



Earnings Management and Dividend Policy with Moderating Role of Corporate Governance: Evidence from Pakistani Listed Companies

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Abstract: This is reported that corporate governance (CG) is a mechanism which control, manage and direct organizations to meet long-term strategies and sustainability (Njoku, 2017). However, this is reported in previous literature that managers manipulate earnings, which in turn affect the distribution of dividend. Therefore, in this study investigated the effect of the earnings management (EM) on dividend policy (DP) with moderating role of CG. Moreover, also used leverage level, operating profit margin and current ratio as control variables. Panel data analysis techniques are used due to panel nature of the data. For this purpose, selected manufacturing sector listed firms on Pakistan Stock Exchange during 2017-22. Results of this study conclude that EM is insignificantly effect the DP, while independent director (CG indicator) is positively and significantly affected the DP. It shows that firms should hire more independent director in boards to control earnings manipulation practices of management. Finally revealed that independent director does not moderated the relationship between DP and EM. Hence, this is recommended that to strengthen the governance system to attract investors and promote the business in Pakistani market.

Keywords: Earnings Management, Dividend Policy, Corporate Governance.

1. Introduction

The basic goal of businesses operating in the market is to maximize shareholder wealth. Businesses use various techniques to build a strong competitive edge and guarantee sustainable growth to achieve their goals. The effective financial management, capital structure choices, investment principles, and dividend principles are some of these tools (Baker et al., 2007). By deciding how profits are shared between shareholders, dividend policy play an important role to change the financial landscape of businesses. The decision making process for allocating profit to stockholders in the form of dividends is termed as DP (Frankfurter & Wood, 2002). It stands for the structure by which businesses inform the market about their financial performance and potential. There are numerous DP which include: hybrid policy, steady DP, constant payout ratio policy, and residual DP (Baker et al., 2007). Each policy has different effects on a company's cash flows, stock prices, and investor opinion. DP seems to be a crucial issue in business as it affects both the interests of the company (Shubita, 2020).

"The market price of a firm will drop when dividend falls as stockholders vend their stocks in the expectancy of difficult times for the firm," (Miller & Rock, 1985). The circulation plan stipulates the amount of money that must be divided among shareholders as a dividend or stock repurchase. Therefore, a dividend distribution happens when

a corporation gives its shareholders a reward that exceeds the value of the company's stock. Companies take these steps to reward long term shareholders for their support and to attract new investors. Also Miller and Modigliani (1961) states that firm's value cannot be raised by altering its DP. Although there is no such thing as a perfect capital market in reality. Agency theory states that dividend payments are seen as a replacement for direct oversight of businesses by significant shareholders in an effort to curb over investment issues (Easterbrook, 1984 & Jensen, 1986). Moreover, Jensen (1986) stated that corporate insiders are motivated to direct resources away from activities that benefit outside shareholders in favor of those that profit them only. On the other hand, the clientele effect describes that companies choose their DP by the clients they desire to work with (Litzenberger & Ramasawmy, 1979). Because they make less taxes, older investors are more likely to hold high dividend equities (Pettit, 1977). We refer to it as the tax clientele effect in this instance. On the other hand, the signaling theory of dividends states that managers use the DP to share information about the company's potential profitability (Bhattacharya, 1979; Miller & Rock, 1985; John & Williams, 1985).

To give investors and lenders a more favorable financial picture, businesses may use EM techniques. However, decisions about DP could be affected by EM. In order to accomplish specific financial goals or objectives businesses strategically manipulate their financial accounts. This practice is known as EM (Healy & Wahlen, 1999). It entails the tactical application of accruals, revenue recognition, and other accounting techniques to affect reported results. As per Dechow et al. (2010), companies use EM for a variety of reasons, including satisfying analyst expectations, preventing debt covenant violations, or raising executive remuneration. Financial scholars have been interested in the relationship between EM and DP. In order to indicate their financial health and draw in investors, companies that use EM to artificially inflate their reported earnings may be those who will probably pay their shareholders bigger dividends (Beneish & Press, 2012). Conversely, EM can also result in lower payouts. Companies may manipulate results to artificially inflate their short term financial performance, but this manipulation could not accurately reflect the company's long term economic performance. As a result companies might adopt a more moderate DP to match their actual capacity for creating profits (Dechow & Skinner, 2000). It is commonly accepted that one of the primary determinants of business behavior and performance is CG, which includes the structures and procedures used to direct and control corporations (Shleifer & Vishny, 1997). Transparency, accountability, and the defense of shareholders' interests all depend on effective CG systems. As both DP and EM have stronger effect on firm value, CG is assumed to have a moderating role in determining how they interact. When the moderating impact of CG is taken into account, the relationship between EM and DP becomes even more complicated. A firm's decision making process is greatly influenced by CG systems such as the boards size (BS), its independence (BI), the CEO's dual role, and the audit quality (Yermack, 1996). They are made to guarantee openness, responsibility, and the defense of shareholder interests. The negative effects of EM on DP may be lessen by effective CG practices.

Although several studies have been done previously on the mentioned topics but limited study has been done on the influence of EM on DP in the context of Pakistani listed non-financial enterprises, particularly in the area of the moderating effect of CG no study has been done yet according to my knowledge. The corporate environment in Pakistan is diverse, with unique ownership structures, governing bodies, and cultural values. In light of this, a thorough investigation of the relationship between EM, DP, and CG is necessary. French context likewise covers this topic and comes to the following conclusion: First, The influence of EM on DP appears to be positively affected by the ownership concentration. Second, companies with a small number of directors on board are more likely to engage in EM to minimize dividend payout ratio (Olfa & Anis, 2021). As with the French CG mechanisms, the market condition is also different from Pakistan. The study findings will help policymakers, regulators, and investors by teaching them how to enhance financial transparency, corporate governance practices, and dividend policies in the Pakistani business sector to investigate the impact of EM on DP and moderating role of CG in listed non-financial companies in Pakistan.

2. Literature Review

Corporate finance mainly deals three main activities; financing, investment, and dividend related decisions (Amar et al. (2018) & Kamińska-Jówiak (2015)). The EM and DP are important components of corporate finance that deals with how businesses make decisions.

2.1 Dividend Policy

Dividend policies are a set of principle or guidelines that a corporation should follow or regularize in order to

provide dividends to its shareholders (Nissim & Ziv, 2001). A company's management should decide the percentage of its profits they will distribute as dividends and how much should be kept on hand for potential future investment needs. This is due to the fact that it considers how profits are allocated between dividends to shareholders and in retained earnings (Ekanayaka & Wijesinghe, 2021). Investors like dividend payments, but the company will be forced to pursue growth opportunities if it continues to pay dividends (Moghri & Galogah, 2013). In recent years, the concept of "dividend policy" drawn the attention of researchers and economists and has been the subject of in-depth theoretical analysis and empirical research (e.g., Chen & Gavigous, 2016; Crockett & Friend, 1988; Frankfurter & Wood, 2002; Hail et al., 2014; Linter, 1956; Miller & Modigliani, 1963; Myers, 1990; Officer, 1990; Shiller, 1986; Twite, 2001; Wang, 2016).

As Baker and Powell (1999) states, dividend payments will show a company's sound financial condition. The stockholders will experience discomfort if DP's are altered more frequently (Aurangzeb & Dilawer, 2012). If this is the case, it will indicate to the market that the company is not financially stable and send a negative message. Signaling theory thus accurately captures DP (Fama, 1991) which states that a rise in dividend payments indicates positive news whereas a decline in payouts indicates negative news. Dividend payments could serve as a communication tool for investors (Brav et al., 2005). On the other hand, Deng et al. (2017) states that the informational content would be diminished if dividend payments were provided for reasons other than informational goals. These elements weaken the correlation between dividends and earnings quality as well. The "information contents of dividend hypothesis" states, dividend payments substantially show information regarding businesses' projected profitability (Nguyen & Bui, 2019).

2.2 Earnings Management

According to Haga et al. (2002), EM is the term used to describe managers' efforts to falsify earnings in financial reports by using a number of accounting procedures. Financial reports that a company makes public are the primary source of data on its earnings, losses, operational risks, and relations with stockholders (Trinh et al., 2022). Additionally, Bushman & Indejejian (1990); Carpenter & Remmers (2001); Sloan (1993); and Sloan (2001) all confirms that managers significantly affect reported earnings. For instance, Verma (2012) has investigated a number of reasons why management might falsify reported results and found that the management manipulate reported earnings for a variety of reasons. These include receiving personal benefits from management, having information asymmetry, receiving performance based rewards, feeling pressure to meet goals, competing in the market, etc. As per previous studies, managers would change structuring or timing of investments, transactions and resource allocation in order to boost EM in the present. Accelerated sales, schedule adjustments, postponed development costs, and other tactics are a few examples of these changes (Dechow & Skinner, 2000). It directly affects cash flow and operational activity. Moreover, Roychowdhury (2006) has defined the most traditional definition of EM with regard to actual business operations. *"It is an enterprise's economic activities which managers do in order to mislead the users of information and build the correct deviation from normal business operations."* Moreover, this study is based on signaling and agency theories.

2.3 Dividend Policy and Earnings Management

Previous studies have been studied the relationship between EM techniques and DP. It is noticed that EM may have an impact on the DP if corporations use tactics to smooth results and the quantity of profit achieved serves as the basis for dividend distribution. In 2012, Aurangzeb & Dilawer conducted a study on the effects of EM on the dividend distribution policy in the Pakistani textile industry, taking into account that the chosen sector is the nation's foundational industry. In the same context, Haider et al. (2012) looked into the impact of discretionary accruals on DP from 2005 to 2009. They showed a weak correlation between these variables. According to the study, EM has an insignificant effect on the textile industry's DP. While according to Ahmed et al.'s (2018) analysis of Pakistan's four most important industries, different industries have different relationships between EM and DP. The findings of the cement and fertilizer sectors, which discovered a negative link between DPS and P/E ratios confirmed the conclusions of Aurangzeb & Dilawer's (2012) study in the textile industry. The research also revealed a favorable correlation between DPS and P/E ratio in the food, oil and gas sectors, which is in contradiction to the findings of Saleem and Alifiah's (2017) study in the oil and gas sector. Given how distinct one industry's nature is from the others, the study also concludes that the relationship between industries may not be consistent. Researchers like Sun & Rath (2009); Ashari et al. (2012) also examined how the effects of EM differs by industry to industry.

Also in 2013, Moghri and Galogah looked at the effects of EM on DP. 140 businesses from the Tehran Stock Exchange's listing period of 2006 to 2011 made up the sample. They discovered that these organizations use discretionary accruals because their management desired to declare more dividends than other businesses, which led them to the conclusion that there is a positive and significant correlation. Additionally, Savov (2006) looked at how EM is set to reclaim the association that focused on corporate reporting activities, speculation, and dividend declaration. According to his research, he took a sample of a German company and came to the following conclusion: "Those firms whose investment is in high portion as compared to low investment firms are tend to report or record more in discretionary accruals in their earning rather than tend to record it is small and low investment firm". Additionally, it was shown that dividend payments were negatively related to both of these high and low investment enterprises. Nevertheless, he found that if a company's worth was exaggerated, there was a chance that this would make its EM more exposed to long-term profitability. Furthermore, in sample companies from the Nigerian market, the connection between discretionary accruals and DP was examined by Monsuru & Adetunji (2014). They showed that DP and discretionary accrual had a negative relationship. Additionally, it was observed that the EM is strongly correlated to the share announcement of certain businesses. They added that the outcome might be a result of sound CG techniques incorporated into their observed regulations.

2.4 Corporate Governance

CG is an effective framework for monitoring firm rules, regulations, and control, according to Keasey and Wright (1993), which permits a variety of internal and external procedures to achieve the desired organization's goals. According to Gillan (2006), CG mechanisms has two types: internal mechanisms and external mechanisms. One example of an external process is the environment in which businesses function. Other examples include the social and political context, as well as the laws and rules that governments and corporations must abide by. In contrast, internal mechanisms are defined as boards of directors, management, shareholders, debt holders, workers, suppliers, and clients. In other terms, CG is a set of instruments used to make sure firms protect the interests of shareholders. Agency theory argues that shareholders and company management frequently have conflicting interests (Jensen & Meckling, 1976). While Thenmozhi & Sasidharan (2020), reports that having more independent directors on boards support the preservation of minority shareholders' interests and boost business performance and prevent agency conflicts.

2.5 Board Independence

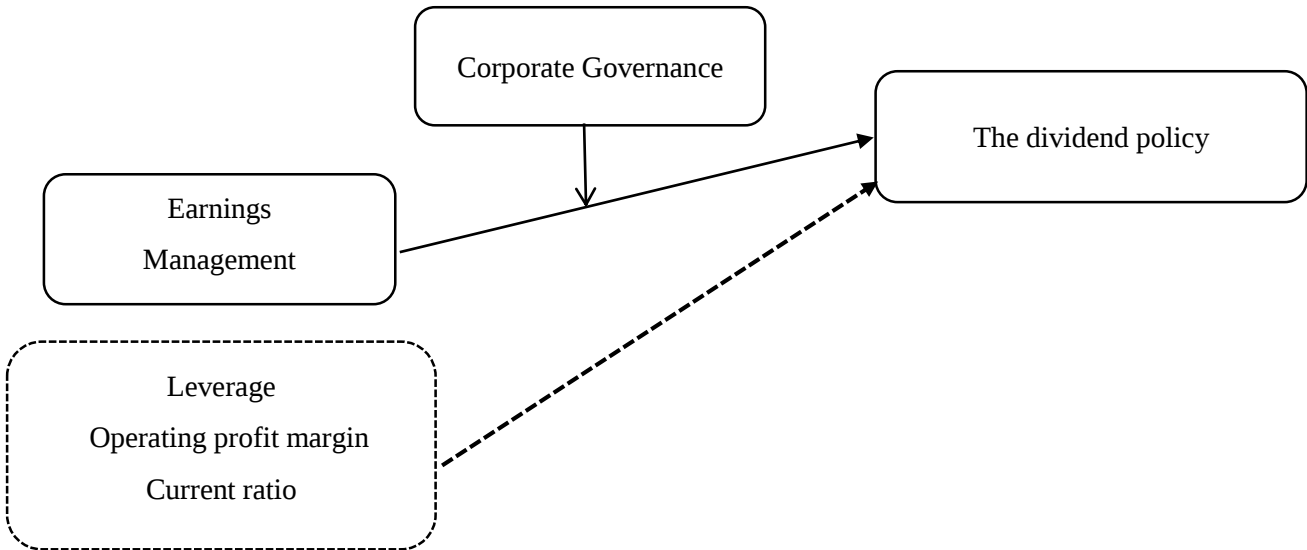
According to CG literature, transparency and disclosure of annual reports are usually replaced with independence. In order to improve management oversight and raise the organization's value, it has also frequently been urged that there should be more outside board members than owners (Cuomo & Zattoni 2010; Ferraz et al. 2011). According to Cheng & Courtenay (2006), there is a direct connection between the level of BI and the quality of information that companies disclose. While Cheng & Courtenay (2006), Karamanou & Vafeas (2005), and Willekens et al. (2006) also reports that a higher level of BI offers more control over the development of company activities and a better defense of the issue of information as a mechanism to carry out processes of accountability to various groups of business interest, and also explained that external directors are not connected to the organizations management. Additionally, a number of prior studies have provided empirical evidence on the topic impact of external directors on the prevention of EM, demonstrating that having more external directors will lead to more financial information being released by companies that is of higher quality, dropping the likelihood of E.M. (Bradbury et al. 2006; Davidson et al. 2005; Garca & Gill, 2007).

2.6 Moderating Role of Corporate Governance on Dividend Policy and Earnings Management

Halviani & Sisdyani (2014) looked at the moderating impact of CG on the return on assets and dividend payout ratio of real estate firms between 2009 and 2012. The combination of management ownership, institutional ownership, and independent commissioners provides an explanation for the Good CG variable. According to the study, there is an association between strong CG, dividend payout ratio, and return on assets. Additionally, effective CG practices enhances the impact of ROA on the dividend payout ratio. The study by Setiawan and Lian (2013) examined the effects of CG, company size, profitability, and growth, as well as DP, between 2004 and 2006. The Transparency Disclosure Index (TDI), used in this inquiry, is used to measure CG. According to this study, CG has a detrimental effect on DP but has a beneficial influence on business growth and profitability. Its DP is unaffected by the company's size. In addition, Jiraporn et al. (2008) used the Gompers et al. (2003) governance

index to research how CG influences EM actions. According to the absolute value of discretionary accruals determined using the modified Jones model, 1991, they found a strong and negative association between CG and EM. The aforementioned studies with contradictory results having positive or negative association between DP and EM and the moderating role of CG drives the choice to investigate both the link between EM and DP as well as how CG affects this relationship.

2.7 Conceptual Framework



3. Research Methodology

This study used a quantitative research technique to examine the effect of EM on DP. The study's population consists of all non-financial companies listed on the PSX. While the Pakistan Stock Exchange (PSX) listed companies in the manufacturing sector is used as a sample. For a five-year period (2017-2022), data is taken from annual reports.

3.1 Variables of the Study

The dependent variable, which Jabbouri (2016) and Salah (2022) both used, is DP. The DP is equal to the total cash dividends divided by the total sales for the relevant period (He et al., 2017). EM is used as an independent variable, recent research have mostly categorized EM into two categories: accruals and real EM, as identified by Roychowdhury (2006). EM can occur through the manipulation of cash flows or by exerting influence on changes in working capital requirements, depreciation, and other estimated charges and income. In this study we studied accrual based EM. This study used a proxy of modified Jones model for AEM which was already used by Dechow et al., (1995). The mathematical expression of MJM is discussed below.

$$TAit = \alpha 0 + \alpha 1(1/A_{it-1}) + \alpha 2 (\Delta SALESit - \Delta RECit/A_{it-1}) + \alpha 3 (PPEit/A_{it-1}) + \epsilon it$$

The moderating variable used in this study is CG. CG refers to the mechanisms, rules, and regulations by which firms are controlled and directed. Key elements include the board structure, board diversity, ownership concentration, executive compensation and board independence (Gompers et al., 2003). While the proxy used to measure CG is IndepDir. According to Suriawinata & Correia (2019), CG measures board independence by employing the percentage of independent directors on board.

Besides dependent, independent and moderating variables like leverage, operating profit margin (OPM), and current ratios (CR) are taken as a control variables. Leverage is a financial ratio that indicates the extent to which a company took debt to finance its day to day operations (Rajan et al., 1995). The firm leverage level is defined as the total debt to total assets ratio (Brealey et al., 2020). OPM is a profitability ratio that measures the percentage of a

company's revenue is left over after paying for its variable costs of production (Brigham& Ehrhardt, 2013). OPM is calculated from income statement of the firms. While Wild et al., 2020 defined OPM as the amount of operating profit that is divided by sales volume. The CR is the liquidity ratio that measures the ability of a firm to pay its short term debts (Penman, 2013). The current ratio is calculated by dividing companies short-term assets to short-term liabilities (Brigham & Houston, 2019).

3.2 Data Analysis Techniques

According to Mendenhall and Sincich (2007), descriptive statistics deals with the examination of data in order to meaningfully characterize and explain the nature of that data. This includes measures of central tendency like the mean, median, and mode as well as analyses of variation like the range, variance, and standard deviation. By using descriptive statistics, it is possible to identify patterns and trends in the data as well as any outliers or unusual results. Correlation analysis is a method through which statistical relationship between two or more variables is examined (Field, 2009). This procedure involves calculating a correlation coefficient which value ranges from -1 to +1. +1 indicates that variables has a perfect positive connection, -1 has a perfect negative correlation while 0 means there is no correlation. In this study the relationship between EM and DP as well as the moderating impact of CG is examined.

3.3 Regression Analysis

Regression analysis is a statistical method through which the relationship between one or more independent variables and a dependent variable is analyzed (Gujarati, 2003). Based on the best fit of the data, a linear equation's parameters are estimated. This equation represents the relationship between the variables. Using the equation and the values of the independent variables, predictions can then be made for the dependent variable.

Regression model estimation frequently uses the Ordinary Least Squares (OLS) method (Wooldridge, 2010, p. 17). The validity of the inferences made from the analysis may be impacted by violations of these assumptions since they may result in inaccurate or biased estimations of the regression coefficients (Hair et al., 2010). The methodology assumes the following essential properties of the model and data:

Normality, serial Independence, Homoskedasticity and No multicollinearity .

3.4 Empirical Model

$$DPO_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 IndepDir_{it} + \beta_3 LEV_{it} + \beta_4 OPM_{it} + \beta_5 CR_{it} + \epsilon_{it} \dots 1$$

For moderating effect

$$DPO_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 IndepDir_{it} + \beta_3 (TA_{it} * IndepDir_{it}) + \beta_4 LEV_{it} + \beta_5 OPM_{it} + \beta_6 CR_{it} + \epsilon_{it} \dots 2$$

Where; DPO_{it} is the dividend payout ratio used for DP, TA_{it} is total accruals used for EM as a proxy; IndepDir_{it} is the number of independent directors used as a proxy for corporate governance; LEV_{it} (leverage), OPM_{it} (operating profit margin) and CR_{it} (current ratio) are control variables and ϵ_{it} is error term.

3.5 Panel Data Analysis

Analysis of panel data is used in this study. With the help of repeated observations of large enough cross-sections and short time periods, panel data analysis enables the researcher to examine the dynamics of change. In ways that would be difficult if only one of these two dimensions were used, data quality and quantity can be more accurate when time series and cross-sections are combined (Baltagi, 1995; Gujarati, 2003). According to Balian (1982) and Habbash (2010), research that do not follow the assumptions of simple regression should not use parametric tests. Therefore, Analyzing data involves using non-parametric tests. Non-parametric tests, don't require any assumptions, in contrast to parametric tests. Additionally, they suggest that normality and variance homogeneity are not necessary assumptions for parametric processes. Similar to this, given their benefits over other kinds of data estimators, panel data methods, according to Asteriou and Hall (2007), are the best estimating strategies. Thus, the panel data approach is suited to investigate and measure challenging to predict in cross-sectional or specific time investigations than cross-sectional or specific time series data. It also allows for the preparation and testing of more sophisticated behavioral models.

The following is the general linear model for panel data.

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \mu_{it}$$

Where;

Cross sections are represented by i , while the number of time periods under examination is represented by t .

The study of panel data, which is frequently employed in economics to evaluate the behavior of various micro and macroeconomic variables, uses a variety of analytical models, including constant coefficient, fixed, and random effects models (Arellano and Bond 1991). In contrast, Baltagi (2001) discloses that two methodologies, including fixed and random effects, employed to evaluate relationships inside or between cross-sections. Gujarati (2004) asserts that using the OLS approach leads to estimates because it fails to take into account the data's geographical and temporal aspects, are skewed. Fixed effects models (FEM) and random effects models (FEM) are preferable for panel data because they account for the temporal and individual elements of the entity. According to Asteriou and Hall (2010), a typical approach of constant estimate requires that "there are no differences among the data metrics of the cross-sectional dimension (N). While, In FEM, each group has its own constant because the constant is group specific. Additionally, because each group has a dummy variable, FEM estimators are frequently referred to as least square dummy variables. Finally, note that the F-test/Chow test (1960) was used to choose between REM and FEM.

On the other hand, He also claim that for each cross section constant, random parameters are used rather than preset values. He claim that REM only calculates a small number of parameters compared to FEM. Additionally, it enables the model to include dummies as needed. They go on to say that REM's GLS characteristics make it preferable to FEM. The fixed model presupposes that each cross-section has a unique intercept, whereas REM presupposes that each cross-section has a unique error term. Inconsistent and skewed estimates will be produced as a result of highly linked explanatory variables and unobserved group-specific effects. The Hausman's test will be used to determine whether to use the fixed-effects model (FEM) or the random-effects model (REM). When the random-effects model (REM) model is selected, the study then uses the Breusch Pagan Lagrange method to compare the random effects model (REM) with the POOLED OLS regression model.

4. Results and Discussions

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

Variables	Mean	Std. Dev.	Min	Max	P-Value	Skew.	Kurt.
DPO	0.296	1.582	0.00	11.698	0.00	6.098	39.726
TA	0.001	1.012	-7.02	5.204	-5.892	-3.71	32.766
IndepDir	0.254	0.142	0.00	0.556	0.00	-0.129	2.083
LEV	0.087	0.126	0.00	0.719	0.00	2.493	10.742
CR	1.697	1.695	0.058	11.249	.058	2.954	14.11
OPM	-0.221	1.462	-13.59	0.183	-13.592	-8.329	75.572

The descriptive statistics of all the variables are given in table 1. The DPO, with a mean of 0.296 and a considerable standard deviation of 1.582, suggests substantial variability in how much of a company's earnings are distributed to shareholders. This variability with minimum to maximum range of 0 to 11.698, indicates that some firms are conservative with dividends while others are more generous, a phenomenon often investigate in literature concerning corporate finance and dividend policy. While TA, characterized by a mean of 0.001 and a standard deviation of 1.012, appears to be relatively stable on average but exhibits a wide range (-7.02 to 5.204). This suggests that while most firms may engage in minimal manipulation of earnings, outliers on both ends engage in more aggressive practices. However these results indicates that in some firms of manufacturing sector of Pakistan EM is low while DPO is high indicating that Pakistan's regulatory and governance frameworks are both efficient, and the country's businesses adhere to accepted accounting standards as it serves as a communication tool (Brav et al., 2005). That's why the confidence of investors and other stakeholders grows, and this information serves to reinforce the governance processes even more. While On average there are 25.4% independent directors on board annually implying that, approximately a quarter of the board is composed of independent directors. The low standard deviation of 0.142 suggests relatively consistent levels of independence across the observed companies, indicating adherence to governance norms.

4.2 Correlational Results

Table 2: Correlational Analysis

Variables	DPO	TA	IndepDir	LEV	CR	OPM
DPO	1.000					
TA	-0.556	1.000				
IndepDir	0.176	-0.064 [^]	1.000			
LEV	0.523	-0.307	0.215	1.000		
CR	-0.146	0.115	-0.186	-0.284	1.000	
OPM	-0.091	0.065	0.177	-0.316	0.054	1.000

Table 2 shows the correlation result of the different variables used in this study. As a rule of thumb, a correlation of 0.70 or higher in absolute value may cause multi-collinearity between variables (Liu, 2020). The correlation coefficient between DPO and EM is (-0.556, $p < 0.05$), and between IndepDir and TA is (-0.064, $p < 0.05$) indicating a moderate negative relationship between these variables. This suggests that firms with higher dividend payout ratios and independent board of directors tend to engage in less EM, these results are supported by Ahmed et al.'s (2018) & Monsuru and Adetunji (2014). While there is a significant positive relationship between earnings management and leverage ($\rho = 0.523$, $p < 0.05$). This implies that companies are more likely to employ more aggressive earnings management techniques when their leverage is higher. In addition, there is a significant positive correlation ($\rho = 0.215$, $p < 0.05$) between the presence of independent directors and EM. This suggests that companies with a greater number of independent directors generally have higher levels of leverage. In general, the analysis highlights the complex relationship between corporate financial policies, governance structures, and managerial decision-making processes.

4.3 Regression Analysis

Table 3: Hausman Test

Hausman test	Coef.
Chi-square test value	5.018
P-value	.414
Breusch and Pagan Lagrangian multiplier test for random effects	
Chi-square test value	174.79
Prob > chibar2	0.000

After investigation of OLS assumptions the variables are non-normally distributed. Moreover, multicollinearity, autocorrelation and heteroskedasticity are checked and find that there is a problem of autocorrelation and heteroskedasticity. After OLS assumption violation as we know the data is panel in nature therefore used panel data estimation techniques and the diagnostic tests results reveal that random effect model is appropriate for analysis as p value is greater than 0.05 shown in table 4. Moreover, the findings of the OLS assumption are reported in the Appendix of the current study.

Table 4 Regression Analysis

DPO	Coef.	St.Err.	t-value	p-value	Sig
TA	.068	.064	1.06	.287	
IndepDir	2.074	.846	2.45	.014	**
LEV	4.173	.773	5.40	0.00	***
CR	-.012	.058	-0.20	.838	
OPM	-.004	.045	-0.09	.931	
Constant	-.605	.343	-1.76	.078	*
R-squared within	0.203		R-squared between	0.255	

*** $p < .01$, ** $p < .05$, * $p < .1$

However, the results of random effect model are reported in Table 4 which reports the estimation relation of EM with DPO. DPO is insignificantly affected by the TA, showing that presence of earnings management does not affect DPO similar to Monsuru and Adetunji (2014). However, CR and OPM have also an insignificant and positively effect on DPO. While, Indepdir and Lev has significant effect on DPO which means that firms should maintain Indepdir in board of directors to increase their DPO. Additionally, the overall model fit is significant ($\chi^2 = 40.399$, $p < .001$), with an R-squared value of 0.250, indicating that the independent variables collectively explain 25% of the variance in the DPO. Hence, the study supports the proposed null hypothesis which confirms that there is no significant relationship between TA and DPO. Numerous studies have shown three possible outcomes (i.e. positive, negative and neutral) for the relation between DPO and TA. Consistent with Abbadi et al. (2020), Shah et al. (2010), Tangestani et al. (2016) and Saleem & Alifiah (2017), our results confirms that there is no significant relationship between DPO and TA in manufacturing sector of Pakistani listed non-financial firms as well. The analysis as a whole emphasizes the significance of leverage and independent directors in affecting the DPO. However, concerned should be taken when interpreting these results, and more investigation into other possible factors may be necessary.

Table 5: Moderating Effect

DPO	Coef.	St.Err.	t-value	p-value	Sig
TA	.136	.11	1.24	.214	
IndepDir	2.088	.847	2.46	.014	**
TAInd	-.313	.408	-0.77	.443	
LEV	4.255	.781	5.45	0.00	***
CR	-.013	.058	-0.22	.83	
OPM	-.004	.045	-0.09	.927	
Constant	-.616	.343	-1.80	.073	*
R-squared within	0.206		R-squared between	0.259	

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 5 shows the moderation analysis of TA and IndepDir and its effect on DPO, However results shows insignificant effect, which means IndepDir has no moderating role in minimizing TA, so for firms it is not necessary to hire independent directors as it is not moderating the relationship between earnings management and dividend payout ratio. These findings align with previous studies suggesting the importance of governance mechanisms in shaping dividend policy decisions (e.g., Fama & Jensen, 1983; La Porta et al., 2000). Hence both hypothesis accepted. As our data is panel nature and as per Hausman test Breusch and Pagan Lagrangian multiplier test, best model for this study is random effect model, which means there is no problem of endogeneity in our results so there is no need to run GMM (Hansen, 1982). Hence we has choose the RE model results for our study.

5. Conclusion

This study clarifies the complex interactions between EM, DP, and CG practices in the Pakistani market by a thorough analysis of the data gathered from financial statements and annual reports of manufacturing sector over a five-year period (2017–2021). First, the data showed a substantial positive insignificant relationship between DPO and EM, indicating that companies with higher degrees of EM typically give their shareholders fewer dividends. This result confirm previous literature findings that EM affect the choice of DPO (Ahmed et al., 2018; Monsuru and Adetunji, 2014). Second, it is concluded that having higher percentage of IndepDir on board and more LEV significantly increase DPO. On the other hand, it is also concluded that variables like OPM and CR has less effect on DPO. Also the findings of this study suggested that IndepDir does not moderates the relationship between DPO and EM. This concludes that although CG initiatives like board independence have an individual effect on DPO but they might not always be able to lessen the effect of EM on DPO.

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