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Does Corporate Governance Moderate the Relationship between Dividend Policy and Earnings Quality: Evidence from Pakistan

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Abstract: This endeavour aimed to empirically investigate the moderating role of the corporate governance characteristics (board size, board independence, board meetings, CEO duality, audit quality, nomination and remuneration committee) in the dividend policy and earnings quality nexus. The study was conducted on the data consisting of 145 non-financial companies listed on Pakistan Stock Exchange (PSX) with 1450 firm-year observations for the period 2010-2019. Earnings quality was assessed by the earnings management represented by discretionary accruals which were estimated by employing the Modified jones model (1995). Multiple Panel regression model was used for analysis. It was discovered that the board size, board meetings, CEO duality and audit quality moderate the relationship between the dividend policy and earnings quality. While the board independence, nomination committee and remuneration committee, were found to have no such influence. Overall the outcomes of this research work suggest that corporate governance mechanisms deserve the attention of all the financial statements users attempting to determine the earnings quality of firms.

Keywords: Earnings quality, Earnings management, Discretionary accruals, Pakistan, Dividend policy, Corporate governance characteristics.

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INTRODUCTION

Financial statements are vital for market participants. The failure of WorldCom, Enron and Xerox, that were the leading companies, raised question marks on quality of financial reports. The researchers started finding the causes behind their bankruptcy and found earnings management (EM) the main reason (Goncharov, 2005). It has been argued that EM that is mostly done by managers is a renowned method for putting desired figures in earnings of companies (Ball & Shivakumar, 2005). Why the management used the false earnings instead of true values is a matter of consideration. And reasons behind this motive is to attract the investors, present good performance in market and satisfy demands of the shareholders for high profit (Ali & Desoky, 2015).

The quality of earnings becomes more important when the investors make decisions regarding investment. The security prices prevailing in the capital market also depend on the earnings. Thus when the companies' earnings are misleading, these influence all the decisions negatively and overall economic decision will be affected (Ismail, Kamarudin, & Sarman, 2015; Jiang, Lee, & Anandarajan, 2008). Earnings quality acts as a backbone of companies and possesses the ability of predicting the firm's prospective earnings. It has also been argued that earnings having the potential of revealing the current performance of a firm as well as forecasting of future performance are considered as of high quality. While the earnings management or earnings manipulation is considered as the one and the same thing, earning management happens mostly when the management of the company uses its personal judgments in making financial reports, & makes changes in the reported earnings of the firm with the purpose of misleading the users about the financial condition of the firm (Azzoz, Abdel, & Khamees, 2016; Chen & Hung, 2021).

Most commonly, earnings are manipulated by using the accruals based earning management techniques. Discretionary accruals are the main tool commonly used by the managers to misrepresent the earnings of the firms with the intention of misleading the users of the financial reports. Management uses its judgment in recording such amounts as per their interest and has discretion in this regard (Bartov & Mohanram, 2004).

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Therefore the investors lose their trust and confidence on the firms reported earnings & in need of knowing the features that relates with EQ. So investors, analysts, standard setters and accounting experts put emphasis on EQ because most of their decisions depend on reported earnings. As the earning quality (EQ) was distorted by the use of EM, hence the researchers of developed countries (Koch & Sun, 2004; Caskey & Hanlon, 2005; Asiri, 2014;Wibowo, 2019) suggested that dividend of the companies and their EQ are found to have association.

The dividends are the amount of profits divided among shareholders and the policies related to the dividends presents the financial condition of the firms because the firms with good financial position are able to pay the dividend. So theories and also many researches have been done in this regard to know about information that the dividend send to market and also tries to find the determinants of DP (Booth & Zhou, 2017; Dewasiri et al., 2019; Lee, Walker, & Zhu, 2015; Miller & Rock, 1985). Hence all those researches showed that the dividend payments give information about the firm stable cash flow and sustainable earning therefore DP and earnings quality found to have the relationship. They indicated that with dividend policy the free cash flow (FCF) availability level is reduces, so managers can't use that cash for personal interests & hence agency problems reduces while increasing quality of earnings. Mainly the researches were done in developed markets. But in developing economies, particularly Pakistan there is limited empirical evidence in this connection. Recently a research conducted in this regard elucidated that DP & EQ are not significantly related, however the attributes of corporate governance influences the earnings management practices (Afzal, Siddiqui, Khan, Khan, & Huseen, 2021).

Another important concept in the business field is the corporate governance (CG) mechanism. Hence CG is arrangement of rules & regulations by which the companies are controlled. So having good corporate governance system also presents the upright situation of the organization in market because the characteristics of CG are considered as the tool that protects the investor's rights and money (Milosevic, Andrei, & Vishny, 2015; Bhatt & Bhatt, 2017; Bhagat & Bolton, 2019) . Hence on the basis of that the researchers tries to explore the relation between the DP and CG because both provides the information about the company's performance and they discovered that there exists a link between the dividend policy and the corporate governance (Sawicki, 2009; Ahmad & Javid, 2010; Jiraporn, Kim, & Kim, 2011). As the researches revealed that CG and EQ are interrelated (Karamanou & Vafeas, 2005; Lin, Li, & Yang, 2006; Liu & Lu, 2007; Jiang, Lee, & Anandarajan, 2008; Mersni & Othman, 2016; Waweru & Nelson, 2018), so this raises the point that whether moderating role of CG affect the link between dividend and earnings quality. Hence a research in France indicated that certain CG attributes moderate this relation (Salah & Jarboui, 2021). But in context of Pakistan no previous research has been conducted in this content.

Thus the purpose of the paper is to investigate the moderating impact of corporate governance attributes on the dividend policy and earnings quality relationship in context of Pakistan. Previously the researches have been conducting in developed economies that have stable political and economic systems. Pakistan is a developing country that faces many problems and has unstable political and economic system. So this study tries to find out whether corporate governance moderates the dividend payments impact on the earning quality of the non-financial firms that is the largest sector in Pakistan. As financial firms are those that collect money from customers and then invest it in financial assets like bonds, mortgages, stocks, loans etc. these institutions provide liquidity to the economy like banks, insurance companies, leasing companies etc. However the non-financial firms includes all those companies other than financial firms like manufacturing, agriculture, trading etc. these companies contribute more in the GDP of Pakistan and also help in reducing the unemployment by increasing the industrialization. So this study considers the non-financial firms because of their more contribution in the economic development. Furthermore this study is significant in various ways. As decision making of all the participants (financial analyst, creditors, brokers, investors) dealing in the stock markets depends on the earnings of the firms (Waweru & Riro, 2013). Like the investors make decision regarding their investments on the basis of reported earnings, capital market set their security prices as on whole the market efficiency determined by information available in the capital market. So if the earnings of the firms are manipulated then the decisions of all the concerned parties are misleaded and in turn the whole economy will be affected (Epps & Ismail, 2009). Hence this study will give the thoughtful guidance on connection between the dividends and EQ while considering the CG as moderating variable. Also the current study enhances the literature on EQ that is limited in Pakistani context. Thirdly this research will shed light whether policies related to dividend effect the EQ of Pakistani firms as it is the main point during investment. Also, the shareholders can mitigate the management activities relating with manipulation by understanding the aspects elaborated in this study.

The remaining structure of the report is as follows: Section II sheds light on the relevant literature done by the different authors. Section III shows the data and methodology employed and Section IV, describes the results and discussion. Section V. discusses the summary of the paper. Section VI reports the conclusion and recommendations and Section VII reports the references.

LITERATURE REVIEW

The literature of this study firstly explains the theories of the current research and then shed light on the findings of researchers that explore the association among dividend policy, corporate governance in relation with earnings quality. Several theories explained the relation between DP, EQ and CG. So signaling theory & agency theory become basis of this research that are explained below.

Signaling Theory

Dividend send signal about the financial performance of the firms. This theory relies on asymmetric information between the outsiders the shareholders & insiders the managers (Bali, 2003; Grullon, Michaely, Benartzi, & Thaler, 2005).

Agency Theory

Dividend payment reduced the level of FCF for managers and as consequences the management cannot use them freely and agency problems decrease (Pinkowitz, Stulz, & Williamson, 2006).

Also when their will be no conflict of interests between the owners & managers so overall the EQ increases because no one is in need to manipulate earnings for personal interests (Fodio, Ibikunle, & Oba, 2013).

Dividend Policy & Earnings Quality

Certain previous researches like (Asiri, 2014; Deng et al., 2017; Hanlon, Myers, & Shevlin, 2007; He, Ng, Zaiats, & Zhang, 2017; Skinner & Soltes, 2011; Tong & Miao, 2011; Wibowo, 2019) establish noteworthy positive association amongst dividend & corporations EQ. As well the above mentioned investigators discussed that the corporations giving dividend have solid cash foundation & upright financial state so consequently they have extraordinary EQ and have lesser manipulation of the earnings. These researches also suggested that as the firms announced their dividends then the investors and analysts changes their expectations about firm's future earnings as they understand the specific information related to the financial situation of organization that is contained in dividend announcement of the firms. Furthermore the stock returns of the firms respond more to earning information of the corporations that pay dividend in comparison with the non-dividend paying firms. So the DP and EM are interrelated. However some authors elucidate no connection amongst EQ & dividends (Afzal et al., 2021; Grullon et al., 2005; Mousa & Desoky, 2019). The outcomes of their studies recommended that dividend do not forecast the future incomes of the corporations and have no connections with earning management. Hence the above studies found the contradictory results; therefore this study used corporate governance as moderating variable so as to find out whether the attributes of CG moderate the relationship among the DP and EQ. As the CG characteristics has significant impact on the EQ that is discussed below.

Corporate Governance Characteristics as moderating variables

Board size and earnings quality

BS refers to the number of members in a company's board. Hence some researches like (Kao & Chen, 2004; Haniffa et al., 2006; González & García-Meca, 2014) establish that the greater board is less proficient in observing the administration actions & therefore causes decline in the quality of earnings. Despite the above fact some investigations initiate significant progressive effect of greater size on quality & favors the greater panel for reduction of earning handling & worthy EQ (Fodio et al., 2013; Xie, Davidson III, & DaDalt, 2003). But (Waweru & Prot, 2018; Mousa & Desoky, 2019) revealed no link between the BS and EQ. As BS is the feature of CG and found to have association with EQ while CG and dividend policy are interrelated therefore on the origin of given link the subsequent hypothesis is anticipated:

H1: Board size moderates the impact of dividend policy on earnings quality.

Board independence and earnings quality

Independent associates don't have any big shares in the business. As it is also the characteristics of CG therefore researchers like (Fodio et al., 2013; Alves, 2014; Khafid & Arief, 2017) revealed out that the independent panel members contain additional proficiency & can notice manipulation & hence raises earnings quality. However (Siregar & Utama, 2008; Houqe et al., 2011; Waweru & Prot, 2018) establish the fact that executive that are independent can't recognize the misrepresentation for the reason that they are not a part of daily business operations & assessments of entity. Hereafter the hypothesis is as under:

H2: Board independence moderates the impact of dividend policy on earnings quality.

Board meetings & quality of earnings

Board meetings include the number of meetings held in a year of the specific company. The works of (Liu & Lu, 2007; Chaharsoughi & Rahman, 2013; González & García-Meca, 2014; Saleem et al., 2016) specified that with recurrent meetings of the members, the EQ is more because of the fact that manipulation is certainly noticeable. On the other hand the researcher, Waweru and Prot (2018) established no impact of meetings on quality. Thus hypothesis is written below:

H3: Board meetings moderate the impact of dividend policy on earnings quality.

CEO duality & earnings quality

CEO duality denotes the condition when the CEO is also the chairman. Some authors in their findings point out that the companies in which the duality of CEO exist the manipulation is of greater extent owing to the fact that the CEO presents companies better performance in shareholders eyes (Hashim & Devi, 2008; Sarkar et al., 2008), whereas Burinwattana, (2016) in distinction originate no outcome of CEO duality on quality of earnings. Henceforth the anticipated hypothesis is:

H4: CEO Duality moderates the impact of dividend policy on earnings quality.

Audit quality and earnings quality

It mentions the analysis of the corporation's financial reporting by highly qualified auditors. The work of preceding studies like (Parte-Esteban & García, 2014; Mousa & Desoky, 2019; Jessica, 2020) generate that the organizations reviewed by Big 4 have premium quality as compared to the companies assessed by non-Big 4 for the reason that they have extra abilities, understanding & financial proficiency. In contrast (Huguet & Gandía, 2016) establish no alteration amongst the quality of the companies inspected by "Big4 & non-Big4". Thus the proposed hypothesis is:

H5: Audit quality moderates the impact of dividend policy on earnings quality

Nomination committee and earnings quality

The process of evaluation of board of directors is done by the NC. So Osma and Noguer (2007) stated that the corporations having nomination groups have higher EQ and lesser EM and it is due to the reason that they designated the well experienced individuals who can lessen the manipulation & increase the quality. Accordingly hypothesis is:

H6: Nomination committee moderates the impact of dividend policy on earnings quality.

Remuneration committee & quality of earnings

The remuneration committee fixed the compensation of the members of board and hence Epps and Ismail (2009) found that the existence of compensation team reduces the manipulation & raises EQ. As team fixes the reward in accordance with the guidelines since no one can deploy the incomes for private assistances. As the literature found that the RC and EQ are interrelated so the following hypothesis is developed:

H7: Remuneration committee moderates the impact of dividend policy on earnings quality.

Control Variables

Mainly the researchers used the firm's size and its level of debt as control variables so this study also used these two main control variables.

Size of firms & earnings quality

The researches of (Mersni & Othman, 2016; He et al., 2017; Jessica, 2020) specified that greater corporations do additional manipulation & lower level of earnings quality for the reason that they need to present the upright economic state of corporations in market. Moreover (Parte-Esteban & García, 2014; Khanh & Nguyen, 2018) predicted negative linked among the companies' size and their quality of earnings.

Leverage and earnings quality

As studies of (González & García-Meca, 2014; Khanh & Nguyen, 2018) argued that extremely levered corporations have increases manipulation activities so as to acquire reduction on the obligation contracts thus organizations leverage is adversely linked with quality of the earnings of corporations. On the other hand (Huguet & Gandía, 2016; Jessica, 2020; Lin, Li, & Yang, 2006) elaborated that debt level of the companies have positive influence on quality of the earnings due to the fact that they face extra inspection from market.

METHODOLOGY

This study used the panel data methodology. The initial sample of the research comprised of 380 non-financial corporations listed on the Pakistan Stock Exchange (PSX). However, the companies in financial sectors were excluded because of their different financial characteristics (Salah & Jarboui, 2021).Whereas within the information extraction process most of the firms were avoided since of the inaccessibility of the specified information moreover some firms are excluded within the outlier's process so the final data comprises of 145 companies with 1450 firm year observation. The time span of the analysis comprises of ten years extending from 2010 to 2019. The information related to the relevant variables is collected from different means just like the Pakistan Stock Exchange website, investing.com, and companies' yearly reports and also from site of State Bank of Pakistan.

Measurement of Variables

Estimation of dependent variable

The explained variable of current analysis is quality of earnings. EQ has been surveyed by earning manipulation & in turn the EM is assessed by the highly utilized intermediary i.e. accruals mainly the discretionary. By looking into the literature, it is clear that value of accruals the discretionary are utilized for assessment earning manipulation & the quality of earnings (Davidson et al., 2005; Alves, 2014, Mousa & Desoky, 2019; Wiowo, 2019). A number of strategies have been utilized to calculate the DAC but Adjusted Jones Model (Dechow, Sloan, & Sweeney, 1995) is the foremost common and capable strategy to assess DAC, since it utilized cross sectional relapse which evacuate the survivorship inclination that emerges in specific time arrangement information (Tam & Thanh, 2019). Moreover, the "Modified Jones Model" eradicated the chances of mistake that the Jones (1991) brings into the estimation process of DAC when the discretion is applied over incomes or sales. Thus, the Dechow (1995) makes corrections within the Jones model by altering the income fluctuations with the account receivables changes, so the businesses couldn't boost the current period profit by the early acknowledgments of the incomes. Thus in this research effort, Modified Jones model (1995) is employed for the assessment of DAC. Firstly, Cash flow approach is utilized for the calculation of TAC as contrary to the approach related with balance sheet (Hribar & Collins, 2002). Therefore the total accrual is designed by subtracting earnings of the business from its operation cash flow.

$$TAC_{it} = \text{ Earningsit } - CFO_{it} \quad \longrightarrow \tag{1}$$

Then by placing the amounts of incomes and operations cash flows in the exceeding equation.1 the quantity of total accruals is estimated. After that "adjusted jones model (1995)" is used to calculate total accruals by their particular components & residuals. Equation is as taken after;

$$\frac{TAC_{it}}{TASS_{it-1}} = a\left(\frac{1}{TASS_{it-1}}\right) + b\frac{(\triangle REV - \triangle REC)}{TASS_{it-1}} + c\frac{PPE}{TASS_{it-1}} + \epsilon_{it} \quad \longrightarrow \tag{2}$$

In exceeding equation ii; total accruals is TACit, total assets lag is TASSit-1, change of revenue is REVit, change of receivables is RECit, , property, plant & equipment is PPEit .Thus setting the amounts of above mentioned constituents in formula (ii), the amounts of the coefficients is estimated. After that those values of coefficients are

utilized for taking the value of normal accruals. Hereafter to assess the DAC the normal accrual are minus from total accruals. Hence to estimate the DAC that is the explained variable the below mentioned formula is used:

$$DAC_{it} = TAC_{it} - NAC_{it} \quad \longrightarrow \tag{3}$$

Hence the value of EQ is calculated by the using the above mentioned formulas.

Estimation of explanatory, moderating & control variables

Explanatory variables of existing report are policy related with dividend while the moderating variables are board individuality, and CEO duality, size of panel, inspection quality, and meeting of panel, appointment committee and compensation committee. Hence in this research dividend is measured by utilizing equation; per share dividend divided by the prices of stock (Wibowo, 2019). Size of panel is measured by add up to number of persons in firm's board (Parte-Esteban & García, 2014; Waweru & Prot, 2018). Board independence is surveyed by the number of non-executives within the board isolated by total number of board individuals (Alves, 2014; Busirin et al., 2015). CEO duality is measured by utilizing dichotomous variable i.e. if the chairman is additionally the CEO of company at that point utilized the dummy variable 1 and in case, they are isolated at that point 0 (Milosevic et al., 2015). Audit feature is stately by usage of dichotomous variable i.e. put value 1 if audited by greater 4 otherwise 0 (Mousa & Desoky, 2019). Board assembly is evaluated by the overall number of gatherings conducted by the board individuals amid entirety year (Maglio, Rey, Agliata, & Lombardi, 2020). Compensation and designation committee is additionally measured by the utilizing the dichotomous variable i.e. a dummy variable 1 in case the committees show something else 0 (Epps & Ismail, 2009).

Consistent with the preceding studies this study used the size of firms (measured by logarithm of total sales) & their debt (total liabilities divided by total assets) as the control factor because assessment of the previous researches gives indication on the association amongst these control factors and earning quality (Klein, 2002; Jiang et al., 2008; Houqe et al., 2011; Mersni & Othman, 2016).

Table 1: Variables Detail

Variables	Nature	Abbreviations	Dimension	Variables used in literature
Earnings Quality	Explained	EQ	Estimated by Modified Jones Model(1995)	(Wibowo, 2019; Mousa & Desoky, 2019)
Dividend Payment	Explanatory	DP	Dividend per share/ stock prices	(Wibowo, 2019; Deng et al., 2017)
Board Size	Moderating	BS	Total number of associates in companies board	(Hashim , 2008;Mousa & Desoky, 2019)
Board Independence	Moderating	BI	Number of liberated administrators in board/ total board members	(Mousa & Desoky, 2019; Jessica, 2020)
CEO Duality	Moderating	CEOD	Dichotomous variable 1 if dual role exists or else 0.	(Xie et al., 2003; Saleem et al., 2016)
Audit Quality(Big 4)	Moderating	AQ	Put value 1 if company is inspected by Big4, otherwise 0.	(Epps & Ismail, 2009; Jessica, 2020)
Board Meeting	Moderating	BM	Total no. of panel meetings directed throughout year.	(González & García-Meca, 2014; Jessica, 2020)

Table 1 Continue....

Nomination Committee	Moderating	NC	If appointment team present then variable 1, otherwise 0.	(Epps & Ismail, 2009)
Remuneration Committee	Moderating	RC	Dichotomous variable 1 if compensation group present, otherwise 0.	(Osma & Noguer, 2007).
Firm's Leverage	Control	LEV	Total debt level to total asset	(Sawicki,2008; Mersni & Othman, 2016)
Size of firms	Control	FS	By taking logarithm of sales	(Abuzayed, 2013; Alves, 2014; Waweru & Nelson, 2019)

Econometric Model

$$DAC_{it} = \beta_o + \beta_1 DP_{it} + \beta_2 DP_{it} * BS_{it} + \beta_3 DP_{it} * BI_{it} + \beta_4 DP_{it} * BM_{it} + \beta_5 DP_{it} * D_1 + \beta_6 DP_{it} * D_2 + \beta_7 DP_{it} * D_3 + \beta_8 DP_{it} * D_4 + \beta_9 FS_{it} + \beta_{10} LEV_{it} + \in_{it} \quad (4)$$

Data Analysis Techniques

The various techniques were applied to analyze the results. Due to the non-normality issue in data, the log transformation is applied to data. Furthermore, this log transformation also removed the problem of heteroscedasticity. Descriptive statistics is utilized in the research. Furthermore correlation matrix is used for analysis of the connection among variables. However panel regression that is multiple regressions is also studied. Specifically Hausman test is useful tool for selection. Analysis of dichotomous factors also applied. Variance Inflation Factor (VIF) is the values that are mainly used for multicollinearity error among independept variables are also used in the research. The values in the table 2 depict non-multicollinearity due to the fact that the figures are less than 10. For autocorrelation the Durbin Watson is estimated (range 1.5 to 2.5). Softwares like the stata & eviews are implemented for analysis.

Multicollinearity

Table 2: Multicollinearity Test

Variables of current study	Variance inflation factor values
Board size	2.143
Dividend policy	1.317
Board meetings	2.230
Board independence	1.183
CEO Duality	1.238
Audit Quality	1.178
Remuneration Committee	1.459
Nomination Committee	1.551
Firm size	1.167
Leverage	2.153

Note: VIF value < 10 show no collinearity between the variables.

Hausman test

Furthermore for the selection of the model the test of Hausman is used and the statistics suggested that this study use the fixed effect model as depicted by the significant p value in table 3.

Table 3: Hausman Test Statistics

Hausman Statistics		
	Chi-sqr value	Probability val.
Model(1)	39.001	0.0021*

Breusch-pagan-godfrey test

Additionally to analyze the heteroscedasticity among the residuals the test name Breusch test is used. And the table 4 explained (sig p. value) that the issue exist so the white correction test is also applies for removal of the issue.

Table 4: Breusch Test

Breusch-Pagan Figures		
	Observation* *R*-sqr	Chi-sqr
Model (1)	29.001	0.0012*

RESULTS AND DISCUSSION

This chapter reports the analysis of data as well as its discussion in detail. Furthermore descriptive statistics, Pearson correlation analysis, fixed effect regression model are used to present the detailed discussion on results.

Descriptive Statistics

The descriptive measurements of all the variables i.e. explained, explanatory, moderating & control factors of the current report are depicted in table 5. Whereas the descriptive insights of dichotomous factors that are the moderating variables in this studies is depicted in table 7. The skewness values are analyzed for the normality of the data which showed that the data is normal because the values of skewness are closed to 0. But firstly the data was not normally distributed because the skewness values were high. So the log transformation was applied on data to make it normal. Hence in the mentioned table the normalized values of the data are presented.

Table 5 shows the descriptive statistics of all 145 non-financial companies from year 2010 to 2019. The average dividend payments by corporation are 0.059 and the standard deviation is 0.115 while the skewness is -0.216. On average, the discretionary accruals value is 0.176 and its deviation from mean is 0.278 and the skewness value is -0.955. Furthermore the meetings of panel were held averagely 5 times in year and minimally 2 times and its skewness is 1.235. Companies size of the board having average members 7 while maximum persons 12 in accordance with skewness value of 1.247. There deviation from mean is 1.541 and 1.268 accordingly. The independence of the panel contains the skewness value 0.752 along with the deviation from means have 0.115 value. Average number of independent associates in board is 0.215 and maximum 0.645 and minimum 0.150. The firm size skewness is 0.015 while its standard deviation is 0.655 and average size is 6.785 with maximum size of 8.515 and minimum value 4.555. The debt of the firms has skewness value 0.386 and deviation is 0.145. The mean debt is 0.895. The maximum level of debt is 1.355 and the minimum amount is 0.253.

Table 5: Descriptive Analysis

Variables	Skewness	Average Max.	Min.	St.deviation	Observation	
DP	-0.216	0.059	2.369	0.012	0.115	1450
DAC	-0.955	0.176	0.863	-0.255	0.278	1450
BM	1.235	5.153	12.000	2.000	1.541	1450
BS	1.247	7.943	12.000	7.000	1.268	1450
BI	0.752	0.215	0.645	0.150	0.115	1450
FS	0.015	6.785	8.515	4.555	0.655	1450
LEV	0.386	0.895	1.355	0.253	0.145	1450

Dichotomous Variables

Besides the table 7 illustrates the recurrence of the dichotomous factors that as it were take the value of 0 or 1. Measurements appeared that the 84.7% of the selected companies have isolated the part of chairman and CEO

whereas CEO duality exists as it were in 15.3% test where the responsibility of chairman and CEO is borne by same individual. Considering the quality of auditors the recurrence appeared that the 54.8% of the chosen test is examined by the Big4 whereas the 45.2% of the data is reviewed by the non Big4. Appointment committee is exists within the 43.2% of the selected companies whereas 56.8% test has no designation committee. Besides 72.7% of the data has the compensation committee whereas 27.3% of the test has no compensation committee.

Table 6: Dummy Variables

Variables	Observations	Frequency of 0	Frequency of 1
RC	1450	395(27.3%)	1055(72.7%)
CEOD	1450	1229(84.7%)	221(15.3%)
AQ	1450	655(45.2%)	795(54.8%)
NC	1450	824(56.8%)	626(43.2%)

Pearson Correlation Matrix

Table 7: Correlation Analysis

Variables	DAC	DP	BS	BI	BM	CEOD	AQ	NC	RC	FS	LEV
DAC	1										
DP	-0.0565	1									
BS	0.1034	-0.0961	1								
BI	0.0234	0.0952	-0.0812	1							
BM	0.1284	0.0142	0.0865	0.1132	1						
CEOD	0.1055	-0.0926	0.1882	0.0962	0.0986	1					
AQ	-0.0246	0.0453	-0.0942	-0.0258	-0.0615	-0.1753	1				
NC	0.1175	-0.0851	0.2042	-0.0432	0.0615	0.2018	-0.0614	1			
RC	-0.0187	-0.2043	0.0857	-0.02876	0.0300	0.0450	-0.0956	0.0827	1		
FS	0.0542	-0.0211	0.1811	0.0257	0.0507	0.2558	0.0814	0.1882	0.1055	1	
LEV	0.0351	0.0453	-0.0557	-0.0787	-0.0831	-0.1736	0.0772	-0.1327	-0.0650	-0.0328	1

Table 7 outlines the outcomes of Pearson relationship matrix that clarify connection between various variables of this research effort. So the correlations exist among the accruals mainly the discretionary which is taken as the substitute for earnings quality and all the other factors i.e. dividend, and the moderating variables that are the characteristics of corporate governance & also the control variables firm size and the debt ratio. The table explained that the dividend has negative affiliation with the DAC same as (He et al., 2017). Size of the board has positive affiliation with accruals in accordance with the results of (Waweru & Prot, 2018). Board individuality appeared to have positive link with the accruals. The meetings of the panel also have positive connection with the discretionary values. CEO duality has positive linked with the accruals (Hashim & Devi, 2008), whereas the review quality (Big4) is found to have a noteworthy negative connection with the discretionary values (Huguet & Gandía, 2016). Appointing committee shown to have positive relation with DAC whereas compensation committee has negative affiliation with the DAC. Size of the firm is significantly related with DAC (Mersni & Othman, 2016), whereas the debt too has positive connection with the DAC. Moreover, the overall results also shown that the correlation amongst the factors isn't appeared to be risky. Because the correlation matrix does not report the higher association between the variables which indicate that the issue of multicollinearity does not exist in the data.

Regression Results

Panel data is used in this study due to the nature of data. The regression results are calculated by using OLS regression technique. Furthermore the explained variable of the study is earning quality that is measured by discretionary accruals while the explanatory variable is the dividend policy and the moderating variables are the features of corporate governance while control factor are leverage & firm's size. So the fixed effect regression is applied on the variables to check the moderating effect of CG characteristics and results are stated below in table 8.

Results of fixed effect regression model

Table 8: Fixed Effect Regression Model

Variables	Coefficient	*t*-Statistic	Prob.
C	3.690859	11.19625	0.0000
DP	-0.189294	-1.38427	0.1665
DBS	0.33866	4.38224	0.0002
DBI	0.49310	0.60616	0.5445
DBM	0.06193	3.28938	0.0011
DCEOD	0.21686	7.11442	0.0042
DAQ	-1.15801	-3.58957	0.0003
DNC	0.17916	0.22101	0.8251
DRC	-0.70550	-1.58412	0.2273
FS	0.21907	3.67543	0.0038
LEV	0.14771	3.97811	0.0009
Adjusted *R*- squared	0.7632	Durbin Watson stat	1.631
F-statistic	33.475	Prob (*F*-statistic)	0.000

Significant level: 0.01, 0.05.

As in table 8, explained variable is the discretionary accrual that's the substitute for EQ whereas the dividend is the explanatory variable while the characteristics of the CG are the moderating variables whereas debt & size are control factors. So, findings demonstrate that the p - value of dividend is 0.166 which is larger than 0.05 with coefficient esteem of -1.384. So, there exists non- significant effect of policy of dividends on EM. But course of connection is negative that's steady with Pearson correlations results and shown that insignificant negative connection exists between the DP and the accruals. These outcomes are related with work of (Mousa & Desoky, 2019) who too found the non-sig link among the EQ & dividends. Despite the fact the outcomes are uneven with judgments of (Tong & Miao, 2011; Deng et al., 2017) who support the sig positive effect of DP on EQ. They strengthened the argument that the companies that pay dividend have higher dividend as compared to others because those firms are upheld by solid cash premise and the higher profit. Subsequently this study is consistent with outcomes of the work of (Grullon et al., 2005) who found no link among the dividend and EQ.

The board size is used as moderating variable which is generated as an interaction term with dividend policy to check its moderation effect on the DP and earnings quality relationship. The p-value of interaction term DBS in this table is 0.00 which is less than 0.05 along with the coefficient value of 0.338, which revealed that board size moderates positively the association between dividend policy and earning management while negatively the earnings quality. So these results are in line with the study of Salah and Jarboui (2021), who also found the positive moderating impact of BS on DP and EM relationship and favors smaller board. Also the researchers (Haniffa et al., 2006; Saleem et al., 2016) support the view that with bigger board manipulation is more since of their less effectiveness in observing the administration activities and recognizing the control that primarily happened in DAC and in turn reduces quality of earnings. Moreover, it is demonstrated that the littler board is more viable in compelling the EM by diminishing the values of DAC. These outcomes are varying with (Waweru & Prot, 2018) who establish no connection amongst the size of panel and quality. Thus H1 is accepted on the basis of the exceeding outcomes, so the board size positively moderates the relationship between dividend policy ad earnings quality.

The BI is also moderating variable that is generated as an interaction term with dividend policy. The interaction term DBI has a p-value of 0.544 that is greater than 0.05 with the coefficient values 0.493, which suggested that board independence cannot moderate the impact of dividend policy on earnings quality. It is consistent with work of (Hashim & Devi, 2008; Houqe et al., 2011) who recommend that the free executives have lack of ability & information related to business, additionally they are not involved in day by day activities of entity so they cannot distinguish the manipulation. Thus H2 is rejected, since the BI has no moderation impact on dividend policy and earnings quality relationship.

Another moderating variable is board meeting that is also generated as an interaction term with dividend policy.

The p-value of DBM is 0.001 that is significant with the coefficient value of 0.061 which demonstrated that board meeting positively moderates that association between dividend policy and earnings management. It supports the analysis of (Gulzar, 2011) who found that the board gatherings cannot distinguish the EM. It is different with the outcomes of (González & García-Meca, 2014) that support negative impact of board assembly on EM and suggested that with more regular board gatherings the manipulation has been simply visible and helps in reducing figures of accruals that in turn create the higher quality. Thus, the H3 is acknowledged, as the BM negatively moderates the impact of dividend policy on earnings quality.

The interaction term DCEO has the probability value of 0.004 with the coefficient of 0.216 which demonstrates the CEO duality positively moderates the impact of dividend policy on earnings management whereas negative moderation impact on EQ. These outcomes are correlated with the findings of (Sarkar et al., 2008; Gulzar, 2011) who supported the view that the firms having duality part have greater manipulation and lower quality. Since the CEO is additionally held capable for the performance of the company before the shareholders so he controls the profit by expanding the accruals for individual benefits and in turn lessens the quality. While it is inconsistent with the findings of Salah and Jarboui (2021), who suggested that CEO duality has no moderation effect on DP and EQ and duality role has no concern with the efficiency of firms. Hence H4 is accepted, since CEO duality has negatively moderates the association between dividend policy and earnings quality.

The *p*-value of auditor's quality is 0.00 and is less than 0.05 along with coefficient of -1.158 which revealed that audit quality has negative moderation effect on dividend policy and earning management. It supports the view of (Parte-Esteban & García, 2014; Jessica, 2020) who suggested that as the firms reviewed by Big4 then the quality of earnings is higher in such firms because big 4 has more monetary skill and information so they can easily identify the manipulation. As manipulations are mainly done in the accruals parts so big 4 can notice the activities of the firm's management and restrict them from misrepresentations and subsequently improve the earnings quality. However it is not consistent with the work of (Salah & Jarboui, 2021) who found that audit quality has no moderation impact. Consequently, the H5 is accepted, because the audit feature positively moderates the impact of dividend policy on earnings quality.

The *p*-value of moderating variable nomination committee is 0.85 which is greater than 0.05 and also it is insignificant with coefficient value 0.179 which revealed that NC cannot moderates the impact of dividend policy on earnings quality . So, this finding does not support the view of Osma and Noguer (2007) who suggested that the presence of NC committee select the well capable and proficient individuals who have the expertise of business so they can decrease the manipulation and raises the quality. Thus H6 is rejected, since nomination committee has no moderation impact on dividend policy and earnings quality relationship.

The interaction term compensation committee has the probability value 0.227 which is more than 0.05 beside the coefficient of -0.705 and shown no moderation impact of remuneration committee. It is inconsistent with the suggestion of Epps and Ismail (2009) who recommend that firms having compensation committee have lower values of accruals and more EQ since the committee settle the remuneration on the premise of rules of the company which in turn moderate the clashes and no one can control the profit for individual advantage. From the over comes about the H7 is rejected because the remuneration committee cannot moderates the linkage between the dividend policy and earnings quality.

In view of the probability value of control factors that's firm size, appears that it is 0.003 which is less than 0.05 with the coefficient of 0.219 and found the sig positive affect of firm's size on manipulation of earnings and negative influence of FS on EQ. Consistent with findings of (Chaharsoughi & Rahman, 2013; Jessica, 2020) and recommeded that the bigger firms increase the accruals values and do more manipulation since they want to display the greater financial condition of the firm within the advertise and needs to attract more speculator so in doing so they control the profit by making changes within the accruals and in return the earning quality is affected. Whereas it is inconsistent with the work of a few analysts who found negative relationship between the firm size & quality (Fodio et al., 2013).

The further control variable debt has p-value of 0.00 with coefficient of 0.147. And outcomes showed that there exists noteworthy positive affect of debt on manipulation whereas critical negative affect on quality. It supports the findings of (Waweru & Riro, 2013) who found that the exceedingly levered firms do more manipulation of the profit since they have pressure from the lenders and they need to induce easing on their obligation agreements so they make alterations within the accruals values consequently controlling the quality and lessens the EQ.

So overall it is suggested that all the users of financial statements must consider the dividend policy and corporate governance mechanism before making decisions related to the earnings quality. Moreover, the R-squared value of this regression model is 76% which shown that the 76% variety in quality of earnings is elucidated by policies of dividend , CEO duality, size of panel, review quality, board freedom, assignment committee, meetings of board panel, compensation committee, firm's size & debt. The value of Durbin-Watson is 1.63 which depicts no issue of autocorrelation in this data. The 33% F-value recommended that the in general the model of the study is significant.

CONCLUSION

This study analyzed the moderation impact of corporate governance attributes on the dividend policy association with earnings quality for a sample of 145 non-financial listed companies of PSX from year 2010 to 2019. As the good corporate governance and dividends are both the signs of firms god financial conditions and both are related with EQ but in Pakistani context dividend showed no relation with EQ. So this study tries to explore the moderating effect of the CG features on impact of the dividend policy on EQ. Thus the findings showed that the board size has positive moderation impact on dividend policy and earnings quality relationship. So smaller board size is more favorable for higher EQ. Board independence and meetings has no moderation impact. Moreover CEO duality negatively moderates the impact of DP on EQ while audit quality positively moderates the relationship. So Big 4 is highly recommended for higher earnings quality. Furthermore the nomination committee and the remuneration committee have no moderation impact on the association between dividend policy and the earnings quality. So overall it is suggested that all the users of financial statements must consider the dividend policy and corporate governance mechanism before making decisions related to the earnings quality

LIMITATIONS

This study also has some limitations. Although the current study contribute in undestanding the association among dividend policy, characteristics of the CG and earning quality. However still the outcomes could not be widespread in other nations that have changed culture and trade environmennt than Pakistan. Also this study only consider one alternative for the dimensioning the dividend. So other proxies could be used. Also the sample is limited because of the unavailabilty of the required data.

FUTURE RECOMMENDATIONS

It is mentioned to do the analogous study in the economies that have comparable commerce settings like Pakistan. As well as the dividend can be measured by means of numerous other alternatives i.e., paying status of dividend, size, changes & persistence of dividend for further robust outcomes. It is additionally recommended that upcoming researches can prolong the time outline & incresaes the size of sample for further survey. Furthermore many other alternatives can be utilized for capturing the earnings quality phenomena of the corporations e.g., timeliness, persistence, smoothness and response coefficient of earnings.

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