link between pay and corporate performance showed less elasticity as compare to US firms (Ozkan, 2011) for Uk firms, (Eriksson and Lausten, 2000) for Danish firms and (Zoghlami, 2020) found similar result that all the European firms in EU countries found very weak relationship between ER and PF it is because the difference in the CG framework and regulations which they have adopted for the protection of the shareholders. Unlike it US firms are more shows the variance in the pay and bonuses and contingent pays due to change in the company corporate FP of the firm however EU firms shows only in the Operational performance link with the remuneration of the executives.

Studies in Pakistan studies the impact like (Bhutta et al., 2019) showed positive but weak relations between the firm performance and DR of the financial firms of Pakistan listed on PSX this results confirms the results of (Aslam et al., 2019) while very informative study conducted (Ghazali and Yahya, 2017) mentioned the risk taking as a moderator showed that the due to presence of managerial power and weak CG framework in Pakistan there is Negative relations between CEO compensation and Operating performance or financial performance of the banking

firms while market performance also showed very weak behavior in relation of ER being enjoyed by the executives. Another opposite results showed (Sheikh et al., 2019) in which CEO performance is in positive relation significantly with future performance of the firm but they have again used very important moderators group affiliation and ownership concentration of firm, which previous studies didn't used in Pakistan context. It found in general DR is in positive relation with FP but in Pakistan for those firms which have high concentration and affiliated with any business group this relationship is opposite means, increase in compensation give rise to low operating performance. (Sheikh et al., 2018) found that ER has no negative on the stock market performance pointing toward any kind of dispute between majority shareholder and management of the firm. Many variables of CG have no relation with the CEO compensation points towards the weak CG structure of the firms.

This study examines and compares the impact of the DR of the executives (directors and CEO) on the financial performance of firm in automobile sector of the Pakistan and India. In context of this study we shall assume that to increase the wealth of stockholders and real owners of the firm it shall offer attractive remuneration to executives to encourage them. In this way the financial and operational performance of the firm will rise.

H1: The FP is in significant and positive relationship with the DR.

Size of the firm (FZ) in many studies playing a central role for the determination of the DR of the firm. In emerging economies (Aggarwal and Ghosh, 2015) ; (Ramaswamy et al., 2018) ; (Abdullah, 2006) ; (Pervan, 2012) ; (Alabdullah et al., 2018). In many companies productivity of the firm has been positively correlated with the firm Size but no evidence of increase in accounting performance of firms (Guo et al., 2004). When we analyze the relationship of firm size and performance of the company such as (Niresh and Velnampy, 2014) there is no relationship between size of the listed firm and their performance. Not only in emerging countries above mentioned, but in Anglo Saxon economies this variable produces much impact on the performance of the firm if compensation of the executives rises or reduces.

Studies of US listed firms, Australia and Canada found the positive relationship between the FZ and FP (Doucouliagos et al., 2007) ; (Lee, 2009) ; While (Ibhagui and Olokoyo, 2018) concluded that the FZ positively related with the smaller ones means as the expansion of the FZ will increase the small firm performance will also be raised but this observation is totally different in large US listed firms. This finding is similar to French and UK firms where FZ has not much impact on the FP. (Zoghلامي, 2020) In various studies FZ has used as independent variable for the

financial growth of the firm, this study has taken the FZ as the moderator which is in many studies also works as a control variable.

As in many studies FZ positively correlated with the firms performance, thus in this relationship study shall assume that FZ is moderating the Relationship of ER and FP of firm.

H2: Size of the firm Moderating the relationship of DR and FP.

Methodology

This study has used positivist lens of philosophy to investigate the impact of DR on the FP of the automobile sector firms in Pakistan and India. Due to deductive nature of research approach, it has adopted, this study has employed purely quantitative test and technique for the investigation of impact of DR on firm's performance of the two Emerging markets. Present study collected data of financial performance and CEO pay from the audited annual reports of top 9 auto assemblers in Pakistan and India. We collected this data from SECP (Securities and Exchange commission of Pakistan) and SEBI (Securities and Exchange board of India) official portals. All sample companies of both countries are listed on PSX in Pakistan and on NSE and BSE two principal exchanges in India respectively. All the entries of the data from 2018 to 2022 were confirmed from companies' websites and excluded all those companies from our sample which have not published their audited financials in few years or whom data is not confirmed from SEBI website.

Measures

Present study employed the use of IV and DV with presence of moderator details of variables has given in the table 3.1

Independent Variable

Director's remuneration in this study will play the role of independent variable which will be measured by the natural log of the Total remuneration paid to the directors during the year. Director Remuneration (DR) = Ln (Total Yearly Cash Remuneration to all the Directors)

Dependent Variable

This study has used the ROA and ROE for measuring the financial performance of the company in accounting performance context only. Formulas of the ROA and ROE are as follows,

Return on Assets (ROA) = Operating income / Total Assets

Return on equity (ROE) = Operating income / Total Equity

Size of the Firm (FZ) = Nature log of Total Assets

Present studies' independent variable is Directors compensation which included Independent and Dependent directors of the companies. After the promulgation of the CCG (Code of Corporate governance 2012) every company in Pakistan is required to disclose the annual compensation of the

Directors in its financial statements. Thus data of DR was collected manually from the websites from audited annual accounts of automobile companies of both countries from FY 2005 to 2022.

DR is the measure which includes yearly salary, performance bonuses, allowances and stipends. DR has been widely used like (Wu et al., 2018) ; (Unite et al., 2008) ; (Lilling, 2006) ; (Eriksson and Lausten, 2000) ; (Ismail et al., 2014) ; (Akter et al., 2020) ; (Bhutta et al., 2019) ; (Abdullah, 2006) ; (Hassan et al., 2003) and many other studies were conducted in which compensation of directors were tested in relations with many other variables of the firms growth and performance under or without the moderating effects. ROA and ROE are the two dependent variables of the FP which are being tested by this study like numerous previous studies conducted in Pakistan and Foreign countries. These are the accounting measure of the FP of the company which shows the Efficiency of management for using Firms assets for earning return on it.

Results and Discussion

Descriptive Statistics

Here is the data available of descriptive statistics in which different values are showing in both countries data. Independent and Dependent variables related to Indian firms are supplying very important information to the users.

First ROE which is equity to net income ratio indicates that the mean value of earning power of equity of Indian firms is 0.36 or 36% while mean value of the ROA is 0.24 or 24% of the total income. Here variation or Standard deviation in both figures is 0.32 and 0.25 respectively. DR and Firm Size are two very important values for the Indian firms' analysis. Mean values of the DR in Indian companies are 263.86 and variation in DR is 315.54, while the mean value of the Firms Size is 11.312. Pakistani firms Independent and Dependent variables related are also giving very important information. First ROE which is equity to net income ratio indicates that the mean value of earning power of equity of Pakistani firms is 0.38 or 38% while mean value of the ROA is 0.17 or 17% of the total income. Variation or Standard deviation in both figures is 0.38 and 0.14 respectively. DR and Firm Size are two very important values for the firms' analysis. Here the mean value of the DR in Pakistani automobile companies is 37.96 and variation in DR is 24.87, while the mean value of the Firms Size is 9.03 and standard deviation is 1.08. **(See Table 1 and 2).**

Table 1 Descriptive Statistics (India)

Variable	Mean	Std. Dev.	Min	Max
ROE	0.36	0.32	-0.11	2.38
ROA	0.24	0.25	-0.04	1.71
DIR REM	263.86	315.54	1.72	1335.7
FIRM SIZE	11.312	1.265	8.403	13.323
SIZE * DR	3047.86	3587.2	14.482	15418.5

Table 2 Descriptive Statistics (Pakistan)

Variable	Mean	Std. Dev.	Min	Max
ROE	0.38	0.38	-0.7	2.14
ROA	0.17	0.15	-0.16	0.87
DIR REM	38	24.87	0.66	131.17
FIRM SIZE	9.03	1.08	5.22	11.2
SIZE * DR	353.74	236.93	5.15	1181.99

Spearman's Correlation matrix

The correlation matrix is also supplying to readers very useful information for the correlation or the relationship between variables and their explanatory power to each other. Every variable has the range of relationship in between 1 and -1 in the data. Here in Indian firms ROA and ROE has strong influence or relationship with each other which is of 0.96 or 96% (see Table 3). Similarly, data shows that the DR has strong relations with ROA and ROE because both values are 0.4251 and 0.4126 respectively. Size of automobile sector firms are in negative relations with the ROE and ROA in Indian automobile firms while the Size of the firm is highly related or in significant influence with the Director's remunerations indicated by interaction term SDR which has the value 0.9967. Here in Pakistani firms ROA and ROE has also strong influence or relationship with each other which is of 0.864 or 86.4%. Similarly, data shows that the DR has strong relations with ROA and ROE because both values are 0.4498 and 0.4933 respectively. Size of automobile sector firms are in positive relations with the ROE and ROA in Pakistan automobile firms but very less or insignificant while, somewhat related or in weak relation with the DR directly having value 0.3347 and by interaction term SDR 0.9885 which is 98%. **(See Table 3 and 4).**

Table 3 Correlation matrix Analysis of Indian firms

	ROE	ROA	DIR REM	FIRM SIZE	SIZE * DR
ROE	1				
ROA	0.9636	1			
DIR REM	0.4251	0.4126	1		
FIRM SIZE	-0.2258	-0.2497	0.1592	1	
SIZE * DR	0.4086	0.3912	0.9967	0.21	1

Significance level = *p < 0.05, **p < 0.01

Table 4 Correlation matrix Analysis of Pakistani firms

	ROE	ROA	DIR REM	FIRM SIZE	SIZE * DR
ROE	1				
ROA	0.8643	1			
DIR REM	0.4498	0.4933	1		

FIRM SIZE	0.0338	0.0222	0.3347	1	
SIZE * DR	0.4301	0.4711	0.9885	0.4462	1

Significance level = *p < 0.05, **p < 0.01

Inferential Statistics - Regression analysis

After checking suitability through Housman test study found that GLS Random effect regression analysis will be applicable. For controlling internal heterogeneity and endogeneity in the group, this study used Random effect model to control the variation in the variables, study used panel data for the sample frame which is the combination of Time series and cross sectional data thus panel data has assumed the distribution normal and there is no skewedness or kurtosis present in the distribution due to which it is no need to perform normality test in the REM test.

Similarly, there are no outliers present in the data as the STATA - REM adjusts all the missing values and outliers in the system automatically and presented the result after adjustment of these and after controlling all the variations which comes in the sector of the companies due to heterogeneity in the model.

In Indian firms ROA regression table F test value of 0.0000 and Adjusted R² value which is 0.688 it indicates that overall model is good and have 68.8% significant explanatory power to explain the relationship of ROE with the independent variable DR and FZ. Beta coefficient values of independent variable DR is 0.0031 and P value is 0.0000. FZ and intervening variable SDR have Beta Coefficient values of -.0621 and -.00026 and the P values of FZ and SDR are 0.016 and 0.000 respectively. (See Table 5)

Similarly, ROE regression table F test value of 0.00000 and Adjusted R² value which is 0.729 also indicates that overall model is good and has significant explanatory power to explain the relationship of ROE with other variables. Here a Beta coefficient value of independent variable DR is negative which 0.0027 is and P value is 0.149. FZ and intervening variable SDR have negative Beta Coefficient values of - 0.0444 and -.00023 and the P values of FZ and SDR are 0.149 and 0.005 respectively. (See Table 6)

In Pakistani firm's regression table of ROA shows that F test value is 0.00000 and Adjusted R² value is 0.552. It indicates that overall model is good and has significant explanatory power to explain the relationship of ROE with other variables. Beta coefficient values of independent variable DR is 0.0119 and P value is 0.086. Firm Size (FZ) and intervening variable SDR have negative Beta Coefficient values of - 0.0276 and - 0.001 and the P values of FZ and SDR are 0.077 and 0.174 respectively. (See Table 5)

Similarly, ROE regression table F test value of 0.0000 and Adjusted R² value which is 0.493 also indicates that overall model is good and has significant explanatory power to explain the relationship of ROE with other variables. Here a Beta coefficient value of independent variable DR is positive which 0.0360 is and P value is 0.055. Firm Size (FZ) and intervening variable SDR have negative Beta Coefficient values of -0.0271 and -0.0033 and the P values of FZ and SDR are 0.516 and 0.104 respectively. This all information in tables have been illustrated as under (See Table 6).

Table 5 Regression Analysis

Variable	Beta	t value	Sig value	Beta	t value	Sig value (P)
DIR REM	0.0031	4.15	0.000	0.0119	1.73	0.086
Firm Size (FZ)	-0.0621	-2.46	0.016	-0.0276	-1.79	0.077
SDR	-0.0002	-3.91	0.000	-0.001	-1.37	0.174
No of Observations	99	INDIAN		125	PAK	
F value	31.89			22.83		
R ²	0.7104			0.5773		
Adj R ²	0.6881			0.5521		

where SDR = Intervening term - moderator

Coefficient values are standardized Significance level = *p < 0.05, **p < 0.01

Table 6 Regression Analysis

Variable	Beta	t value	Sig value	Beta	t value	Sig value (P)
DIR REM	0.0028	3.05	0.003	0.03608	1.94	0.055
Firm Size (FZ)	-0.0445	-1.46	0.149	-0.0271	-0.65	0.516
SDR	-0.0002	-2.87	0.005	-0.0033	-1.64	0.104
No of Observations	99	INDIAN		125	PAK	
F value	38.67			18.26		
R ²	0.7484			0.5222		
Adj R ²	0.7291			0.4936		

where SDR = Intervening term - moderator

Coefficient values are standardized

Discussions

In regression analysis the figures are also giving us very important insight about the impact of DR on the accounting performance indicators ROA and ROE in presence of study's moderator firm size.

For Indian firms, P values of the DR for the relation of ROE is 0.003 which shows on 10% significant level that significant relationship of DR is with ROE, while P values of Size 0.149 showing insignificant relationship with ROE. Value of 0.005 of SDR showing significant relationship with ROE. Coefficient Beta of DR is 0.0027 while of Size is -0.0444 which shows the negative but weak relationship between both. It can be interpreting that as Indian companies are

increasing in size their ROE is declining showing negative but very weak relation between ROE and FZ. This weak relations of FZ with other variable is confirming the results of (Nireesh and Velnampy, 2014) ; (Guo et al., 2004) ; (Alabdullah et al., 2018) ; (Ramaswamy et al., 2018) ; (Mohd Razali et al., 2018) it may be due to maximization of managerial utility and adamant organizational structure of large automobile companies in India. But here in India SDR, this study's moderator is showing negative relationship having Coefficient beta value - 0.0002 indicating that as the SDR increases in the presence of size thus it gives negative returns of - 0.02% on equity. This negative effect is in very significant relationship with ROE as P value is 0.005 thus from all variables, it can conclude that the DR of firms is significantly affected by the ROE despite of decline in size of the Equity. Which is consistent with the findings of (Aslam et al., 2019) ; (Mohd Razali et al., 2018) ; (Zoghلامي, 2020) ; (Leonard, 1990) and (Raithatha and Komera, 2016) in our selected studies.

P value of DR in relation with ROA is 0.000 which shows on 10% significant level that there is strong and significant positive relationship between DR and ROA while Coefficient beta value is also 0.00314 which is also positive shows that Indian firms are rewarding their directors on the performance basis. This finding supports the results of studies like (Ismail et al., 2014) ; (Mohd Razali et al., 2018) ; (Zoghلامي, 2020) for accounting Indicator content only, (Aggarwal and Ghosh, 2015), (Arijit Ghosh, 2006) for Indian manufacturing firms, (Kato and Kubo, 2006) for Japanese firms and (Unite et al., 2008) for Philippines family control group firms.

P value for size is 0.016 less than 0.05 but Coefficient value is negative - 0.6211. It indicates the negative relation of size of Indian firms with their annual return. It can be said that these firms when expands so their annual return declines due to increased finance and administration costs. Moderator SDA is also in significant negative relationship with ROA as its P value is 0.000 while Coefficient beta value is - 0.000263, thus this value is clearly showing that it is also taking the effect of size which is negative thus it also becoming negative.

For Pakistani firms, Coefficient beta of DR is 0.036 in ROE table which shows that 1% increase in DR increases the ROE with 3.6%. While P value of DR is 0.055, thus there is positive relationship between the DR and ROE which is also consistent with the findings of (Ismail et al., 2014) ; (Leonard, 1990) ; (Eriksson and Lausten, 2000) ; (Sheikh et al., 2018) Similarly P value for FZ is 0.516 and of SDR mediating variable P value is 0.104. Both of values show that both FZ and SDR is not in significant relationship with the ROE of Pakistani firms contrary to the results of (Shah et al., 2009), one study (Cybinski and Windsor, 2013) shows that FZ has significant relationship with the CEO compensation.

From this study it can be interpreted that as Pakistani companies are increasing in size or big companies, their ROE is declining proving negative relationship. This may be due to low marginal capital efficiency in Pakistani economy that as the size of the firm is increasing so the ROE is shrinking due to inefficient capital due to recent inflation and foreign exchange fluctuation. Similarly, SDR study's moderator is also showing negative relationship shows that as the DR increases in the presence of FZ thus it gives negative returns of -0.03% on equity this negative effect is very slight and ignorable.

P value of DR in relation with ROA is 0.086 which shows on 10% significant level that there is significant positive relationship between DR and ROA while P value for size is 0.077 which is in insignificant negative relation with the ROA supporting the results of (Jaafar et al., 2012) ; (Murphy, 1985) ; (Niresh and Velnampy, 2014) and (Pervan, 2012) also in contrary to the results of (Akter et al., 2020) ; (Lee, 2009) study which showed negative relations of CEO and Directors compensation to the firm financial and operational performance. This study's moderator SDA is also showing insignificant relationship with the ROA as its P value is 0.174 which is more than 10%, thus it means that Yearly performance of the company in Pakistan always affects the DR but size and SDA does not related with the ROA of automobile firms.

Above mention previous studies reveals that the DR of the Indian and Pakistani firms is in relation with the accounting performance indicator of ROA and ROE there are many studies like (Hassan, Christopher, & Evans, 2003) for Malaysian listed companies, (Ibrahim et al., 2019) for Telecommunication industry Malaysia, (Aggarwal and Ghosh, 2015) for Indian listed corporates, (Shah et al., 2009) and (Ozkan, 2011) for UK firms have shown opposite picture. As there are many companies in both countries where the DR is in negative relationship with the financial performance of the company this can be due to prioritizing own interests over the company interests, mutual back scratching phenomena, formation of asymmetric information structure (Ozkan, 2011) in firms and risk taking attitude of directors.

These above results shows that Indian and Pakistani firms are both following their corporate governance frameworks up to the extent of pay for performance relationship, they have not signs and symptoms like those firms which shows negative relations of DR with the accounting Performance indicators due to lack of stewardship attitude in directors and CG, as the remuneration which their executives and directors are receiving is according to the financial performance of the entity. It also shows that automobile sector has efficient, transparent and fair governed companies. It also shows they have strict internal controls and better management by BOD and committees.

Conclusion

This study examined the relationship of Director Remuneration (DR) with accounting performance of nine auto mobile companies listed in Pakistan and Indian Stock exchanges from the year 2005 to 2019. This study for measuring accounting performance of entities took ROA and ROE as the financial performance proxies which shows the intrinsic value of the firm, while Moderator in this study was FZ measured through natural log of assets of the firms, affecting the relationship of variables. Present study also undertook comparative analysis of pay and performance relationship in automobile sector of two emerging markets.

In pay and performance relationship, this study performed correlation and then performed Regression analysis for examining the relationship of independent variables and dependent variable. This study found the positive relationship of ROE and ROA with cash based DR of automobile firms but very weak and inverse relationship with FZ in both cases of Pakistan and India.

Current findings of the present study strongly support the notion of agency theory which forces Remuneration Committee to pay BOD and Top Management according to the financial performance of the company.

Current study has done an important contribution in the theoretical and empirical knowledge it has introduced the Size of the firm (FZ) as a moderator for empirical testing of variables of automobile sector of two emerging markets. This study has also shown against the finding of the (Arijit Ghosh, 2006) ; (Niresh and Velnampy, 2014) ; (Pervan, 2012) and many other studies that FZ is producing negative effect on ROA and ROE. According to our knowledge none of the study in both countries has applied this empirical testing on the automobile sector by making FZ as the moderator. As these sectors are the close competitors of each other. Thus this sector's companies can use the present study for the adjustment of their CG framework.

Limitations and managerial implications

Although present study has provided the reliable results of Pay and performance relationship, but still it is limited in some aspect. First it has taken only 5 years with very small number of sample firms which consist of both economies' automobile sector only. Second it has taken only one control variable for relationship. Third it has taken only cash based remuneration of the directors of the firms means noncash based compensation like stock options has not been considered in this study. Fourth it has taken only accounting based measures for the empirical testing it has not taken market based measures, productivity, or operational efficiency as the performance measures.

The present study's findings can be a policy making tool for the authorities and policy experts of the emerging markets specially which have the corporate culture similar to Pakistan and India. The important implication of this study can be that firms of both countries should make their corporate governance framework stronger by realignment of the compensation system with the performance of the firm. Second only cash based remuneration should be avoided, but companies should offer substantial amount of non-cash benefits linked to the financial and non-financial performance of the firm. Third firms should make sure the independence of the board and proper independent board committees should be formed. In general the application of the latest guidelines issued in 2019 by the SECP and SEBI can be helpful for the transparent governance of the entities for the wealth maximization of shareholders.

Implication for further research

Thus, future studies can apply our study on other industries of both countries or taking more countries in the sample, similarly future studies can be undertaken by taking extrinsic performance Indicators of the firm like share price of the firm and market value of the firm, by taking other CG variables as a moderator and mediator and taking years of study from 2013 after inclusion of clause 49 in Indian Companies Act 2013. Present study has considered only cash based compensation of Directors, however noncash compensation and long term stock options are forms in which rewards are being given, so this study can also be performed by including non-cash rewards. More robust statistical analysis like multivariate analysis taking market based measures of firm performance as good option for future researcher to fill the gap. Study can be more accurate by including some qualitative data collection methods like taking interviews of CEO's, Directors, SEC officials and corporate law practitioners relating to CG and the pay – performance relationship.

Conflict of interest

There is no conflict of interest associated with the present study.

Acknowledgment

The authors are thankful for the Course Associate Professors and colleagues for their guidance and support for the preparation and improving the article.

References

- Abdullah, S. N. (2006). Directors' remuneration, firm's performance and corporate governance in Malaysia among distressed companies. *Corporate Governance*, 6(2), 162–174. <https://doi.org/10.1108/14720700610655169>
- Aggarwal, R., and 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. <https://doi.org/10.1108/IJLMA-08-2011-0006>
- Akter, S., Ali, M. H., Abedin, M. T., and Hossain, B. (2020). Directors' remuneration and performance: Evidence from the textile sector of Bangladesh. *Journal of Asian Finance, Economics and Business*, 7(6), 265–275. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.265>
- Alabdullah, T. T. Y., Ahmed, E. R., and Yahya, S. (2018). The determination of firm performance in emerging nations: Do board size and firm size matter? *International Academic Journal of Accounting and Financial Management*, 05(02), 57–66. <https://doi.org/10.9756/iajafm/v5i2/1810017>
- Aslam, E., Haron, R., and Tahir, M. N. (2019). How director remuneration impacts firm performance: An empirical analysis of executive director remuneration in Pakistan. *Borsa Istanbul Review*, 19(2), 186–196. <https://doi.org/10.1016/j.bir.2019.01.003>
- Bebchuk, L. A., Cremers, K. J. M., and Peyer, U. C. (2011). The CEO pay slice. *Journal of Financial Economics*, 102(1), 199–221. <https://doi.org/10.1016/j.jfineco.2011.05.006>
- Bhutta, A. I., Sheikh, M. F., and Sultan, J. (2019). *The Relationship among Directors' Pay, Corporate Governance, and Firm Performance: Evidence from Financial Sector of Pakistan*. 8(3), 512–525.
- Cybinski, P., and Windsor, C. (2013). Remuneration committee independence and CEO remuneration for firm financial performance. *Accounting Research Journal*, 26(3), 197–221. <https://doi.org/10.1108/ARJ-08-2012-0068>
- Davis, J. H., Schoorman, F. D., and Donaldson, L. (2018). Toward a stewardship theory of management. *Business Ethics and Strategy, Volumes I and II*, 22(1), 473–500. <https://doi.org/10.4324/9781315261102-29>
- Dogan, E., and Smyth, R. (2002). Board Remuneration, Company Performance, and Ownership Concentration: Evidence from Publicly Listed Malaysian Companies. *ASEAN Economic Bulletin*, 19(3), 319–347. <http://www.jstor.org/stable/25773741>
- Doucouliaagos, H., Haman, J., and Askary, S. (2007). Directors' remuneration and performance in Australian banking. *Corporate Governance: An International Review*, 15(6), 1363–1383. <https://doi.org/10.1111/j.1467-8683.2007.00651.x>
- Eriksson, T., and Lausten, M. (2000). Managerial pay and firm performance - Danish evidence. *Scandinavian Journal of Management*, 16(3), 269–286. <https://doi.org/10.1016/S0956->

5221(99)00026-3

- Ghazali, Z., and Yahya, F. (2017). The moderating role of risk-taking between CEO compensation and firm performance: Evidence from financial sector of Pakistan. *International Journal of Economic Research*, 14(15), 417–430.
- Ghosh, Arijit. (2006). Determination of executive compensation in an emerging economy: Evidence from India. *Emerging Markets Finance and Trade*, 42(3), 66–90. <https://doi.org/10.2753/REE1540-496X420304>
- Ghosh, Ayan, Aggarwal, R., and Ayan Ghosh Dr. Rashmi Aggarwal. (2011). Directors' Remuneration: Various Issues Relating To Firm Performance. *Paradigm*, 15(1–2), 93–101. <https://doi.org/10.1177/0971890720110113>
- Guo, B., Wang, Q. Z., and Shou, Y. Y. (2004). Firm size, Rand D, and performance: An empirical analysis on software industry in China. *IEEE International Engineering Management Conference*, 2, 613–616. <https://doi.org/10.1109/iemc.2004.1407451>
- Hassan, S., Christopher, T., and Evans, R. (2003). Directors' Remuneration and Firm Performance: Malaysian Evidence. *Malaysian Accounting Review*, 2(I), 57–67.
- Holmstrom. (1989). The theory of the firm. In *Economic Analysis and Multinational Enterprise: Vol. I* (pp. 31–46). <https://doi.org/10.4324/9781315824000-9>
- Ibhagui, O. W., and Olokoyo, F. O. (2018). Leverage and firm performance: New evidence on the role of firm size. *North American Journal of Economics and Finance*, 45(August 2017), 57–82. <https://doi.org/10.1016/j.najef.2018.02.002>
- Ibrahim, N. A., Md Zin, N. N., Md. Kassim, A. A., and Tamsir, F. (2019). How Does Directors' Remuneration and Board Structure Impact on Firm Performance in Malaysia Telecommunication Industry? *European Journal of Business and Management Research*, 4(4), 1–7. <https://doi.org/10.24018/ejbmr.2019.4.4.96>
- Ismail, S. Bin, Yabai, N. V., and Hahn, L. J. (2014). Relationship between CEO Pay and Firm Performance: Evidences from Malaysia Listed Firms. *IOSR Journal of Economics and Finance*, 3(6), 14–31. <https://doi.org/10.9790/5933-0361431>
- Jaafar, S., Wahab, E., and 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., and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

[https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)

- Kanapathippillai, S., Gul, F., Mihret, D., and Muttakin, M. B. (2019). Compensation committees, CEO pay and firm performance. *Pacific Basin Finance Journal*, 57(August), 101187. <https://doi.org/10.1016/j.pacfin.2019.101187>
- Kato, T., and 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. <https://doi.org/10.1016/j.jjie.2004.05.003>
- Kini, O., Williams, R., and Yin, S. (2018). Restrictions on CEO Mobility, Performance-Turnover Sensitivity, and Compensation: Evidence from Non-Compete Agreements. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3186802>
- Lazear, E. P. (1979). *NBER WORKING PAPER SERIES RANK-ORDER TOURNAMENTS AS OPTIMUM LABOR CONTRACTS Sherwin Rosen Working Paper No. 401 NATIONAL BUREAU OF ECONOMIC RESEARCH 1050 Massachusetts Avenue Cambridge MA 02138 November 1979 We are indebted to Merton Miller for helpful c. November.*
- Lee, J. (2009). Does size matter in firm performance? Evidence from US public firms. *International Journal of the Economics of Business*, 16(2), 189–203. <https://doi.org/10.1080/13571510902917400>
- Leonard, J. S. (1990). Executive Pay and Firm Performance. *Industrial and Labor Relations Review*, 43(3), 13S. <https://doi.org/10.2307/2523569>
- Lilling, M. S. (2006). The link between CEO compensation and firm performance: Does simultaneity matter? *Atlantic Economic Journal*, 34(1), 101–114. <https://doi.org/10.1007/s11293-006-6132-8>
- Merhebi, R., Pattenden, K., Swan, P. L., and Zhou, X. (2006). Australian chief executive officer remuneration: Pay and performance. *Accounting and Finance*, 46(3), 481–497. <https://doi.org/10.1111/j.1467-629x.2006.00178.x>
- Mitnick, B. M. (2017). The Theory of Agency: A Framework. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1021642>
- Mohd Razali, M. W., Yee, N. S., Hwang, J. Y. T., Tak, A. H. Bin, and Kadri, N. (2018). Directors' Remuneration and Firm's Performance: A Study on Malaysian Listed Firm under Consumer Product Industry. *International Business Research*, 11(5), 102. <https://doi.org/10.5539/ibr.v11n5p102>

- Murphy, K. J. (1985). Corporate performance and managerial remuneration. *Journal of Accounting and Economics*, 7(1-3), 11-42. [https://doi.org/10.1016/0165-4101\(85\)90026-6](https://doi.org/10.1016/0165-4101(85)90026-6)
- Niresh, J. A., and Velnampy, T. (2014). Firm Size and Profitability: A Study of Listed Manufacturing Firms ed Manufacturing Firms in Sri Lanka. *International Journal of Business and Management*, 9(4), 57-64. <https://doi.org/10.5539/ijbm.v9n4p57>
- Olaniyi, C. (2019). Asymmetric information phenomenon in the link between CEO pay and firm performance: An innovative approach. *Journal of Economic Studies*, 46(2), 306-323. <https://doi.org/10.1108/JES-11-2017-0319>
- Olaniyi, C. O., and Olayeni, O. R. (2020). A new perspective into the relationship between CEO pay and firm performance: evidence from Nigeria's listed firms. *Journal of Social and Economic Development*, 22(2), 250-277. <https://doi.org/10.1007/s40847-020-00103-3>
- Ozkan, N. (2011). CEO Compensation and Firm Performance: An Empirical Investigation of UK Panel Data. *European Financial Management*, 17(2), 260-285. <https://doi.org/10.1111/j.1468-036X.2009.00511.x>
- Pervan, M. (2012). Influence of Firm Size on Its Business Success. *Croatian Operational Research Review*, 3(1), 213-223.
- Raithatha, M., and Komera, S. (2016). Executive compensation and firm performance: Evidence from Indian firms. *IIMB Management Review*, 28(3), 160-169. <https://doi.org/10.1016/j.iimb.2016.07.002>
- Ramaswamy, K., Veliyath, R., and Gomes, L. (2018). *of CEO Compensation in India*1. 40(2), 167-191.
- Ramplung, P. N. (2012). CEO and Executive Director Remuneration and Firm Performance. *SSRN Electronic Journal, December 2011*. <https://doi.org/10.2139/ssrn.1969656>
- Rasoava, R. (2019). Executive compensation and firm performance: A non-linear relationship. *Problems and Perspectives in Management*, 17(2), 1-17. [https://doi.org/10.21511/ppm.17\(2\).2019.01](https://doi.org/10.21511/ppm.17(2).2019.01)
- Ross, S. A. (1973). The Economic Theory of Agency: The Principal's Problem. *The American Economic Review*, 63(2), 134-139. <http://www.jstor.org/stable/1817064>
- Scholtz, H. E., and Smit, A. (2012). Executive remuneration and company performance for South African companies listed on the Alternative Exchange (AltX). *Southern African Business Review*, 16(1), 22-38.

- Shah, S. Z. A., Javed, T., and Abbas, M. (2009). Determinants of CEO compensation empirical evidence from Pakistani listed companies. *International Research Journal of Finance and Economics*, 32(January 2014), 148–159.
- Sheikh, M. F., Bhutta, A. I., and Sultan, J. (2019). CEO compensation and unobserved firm performance in Pakistan. *Journal of Asian Finance, Economics and Business*, 6(3), 305–313. <https://doi.org/10.13106/jafeb.2019.vol6.no3.305>
- Sheikh, M. F., Shah, S. Z. A., and Akbar, S. (2018). Firm performance, corporate governance and executive compensation in Pakistan. *Applied Economics*, 50(18), 2012–2027. <https://doi.org/10.1080/00036846.2017.1386277>
- Unite, A. A., Sullivan, M. J., Brookman, J., Majadillas, M. A., and Taningco, A. (2008). Executive pay and firm performance in the Philippines. *Pacific Basin Finance Journal*, 16(5), 606–623. <https://doi.org/10.1016/j.pacfin.2006.12.002>
- Wu, H., Li, S., Ying, S. X., and Chen, X. (2018). Politically connected CEOs, firm performance, and CEO pay. *Journal of Business Research*, 91(June 2017), 169–180. <https://doi.org/10.1016/j.jbusres.2018.06.003>
- Zhou, X. (2000). *Zhou-2000-Canadian_Journal_of_Economics%2FRevue_canadienne_d%27-conomique*. 33(1).
- Zoghalmi, F. (2020). Does CEO compensation matter in boosting firm performance? Evidence from listed French firms. *Managerial and Decision Economics*, June, 1–13. <https://doi.org/10.1002/mde.3219>