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Do Board of Directors' Characteristics Matter in Restraining Earnings Manipulation? Empirical Evidence from Pakistan Stock Exchange

Sattar Khan [1] & Yasir Kamal[2]

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A B S T R A C T

This paper investigated the effect of the Board of Directors' (BOD) attributes on discretionary accruals the proxy of Earnings Management (EM). The basic aim of this study is to test which BOD characteristics are restricting EM. This study used 172 non-financial firms' data for the period of 2013 – 2017 of Pakistan Stock Exchange (PSX). The data is the panel so "Fixed Effect Regression" Model has been used for analysis and interpretation. The outcomes of this study documented that Expertise in board and CEO expertise has a role in restricting EM. The finding of the study indicates that the larger expert member in BOD and expert CEOs in an organization due to their knowledge can effectively monitor management opportunistic behaviour. Moreover, the size of the BOD is also instrumental in decreasing EM. Other BOD characteristics such as Meetings, Independence, Diversity and CEO duality has no role in reducing EM. This research study extends and throws light on the literature about EM and BOD characteristics in the Pakistani context as well as gives a policy recommendation to the regulator in the country to give more emphasis on BOD Expertise in Pakistani companies.

INTRODUCTION

The primary aim of this study is to investigate the influence of the Board of Directors (hereafter BOD) characteristics on earnings management (hereafter EM) on Pakistani listed non-financial firms. According to Kouwenberg & Thontirawong (2016) EM (accrual based) is the management involvement in the financial statements due to their discretion and judgments about accounting methods and choices. Schipper (1989) defined EM, as an intentional involvement in the financial statements with the aim of getting some private benefits from it. Management of the corporations can use their designated decision making powers upon the corporations to obtain their personal objectives at the expense of the owners.

[1]Ph.D. Scholar in Management, at the Institute of Management Sciences Peshawar. Email: phd181811439@imsciences.edu.pk.
[2] Associate Professor, at the Institute of Management Sciences Peshawar. Email: yasir.kamal@imsciences.edu.pk

Due to unfair and unlawful EM[3] practices in the companies the quality and usefulness of the financial statements reduces which result in loss of the investors and stakeholder's confidence and trust on the corporations. In the early 2000s Corporate Governance received unprecedented attention from the researchers and public policy institutions due to corporate scandals in big corporations such as Xerox, WorldCom, Enron, Tyco, Adelphia, and One-Tel etc. all these big corruption cases were the result of opportunistic manipulation in the financial reports (Saona, Muro, & Alvarado, 2020). This unfair EM practices can be reduced by establishing effective monitoring and controlling systems in the shape of corporate governance (hereafter CG) and the independence of external auditor (S. N. Khan, Ismail, Ali, & Boudiab, 2017). In the internal corporate governance BOD is considered a symbol of the protection of shareholder's rights by performing their monitoring role (Eluyela, Asaleye, Popoola, Lawal, & Inegbedion, 2020). According to Saeed & Faiz (2018) an organized group of people who have combined liability to run or administer the day-to-day affairs of the organization and elected by shareholder to work as their agents is collectively known BOD. Moreover, Olfa Daghsni, Mighri Zouhayer (2016) added that BOD is recognized as the "Apex Body" of the system in CG. Moreover, Directors in any organization has a very prominent role, it is considered a valuable asset in the internal CG mechanism for resolving the agency conflicts between shareholders and management by effectively mitigating the practice of EM.

Although BOD has a very important role in CG and in protecting the shareholder rights but there is considerable empirical evidence showing management involvement in earnings manipulating practices (Roychowdhury, 2006; Schipper, 1989; Young, Tsai, Chen, & Liao, 2012) this evidence is based on developed countries, therefore, the main motive of this research study is to check that phenomena that whether BODs are involved in EM practices in Pakistan a developing country. Shaikh, Fei, Shaique, & Nazir (2019) added that Pakistani firms' ownership structure is unique in the sense that it is enormously concentrated, the reason behind this phenomenon is family ownership, in addition to this, the study of (Hussain & Safdar, 2018) depicted that in Pakistan most of the firms have concentrated ownership and controlled by business families. Due to family orientation and ownership concentration in the Pakistani listed firms, the majority of boards are consists of family members and relatives. Therefore, focused has been made by the regulator (SECP) in the corporate governance codes to include outside directors in

[3] Earnings Manipulation is conversely used with Earnings Management

boardrooms in Pakistan to ensure transparency and effective board monitoring for minority shareholder's rights protection. Keeping in view the importance of independent directors, this study is intending to check the role of independent as well as female directors in attenuating EM. In addition to this, in Pakistan researcher has linked ownership structure (Kamran & Shah, 2014a; Nazir & Afza, 2018), audit committee attributes (S. Khan et al., 2020) and overall CG variables with EM (Ahmad, Khan, & Zahid, 2020; Ilyas, 2018; Ilyas, Khan, Khan, & Khan, 2017; A. S. Latif & Abdullah, 2015; A. W. Latif, Latif, & Abdullah, 2017). To the best of our knowledge, there is no study in the concerned literature by linking board attributes to EM in Pakistan. Therefore, this study is intending to fill this gap in the literature regarding board attributes and EM in the Pakistani context by examining the research question: whether board attributes such as size, independence, expertise, female director, CEO expertise, board activity and CEO Duality influencing earnings manipulation practices or not.

The objective of this research study is to check the influence of BOD characteristics such as Independence, Diversity, Expertise, Meeting activity of the BOD, CEO Duality and CEO Expertise on EM .This research study used 172 non-financial firms from 2013 to 2017 listed in the Pakistan Stock Exchange (hereafter PSX). Moreover, in addition to above mentioned explanatory variables return on asset, firm size, firm age, Big 4 audit firm, audit committee expertise & independence and leverage has been included as control variable in the study. The results of this study documented that Expertise in board and CEO expertise has a role in restricting EM. The finding of the study indicates that the larger expert member in BOD and expert CEOs in an organization due to their professional knowledge and experience can effectively monitor management opportunistic behavior and reduce earnings manipulation in Pakistani listed non-financial firms. Moreover, the size of BOD is also instrumental in decreasing EM. Other BOD characteristics such as Meetings, Independence, Diversity and CEO duality has no role in reducing EM.

This research paper contributed to the prevailing CG and earnings manipulation literature on the following grounds. Firstly, the previous studies have linked overall CG to check its effect on earnings manipulation and have given more emphasis on board size, independence, activity and composition while this study included some new variables in the BOD characteristics such as board expertise, CEO expertise and Diversity of the Boards to investigate in the context of the emerging economy of Pakistan. Moreover, this paper offers additional insights of BOD is a fundamental element of CG in restraining EM in Pakistani listed firms. It is widely believed in the corporate world that independence and expertise of the Boards lessen the chances of EM, while this study conclusively shows that independence of the boards has no role in reducing EM but expertise of the board does. Secondly, previous research on this topic is focused on developed countries while we are adding a developing country perspective where family and ownership concentration is prevailing and majority boards have family members. Lastly, this study has added in the small body of existing literature in CG and earnings manipulation regarding board expertise, CEO expertise and female directors.

At last the rest of the study has adopted the following scheme. In the section II the relevant literature and study's hypothesis are given. The EM model, sample size details, the econometrics model of the study is given in section III. Section IV of the study gives descriptive, correlation and regression analysis details with pre and post estimation tests, moreover discussion on the results is also given in section IV, and this study ends with a conclusion.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The concerned literature about EM showed different definitions of earnings management, and every researcher define EM in his own way. According to Ngamchom (2015) the effective and attractive use of accounting principles and taking the benefits of elasticity given in the Generally Accepted Accounting Principles (GAAP) to meet the set objectives on behalf of the management is called EM. Watts and Zimmerman (1986) argued that the basic motivation or reasons behind the management opportunistic behavior to engage in EM practices are "The bonus plan hypothesis" which states to increase compensation, "The debt covenant hypothesis" which focus on to minimize the loan agreement default ratio or to decrease the cost resulting from bankruptcy and the "Political cost hypothesis" which believe that to reduce any negative impact on all stakeholders of the corporations. In order to tackle the opportunistic behavior of the management BOD can play an effective and efficient role to reduce the EM practices. The effective CG is very important in monitoring management activities because its practices can be used to minimize the agency costs by separating the stakeholders specially owners and management interest. The Board of Directors in any organization has a very prominent role, it is considered a valuable asset in the internal CG mechanism for resolving the agency conflicts between shareholders and management by effectively mitigating the practice of EM, in addition to this, BOD is an integral part of CG system in throughout the corporate world. The related literature of BOD characteristics and earnings management are discuss in next lines.

Earnings Manipulation and Size of the Board

It is widely accepted in the literature that the larger the board the more will be monitoring, it will improve quality of financial reporting and it is expected to reduce EM as compare to smaller Boards. In the bigger boards the span of knowledge and expertise is more as compare to the smaller board, thus larger board enhances the board supervision on manager and curtail EM (Rajeevan & Ajward, 2019). Although, the relationship between board size and earnings manipulation is inconsistent in the literature, in this regard (Saona et al., 2020) added that due to fact on the inconsistent relationship of board size and EM, this relationship is consistently negative in the Spanish firms which shows that members of the board negatively related to managerial discretion of manipulating earnings. Kiel and Nicholson (2003) documented that under the agency theory preview the larger boards have the advantage of having considerable number of seasonal directors which can be utilized for monitoring the management actions. Moreover, Saleh et al., (2005) added that the larger board may react quickly to the change in external competitive environment and may stimulate better performance. The literature shows a varied result of size of the board and EM, studies such as, (Abed et al., 2012, Chekili, 2012, Soliman & Ragab 2013, Aygun et al. 2014), etc. found that EM is negatively related to the size of the board. In addition to this, research studies of (Talbi et al. 2015; Xie, Davidson Iii, & Dadalt, 2003; Chung et al., 2004) posited that the larger board size has more chances of having diversity of views, more chances of independent and experts directors and effective communication ability may result less earnings manipulation and transparent financial reporting. On the contrary the studies of (Pretty et al. 2014, Beasley, 1996, Garven, 2009) argued that board size and EM have positive coefficients which indicates that board size increases the EM. In the context of Pakistan the research study of (Shah, Rashid, & Shahzad, 2019) documented that size of board of Pakistani firms have decreased (negative relationship with) EM while the studies of (Ahmad et al., 2020; A. S. Latif & Abdullah, 2015) shows positive coefficients almost significant relationship of EM and board size. In addition to this, (Kamran & Shah, 2014; Rasheed, Fareena, & Yousaf, 2019)added that there is no relationship of EM and size of the board. So after the above discussion, it is clear that the impact of board size on EM is unclear, therefore, the first hypothesis of the study will be un-directional due to inconclusive results in the literature,

***H1**: Board size and EM are related in Pakistan Stock Exchange non-financial listed firms.*

Earnings Manipulation and Independence in the Board

Independence in BOD is one of the most essential elements in the board structure. In every corporate governance code or law independence is consider a vital part of that code or law and it is observed throughout the world. Independent directors in BOD are regarded better for supervision and monitoring purpose through which opportunistic behavior can be prevented. The literature relating independent directors and EM is inconclusive. Alden, Al, Sukoharsono, & Andayani, (2019) added that board independence is strongest CG indicator through which earnings manipulation can be mitigated. They study of Saona et al., (2020) added that outside (independent) directors are unbiased in their decision making, they have lack of personal interest in the company and have inexistence of family relation within a company so the higher the ratio the less will be earnings manipulation. In addition to this, Yung-chuan Lee (2013) argued that independent directors improve the quality of reported earnings and has a positive impact on company's reported earnings quality.

Anglin et al, (2013) and Jouber et al, (2012) studied Canadaian, United States (US), and French firms using different time period and sampling of the firms found that independence in BOD leads to reduce in earnings manipulation. Cheng, Chen, & Wang (2015) added that independent directors reduces EM in that situation where acquisition of company related information is easy and cost effective. In addition to this, Young et al., (2012) posited that those board which have higher independent and professional directors have negative impact on earnings manipulation which result better board governance and monitoring. The literature review study of (Man & Wong, 2013) indicated that board independence in the board improves the board (management) ability to monitor and control management form EM practices. In the Thailand (Supawadee et al., 2013) conducted a study which disclose that there is positive relationship between board independence and EM. In addition to the above discussion, the studies of (Chen, Cussatt, & Gunny, 2020; Habbash, Xiao, Salama, & Dixon, 2014; Oh & Jeon, 2017) provided evidence that independent cum outside directors are not linked to reduce EM because only independence is not sufficient to keep watch on management but it requires specific firm related knowledge as well. In the case of Pakistan where dominance of family business is prevalent and regulators encourage independence in corporate codes which was not made mandatory in past CG codes, so there is very low ratio of independent directors in Pakistan. The studies of (Rasheed et al., 2019; Shah et al., 2019; Zulfiqar, Zafar, & Durrani, 2009) investigated CG and related variables with EM and found that board independence has no role in reducing EM in Pakistan. On the other side the results of the studies of(Sajjad, Abbas, Hussain, Ullah, & Waheed, 2019; Umer, Abbas, Hussain, & Naveed, 2019) show that board independence is negatively related to EM. Based upon the above discussion, we cannot hypothesize the directional hypothesis due to inconclusive and mixed result not only in Pakistani literature but throughout the world, so the second hypothesis for this research study is as follows.

> ***H2**: Independence in the BOD is may or may not be related to EM in Pakistan Stock Exchange non-financial listing firms.*

Earnings Manipulation and Gender Diversity in Board

Diversity in board is an important feature for monitoring and controlling the corporation. According to Peni & Vahamaa’s (2010);Man & Wong, (2013) gender diversity matters in earnings manipulation because women in BOD give motivation, they have high moral principles, conservative to follow EM strategies and more risk-averse towards EM practices. Moreover, Lakhal et al., (2015) added that diversity in BOD and company’s top management leads to mitigation in EM. Due to the importance of diversity in BOD, it is made mandatory in Pakistan according to the recent amendment in the end of 2017 in the Code of Corporate Governance, which says that at least there must be one female director in the board of Pakistani firms. Fernández-Temprano & Tejerina-Gaite, (2020) investigated that gender diversity in the board increase firm accounting performance which means that female director in the BOD reduces EM practices. The study of Srindhi & Tsui, (2011) revealed that female directors in monitoring position in the companies improve earnings quality and make transparent reporting to the outside stakeholders. In addition to this, the studies such as (Moradi et al., 2012, Hili & Affes , 2012, Sun et al., 2011 and Rehman et al., 2006) showed that there is no negative relationship between EM and gender diversity in the BOD. The study of (Umer et al., 2019) shows that diversity in corporate boards in Pakistan reduces EM, furthermore, they added that female directors are very viable in board rooms and their presence in board strengthen the effectiveness of the BOD which curtail EM. After the above discussion the third hypothesis of the study will be in the following words,

> ***H3**: Diversity (female director) in BOD has a negative effect on EM in Pakistan Stock Exchange non-financial listed firms.*

Earnings Manipulation and Dual Position of CEO

One of the important characteristics of the BOD is the duality of Chief Executive Officers (CEO). The Chairman and CEO play a vital role in effective operation of BOD and company at large. The Chairman of the board is responsible to take work from the BOD and to effectively utilize and used the duties, responsibilities and expertise of board members in order to achieve the overall objective of the company. While on the other hand CEO is responsible to carry out the day to day operating activities of the corporation. Olfa Daghsni, Mighri Zouhayer (2016) added that the duties of the Chairman of the board are to run and schedule the meetings, guide the processes of hiring, firing, performance evaluation and compensation of the BODs and CEO, they further added if the position of the CEO and Chairman is the same then there will no independence in the Board instead it will be dependent on the top level management and controlled by few.

In Pakistan in the recent past amendment in the code of corporate governance has removed the option for companies to have the same person as a CEO and chairman. Now under the law in Pakistan same person cannot be work as CEO and Chairman of the Board. This aspect of the corporate governance law is under the spirit of agency theory which states that if the position of the CEO and chairman is same then it will be considered is an obstacle in the working of the Board. The study of (Dechow et al., 1996) stated that companies are proven for earnings manipulation and found for alleged Generally Accepted Accounting Principles (GAAP) violation where chairman and CEO position is held by the same person. In addition to this (Azeez et al., 2019; Saona et al., 2020) added that CEO duality has not have negative impact on EM, which indicates that untying the CEO and Chairman position may yield positive consequences for companies and may enhance the BOD controlling and monitoring abilities. The study of (Peasnell et al., 1999) documented that the dual position has no effect on EM while separation of CEO and Chair has negative relationship with EM with strong significance. The study of Jensen (1993) documented that the dual position of CEO allows the CEO to control the financial information of the company which may obstruct effective board monitoring. Moreover, the studies of (Azeez et al., 2019; Rajeevan & Ajward, 2019; Saim et al., 2014 and Iraya et al., 2015) documented that there is a positive relationship between EM and CEO duality, these studies further added that there is no evidence which prove that CEO duality has an influence in reducing or constraining EM. To conclude the above discussion about the CEO duality this study will propose the following hypothesis,

> ***H4****: The CEO duality will enhance the EM in Pakistan Stock Exchange non-financial listed companies.*

Earnings Manipulation and Board Activity

The activity of the board also adds its part in the effectiveness of the Board. The activity of the board means the meeting frequency of the Board in a year. Its importance cannot be ignored in constraining earnings manipulation practices by the side of management. The literature is not uniform about the number of meeting of the board during a particular year, different researchers has given different number of meeting which could be sufficient to constrain management opportunistic behavior. The research papers such as (Gonzalez and Garcia-Meca, 2013 and Xie et al., 2003) argued that activity of the board is one of the effective way to curb EM and improve the quality of financial reporting. Moreover, (Menon and Williams, 1994) added that the maximum number of meeting of the BOD can improve the supervisory role of BOD and improve the quality of financial reporting. Furthermore, the study of Godard et al., (2004) in the French context investigated that the numbers of board meeting assist the board to control and monitored the management. Rajeevan & Ajward, (2019) documented that activity of the BOD is not related to EM in Sri Lankan companies.

In Pakistan the study of (A. S. Latif & Abdullah, 2015) has found no impact on of board meeting on earnings manipulation, while the study of (Sajjad et al., 2019) shows that board meeting frequency limits earnings manipulation in Pakistani listed firms. In addition to this, the study of (Chatterjee, 2020) added that in Indian corporations the majority of the boards are dominated by families, in addition to this, he added that the most key positions in Indian firms are also held by family members, so in this scenario a diligent board may be useful to prevent management from earnings manipulation. The same argument may be true for Pakistan as well because in Pakistan too the majority of the listed firms are family owned (Hussain & Safdar, 2018). Due to family ownership and ownership concentration a diligent board with female and independent directors may prevent management from earnings manipulation. So this study will present the fifth hypothesis in the following words,

> ***H5****: EM is negatively related with the number of Board meeting in Pakistan Stock Exchange non-financial listed firms.*

Earnings Manipulation and Board Expertise

The term ‘financial literate (expertise)’ means such a person who has the membership of a Security Exchanges Commission of Pakistan (SECP), or recognized body of professional accountants or has a higher degree in finance from a Higher Education Commission (HEC) recognized university or equivalent institution (Code of Corporate Governance, 2017)[4]. It is widely believed that expertise in

[4] https://www.secp.gov.pk/laws/regulations/

BOD is vital for reducing EM. According to Yeung & Lento, (2020) there is two perspective of the board of directors role in companies, one is agency theory perspective and other is resource dependency theory perceptive, the letter view asserts that expert BOD in the companies provides efficient governance which effectively deals with uncertain situations. Director's professional expertise especially accounting expertise is one of the vital feature in their monitoring role (Qiao, Chen, & Hung, 2018) this quality of directors constrain management form EM . Although the monitoring role is paramount for the directors but advisory role is also most important which will be possible for them by having not only professional knowledge but also by their past working experience (Kroll, Walters, & Wright 2008). Therefore, by having professional and past working experience expert directors will reduced earnings manipulation. The study of (Xie et al., 2003) documented that financially expertise members in the board of companies result lower EM. On contrary on this view (Ahmed, 2013 and Ruparatne & Meegaswatte, 2019) added that expertise in BOD it cannot be helpful to reduce EM, they further added the financial expert director in BOD may use their intellectual skills and abilities to mask the accounting figure and indulged in EM practice. The study of (Siam, Laili, & Khairi, 2014) posited that for the monitoring process and to make the financial statements more transparent directors must have expertise (accounting cum past working experience) which will enable them to curb EM. Based on this argument and scarcity of literature of board expertise and EM, this study will propose the following hypothesis

> ***H6****: Expertise in Board is lessening EM in Pakistan Stock Exchange non-financial listed companies.*

Financially expertise CEO and Earnings Management

Gounopoulos & Pham, (2018) documented in their research study that financially expert CEOs means those CEOs who have the experience of working in diversified organization such as Banks, investing & auditing firms, and financial companies, they further added that those CEOs who have accounting and finance related qualification are instrumental in decreasing earnings manipulation. Moreover, Jiang, Zhu, & Huang (2013) added that those CEOs who have financial experience communicate more accurate and precise earnings related information and stimulate management to produce the higher quality of financial reporting to outsiders. In critical financial times expert/experienced CEOs reacts sensibly and outsiders trust them to act proficiently in the best interest of all stakeholders, furthermore, expert CEOs are more skillful and able to predict future events and earnings as compare to un-expert CEOs (Zouari, Lakhal, & Nekhili, 2012). In addition to this it is generally believed in the related literature that financially expertise CEO's improve the quality of financial statements and they are better monitors' of the companies' disclosure and accounting policies. But due to family ownership dominance and ownership concentrations we assume that family members are in key positions in Pakistan, so there will be family CEOs in Pakistani family firms, keeping this point in mind and following the literature regarding CEOs role in BOD, this study assume that due to their (CEO's) knowledge/experience they manipulate earnings for their specific targets (Qawasmeh & Azzam, 2020).Thus, this research study will propose the following hypothesis

> ***H7****: Financially expertise CEO and EM is positively related in the non-financial listed firms in Pakistan Stock exchange.*

RESEARCH METHODOLOGY

The main objective of this paper is to check, whether the BOD characteristics had any influence on discretionary accruals (the proxy of EM), and to test that which BOD characteristic is instrumental in limiting the EM. We considered 172 non-financial firms for the period of 2013 to 2017 of listed firms in PSX. The sample size of the study covers almost every sector in the PSX listed companies the detail of this is given in Annexure 1. This study excluded companies of financial sectors such as Banks, Investment Companies (banks), Mutual funds etc. The reasons for this are due to their accounting policies, capital structure and different approaches to accruals.

Description of Variables

The variable of interest for this study is earnings management (EM) and board of director (BOD) characteristics. The dependent variable of this study is EM. It is estimated by proxy of discretionary accruals and after its estimation, the absolute value of it is taken for analysis (Qamhan et al., 2018). This study will use (Kothari, Leone, & Wasley, 2005) model of estimating and detecting EM. The following steps are used to obtained the value of discretionary accruals (DA),

In the first step the value of Total Accruals will be obtained, this is calculated by following equation:

$$TA_{it} = NI_{it} - CFO_{it} \qquad \boldsymbol{EQ}: \mathbf{1}$$

Whereas:

TA_{it} = *Total Accruals at t period for i company*

NI_{it} = *Net Income before tax at t period for i company*

CFO_{it} = *Net Cash Flow from Operating Activities at t period for i company*

When the value of TA has been calculated then the value of discretionary accruals (DA) will be calculated, it is calculated by running the regression on equation 2, the residual of equation 2 will be DA, and it will be used as a dependent variable for this study. The details of equation 2 is as follows,

$$TA_{it}/LAGTAS_{it} = \alpha + \alpha_1 (1/LAGTAS_{it} + \alpha_2 (\Delta REV_{it} - \Delta REC_{it})/LAGTAS_{it} + \alpha_3 (PPE_{it}/LAGTAS_{it}) + \alpha_4 (ROA_{it} / LAGTAS_{it}) + \varepsilon_{it} \quad \textbf{EQ: 2}$$

Whereas:

TA_{it} = *Total Accruals at t period for i company*

$LAGTAS_{it}$ = *Lagged value of total assets for a company i for time t–1*

ΔREV_{it} = *Delta revenues means ($REV_{it} – REV_{it}–1$)*

ΔREC_{it} = *Delta receivable means ($REC_{it} – REC_{it}–1$)*

PPE_{it} = *The gross value property, plant and equipment for a company i for time t*

ROA_{it} =*Return on Assets*

$\beta_o, \beta_1, \beta_2,$ = *Parameters in the model*

ε_{it} = *Residual*

The explanatory variables for this research study are Size of the board, independence in the Board, diversity in the board, board expertise, CEO duality and CEO expertise. Apart from that some control variables are also included such as audit committee independence & expertise, Firm size, firm age, Financial Leverage and Return on Assets of the selected companies. The detail of variables description is given in the Table 1.

Table 1. Definition of Variables of the study

Variables	Acronym	Definition	Literature support	Test
Discretionary Accruals	DA	Estimated by (Kothari et. al. 2005) Model	(Kothari et. al. 2005)	Dep. variable
Board of Director Size	BS	Total member in the Board	(Azeez et al., 2019)	H1
Board Independence	BI	The ratio of independent director to total directors.	(Olfa Daghsni, Mighri Zouhayer, 2016)	H2
Diversity in Boards	BD	The ratio of female directors to total directors	(Bala & Kumai, 2015)	H3
CEO Duality	CEOD	Dummy variable taking the 1 if the CEO and Chairman are same person otherwise 0	(Jiang et al., 2013, Hussaini Bala, 2015 and Gounopoulos & Pham, 2018)	H4
Activity in Boards	BM	Meeting frequency of the BOD	(Ruparatne & Meegaswatte, 2019 and Alden et al., 2019)	H5
Expertise in Boards	BE	Number of Board members with accounting and finance experience.	(Bala & Kumai, 2015)	H6
CEO Expertise	CEOE	Dummy variable taking the 1 if the CEO have the accounting and finance education otherwise 0	(Gounopoulos & Pham, 2018)	H7
ACIND	ACIND	Independent directors in Audit Committee/size of Audit committee	(S. Khan et al., 2020)	Control
ACEXP	ACEXP	Expert directors in Audit committee/Size of Audit committee	(S. Khan et al., 2020)	Control
Firm Size	FS	Log of total Assets	(Azeez et al., 2019)&(Bala & Kumai, 2015)	Control
Financial Leverage	LEV	Total Borrowing by to Total Assets of the company	(Azeez et al., 2019)&(Bala & Kumai, 2015)	Control
Return On Assets	ROA	Net Income after Tax by Total Assets	(Ilmas, Tahir, & Asrar-ul-Haq, 2018)	Control
Big 4 Audit Firm	BIG4	A firm audited by Big 4 audit firm will take 1 and others will take 0	(Kamran & Shah, 2014a; A. S. Latif & Abdullah, 2015)	Control
Firm Age	FAGE	The age of the firm since its incorporation	(Abdulsamad, Yusoff, & Lasyoud, 2018)	Control

Econometric Model of the Study

$$DA_{it} = \beta_0 + \beta_1 BS_{it} + BI_{it} + \beta_3 BE_{it} + \beta_4 BA_{it} + \beta_5 CEOD_{it} + \beta_6 CEOE_{it} + B_7 FS_{it} + \beta_8 BD_{it} + B_9 ROA_{it} + \beta_{10} LV_{it} + \beta_{11} BIG4 + \beta_{12} FAGE + \beta_{13} ACIND + \beta_{14} ACEXP + \varepsilon_{it}$$

EQ: 3

Whereas,

DA_{it} =	The estimated value of discretionary accruals
BS_{it} =	Board Size
BI_{it} =	Board Independence
BE_{it} =	Expertise in Board of Directors
BA_{it} =	Board Activity (meetings)
BD_{it} =	Diversity in Boards
$CEOD_{it}$=	CEO Duality
$CEOE_{it}$=	CEO Expertise

FS_{it}=	Firm Size
ROA_{it}=	Return on Assets
LEV_{it}=	Leverage
$ACIND_{it}$=	Number of Independent directors in Audit Committee
$ACEXP_{it}$=	Number of Expert directors in Audit Committee
$BIG4_{it}$=	Firm Audited by Big 4 Audit Firm
$FAGE_{it}$=	A firm age since its incorporation
$\beta_o, \beta_1, \beta_2$, etc=	Parameters in the model
ε_{it} =	Residual

EMPIRICAL RESULTS AND DISCUSSION

In this chapter the main results of the research study is given such as Descriptive Statistics, Correlation Matrix and Regression Analysis. The Table 2 depicted the results of descriptive statistics in which variables description, total number of observation (N), mean value, standard deviation (SD), median and minimum (Min) & maximum (Max) value of each variable is given. The total observation are ranging from 665 to 849 due to unbalance panel. The result shows that expertise of BOD has total 665 observations, with mean and SD values are .32 and .146. The mean value shows that there is average 32 per cent expertise in BOD in the sample size firms.

The meeting of the BOD has 835 observations with mean 5.38 and standard Dev 1.83 values this indicates that average 5 meeting were held during a year in the selected firms. In addition to this average board independence is 19 per cent with minimum 0 and maximum 77 per cent in the selected firms. The mean value of the size of board is 8.18 while the maximum value of the board is 15. The DA is the proxy of EM which is selected by using the estimation of (Kothari et al.2005) model which is dependent variable in the study it total observations are 668 whereas, .10 & .13 are mean and SD values and others are control variables detail such size of firm, financial leverage, audit committee expertise & independence, Big4 and return on assets.

Table 2. Descriptive Statistics

Variables	N	Mean	Median	SD	Min	Max
DA(KM)	668	.107	.071	.131	0	.963
BEXP	665	.329	.286	.146	0	.857
BIND	730	.196	.143	.122	0	.778
BSIZE	835	8.18	8	1.52	6	15
BMEET	835	5.38	5	1.83	2	17
ROA	849	6.99	6.03	12.9	-76.2	67.5
LEV	734	2.68	1.97	5.11	25.8	68.8
FS	856	6.81	6.80	.736	4.34	9.51
FAGE	830	36.8	34	18.6	5	156
ACIND	841	.197	.143	.174	0	1
ACEXP	631	.916	1	.669	0	4

In Table 3 tabulation of dummy variables is given, it shows that CEOEXP is 211 observations out 501 observations, similarly about 35 per cent Pakistani listed firms have female directors in the board. In addition to this, only 10 per cent of sample size firms have CEO's who have dual position as CEO and Chairman, at last 63 per cent sample size firms are audited by BIG4 audit firms.

In table 4 the result of pairwise correlations is presented. It shows the correlations matrix of independent & dependent variable along with residual of the model to check the Multicollinerity and Endogeneity

Variables	Descriptions	Freq.	Percent	Cum Freq.
CEOEXP	CEO is not having expertise in Accounting/Finance	294	58.22	58.22
	CEO is expertise in Accounting/Finance	211	41.78	100.00
BDIV	Absence of Female Director in the company's Board	540	64.67	64.67
	Presence of Female Director in the company's Board	295	35.33	100.00
CEOD	Chairman & CEO are not Same Director	737	89.01	89.01
	Chairman &CEO are same Director	91	10.99	100.00
BIG4	Firm is Not Audited By BIG4	304	36.32	36.32
	Firm is Audited By BIG4	533	63.68	100.00

problem. The value of the variables shows that there is no issue of multicollinerity because all the values of variables are less than .60. In addition to this we have predicted the residuals of regression model in order to check the Endogeneity problem between error term and explanatory variables, the result indicates that there is no issue of Endogeneity as well. Furthermore, this study also carried out a more rigors test of VIF for checking multicollinerity, in the table 5 its values confirms that there is no issue of

multicollinerity in the data of the study.

After conducting descriptive statistics in order to describe the individual variable and to check the relationship of independent and dependent variable via correlation matrix it is imperative to test the study hypotheses through panel data Regression Analysis. For panel data three type of regression analysis is mostly used which are "Ordinary Least Square Regression", "Fixed Effect Regression" and "Random Effect Regression." Therefore, in order to check the influence of BOD characteristics on EM all the above mentioned model had been used but among them the most appropriate model is Fixed Effect Regression Model which is adopted after Hausman Specification Test the result of which is given in table 6.

In the Table 8 the main result of "Fixed Effect Regression" is given. In addition to Hausman test this study have also carried out some other diagnostic tests such VIF test for multicollinearity and Breusch-

Pagan / Cook-Weisberg Test for Heteroscedasticity.

Table 5 Variance Inflation Factor

Variables	VIF	1/VIF
ACIND	2.064	.484
FS	1.759	.568
BI	1.715	.583
ACEXP	1.588	.63
BE	1.503	.665
BM	1.467	.682
LEV	1.434	.697
ROA	1.401	.714
BS	1.376	.727
CEOD	1.344	.744
BD	1.248	.802
CEOEXP	1.24	.807
BIG4	1.238	.808
FAGE	1.147	.872
Mean VIF	1.466	.

There is heteroscedasticity problem, which is depicted in table 7, so this study has used Fixed Effect Regression with robust command in order to tackle heteroscedasticity problem. The outcomes of the Fixed Effect Regression indicates that BOD expertise, BOD size and CEO expertise have a negative impact of discretionary accruals(EM) while other variables such as Meeting of BOD, board independence and CEO duality have no relationship with EM. The result of the above table shows that Expertise in BOD significantly reduced EM in PSX listed firms which accept ***H6*** and confirms the results of (Saona et al., 2020; Yeung & Lento, 2020; Xie et al., 2003)

Table 4. Pairwise Correlations

Variables	KM(DA)	BEXP	BIND	BSIZE	CEOD	CEOEXP	BDIV	BMEET	ROA	LEV	BIG4	FAGE	ACIND	ACEXP	FS	RESID
KM(DA)	1.000															
BEXP	0.047	1.000														
BIND	-0.055	0.144*	1.000													
BSIZE	-0.050	0.012	0.130*	1.000												
CEOD	0.049	-0.047	0.005	-0.084*	1.000											
CEOEXP	-0.030	0.312*	0.024	0.007	0.037	1.000										
BDIV	-0.152*	0.041	-0.121*	-0.043	-0.011	0.146*	1.000									
BMEET	0.113*	-0.006	0.236*	-0.015	0.028	0.076	0.055	1.000								
ROA	0.070	0.078*	0.064	0.102*	-0.031	-0.114*	0.058	-0.124*	1.000							
LEV	0.005	-0.023	0.108*	-0.031	0.061	0.049	-0.080*	0.012	-0.099*	1.000						
BIG4	0.069	0.018	0.004	0.013	0.073*	0.007	0.070*	0.003	-0.028	-0.017	1.000					
FAGE	-0.046	0.053	0.005	0.067	-0.016	0.123*	0.171*	-0.010	0.129*	-0.054	0.081*	1.000				
ACIND	0.007	0.174*	0.501*	0.136*	-0.052	-0.070	-0.051	0.170*	0.235*	0.000	0.024	0.013	1.000			
ACEXP	0.103*	0.344*	-0.017	-0.091*	-0.024	0.081	-0.045	0.016	-0.136*	0.048	0.141*	0.126*	-0.264*	1.000		
FS	-0.257*	0.039	0.229*	0.274*	0.023	0.014	-0.004	0.051	0.295*	-0.008	-0.115*	0.105*	0.372*	-0.182*	1.000	
RESID	0.659*	-0.082	-0.203*	0.234*	-0.105	-0.052	-0.171*	-0.106	-0.253*	-0.029	0.029	0.062	-0.288*	0.035	-0.630*	1.000

*** Shows Significance at the 0.05 level**

The detail description of variables is given in table 1.

Table 6. Hausman Specification Test

Test Summary	Coef.
Chi-square test value	36.19
P-value	.001

Director’s professional expertise especially accounting expertise is one of the curial feature in their monitoring role (Qiao et al., 2018) this quality of directors constrain management form EM, moreover, the study of (Siam et al., 2014) posited that for monitoring process and to make the financial statements more transparent directors must have expertise (accounting cum past working experience) which will enable them to curb EM, our study findings are similar with the findings of above mentioned studies, therefore, this study showed evidence that professional and expert directors reduced EM in Pakistani listed firms.

Table 7. Breusch-Pagan / Cook-Weisberg Test for Heteroscedasticity
Ho: Constant variance
Variables: fitted values of abs_KM
$\chi2$ (1) = 5.86
$\chi2$ > chi2 = 0.0155

In addition to this, the size of board and CEO expertise is negatively related to EM the value of the coefficient & t-statistics of the board size is -0.064 & -2.87 and -0.060 & -1.81 for CEO expertise which indicates that size and CEO expertise reduce earnings manipulation which accept H1 and reject H7 our study, in addition to this, these findings are in line with the studies of (Jamel Chouaibi, MoezHarres, 2018; M. A. Khan, Khidmat, Ullah, & Khan, 2019; Saona et al., 2020).

Table 8. The Fixed Effect Regression Table

	Without Robust Standard Error Predicted Variable (EM)			With Robust Standard Error Predicted Variable (EM)		
Predictors	**Coef.**	**Std Error**	**T-value**	**Coef.**	**Std Error**	**T-value**
BEXP	**-0.187**	**0.115**	**-1.62**	**-0.213**	**0.124**	**-1.72***
BIND	0.007	0.172	0.04	-0.025	0.174	-0.14
BSIZE	**-0.051**	**0.019**	**-2.64*****	**-0.064**	**0.022**	**-2.87*****
CEOD	0.005	0.026	0.19	0.012	0.026	0.44
CEOEXP	**-0.043**	**0.032**	**-1.36**	**-0.060**	**0.033**	**-1.81***
BDIV	0.006	0.028	0.20	0.026	0.031	0.85
BMEET	-0.008	0.006	-1.24	-0.007	0.006	-1.15
ROA	-0.001	0.003	-0.32	0.000	0.003	-0.08
LEV	-0.005	0.032	-0.15	0.003	0.030	0.10
BIG4	0.018	0.042	0.43	0.025	0.038	0.67
FAGE	-0.002	0.004	-0.56	0.002	0.003	0.67
ACIND	-0.015	0.060	-0.25	0.002	0.052	0.04
ACEXP	0.025	0.040	0.62	0.026	0.046	0.56
FS	0.212	0.169	1.26	0.058	0.024	2.42***
Constant	-0.732	1.099	-0.67	0.688	0.229	3.00***
Observations		256			256	
R^2		0.110			0.085	
Adjusted R^2		0.051			0.028	
F		5.179			3.862	

Our study findings are in line with the study of (Rajeevan & Ajward, 2019) who argued that in the bigger boards the span of knowledge and expertise is more as compared to smaller board, thus larger board enhances the board supervision on the manager and curtail EM this argument is confirmed by our study findings. Moreover, in the case of expert CEO's who are more skilful and able to predict future events and earnings as compare to un-expert CEOs (Zouari et al., 2012) so due to their such a type of expertise and knowledge reduces earnings manipulation. Instead of the above mentioned variables all other independent variables have no impact on discretionary accruals (EM) in PSX listed firms so ***H2, H3, H4 & H5*** are not accepted. Although many studies such as (Azeez et al., 2019; Jamel Chouaibi, MoezHarres, 2018; Saona et al., 2020; Tahir, Masri, & Rahman, 2020) documented that independence in the board is instrumental in constraining EM practices, but in our case the result is not consistent with these studies.

Table 9 Wu-Hausman Test for Endogeneity

Tests of endogeneity		
Ho: variables are exogenous		
Durbin (score) $\chi 2$ (6)	**= 6.91476**	**(p = 0.3288)**
Wu-Hausman F(6,238)	**= 1.10561**	**(p = 0.3597)**

The possible factors which will responsible for this will be the ownership concentration and family businesses in Pakistan, which didn't allow independent directors to act in the best interest of all shareholders. Moreover, according to Chen et al., (2020) for better board monitoring independence alone is not sufficient, it requires professional skills and knowledge, furthermore, independent directors (outside directors) are not better monitors than insider directors due to information access and advantage. Therefore, keeping in view, Chen et al., (2020) study's observations regarding outside (independent) directors, so this study's findings may be linked with their findings.

For robustness of results this study has carried out the Wu-Hausman Test of Endogeneity for endogeneity to validate the fixed effect results. Although we have predicted error term and have included it in correlations analysis which shows no sign of endogeneity between explanatory variables and error term, so for testing endogeneity we have included in 2SLS regression, the board independence, the board size, board diversity, ROA and firm size as a endogenous variables while board meeting, audit committee expertise, BIG4 audit firm, and firm age as instrumental variables. After the estimation of 2SLS we run the Wu-Hausman Test of Endogeneity, the result of table 9 shows that we cannot reject the null hypothesis that variables are exogenous due to insignificant of the p-value, the result of the Wu-Hausman Test also confirm the result of correlation analysis which confirm that there is no endogeneity issue in our estimates.

CONCLUSION

To achieve the objective of the study, this research paper investigated the impact of BOD characteristics with EM as proxied by discretionary accruals. The research study aimed to check which BOD characteristics were instrumental in bringing down the value of discretionary accruals. To the best of our knowledge, this is the first research study in Pakistani context which checked the influence of specific of BOD attributes with the bunch of control variable on earnings manipulation. Although previous studies in Pakistan researcher has linked ownership structure (Kamran & Shah, 2014a; Nazir & Afza, 2018), audit committee attributes (S. Khan et al., 2020) and overall CG variables with EM (Ahmad et al., 2020; Ilyas, 2018; Ilyas et al., 2017; A. S. Latif & Abdullah, 2015; A. W. Latif et al., 2017). To the best of our knowledge, there is no study in the concerned literature by linking board attributes to EM in Pakistan. So this study has filled this gap by investigating BOD attributes on EM. The findings of this paper shows that BOD Expertise, Board size and CEO expertise can effectively monitor the management opportunistic behavior in order to thwart them from manipulating earnings figures. The expertise of BOD is consider an important characteristic which prove right by the findings of this study which confirms the studies (Kiel & Nicholson, 2003;Saona et al., 2020). Moreover, under the agency theory preview the larger boards have the advantage of having considerable number of seasonal directors which can be utilized for keeping watch on the management actions. Furthermore, this research find no evidence to support that activity of BOD, CEO duality, BOD independence, Diversity in BOD has any impact on EM. The unexpected result of this study is the no link of board independence with EM, which is the most documented characteristics in the international literature to curb earnings manipulation. Many reasons may be attributed to these findings but the most visible is the family business and ownership concentration phenomena in Pakistan.

REFERENCES

Abdulsamad, A. O., Yusoff, W. F. W., & Lasyoud, A. A. (2018). the Influence of the Board of Directors' Characteristics on Firm Performance: Evidence From Malaysian Public Listed Companies. *Corporate Governance and Sustainability Review*, *2*(1), 6–13.

Abed, S., Al-Attar, A., & Suwaidan, M. (2012). Corporate Governance and Earnings Management: Jordanian Evidence. *International Business Research*, *5*(1), 216- 225.

Ahmad, S., Khan, A. S., & Zahid, M. (2020). The Impact of Corporate Governance on Earnings Management: The Case Of Pakistan Textile Industry. *Journal of Business and Tourism*, *06*(01), 71–87.

Anglin, P., Edelstein, R., Geo, Y., & Tsang, D. (2013). What Is The Relationship Between REIT Governance And Earnings Management. *Journal of Real Estate Finance and Economics, 47*(3), 538-563.

Aygun, M., Ic, S., & Sayim, M. (2014). The Effects Of Corporate Ownership Structure And Board Size On Earnings Management: Evidence From Turkey. *International Journal of Business and Management*, *9*(12), 123-126.

Azeez, H. A. R. Al, Sukoharsono, E. G., Roekhudin, & Andayani, W. (2019). The Impact of Board Characteristics on Earnings Management in the International Oil and Gas Corporations. *Academy of Accounting and Financial Studies Journal*, *23*(1), 1–26.

Bala, H., & Kumai, G. B. (2015). Board Characteristics and Earnings Management of Listed Food and Beverages Firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, *3*(8), 25–41.

Beasley, M.S. (1996),"An Empirical Analysis Of The Relation Between The Board Of Director Composition And Financial Statement Fraud", *The Accounting Review*, 71, 443-465.

Chatterjee, C. (2020). Board Quality and Earnings Management: Evidence from India. *Global Business Review*, *21*(5), 1302–1324. https://doi.org/10.1177/0972150919856958

Chekili S. (2012). Impact Of Some Governance Mechanisms On Earnings Management: An Empirical Validation Within The Tunisian Market. *Journal of Business Studies*, *3*(3), 95-104.

Chen, J. Z., Cussatt, M., & Gunny, K. A. (2020). When Are Outside Directors More Effective Monitors? Evidence From Real Activities Manipulation. *Journal of Accounting, Auditing and Finance*, *35*(1), 26–52. https://doi.org/10.1177/0148558X17692691

Cheng, Q., Chen, X., & Wang, X. (2015). *Does increased board independence reduce earnings management ? Evidence from recent regulatory reforms*. Singapore Management University.

Dechow, P., Sloan, R.G., & Sweeny, A.P. (1996). Detecting earnings management. *The Accounting Review*, *70*(2), 193-225.

Eluyela, D. F., Asaleye, A. J., Popoola, O., Lawal, I., & Inegbedion, H. (2020). Grey directors , corporate governance and firms performance nexus : Evidence from Nigeria. *Cogent Economics & Finance*, *8*(1), 0–16.

Fernández-Temprano, M. A., & Tejerina-Gaite, F. (2020). Types of director, board diversity and firm performance. *Corporate Governance (Bingley)*, *20*(2), 324–342. https://doi.org/10.1108/CG-03-2019-0096

Gounopoulos, D., & Pham, H. (2018). Financial Expert CEOs and Earnings Management Around Initial Public Offerings. *International Journal of Accounting*, *53*(2), 102–117. https://doi.org/10.1016/j.intacc.2018.04.002

González, J., S., & García-Meca, E. (2013). "Does corporate governance influence earnings management in Latin American markets?" *Journal of Business Ethics*,121 (3), 419–440.

Habbash, M., Xiao, L., Salama, A., & Dixon, R. (2014). Are Independent Directors and Supervisory Directors Effective in Constraining Earnings Management? *Journal of Finance, Accounting and Management*, *5*(1), 2014.

Hemathilake, Ruparatne, & Meegaswattee. (2019). Board Characteristics and Earnings Management: A Sri Lankan Perspective. *IJARIIE*, *5*(1), 326–338.

Hili, W., & Affes, H. (2012). Corporate Board Gender Diversity and Earnings Persistence: The Case of French Listed Firms. *Global Journal of Management and Business Research*, *12*(22).

Hussain, S., & Safdar, N. (2018). *Ownership Structure of Family Business Groups of Pakistan*. (January). https://doi.org/10.20472/efc.2018.009.006

Ilmas, F., Tahir, S., & Asrar-ul-Haq, M. (2018). Ownership structure and debt structure as determinants of discretionary accruals: An empirical study of Pakistan. *Cogent Economics and Finance*, *6*(1). https://doi.org/10.1080/23322039.2018.1439254

Ilyas, M. (2018). *Impact Of Corporate Governance On Earnings Management And Cost Of Capital : Evidence From Pakistan*. Abdul Wali Khan University Mardan.

Ilyas, M., Khan, I., Khan, M. N., & Khan, T. (2017). Corporate Governance and Earnings Manipulation : Empirical Analysis of Non-Financial Listed Firm of Pakistan. *Journal of Managerial Sciences*, *11*(4), 283–304.

Iraya C., Mwangi, M., & Muchoki, G. (2015). The effect of corporate governance Practices on earnings management of Companies listed at the Nairobi Securities Exchange. *European Scientific Journal*, *11*(1) 169-178.

Jamel Chouaibi, MoezHarres, N. B. B. (2018). The Effect of Board Director ' s Characteristics on Real Earnings Management : Tunisian-Listed Firms. *Journal of Knowledge Economy*, *9*(1), 999–1013. https://doi.org/10.1007/s13132-016-0387-3

Jiang, F., Zhu, B., & Huang, J. (2013). CEO's financial experience and earnings management. *Journal of Multinational Financial Management*, *23*(3), 134–145. https://doi.org/10.1016/j.mulfin.2013.03.005

Kamran, & Shah, A. (2014a). The Impact of Corporate Governance and Ownership Structure on Earnings Management Practices: Evidence form Listed Companies in Pakistan. *The Lahore Journal of Economics*, *19*(2), 27–70. https://doi.org/10.1016/j.sbspro.2014.03.686

Kamran, & Shah, A. (2014b). The Impact of Corporate Governance and Ownership Structure on Earnings Management Practices: Evidence from Listed Companies in Pakistan. *The Lahore Journal of Economics*, *19*(2), 27–70.

Kiel, G. & Nicholson, Gavin. (2003). Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance. *Corporate Governance: An International Review*. 11. 189-205.

Khan, M. A., Khidmat, W. Bin, Ullah, F., & Khan, N. U. (2019). Corporate Governance and Earnings Management: The Role of The Board of Directors. *SSRN Electronic Journal*, *5*(2), 317–342.

Khan, S., Kamal, Y., Khan, A., Hussain, A., Rafiq, M., Bibi, M., … Khan, M. (2020). The Impact of Ownership Types on The Value of Discretionary Accruals: What is The Role of Audit Committee? Evidence from Pakistan. *International Journal of Economics and Financial Issues*, *10*(4), 141–150. https://doi.org/10.32479/ijefi.10081

Khan, S. N., Ismail, E., Ali, E., & Boudiab, M. (2017). The Role of Audit Committee on Performance of Listed Companies in Pakistan; an Empirical Evidence. *International Journal of Innovative Knowledge Concepts*,

5(12), 2454–2415.
Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, *39*(1), 163–197. https://doi.org/10.1016/j.jacceco.2004.11.002
Kouwenberg, R., & Thontirawong, P. (2016). Group affiliation and earnings management of Asian IPO issuers. *Review of Quantitative Finance and Accounting*, *47*(4), 897–917. https://doi.org/10.1007/s11156-015-0524-2
Latif, A. S., & Abdullah, F. (2015). The Effectiveness of Corporate Governance in Constraining Earnings Management in Pakistan. *The Lahore Journal of Economics*, *20*(1), 135–155.
Latif, A. W., Latif, A. S., & Abdullah, F. (2017). Influence of Institutional Ownership on Earnings Quality: Evidence for Firms Listed on the Pakistan Stock Exchange. *PAKISTAN BUSINESS REVIEW*, *19*(3), 668–687.
Lakhal, F., Aguir, T., & Lakhal, N. (2015). Do women on boards and in top management reduce earnings management? Evidence in France. *The Journal of Applied Business Research*, *31*(3), 1107-1118
Man, C. keung, & Wong, B. (2013). Corporate governance and earnings management: A survey of literature. *Journal of Applied Business Research*, *29*(2), 391–418.
Moradi, M., Salehi, M., Bighi, S.J., & Najari, M. (2012). A study of relationship between board characteristics and earnings management: Iranian scenario. *Universal Journal of Management and Social Sciences*, *2*(3), 12-29.
Nazir, M. S., & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market. *Future Business Journal*, *4*(1), 139–156. https://doi.org/10.1016/j.fbj.2018.03.001
Ngamchom, W. (2015). Impact of Board Effectiveness and Shareholders Structure on Earnings Management in Thailand. *Review of Integrative Business&Economics Research*, *4*(2), 342–354.
Oh, H. M., & Jeon, H. J. (2017). Does Board Characteristics Constrain Real Earnings Management? Evidence from Korea. *The Journal of Applied Business Research*, *33*(6), 1251–1262.
Olfa Daghsni, Mighri Zouhayer, K. B. H. M. (2016). Earnings Management and Board Characteristics : Evidence from French Listed. *Arabian Journal of Business and Management Review*, *6*(5), 1–9. https://doi.org/10.4172/2223-5833.1000249
Peasnell, K.V., P.F. Pope and S. Young (1999), ‘Directors: Who are They?’, Accountancy, p. 114.
Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, *35*(7), 629-645.

Qawasmeh, S. Y., & Azzam, M. J. (2020). Ceo characteristics and earnings management. *Accounting*, *6*(7), 1403–1410. https://doi.org/10.5267/j.ac.2020.8.009
Qamhan, M. A., Haat, M. H. C., Hashim, H. A., & Salleh, Z. (2018). Earnings management: do attendance and changes of audit committee members matter? *Managerial Auditing Journal*.
Qiao, Z., Chen, K. Y., & Hung, S. (2018). Professionals inside the board room: accounting expertise of directors and dividend policy. *Applied Economics*, *50*(56), 6100–6111. https://doi.org/10.1080/00036846.2018.1489501
Rahman, R.A., & Ali, F.H.M. (2006). Board, Audit Committee, Culture And Earnings Management: Malaysian Evidence. *Managerial Auditing Journal*, *21*(7), 783-804.
Rajeevan, S., & Ajward, R. (2019). Board characteristics and earnings management in Sri Lanka. *Journal of Asian Business and Economic Studies*, *27*(1), 2–18. https://doi.org/10.1108/jabes-03-2019-0027
Rasheed, S. M., Fareena, S., & Yousaf, T. (2019). Corporate Governance and Real Earnings Management: Evidence from Pakistan Stock Exchange. *Pakistan Business Review*, *21*(2), 292–305.
Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, *42*(3), 335–370. https://doi.org/10.1016/j.jacceco.2006.01.002
Saeed, S. K., & Faiz, U. (2018). *Corporate Governance in Pakistan* (first). Islamabad: Higher Eduction of Pakistan.
Saleh, N.M., Iskandar, T.M., & Rahmat, M.M. (2005). Earnings Management And Board Characteristics: Evidence From Malaysia. *Journal of Pengurusan*, *24*(1), 77-103.
Sajjad, T., Abbas, N., Hussain, S., Ullah, S., & Waheed, A. (2019). The impact of Corporate Governance, Product Market Competition on Earning Management Practices. *Journal of Managerial Sciences*, *13*(2), 59–83.
Saona, P., Muro, L., & Alvarado, M. (2020). How do the ownership structure and board of directors’ features

impact earnings management? The Spanish case. *Journal of International Financial Management and Accounting, 31*(1), 98–133. https://doi.org/10.1111/jifm.12114
Schipper, K. (1989). Earnings Management. *Accounting Horizons*, *3*(3), 91–102. https://doi.org/10.4135/9781412964289.n318
Shah, S. F., Rashid, A., & Shahzad, F. (2019). Does board structure improve financial reporting quality? Evidence of real earnings manipulation among Pakistani firms. *Abasyn Journal of Social Sciences*, *12*(2), 311–328. https://doi.org/10.34091/ajss.12.2.09
Shaikh, R., Fei, G., Shaique, M., & Nazir, M. R. (2019). Control-Enhancing Mechanisms and Earnings Management: Empirical Evidence from Pakistan. *Journal of Risk and Financial Management, 12*(3), 1–23. https://doi.org/10.3390/jrfm12030130
Siam, Y. I. S. A., Laili, N. H. B., & Khairi, K. F. Bin. (2014). Board of directors and earnings management among Jordanian listed companies: proposing conceptual framework. *International Journal of Technical Research*, *2*(3), 1–7. Retrieved from http://www.ijtra.com/special-issue-view/board-of-directors-and-earnings-management-among-jordanian-listed-companies-proposing-conceptual-framework.pdf
Soliman, M.M., & Ragab, A.A. (2013). Board of director's attributes and earning management: Evidence from Egypt. *Proceedings of 6th International Business and Social Sciences Research Conference*. Dubai, UAE.
Srindhi, B., Gul, F.A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, *28*(5), 1610-1644
Sun, J., Liu, G., & Lan, G. (2011). Does female directorship on independent audit committees constrain earnings management? *Journal of Business Ethics*, *99*(3), 369-382
Tahir, H., Masri, R., & Rahman, M. M. (2020). Impact of board attributes on the firm dividend payout policy: evidence from Malaysia. *Corporate Governance (Bingley)*, *20*(5), 919–937. https://doi.org/10.1108/CG-03-2020-0091
Talbi, D., Omri, M., Guesmi, K., & Ftiti, Z. (2015). The role of board characteristics in mitigating management opportunism: The case of real earnings management. *The Journal of Applied Business Research*, *31*(2), 661-674.
Umer, R., Abbas, N., Hussain, S., & Naveed. (2019). The Gender Diversity and Earnings Management Practices : Evidence from Pakistan. *City University Research Journal*, *10*(2), 342–357.
Watts, R. Zimmerman, J. 1986. Positive Accounting Theory. *Prentice Hall Eaglewood Cliffts*.
Xie, B., Davidson Iii, W. N., & Dadalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, *9*(1), 295–316. Retrieved from www.elsevier.com/locate/econbase
Yeung, W. H., & Lento, C. (2020). Earnings opacity and corporate governance for Chinese listed firms: the role of the board and external auditors. *Asian Review of Accounting*, *28*(4), 1–29. https://doi.org/10.1108/ARA-06-2019-0124
Young, C. S., Tsai, L. C., Chen, C. H., & Liao, S. T. (2012). Board characteristics and real earnings management. *NTU Management Review*, *23*(1), 363–400.
Yung-chuan Lee. (2013). Can Independent Directors Improve the Quality of Earnings ? Evidence from Taiwan. *Advances in Management & Applied Economics*, *3*(3), 45–66.
Zouari, Z., Lakhal, F., & Nekhili, M. (2012). Do CEO's Characteristics Affect Earnings Management? Evidence from France. *SSRN Electronic Journal*, 1–39. https://doi.org/10.2139/ssrn.2082009
Zulfiqar, S., Zafar, N., & Durrani, T. K. (2009). Board Composition and Earnings Management an Empirical Evidence Form Pakistani Listed Companies. *Middle Eastern Finance and Economics*, *4*(3), 27–37.