



The Impact of Ownership Types on the Value of Discretionary Accruals: What is the Role of Audit Committee? Evidence from Pakistan

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ABSTRACT

The research paper attempts to investigate the connection between Ownership Structure and Audit Committee Effectiveness on discretionary accruals in Pakistan. This study analyzed 5 years of data over the period of 2013-2017 of 169 listed firms of the Pakistan stock exchanges (PSX). The data is panel and it is analyzed with the random-effect regression to check the association between ownership structure and audit committee effectiveness on discretionary accruals. The findings of this article show that the effectiveness of an audit committee is very instrumental in bringing down the value of discretionary accruals. This paper confirms the view that audit committee effectiveness mitigates discretionary accruals in PSX listed firms, Furthermore, this study found no clue that blocks ownership, management ownership, foreign ownership and institutional ownership constrain discretionary accruals. To the best of researchers' knowledge, this empirical study is first of its kind in Pakistan. The present research study recommended and supports the recent amendment in Pakistan Corporate Governance Code about audit committee independence and expertise in reducing discretionary accruals.

Keywords: Ownership Types, Audit Committee Effectiveness, Corporate Governance, Discretionary Accruals, Pakistan Stock Exchange

JEL Classifications: G34, M4

1. INTRODUCTION

Companies around the globe provide financial information to outsiders through financial statements reporting. The fundamental aim of financial statements to the outsiders is to present the financial data in a timely and credible manner (Ilmas et al., 2018). The most important element of financial statements is earnings, and it is considered the main indicator of the financial position of the companies in the eyes of outside investors. According to Byun et al., (2011), the existence of information asymmetry between insider (management) and outsiders (investors) stimulates

management to alter the earnings for their vested interest. Moreover, the difference between management and shareholders' goals may fuels management to apply and utilize the flexibility of accounting standards to manipulate earnings in financial statements (Lassoued et al., 2017). This opportunistic behavior on behalf of the management is called earnings management (EM) (Hussain et al., 2019; Shah et al., 2020).

EM means managers' tempering in companies' financial statements for the purpose to manipulate accounting figures in order to achieve the desired results (Kamran and Shah, 2014). Since accounting

figures include earnings numbers so it can be used to minimize agency costs, bonuses for management, meeting companies' targets and it may be used to raise funds for corporations (Habbash, 2013; Pucheta-Martínez and García-Meca, 2014). According to Siam et al. (2014) the well-known financial frauds/scams such as Parmalat, Enron, Xerox, and WorldCom, etc. are the result of EM in those corporations.

The EM practice on behalf of the management make financial statements highly questionable and less reliable in the eyes of outsider stakeholders, therefore, in order to restore the stakeholders' confidence and ensure the credibility and quality in reporting of financial statements the monitoring systems play a vital role in this regard. The primary endeavor of corporate governance (hereafter CG) is to resolve the agency squabble between management and shareholder by combing their interests (Habbash, 2010). The monitoring system of CG is very instrumental in curbing the opportunistic behavior of EM. Moreover, Xie et al. (2003) mentioned that the monitoring system of CG decreases EM. There are various definitions of CG in the corporate governance literature it can be defined as the monitoring mechanism through which companies are directed and controlled as well as the interest of outside stakeholders are protected. The Cadbury Committee (1992) defines CG is a monitoring system through which corporations are directed and controlled.

It has been witnessed in the world that CG has four important attributes such as ownership structure, board structure, compensation structure, and boards committees in any firm/corporation (Fayyaz, 2016). There are different committees of the board such as Human Resource Committee, Nomination Committee, Executive Committee and Audit Committee (hereafter AC) among them the most important is AC. The AC is considered one of the key components in the internal governance mechanism because AC effectiveness ensures financial reporting disclosure and transparency in financial statements. According to Varma (1997) AC is the most dominant and well-established committee which deters the financial irregularities and frauds, in addition to this, it enables companies' directors to ensure the health of financial statements.

The study of CG theories reveals that independence of the board and ownership structure are the important elements of the overall CG system (Jentsch, 2014). The ownership structure of any company is considered an effective tool to implement CG. It is believed that effective and appropriate ownership structure is necessary to curb EM and to ensure the oversight of financial statements reporting. Nazir (2015), posits that ownership structure can be divided into two categories one is ownership concentration and other is ownership identity, the former means having majority of shares or more than 10% of shares in corporation which is also called block holders and the latter means shares held by managers, directors, family, institutions, and individuals etc. Jensen and Meckling (1976) argued that the existence of block holders in corporation resolves the traditional divergence of interest between management and shareholders because block holders existence put certain pressure on the behavior of management to work for the interest of all stakeholders' of the corporations. Moreover,

Shleifer and Vishny (1997) added that institutional investors have an influence on management to present true and reliable economic results. This study included foreign ownership, insider ownership (managerial ownership) and institutional ownership as ownership identity whereas Block ownership as an ownership concentration, for the purpose to check whether both types of ownership with audit committee effectiveness have any role in reducing discretionary accruals.

The basic objective of this study is to check the collective influence of effectiveness of AC and ownership structure on EM as proxies by discretionary accruals. The study includes the non-financial firms of Pakistan Stock Exchanges (hereafter PSX) over the period of 2013-2017. Ownership structure proxies are institutional ownership, block ownership, insider ownership, and foreign ownership while audit committee effectiveness is measured by an index of four points which are consist of AC independence, AC meeting frequency, AC size and AC members financial expertise as adopted by (Habbash, 2013).

This research study makes three significant contributions to the literature on AC effectiveness, ownership structure, and discretionary accruals. Firstly, this research study confirms the view that an AC independence, financial expertise, and active members effectively mitigate EM practices in PSX listed companies. The feature of independence and expertise an audit committee possibly improves the financial reporting quality. Our study's findings support the recent amendment made in Pakistan Corporate Governance Code which related to audit committee independence and expertise. Secondly, to the best of the researchers' knowledge, this research study is the first research paper that is made in Pakistan on audit committee effectiveness and EM after the recent-past amendment which is made in December 2017 in Pakistan Corporate Governance Code. Thirdly, this research study is unique in nature in collectively checking audit committee attributes with ownership structure on EM (discretionary accruals) and expanding the literature on ownership structure, AC, and discretionary accruals.

This chapter ends with the scheme of the study which is as follows. This study starts with introducing the concept of EM, ownership structure, and audit committee. Section 2 presents the theoretical background, the literature of AC, ownership structure and discretionary accruals and ends with the hypotheses development, Section three discuss the research design, methodology, data, sample size and population, chapter four represent the results and analysis and the last chapter end the study with the conclusion.

2. RELATED LITERATURE

2.1. Theoretical Background

Jensen and Meckling (1976) argued CG mechanisms such as ownership structure and AC effectiveness comes under the agency theory preview, agency theory is related to owners (shareholder) and managers (agents), in addition to this, it (agency theory) suggests that division of ownership and control between principals and agents leads to divergence of interest between them. The agent's action to serve their own interest instead of principal

interest leads to agency problem, management this behavior includes EM. The practice of EM is the management reporting strategy to manipulate financial records in order to achieve their pre-determined financial objective. According to Qamhan et al. (2018) EM practices on behalf of the management result unreliable accounting data that doesn't imitate the real financial position of the company. Juhmani (2017) maintained that management uses EM either for the company's interest or their own vested interest, this action of the management result in an agency problem. Therefore, to keep a check and monitor management actions and decisions and to ensure that the principal's interests are safeguarded, in this regard proper internal and external control mechanism is needed. Kazemian and Sanusi (2015) added that the free market is an effective external control mechanism, whereas ownership structure, board and committees are internal mechanisms of the corporation to control EM.

2.2. Ownership Structure and Earnings Management

The transparency and credibility of the financial statements of the companies are ensured by an effective CG system. According to (Alves, 2012; Ilmas et al., 2018; Sultana, 2015) management incentives to manipulate earnings figures are reduced by ownership structure. The ownership structure is very instrumental in constraining EM practices in corporations. Shleifer and Vishny (1986) argued that different ownership structures stimulate different incentives to keep a check on a firm's management action.

Therefore, block ownership has an influence on earnings manipulation and influencing the superiority of financial statements. In the same way, managerial ownership has both negative as well as positive impacts due to management interest and strategy. In the literature different researchers used different types of proxies for ownership structure such as Kamran and Shah, (2014) used concentration of ownership, institutional investor's ownership, and managerial ownership, in their study. The study of Ilmas et al., (2018) used management (insider) ownership, institutional investor's ownership, family ownership and ownership concentration, Habbash, (2013) include block ownership, Alves (2012) used ownership concentration, institutional ownership, and managerial ownership while the study of Sánchez-Ballesta and García-Meca (2007) had used block and managerial ownership. This research study will include block ownership, insider ownership, foreign ownership and institutional ownership for ownership structure proxies. In the following lines, each proxy and its relationship has been elaborated with discretionary accruals (the proxy of EM).

2.3. Earnings Management and Foreign Ownership

Companies with foreign ownership may thwart management opportunistic behavior and cut the management power of discretionary expenses in result foreign ownership decreases EM (Rizvi, 2018 and Sun et al., 2014). Jiang and Kim (2004) documented that companies with foreign ownership are related to high financial reporting transparency and low financial information asymmetry. Ji et al., (2015) added that foreign shareholding has a low business relationship with local management improve financial oversight and curb EM via companies operating activities. The research study of Chung et al. (2004) documented that foreign

investors in firms have lower earnings manipulation as compare with other companies. Subsequently, it can be described that foreign investors are linked with better monitoring, lessens the ability of management to influence earnings manipulations for their own vested interest. After the above-mentioned write up the study hypothesized that:

H₁: Foreign ownership and EM is negatively related to each other.

2.4. Earnings Management and Block Ownership

Block ownership means the concentration of shares in a few hands, in this research study block holders, are those shareholders who own 10% or more than 10% shares in firms. In Pakistan, family businesses are very common so most of the businesses have block ownership. Shleifer and Vishny (1997) documented that external block holders are more curious and motivated to monitor management actions than those who are small fractions of shares, the reason behind that is monitoring is more suitable and cost-efficient for block holders than those who have small fractions of shares. In addition to this Jensen and Meckling (1976) added that block holders' monitoring may reduce agency costs. According to Cronqvist and Fahlenbrach (2008) block ownership has a larger stake in companies so there is why they have a great interest in monitoring the management. Therefore, block ownership may reduce EM in Pakistani companies, in this perceptive the study hypothesized that:

H₂: Block holders ownership is reducing discretionary accruals in PSX listed firms.

2.5. Earnings Management and Managerial Ownership

Jensen and Meckling (1976) posited that insider ownership is associated with higher firm value, more reliable earnings figures, and likely less altered earnings figures because the interest of shareholders and management are closely associated with each other in case of managerial ownership. High managerial ownership in companies replicates the true financial position and reliable earnings, although on the other hand lack of insider ownership or less managerial ownership tent the management behavior to influence earnings figures for the purpose to relieve pressure imposed by annual targets and commitment (Warfield et al., 1995). In the literature two hypotheses are often presented for managerial ownership one is aligned effect and the other is entrenchment affect. The farmer hypothesis states that the increased managerial ownership in firms decreases agency cost, reduces the management opportunistic behavior, increases firm's earnings informativeness and decreasing EM (Kamran and Shah, 2014; Jensen and Meckling, 1976; Siregar and Utama, 2008). In contrast, the entrenchment hypothesis states that increasing managerial ownership up to a certain extent may cause minority shareholder interest. Nedal et al. (2010) added that insider ownership has no role in reducing EM and further added that managerial ownership firms are not aligned with other shareholder interests in value-maximizing of the firms, this is in line with the entrenchment hypothesis. In addition to this, the entrenchment hypothesis is true in Pakistan because in Pakistan majority of firms have to block ownership that can use their voting powers in their favors. As evident from the literature there is a mixed result of managerial ownership on EM so the third hypothesis of the study will not be directional rather as follows;

H₃: Management ownership is related to Earnings manipulation in Pakistani listed firms.

2.6. Earnings Management and Institutional Ownership

Institutional shareholders mean shares held by institutions in any firm. Institutional investors are more skillful and influential than an individual shareholder in getting and processing information as well as monitoring companies (Yasser et al., 2017; Abdullah, 2008). Institutional shareholders are considered a vital corporate governance tool for monitoring and controlling management behavior than individual shareholders (Black, 1992). According to Warfield et al. (1995) institutional investors with a high level of holding resulted in lower EM. The efficient monitoring hypothesis which is originated from agency theory suggests that institutional ownership serves the ability to monitor companies' management due to their high stake in it.

In the CG literature, there are two views about institutional ownership and EM. In the first view, institutional ownership with a high level of participation and shareholding has more incentive and more interest in management behavior to restrict them from EM and company performance. In the second view, the lower level participation and shareholding of institutional ownership are interested in short term returns not in company affairs. In addition to this, Sharma (2004) added that higher the institutional shareholding ratio the less will be EM/fraud. The studies of (Bushee, 1998; Roychowdhury, 2006; Chung et al., 2002 and Kamran and Shah, 2014) documented that institutional shareholding is associated with less EM in corporations. Whereas the studies of (Porter, 1992; Charitou et al., 2007; Latif and Abdullah, 2015; Lassoued et al., 2017) investigated that there is a positive relationship between institutional shareholders and EM. Moreover, Alves, (2012) added that institutional shareholders don't play a vigorous role in monitoring management rather than they are keen in immediate perks and more likely to sell their holding in a short period. To conclude, this research study presents the fourth hypothesis in the followings words.

H₄: Institutional ownership decreases discretionary accruals in PSX listed firms.

2.7. Earnings Management and Audit Committee Effectiveness

In the literature, there is a mixed result of AC Effectiveness impact on EM such as (Xie et al., 2003; Bedard et al., 2004; Baxter and Cotter, 2009; Abdul Rahman and Ali, 2006) investigated in their studies that AC Effectiveness has not affected discretionary accruals. However, the studies of (Habbash, 2013; Klein, 2002; Benkel et al., 2006; Piot and Janin, 2007; Chang and Sun, 2009; Davidson et al., 2004) found that AC characteristics have a negative impact on discretionary accruals.

In the internal monitoring of the company, AC is a very effective tool. The main task of an AC is to review the financial statements of a firm for the purpose to make sure that these statements of financial position depict the true and real picture of the company's financial performance. According to Klein (2002) an AC is effective CG mechanism that improves the financial reporting quality. However, this argument does not come fit for those firms where ownership

is concentrated and the conflict is between minority and majority shareholders (Habbash, 2013). Research studies of (Klein, 2002; Xie et al., 2003; Abbott et al., 2004) documented that independence and frequency of meeting an AC decrease EM practices in corporations. Moreover, financial expertise in members of AC is one of the key attributes which is instrumental in bringing down the EM practices in financial reporting. Research studies such as (Abbott et al., 2004; Yang and Krishnan, 2005; Ayemere and Elijah, 2015) documented the inverse relationship between EM and AC expertise. In addition to this, another important feature of an AC is the size of the committee. Different researchers documented a different relationship with EM. A well-known belief about the size is that among the researcher that the larger the extent of an AC the lesser will be discretionary accruals. Therefore, for Audit Committee Effectiveness four characteristics of AC are used in the literature which consist of size, independence, meeting, and expertise.

The last amendment in Pakistan Corporate Governance Code 2002 in 2017 is about audit committee effectiveness. In that amendment, it made mandatory that AC must be chaired by an independent director and there must be at least one member who should have financial knowledge. This recent amendment in Pakistan Corporate Governance Code 2002 is in line with the Sarbanes-Oxley Act (SOX) (2002)¹ and the report of Blue Ribbon Commission (1999). Moreover, this Corporate Governance Code 2002 requires from the listing companies to have at least 3 members in AC and AC should meet once in each quarter. These regulations of the code make AC more effective to keep the authenticity of annual reports. Therefore, this study has adopted the index of four points of four important variables of AC as mentioned above, so the last hypothesis of the study is:

H₅: Audit committee effectiveness is negatively related to discretionary accruals PSX listed firms.

3. RESEARCH METHODS

The objective of this paper is to investigate that "Do Ownership Structure and Audit Committee Effectiveness constrain discretionary accruals in PSX listed firms." This research study is quantitative in nature and has utilized secondary data for data analysis and results. This study data is unique and handpicked from annual reports of the concerned companies. This time period of the study is from 2013 to 2017 and the sample size is 169 listed firms representing all the non-financial sectors in PSX. The detail of population and sample size of this paper is given in Table 1.

3.1. Definitions of Variables

3.1.1 Dependent variable

The dependent variable for this study is earnings management (EM). It is estimated by proxy of discretionary accruals and after calculating it the absolute value of the proxy of discretionary accruals (EM) is taken (Qamhan et al., 2018). According to (Haider et al., 2012) discretionary accruals can be estimated by two approaches or methods one is taking the values from balance sheet which is called balance sheet approach and other is taking

¹ Sarbanes-Oxley Act (Sox) was passed in US in 2002 in order to safeguard the interest of investors after the failure of large Corporations such as Enron and WorldCom etc.

values from cash flow statements in order to estimate total accruals this is called cash flow statement approach. The literature of EM depicted that most of the researcher has used cash flow statement for estimating earnings management. (Haider et al., 2012). In this study, the cash flow statement approach has been used to calculate total accruals . In addition, to this we will use cross-sectional model as recommended by (Bartov et al., 2001). Following is the equation for calculating total accruals.

$$TA_{it} = NI_{it} - CFO_{it} \quad (1)$$

Where as:

TA_{it} = Total accruals at t period and I firm

NI_{it} = Net income before tax at t period and I firm

CFO_{it} = Net cash flow from operating activities at t period and for I firm

When the value of total accruals has calculated then the value of discretionary accruals will be calculated, this study has used the modified Jones Model (1995) to estimate the value of discretionary accruals.

The procedure of calculating Modified Jones Model (1995) is as follow,

$$TA_{it} / LA_{it} = \alpha(1 / LA_{it} - 1) + \beta_1(\Delta REC_{it} - \Delta REC_{it} / LA_{it} - 1) + \beta_2(PPE_{it} / LA_{it} - 1) + \epsilon_{it} \quad (2)$$

TA_{it} = Total Accruals at t period and I firm

LA_{it} = Lagged value of the Total Assets for a company I and for the time period t

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 of Property, Plant and Equipment for a company I and for the time period t

$\beta_0, \beta_1, \beta_2,$ = Parameters in the model

ϵ_{it} = Residual

3.2. Research Model of the Study

In order to check whether AC effectiveness and ownership structure affect discretionary accruals, in this regard the following research model is implemented.

$$EM_{it} = \alpha + \alpha_1 ACS_{it} + \alpha_2 BOWN_{it} + \alpha_3 FOWN_{it} + \alpha_4 IOWN_{it} + \alpha_5 MOWN_{it} + \alpha_6 \sum_{j=1}^{11} C_{control, it} + \epsilon_{it} \quad (3)$$

Where as:

EM_{it} = The absolute value of discretionary accruals

ACS_{it} = Audit committee score out of four points

$BOWN_{it}$ = A dummy variable which will take 1 if 10% or more of shares owned by the individual block holder otherwise 0

$FOWN_{it}$ = Number of shares owned by Foreigners by the total number of shares

$IOWN_{it}$ = The number of shares held by institutions/total number of shares

$MOWN_{it}$ = The number of shares held by the management/total number of shares."

Control variables:

Board's Expertise_{it} = The number of board member who has finance and accounting knowledge by total board members.

Board's size_{it} = Total Number of board members in the board of directors.

CFO_{it} = The cash flow form operation

Firmsize_{it} = Firm size measure by the log of total assets

leverage_{it} = Long term debt divided by shareholder equity is the ratio of leverage

Table 1: Detail of population and sample of the study

Sector	Total No.	Sector %	Sample	Sample %
Automobile assemble, parts and accessories	22	59%	13	8%
Cable and electrical Goods	6	50%	3	2%
Cement	21	67%	14	8%
Chemical	28	89%	25	15%
Engineering	19	32%	6	4%
Fertilizer	6	83%	5	3%
Food and personal care products	22	41%	9	5%
Glass and ceramics	10	50%	5	3%
leather and tanneries and MIS	21	62%	13	8%
Oil and gas exploration companies and marketing	12	67%	8	5%
Paper and board	10	60%	6	4%
Pharmaceuticals	12	75%	9	5%
Power generation and distribution	18	33%	6	4%
Refinery	4	25%	1	1%
Sugar and allied industries	30	23%	7	4%
Synthetic and rayon	10	50%	5	3%
Technology and communication	12	33%	4	2%
Textile	129	19%	24	14%
Tobacco	3	67%	2	1%
Transport	5	60%	3	2%
Vanaspati and allied industries and woolen	7	14%	1	1%
Total	407	100	169	100

$$ROA_{it} = \text{Net income} / \text{Total asset} * 100$$

The detail of the above mentioned variables is given in the Appendix I.

4. DATA ANALYSIS

4.1. Descriptive Statistics

The Table 2, shows the values of descriptive statistics of the EM, AC effectiveness, and Ownership structure of Pakistani listed firms. The total numbers of observations are ranging from 607 to 853 because of the missing observations for some variables due to unbalanced panel data. The mean of absolute discretionary accruals is 0.135 and the standard deviation is 0.293. The audit committee score is an index of four points that has mean 3.51 with a standard deviation of 0.61. This shows a higher average audit committee score. Block ownership almost 1 with 0.94, this value indicates the mostly firms in Pakistan has block ownership. Foreign ownership is the investment in shares by foreign companies or individuals it's mean is 0.129, while maximum value is 21%. The institutional shareholding means value is 0.06 along with 0.20 and 0.75 with maximum and standard

deviation values. The managerial ownership has mean of 0.25 while the maximum value is 6.30 and the standard deviation is 0.34. In control variables, the mean of leverage is 2.97 with minimum 0 and maximum of 86.08, firm size is a mean of 6.83. ROA has mean of 7.23 with minimum -88.45 and maximum 123.95. The average board size is 8 while maximum board size is 15 members, in addition to this average expert members in board of listed firms are 25% which is quite low which needs to be strengthened.

In Appendix II, the correlation matrix is presented with correlation coefficient values. The correlation matrix gives us different information regarding the robustness of our analysis; first, the correlation coefficients show us the strength of relationship among the study variables; second, it helps in diagnosis of multicollinearity problem and third, the diagnosis of endogeneity. The correlation coefficient of predicted residual shows no endogeneity problem because all the coefficients values are <0.60 which shows no Endogeneity problem, in addition to this, all the coefficients values of the Table 1 are below the (0.6) threshold level which indicates that there is no issue of multicollinearity.

Table 2: Descriptive statistics

Variables	n	Mean	S. Dev.	Min.	Max.
Dependent variable					
MJM	607	0.135	.293	0	4.283
Independent variables					
AC score	817	3.517	.618	2	4
Block OS	769	.944	.23	0	1
Foreign OS	753	.129	.857	0	21.009
Institutional OS	748	.067	.757	0	20.585
Management OS	749	.258	.34	0	6.306
Control variables					
Board size	835	8.216	1.553	6	15
Board expertise	836	.253	.188	0	.857
Firm size	755	6.839	.734	3.99	9.51
ROA	845	7.238	13.803	-88.45	123.95
Leverage	739	2.975	5.43	0	86.08
CFO	853	2630000	9600000	-1.94e+07	1.86e+08

Table 3: Random effect regression analysis

Predicted variable MJM (EM)	Modified jones model (1995)		Modified jones model (1995) Robust	
	Coefficients	Std. err. (t-values)	Coefficients	Std. err. (t-values)
AC score	-0.086	0.044 (-1.97)**	-0.056	0.022 (-2.53)**
Block OS	0.047	0.103 (0.46)	0.040	0.053 (0.74)
Foreign OS	0.000	0.013 (0.01)	0.001	0.001 (1.14)
Institutional OS	0.000	0.013 (-0.01)	-0.004	0.002 (-1.59)
Management OS	0.011	0.043 (0.26)	0.013	0.014 (0.93)
Control variables				
Board's expertise	-0.078	0.229 (-0.34)	-0.011	0.123 (-0.09)
Board's size	0.364	0.230 (1.58)	-0.011	0.026 (-0.43)
Firm size	0.723	0.126 (5.75)***	0.917	0.542 (1.69)*
ROA	0.006	0.002 (2.85)***	0.005	0.003 (1.79)*
Leverage	0.025	0.010 (2.41)***	0.021	0.009 (2.43)**
CFO	0.000	0 (5.21)***	0.0000	0.000 (1.72)*
Constant	-4.679	0.894 (-5.23)***	-6.115	3.785 (-1.62)**
ID	Y	Y	Y	Y
YD	Y	Y	Y	Y
Prob >Chi2	0.000***		0.000***	
Number of obs.	451		451	
Overall R-sq.	0.19		0.22	

***, ** and * refers to significance level at 1%, 5% and 10% ID, is for industry dummy, YD is for Year Dummy and Y for Yes

Table 3, shows the result of equation No.3 which checks the relationship among ownership structure proxies, audit committee effectiveness points, and EM proxy. The audit committee score variable is significant and has a negative coefficient showing that an increase in audit committee score decreases the discretionary accruals by -0.086 and 0.056 which is quite effective in mitigating EM. The coefficients of ownership structure proxies such as blockholder ownership, managerial ownership, foreign ownership, and institutional shareholding are insignificant but have positive effect on discretionary accruals.

In the Table 3, the managerial ownership value indicates the entrenchment hypothesis of managerial ownership which states that increasing the managerial ownership up to a certain extent may cause minority shareholder interest. (Nedal et al., 2010) added that insider ownership has a positive effect on EM and further added that managerial ownership firms are not aligned with other shareholder interests in value-maximizing of the firms, this is in line with the entrenchment hypothesis. Additionally, the institutional ownership value is positive and insignificant indicates passive hands-off hypothesis which proposes that institutional stockholders are keen in short term perks and more likely to sell their investment in a short period.

5. CONCLUSION

The study includes the non-financial firms of PSX over the period of 2013-2017. Foreign ownership, block ownership, insider ownership, and institutional shareholding are the proxies of ownership structure while for audit committee effectiveness an index of four points has been used in this study consisting of 1 point each for Audit committee expertise, independence, size and meetings. For dependent variable discretionary accruals (EM) proxy has been estimated by following Dechow et al., (1995) model which is popularly known is a Modified Jones Model in this study. The EM proxy was regressed with ownership structure variables, AC effectiveness Index and related control variables.

The findings of the study show that AC effectiveness effectively constrains discretionary accruals which prove the importance of the recent amendment in Pakistan Corporate Governance Code. Moreover, the findings of this research show that ownership structure proxies have no role in reducing discretionary accruals. The possible reason behind this may be that concentrated and family ownership is most of the businesses in Pakistan. In addition to this H_1 , H_2 , H_3 and H_4 which is related to ownership structure have no association with discretionary accruals so they are rejected. The H_5 of this study is accepted which indicates that AC Effectiveness is effectively mitigating discretionary accruals.

6. FUTURE RESEARCH AND LIMITATIONS OF THE STUDY

The outcomes of this study have left certain research gap for future research studies, future research studies could include additional proxies such as State/Govt. ownership, associated companies ownership, family ownership, and public ownership for ownership

structure while on for audit committees effectiveness variables such as AC shareholding, AC tenure and additional directorship in AC could be checked with EM.

We acknowledge that similar to other research studies this research study does have some limitations, firstly the results of this study cannot be generalized to financial firms due to their accountings procedures, different regulatory requirements and different revenue recognition principals. Moreover, the small sample size adopted for this study is not a rule of thumb. Thirdly, this study didn't include all the proxies of the ownership structure. Lastly, its findings cannot be generalized to developed countries' stock exchanges due to their market capitalization and bigger firm sizes.

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APPENDIXS

Appendix I: Detail of variables description

Variables	Acronym	Definition	Literature support	Test
Foreign Ownership	ForeignOwn _{it}	Number of shares held by foreign investors/total number of shares	(Alzoubi, 2016; and Jun et al., 2015)	H1
Block holders ownership	BlockOwner _{it}	A dummy variable which will take 1 if 10% or more of shares owned by the individual block holder otherwise 0.	(Habbash, 2013)	H2
Managerial ownership	Maown	The number of shares held by the management/total number of shares	(Alves, 2012; Kamran and Shah, 2014; and Ilmas et al., 2018)	H3
Institutional ownership	Instown	The number of shares held by institutions/total number of shares	(Ilmas et al., 2018; and Sadjiarto et al., 2019)	H4
Audit committee effectiveness	AuditcomSc _{it}	An Index of four points consisting of four audit committee characteristics such as if one member in AC has expertise and independence then 1 point each, as well as if the AC meet 4 time a year and minimum 3 member size 1 point each	(Habbash, 2013)	H5
Firm size	Firm size	Log of total assets	(Young, 1998; Qamhan et al, 2018 and Salah et al., 2007)	Control
Board's expertise	Board's expertise	The number of board member who have finance and accounting knowledge by total board members	(Hussaini, 2015)	Control
Board's size	Board's size	Total number of board members in the board of directors	Hussaini, 2015)	Control
CFO _{it}	CFO _{it}	The Cash flow form operation	Hussaini, 2015)	Control
Financial leverage	Leverage	Long term debt divided by shareholder equity	Qamhan et al, 2018	Control
Return on assets	ROA	Net income/total asset *100	(Kamran and Shah, 2014)	Control

Appendix II: Matrix of correlations

Variables	AC score	MJM	Block OS	Foreign OS	Institutional OS	Management OS	Firm Size	ROA	Leverage	CFO	Board's size	Board's expertise	Residual
MJM	1.000												
AC score	0.027	1.000											
Block OS	0.041	0.071	1.000										
Foreign OS	-0.027	0.019	0.006	1.000									
Institutional OS	-0.012	-0.034	0.017	0.005	1.000								
Management OS	-0.029	-0.102	-0.007	0.052	-0.016	1.000							
Firm size	-0.087	0.094	-0.049	-0.013	0.081	-0.031	1.000						
ROA	0.074	0.246	-0.081	-0.027	0.013	-0.091	0.409	1.000					
Leverage	0.003	-0.040	0.060	-0.015	-0.028	-0.064	-0.033	-0.222	1.000				
CFO	0.095	0.098	-0.026	-0.022	0.015	-0.022	0.497	0.252	-0.071	1.000			
Board's size	0.015	0.095	-0.008	-0.039	-0.033	-0.060	0.322	0.138	-0.005	0.293	1.000		
Board's expertise	0.017	0.019	0.033	-0.081	0.142	0.030	0.128	0.204	-0.073	0.093	0.092	1.000	
Residual	-0.047	0.076	-0.039	-0.021	0.069	-0.037	0.973	0.445	0.009	0.654	0.329	0.141	1.000