

Ownership Structure and Financial Reporting Quality: Influence of Audit Quality Evidence from Jordan



Hamza Kamel Qawqzeh, Wan Anisah Endut, Norfadzilah Rashid, Mohammad Mustafa Dakhllalh

Abstract: *The issues of ownership structure, audit quality, earnings management and financial reporting quality have received more consideration from public, profession and other interested parties particularly after persistent firms' scandals. Ownership structure play essential role in improve financial reporting quality (FRQ) through acting as effective internal control. This study examines the influence of the various types of ownership on the FRQ and the influence of audit quality. A stream of literature has examined the relationships between the different types of ownership, audit quality and FRQ. This study aims to connect such of these variables to produce an integrated model describing the influence of ownership structure with in the company and audit quality on FRQ. Therefore, the following relationships are tested: Ownership structure and FRQ, Mediating effect of auditor quality on these relationships, and audit quality and FRQ. Using Panel Data of 180 Jordanian company listed in ASE from 2009-2017, results showed that directors' and family ownership have significantly positive effect on FRQ through reducing earnings management; Institutional ownership has significantly negative influence on FRQ; Managerial ownership has insignificant impact on FRQ. Audit quality has partial mediating impact on these relationships. Audit quality found to has significantly positive impact on FRQ, it implies that audit quality is considered as deterrent to earnings management. This study suggests to increase the supervisory and monitoring role of institutional ownership on the management when preparing financial statements.*

Keywords: *Audit quality, Discretionary accruals, Earnings Management, Financial Reporting Quality, Jordan, Ownership structure.*

Manuscript published on November 30, 2019.

* Correspondence Author

Hamza Kamel Qawqzeh*, Faculty of Business & Management, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia. Email: hqawqzeh@yahoo.com

* Correspondence Author:

Wan Anisah Endut*, Faculty of Business & Management, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia. Email: wanisah@unisza.edu.my

Norfadzilah Rashid, Faculty of Business & Management, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia. Email: nikmfadzilah@unisza.edu.my

Mohammad Mustafa Dakhllalh, Faculty of Business & Management, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia. Email: mohammad_dakhllalh@yahoo.com

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>

I. INTRODUCTION

Financial reporting quality (FRQ) in its essence is a description of all financial and accounting activities of a company that can be used as a reference by external and internal parties to make final decisions. The use of financial reporting will be more pronounced if it meets the qualitative characteristics of reliable, understandable, relevant and comparable. The financial crisis and its relation with the lack of accountability of directors for allowing their companies to take excessive risks raise a big and world-wide debate on the directors' obligations and its enforceability [1].

Given that investors need to real and unbiased earnings information to know and estimate cash flows, the scandals have made corporate governance and governance structures reforms more essential and highlighted the crucial need for firms to enhance the quality of reported earnings [2]. There are many users of the company's financial information and reports, such as owners, customers, management, employees, government and creditors. The management needs to know the situation the firm is in to be able to make accurate economic decisions, the owner need to know the real performance of his firm to be able to separate right investments from bad, the suppliers wants to make sure that this firm can pay for them and the credit institutions needs to make sure that this firm will return their money that they borrow. Quality of financial and accounting disclosure plays a crucial role in maintaining an effective, efficient and active capital market [3].

Furthermore, it has been highlighted by several parties that audit quality and FRQ and CG can play crucial roles in the various financial scandals. Understanding how the relationships between effective CG, audit quality and FRQ is important, and it's requires investigating their components more precisely [4]. The influence of good CG mechanisms to enhancing FRQ is considered as a vital topic and it's widely considered in order to assessing the performance of the companies and the situations of stock exchanges in the different economies. Several of the regularity agencies assume that there are a direct relationships among CG mechanisms, audit quality, earnings quality and FRQ [5]. Therefore, investigation the effect of ownership structure, as a mechanism of corporate governance and FRQ, is very important.

The study has a contribution that it enhances our understanding of the interaction and the relationships between the different types of ownership such as (Institutional Ownership, Managerial, Family and Directors' ownership), audit quality, FRQ and earnings management.

Therefore, the main objective of the current study is to determine the relationships between ownership types

(directors, family, institutional and managerial ownership) and FRQ, and the influence of external audit quality on these relationships in one of the developing countries (Jordan).

II. LITERATURE REVIEW

A. Financial Reporting Quality

A series of well publicized cases of financial scandals such as WorldCom and Enron have captured the attention of regulators and investors alike. These scandals and crises have greatly shaken the investors' and stakeholders' confidence in the integrity of the firms' financial reporting, and have raised several criticisms about the FRQ [6]; [7]. Financial reporting now is not perceived as an ordinary bookkeeping activity or as a mere recording of transactions. It is seen as a central function for directing a firm under good principles of corporate governance (CG) [8].

The audited financial statements should provide information to the investors, shareholders and all users in order to take the appropriate financial and economic decisions. Financial information is taken as essential basis for decision making of the all parties on the capital market. Financial reports contribute identifying the past performance, predicting the firm's profitability and monitoring the behaviors of the managers [9]. In addition, the financial reporting will be useful if the information contained in financial reporting be useful as a reference to predict the state of the company in the future. This will be indispensable for all users to guide the company to a better direction [10].

On the other hand, earnings management (EM) can happen if the prepare of financial reports based on the accrual. The accrual method provides an opportunity for the management to make changes on the earnings that will affect the reported statements. Earnings management is done by company managers to cover any deficiencies that the company has in order to make the company looks good in front of the financial reporting users [11].

Jensen and Meckling [12] said that a mechanism is needed to enable the control and the supervision on the performance of management, so the management work in accordance with the interests of shareholders. Ownership structure is a useful mechanism for minimizing conflicts between shareholders and managers. The ownership structure is an effective regulatory mechanism that limits EM through invisible supervision and involvement in management [13].

The wide accounting and financial scandals have prompted the urgent need to improve the credibility of financial reports through establish the various governance structures [14]. The interactions between CG, ownership structure and FRQ have been widely debated within the context of the developed countries. The attention regarding to these issues has been recently turned to the context of the developing countries to

investigate the interactions between corporate governance, governance structures, external audit quality and reporting quality.

B. Directors' Ownership

This study investigates the impact of directors' ownership on both of audit quality and FRQ as a single variable, based on the argument that "combining directors' ownership with the management or substantial shareholders in one variable might hide part of fact" [15].

The proportion of the capital held by the directors based on agency theory, may provide a sufficient incentive for the directors to exerting effective monitoring role on the management and the financial accounting process [12]. Thus, directors who possess ownership in the company are more effective and responsive to provide more transparent disclosure that meets the requirements of investors and creditors [15, 16]. Consequently, it is expected that the ownership by directors allows for enhancing the FRQ and disclosures through limiting the aggressive accounting methods and discretionary adjustments [18].

Bhagat and Bolton [19] indicate that due to the requirements of ownership structure are positively associated with firm's performance, these requirements are better proxies of the quality of CG than existing complex proxies. The current studies often equate directors' ownership with enhanced CG and enhanced financial performance [20].

The directors may become better and stronger monitors when they have larger ownership in the funds they oversee and are thus more diligent in taking actions and strict decisions [21]. The directors who owned stock are more likely to oppose the opportunistic attempts by the management to manage earnings when transparency increases [20].

Lin and Hwang [22] found that the ownership by the directors have positive impact on EM. Gouiaa and Zeghal [18] showed that the directors' ownership has significantly positive impact on quality of accruals. Based on the previous results, it can establish the following hypothesis:

H1: Directors' ownership has significant influence on FRQ.

C. Family Ownership and FRQ

The ownership held by the family is usually can be related with the double effect for both managers and owners. This kind of ownership can make a long-term pledge to the firm but they are often far from the risk given that high level of their interests and wealth are closely related in the firm [23]. The owners from the families can obtain a special benefit from managing the firm at expense of small owners [24]. In previous studies, family ownership has been related with high level of earnings quality [24, 25].

Cucculelli and Micucci [27] and Anderson et al [28] revealed that the ownership held by the family have negative influence on financial performance. Slotte [29] also found that the family ownership decreases earnings quality. Klai and Omri [14] revealed that the family ownership reduces the FRQ.

Reyna [13] studied the influence of ownership composition on EM practices, the results also indicate that family ownership decrease the EM practices, but this effect depends on the firm size. Madani et al [9] revealed no a significant effect between family ownership with FRQ. Affan et al [11] found that the family ownership does not influence the FRQ. Alaryan [30] found that family ownership plays a significant effect in ensuring earnings quality. This inconsistency formed the following hypothesis:

H2: Family ownership has significant influence on FRQ.

D. Institutional Ownership and FRQ

Apriada and Suardikha [31] suggested that higher levels of institutional ownership will enhance external control over management and improve FRQ. This is in line with the study of [32]. Reyna [13] revealed that institutional ownership reduces the EM practices, but this effect also is depending on the firm size.

Affan et al [11] found that institutional ownership can affect FRQ in the companies that uses real earnings management (EM) indicator, and the agents tend to use new methods of EM, and thus it can reduce the FRQ. On the other hand, in the same study, he found that this type of ownership can enhance FRQ in the companies that uses accrual earnings management indicator.

Several researchers argued that the institutional owners have limited efficiency in monitoring the agents [33]. Still, some studies revealed on positive effects of institutional ownership with the firm performance [34]. Further, both a negative effect [35] and a positive effect [36] have been found between the institutional ownership and FRQ.

In contrast to previous research, Adebiyi and Olowookere [37] make study on influence of several types of the ownership on the FRQ, and they found negative influence for institutional ownership on FRQ. But Madani et al [9] revealed on insignificant relation between institutional ownership and FRQ. This inconsistency formed the following hypothesis:

H3: Institutional ownership has significant influence on FRQ.

E. Managerial Ownership and Financial Reporting Quality

The relations between managerial ownership and the FRQ have been examined in several studies, Adebiyi and Olowookere [37] & Alves [38], found that managerial ownership enhance FRQ, which means that the managers who own shares have less incentive to manipulate financial statements, and it can reduce EM. This result and this relation are in the same line with many studies such as Jensen & Meckling [12], Dhaliwal et al [39], Morck [40].

Alves [38] revealed that EM is negatively related with managerial ownership, and managerial ownership enhance FRQ through reducing the levels of EM. But previous studies are not always on the same line with the theory. Teshima & Shuto [41], Han [42], Apriada & Suardikha [31] revealed that weak supervision of high managerial ownership levels can reduce the FRQ. Saftiana et al [43] and Affan [11] found that managerial ownership does not has significant impact on EM or FRQ.

Managerial ownership will make the managers feel that they also have the company, so the conflict of interest between the owners and the agents will decrease [44]. Based on these results, it can formulate the next hypothesis:

H4: Managerial ownership has significant impact on FRQ.

F. Audit Quality

The external audit quality considered as essential determinant to the quality of financial statements. In audit literature, auditor size and audit fees have been widely used as an indicator for the quality of external audit [45].

With regarding to audit quality, the most popular definition of external AQ is by DeAngelo [46] who define external audit quality (AQ) as the probability that the auditor will find a breach and he will report this breach. Thus, the external auditor will either succeed or fail in detecting the violations in the GAAP [47]. DeFond et al [48] revealed that the responsibilities of the external auditor are extend well beyond the detection of the violations in the financial statements, to provide high assurance of FRQ. Palmer [49] posited that auditor quality directly influences the FRQ, and that better quality of audits is also associated with better quality of disclosures. Accordingly, we can formulate the following hypotheses:

H5: The relationship between (institutional, family, managerial and directors' ownership) and FRQ is mediated by audit quality.

H6: Audit quality has significant effect on FRQ.

III. AGENCY THEORY

The association between the institutional ownership and FRQ can be explained through the approach of agency theory, this theory stating that this type of ownership can improve monitoring role on the management in the company through reduce agency conflicts between agents and owners [11]. Based on agency theory, agency problems arise when there is a difference between the interests of both of owners and managers. The interests of shareholders should be more concerned, since the company's objectives is more for the welfare of shareholders.

Agency theory approach used to explain the relations between the owner and the manager. The separation of ownership from management in the firm, provide background designed for the functions of agency theory. Most of the companies have isolated ownership, as a shareholder, who are not often involved in manage of their firms. Therefore, agency theory points out that the interest of stakeholder's is more important than the interest of manager's, and managers must act to keep track of stakeholder's interest. This distinction among control and ownership establishes the possibility to rise conflicts of interest among managers and shareholders or the shareholders/principals [12, 48]. Managers are always motivated by work to exploit their personal interest and their own individual interests rather than of the stakeholders' interests which become the most relevant based on the agency theory [51].

In agency theory, strong CG and governance structures are expected to increase the veracity of financial reports and, hence, improve quality of reported earnings to financial information users [12]. The prior studies regarding to this theory argued that the increasing in the ownership and authority of the family ownership can mitigate the conflicts of interest. Additionally, those firms that controlled by the families confront with less agency costs and it can be more efficient [9].

IV. RESEARCH METHODOLOGY

A. Data Collection and Resources

The population of this study is all listed companies in Amman Stock Exchange (ASE) during the 2009- 2017. The period was selected considering that in 2009 Jordan has adopted corporate governance codes. The sample of this study consists of all existing companies that have disclosed information about their ownership structure. The period runs for nine years during 2009-2017 (180 companies). Data related to Mediator and Independent variables were collected manually from annual reports through ASE's website, and the data that related to discretionary accruals was collected from Datastream through university sultan zainal abidin's library (UNISZA).

Table- I: Classification of Jordanian Sectors

Sector Name	Number of Companies
Financial Sector	86
Services Sector	45
Industrial Sector	49
Total	180

B. Measurement the variables

This study will use discretionary accruals (DACC) as a proxy for FRQ. Given that the basic assumption that the level of DACC can be good indicator of earnings management (EM) and therefore it's provided an inverse proxy of FRQ. The low level of DACC is expected to indicate good financial reporting quality and earnings quality [50, 51, 52, 53].

In the current study, the model of "performance-matched DACC" introduced by Kothari et al [56] will be used to measure the level of EM practices. The accruals variable is referred to as DAC_PERF (Discretionary-Performance).

$$ACCrit/TAit-1 = \alpha_0 + \alpha_1(1/TAit-1) + \alpha_2(\Delta REVit - \Delta ARit)/TAit-1 + \alpha_3(PPEit/TAit-1) + \alpha_4 ROAit-1 + \epsilon it$$

Where:

ACCR it: Total Accruals

TAit: Total assets

ΔREVit: The Change in Revenues,

ΔARit: The Changes in receivable,

PPEit: property, plant, equipment,

ROAit: Return on the Assets, and,

εit: Error term.

The level of the DACC is residual of the equation above, it a difference between the actual total accruals (ACCR) and normal accruals through the fitted values in the above equation. The measure of ACCR through difference between net income and the operating cash flows.

Therefore, to improve our model, the study will separate the firms take a conservative strategy (DACC < 0) and the firms engaged in the aggressive strategy (DACC > 0) [55].

Table- II: Measurement the Variables

variable	Variable type	Measurement
Financial reporting quality	Dependent variable	Discretionary accruals
Audit quality	Mediator variable	Audit fees
institutional ownership	Independent variable	Proportion of institutions ownership to the paid capital
family ownership	Independent variable	Proportion of family ownership to the paid capital
managerial ownership	Independent variable	Proportion of managers' ownership to the paid capital
board's ownership	Independent variable	Percentage of director's ownership in the board to the paid capital.

Based on the table II above, the model of this study have three equations as follow:

$$1- EM = \beta_0 + \beta_1 BDOWN + \beta_2 FMOWN + \beta_3 INSOWN + \beta_4 MAOWN + \epsilon$$

$$2- EM = \beta_0 + \beta_1 AFEES + \beta_2 BDOWN + \beta_3 FMOWN + \beta_4 INSOWN + \beta_5 MAOWN + \epsilon$$

$$EM = \beta_0 + \beta_1 AFEES + \epsilon$$

V. FINDING

Summary descriptive statistic for the variables showed in Table III. The average of Earning management (EM) and Audit fee (AFEES) are -0.00034 and 8.52002 and broadly disperses -1.39907 to 8.40031 and 4.00733 to 11.59910 respectively.

Independent variables are offered by Board ownership (BDWON), Family ownership (FMOWN), Institutional ownership (INSOWN) and Managerial ownership (MAOWN). The means of BDWON, FMOWN, INSOWN and MAOWN are 0.16472, 0.04260, 0.284394, and 0.02898 respectively. Table III also shows other features of considered variables in this study such as skewness, std. deviation, Kurtosis and Jarque-Bera tests.



Table- III: Descriptive Statistics

	EM	AFEES	BDOWN	FMOWN	INSOWN	MAOWN
Mean	-0.000340	8.520025	0.164742	0.042606	0.284394	0.028987
Median	0.002918	9.071078	0.103185	0.005075	0.23356	0.001280
Maximum	8.400316	11.59910	1.000000	0.955000	0.999	0.648950
Minimum	-1.399073	4.007333	0.000000	0.000000	0.000000	0.000000
Std. Dev.	0.262090	1.413104	0.191908	0.243753	0.279598	0.071539
Skewness	20.35679	-0.239488	1.714231	0.764537	0.389322	3.994734
Kurtosis	655.7981	1.788446	6.253827	2.779167	2.125510	22.32864
Jarque-Bera	28876699	114.5665	1508.067	161.1113	92.54384	29526.38
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	1620					

After descriptive statistics, the correlation between all variables is provided in the Table IV. it can be seen that the correlation of EM and AFEES is high that can be a sign of mediation relationship. Following that, BDOWN and

INSOWN has high correlation and rest have lower correlation that are not causing any issue.

Table- IV: Correlation Coefficients between DV, IVs and Mediating Variables

	EM		AFEES		BDOWN		FMOWN		INSOWN		MAOWN
EM	1.000										
AFEES	-0.390	***	1.000								
	0.000										
BDOWN	-0.052	**	0.077	***	1.000						
	0.035		0.002								
FMOWN	0.014		0.036		0.093	***	1.000				
	0.582		0.148		0.000						
INSOWN	-0.013		0.038	***	-0.348	***	-0.152	***	1.000		
	0.615		0.125		0.000		0.000				
MAOWN	-0.034		0.091	***	0.343	***	0.071	***	-0.129	***	1.000
	0.177		0.000		0.000		0.005		0.000		

Variance Inflation Factors (VIF) is considered as a test to measure the multicollinearity among all variables in the analysis. [57]. Based on the data shown in Table V, the VIF of all variables are less than 10, therefore, there is no multicollinearity problem, this study will not exclude any variable from the model. Table V. Result of Multicollinearity test.

Table- V: VIF

Variable	Centered VIF
AFEES	1.04
BDOWN	1.64
FMOWN	1.09
INSOWN	1.63
MAOWN	1.14

Following that, Breusch-Pagan-Godfrey test are utilized to investigate the existence of heteroskedasticity issue. As table 6 shows, the probability of this test it is insignificant and hence there is no issue of heteroskedasticity.

Table- VI: Heteroskedasticity

Breusch-Pagan-Godfrey	3.863480	Prob. Chi-Square(4)	0.4248
-----------------------	----------	---------------------	--------

To assess the mediating role of AFEES in this study, three equations will be applied. In the first equation the effect of

independent variables (including BDOWN, FMOWN, INSOWN and MAOWN) on dependent variables (EM) is analyzed and in the second equation the effect of independent variables (same as above mentioned ones) and mediator (AFEES) will be assessed. In the third equation the effect of mediating variable (AFEES as independent variable) on the dependent variable will be assessed.

Since all equations are Panel data, three compulsory tests for Panel data analysis should be applied to select among Pooled OLS, Fixed/Random effect. Those tests are: F-test (between Pooled OLS and Fixed effect (FE)), Breusch-pagan test (Pooled OLS and Random effect (RE)), as well as Hausman test (Random effect (RE) and fixed effect (FE)).

Tables VII, VIII and IX demonstrate the outcome of these three tests for the first, second and third equations. As the outcome of F-test shows, null hypothesis will reject, the other hypothesis which is fixed effect will be acceptance. Then, the result of Breusch-Pagan test rejects null hypothesis too and implies the acceptance of random effect. So, the Hausman test will clarify the final selection. Finally, the result of Hausman shows the null hypothesis must be rejected and other hypothesis which is the Fixed effect should be accepted.

Ultimately, it becomes clear that the most appropriate method for all equations is Fixed effect (FE). So, the final model for equation 1, 2 and 3 will be applied based on Fixed effect method.

Table- VII: F-test, BP-LM and Hausman for Equation1 (IVs on DV)

Tests	Statistic	d.f.	Prob.
F-test (F-statistic)	6.802	(179,1255)	0.000
BP-LM test	160.242	-----	0.000
Hausman test (Chi-Sq.	505.007	5	0.000

Table- VIII: F-Test, BP-LM and Hausman for Equation 2 (IVs and Mediator on DV)

Tests	Statistic	d.f.	Prob.
F-test (F-statistic)	5.594	(179,1254)	0.0000
BP-LM test	142.718	-----	0.000
Hausman test (Chi-Sq.	406.208	6	0.000

Table- IX: F-Test, BP-LM and Hausman for Equation 3 (Mediator on DV)

Tests	Statistic	d.f.	Prob.
F-test (F-statistic)	3.182030	(179,1258)	0.0000
BP-LM test	207.4964	-----	0.000
Hausman test (Chi-Sq.	20.361672	2	0.000

Table X illustrates the final outcome of first equation. In other words, it shows the impact of independent variables of this study on dependent variable. It is important to mention that to solve the issue of Autocorrelation and Unitroot in this model, all independent variables are converted to their first difference values also lagged value for dependent variable included in these models. It can be seen that no autocorrelation issue through the value of Durbin-Watson (DW), as shown in Table X. The DW value is 1.444 and the value range between the values -2 to +2, which means there is no autocorrelation issue [58]. R-squared in this model is (0.610), and Prob (F-statistic) is (0.000).

On the other hand, with regarding to the Normality; it detected that all of the data have a normal distribution. Also, as [57] pointed out that if the number of the observations is bigger than 100 observations; Normality of residual is not issue. This study has 1620 observations. "These days there are huge of data which involves a fairly huge number of the observations. Thus, the normality assumption may not be very important in the big data sets" [57].

The findings revealed that BDOWN and FMOWN have significantly negative influence on EM. It implies if these two independent variables increase, it leads to decrease EM, (which also mean that the board's and family ownership have significantly positive influence on FRQ). The results regarding to BDOWN are supported by [18]; [21]; and the results regarding to FMOWN on the same line with Wang [25]; Ali et al [26]; Reyna [13]; Alaryan [30].

On the other hand, INSOWN have significant and positive impact on EM which shows that if INSOWN increase, EM will be increased accordingly, (It reflect that the institutional ownership have negative and significant impact on FRQ), these results supported by Koh [59], Adebisi, and

Olowookere [37], Affan et al [11]. Also; the results indicate that MAOWN have insignificant impact on EM, and these results on the same line with Agustia [60], Saftiana et al [43]; Affan et al [11]. The finding of this equation supported the three hypotheses that BDOWN, FMOWN, INSOWN have significant impact on EM. But the findings also didn't support the hypothesis that Managerial Ownership have significant impact on EM.

Table- X: Equation 1 (IVs on DV)

Variable	Coefficien t	Std. Error	t-Statisti c	Prob.
DBDOWN	-0.153	0.052	-2.964	0.003
DFMOWN	-0.725	0.124	-5.865	0.000
DINSOWN	0.547	0.025	21.566	0.000
DMAOWN	0.176	0.305	0.577	0.564
LAGEM	-0.321	0.016	-20.198	0.000
Constant	-0.005	0.000	-20.059	0.000
R-sq	0.610	Adjusted R-sq		0.552
F-statistic	10.651	Prob(F-statistic)		0.000
D-W	1.444			

Following that, table XI illustrates the final outcome of second equation. In other words, it shows the impact of independent variables and mediator of this study on dependent variable. Similar to previous section, to solve the issue of Autocorrelation and Unitroot in this model, all independent and mediator variables are converted to their first difference values and also the lagged value of dependent variable is included in above model. Also, it can be seen that there is no autocorrelation issue through the DW value, as shown in Table XI. The DW value is 1.383 and the value range between the values -2 to +2, which means that there is no autocorrelation issue [58]. R-squared in this model is (0.626), and Prob (F-statistic) is (0.000).

The results indicate that BDOWN, FMOWN and also mediator (AFEES) have significant and negative impact on EM. It implies if these two independent variables and mediator increase, it causes decreasing EM. Besides that, INSOWN has significant and positive impact on EM which shows that if INSOWN increase, EM will be augmented accordingly. Also; the results indicate that MAOWN have insignificant effect on EM.

The outcome of this equation supported the hypothesis that AFEES has mediating role in the relationship between independent variables of this study and EM. Furthermore, it should be mentioned that even after entering mediator (AUDIT FEES), independent variables still have meaningful effect and their impact does not changed to zero, so it means that AUDIT FEES have partial mediating effect not full mediating effect.

Table- XI: Equation 2 (IVs and Mediator on DV)

Variable	Coefficien t	Std. Error	t-Statisti c	Prob.
DAFEES	-0.014	0.002	-7.461	0.000
DBDOWN	-0.121	0.051	-2.383	0.017
DFMOWN	-0.638	0.122	-5.248	0.000
DINSOWN	0.512	0.025	20.253	0.000
DMAOWN	-0.027	0.299	-0.091	0.928

LAGEM	-0.271	0.017	-15.991	0.000
Constant	-0.004	0.000	-16.010	0.000
R-sq	0.626	Adjusted R-sq		0.571
F-statistic	11.355	Prob(F-statistic)		0.000
D-W	1.383			

Table XII illustrates the final outcome of third equation. In other words, it shows the impact of mediating variable on the dependent variable. And again, here it can be seen that there is no autocorrelation issue through the Durbin-Watson value (DW), as shown in Table XII. The DW value is **1.956** and the value range between the values -2 to +2, which means there is no autocorrelation issue. R-squared in this model is (0.454), and Prob F-statistic is (0.000).

The results of last equation indicate that audit fees have significant and negative impact on EM. It implies if Audit Fees increase, it leads to decrease EM, and improve FRQ, this result supported by [49]. The finding of this equation supported the hypothesis that AFEES have significant impact on EM.

Table- XII: Equation 3 (Mediator on DV)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DAFEES	-0.025753	0.002156	-11.94679	0.0000
LAGEM	-0.036246	0.014332	-2.528976	0.0116
C	-0.000472	0.000206	-2.290173	0.0222
R-sq	0.454680			
Adjusted R-sq	0.376220			
F-statistic	5.795047			
D-W	1.956			

Finally, it should be noted that, as noted before, discretionary accruals (DACC) is the final measure of FRQ. This is based on the assumption that the DACC reflects the level of EM and therefore it's provided an inverse proxy of FRQ. So, in above-mentioned outcome, whenever, the independent variables and mediator variable have negative impact on EM, it implies that they have positive impact on FRQ, and vice versa for case of positive effect.

VI. CONCLUSIONS

The issues of ownership structure, audit quality, earnings management and FRQ have received huge consideration from public population, government controllers, profession of auditing and accounting, shareholders, investors and other interested parties particularly after persistent firms' scandals.

Researchers in the financial, accounting and management profession have examined many ways for enhancing and restoring confidence in the accounting profession due to continuous firms' scandals. Several suggestions have been made on how to develop and enhance FRQ including the implementation of CG mechanisms, audit quality, regulations, disclosures and ethical compliance.

This study explored the relationships between (Directors, family, institutional and managerial ownership), earnings management and FRQ, and impact of audit quality on this relationship, also; the association between audit quality and FRQ in Jordanian listed firms in ASE, with the sample of 180 firms from 2009 to 2017.

Based on the discussion and the findings of this study, it

can be seen that three variables out of the four variables used as a proxy of ownership structure are significantly affect FRQ.

The results revealed that Directors' ownership and Family ownership have significantly negative influence on earnings management (significant and positive impact on FRQ). It implies if these two independent variables increase, it leads to decrease EM and improve FRQ.

Institutional ownership has significantly positive influence on EM (negative and significant influence on FRQ) which means that institutional ownership lead to reducing the FRQ. Managerial ownership found to have insignificant impact on earnings management and FRQ.

With respect to the mediating effect of audit quality, the findings indicate that the audit quality (audit fees) has mediating impact on the relation between ownership structure and EM, and this effect was partial mediating effect.

Also, regarding to the association between the audit quality and EM practices, the findings revealed that audit quality have significantly negative influence on EM (significant and positive effect on FRQ). It means that audit quality improves and enhance FRQ through reducing and restriction the earnings management.

The main contribution of the current study is that it shows the association of some of the CG mechanisms (ownership structures) with audit quality, earnings management and FRQ in different ways, in one of developing countries (Jordan) with new perceptions, due to the lack of studies in this field. Thereby enhance our understanding how ownership structures affects FRQ and the role of external auditor.

Furthermore, this study recommends of the shareholders and investors to reconsider in the levels of the ownerships in the companies, especial the institutions that invest in other companies in order to increase their supervisory role on the management performance when preparing financial statements.

The findings of this study can help shareholders, investors, institutions and all parties to know the relationships between ownership structure, audit quality, EM practices and FRQ. Besides, from the theoretical aspect, these results provide better and broad understanding of agency theory.

Future studies can explore the effects other mechanisms of CG (board structure and audit committee), also; it should examine the external auditor characteristics along with corporate governance mechanisms, due to the external auditor plays a pivotal, critical and vital role in all financial issues related to the company and all related-party transactions.

REFERENCES

1. C. Fernández Méndez, R. Arrondo García, and S. Pathan, "Capacidad supervisora de los consejeros ocupados y solapados: Un análisis de la remuneración ejecutiva y la calidad de la información financiera," *Rev. Esp. Financ. y Contab.*, vol. 46, no. 1, pp. 28–62, 2017.
2. R. A. Al-Dhamari and K. N. I. Ku Ismail, "Governance structure, ownership structure and earnings predictability: Malaysian evidence," *Asian Acad. Manag. J. Account. Financ.*, vol. 9, no. 1, pp. 1–23, 2013.
3. H. Edlund, "Reasons behind presumed low financial reporting quality (FRQ) in China," *Univ. Vaasa*, 2012.

4. S. M. Hosseiniakani, H. Inacio, and R. Mota, "A review on audit quality factors," *Int. J. Acad. Res. Accounting, Financ. Manag. Sci.*, vol. 4, no. 2, pp. 243–254, 2014.
5. Q. R. Yasser, A. Al Mamun, and M. Hook, "The impact of ownership structure on financial reporting quality in the east," *Int. J. Organ. Anal.*, vol. 25, no. 2, pp. 178–197, 2017.
6. A. Agrawal and S. Chadha, "Corporate governance and accounting scandals," *J. Law Econ.*, vol. 48, no. 2, pp. 371–406, 2005.
7. J. R. Brown, D. Falaschetti, and M. J. Orlando, "Auditor Independence and Earnings Quality: Evidence for Market Discipline vs. Sarbanes-Oxley Proscriptions," *SSRN Electron. J.*, 2011.
8. C. P. Ezelibe, O. Nwosu, and S. Orazulike, "Empirical investigation of corporate governance and financial reporting quality of quoted companies in Nigeria," *Int. J. Econ. Bus. Manag. Res.*, vol. 1, no. 5, pp. 117–137, 2017.
9. M. Madani, A. M. Moein, and A. A. Rad, "Impact of Family Ownership, State ownership and Major Shareholders on the Financial Reporting Quality of the Firms Listed on the Tehran Stock Exchange Interdiscip," *Interdiscip. J. Contemp. Res. Bus.*, vol. 5, no. 5, pp. 5–12, 2013.
10. A. Mohandi and A. Odeh, "The Effect of Ownership Structure on the Quality of Financial Statements in Jordan," *J. Bus. Adm.*, vol. 19, no. 2, pp. 1–233, 2010.
11. L. Affan, M., Rosidi, S., & Msi, "The Effect of Ownership Structure on the Quality of Financial Reporting Of Manufacturing Companies Listed In the IDX during the Period of 2013-2015," *Imp. J. Interdiscip. Res.*, vol. 3, no. 7, 2017, 2017.
12. M. Jensen and W. Meckling, "Theory of the firm: Managerial behaviour, agency costs and ownership," *Strateg. Manag. J.*, vol. 21, no. 4, pp. 1215–1224, 1976.
13. J. M. San Martin Reyna, "The effect of ownership composition on earnings management: evidence for the Mexican stock exchange," *J. Econ. Financ. Adm. Sci.*, vol. 23, no. 46, pp. 289–305, 2018.
14. N. Klai and A. Omri, "Corporate Governance and Financial Reporting Quality: The Case of The Tunisian Firms," *Int. Bus. Res.*, vol. 4, no. 1, pp. 69–77, 2014.
15. Z. M. Sori and S. Mohamad, "Governance structure and external audit price: evidence from an emerging economy," *Int. J. Econ. Manag.*, vol. 2, no. 2, pp. 259–279, 2008.
16. K. J. M. Cremers and V. B. Nair, "Governance mechanisms and equity prices," *J. Finance*, vol. 60, no. 6, pp. 2859–2894, 2005.
17. K. U. Bhat, Y. Chen, K. Jebran, and N. A. Bhutto, "Corporate governance and firm value: a comparative analysis of state and non-state owned companies in the context of Pakistan," *Corp. Gov.*, vol. 18, no. 6, pp. 1196–1206, 2018.
18. R. Gouiaa and D. Zéghal, "an Analysis of the Effect of Board Characteristics and Governance Indices on the Quality of Accounting Information," *J. Gov. Regul.*, vol. 3, no. 3, pp. 104–119, 2016.
19. S. Bhagat and B. Bolton, *Director ownership, governance, and performance*, vol. 48, no. 1, 2013.
20. J. M. Rose, C. R. Mazza, C. S. Norman, and A. M. Rose, "The influence of director stock ownership and board discussion transparency on financial reporting quality," *Accounting, Organ. Soc.*, vol. 38, no. 5, pp. 397–405, 2013.
21. Y. Ju and L. Zhao, "Directors' Ownership and Closed-End Fund Discounts," *J. Financ. Serv. Res.*, vol. 45, no. 2, pp. 241–269, 2014.
22. J. W. Lin and M. I. Hwang, "Audit quality, corporate governance, and earnings management: A meta-analysis," *Int. J. Audit.*, vol. 14, no. 1, pp. 57–77, 2010.
23. S. Thomsen and M. Conyon, *Corporate governance: Mechanisms and systems*. McGraw Hill, 2012.
24. R. La Porta, F. Lopez-de-Silanes, and A. Shleifer, "Corporate ownership around the world," *J. Finance*, vol. 54, no. 2, pp. 471–517, 1999.
25. D. Wang, "Founding family ownership and earnings quality," *J. Account. Res.*, vol. 44, no. 3, pp. 619–656, 2006.
26. A. Ali, T. Chen, and S. Radhakrishnan, "Corporate disclosures by family firms," no. July, 2005.
27. M. Cucculelli and G. Micucci, "Family succession and firm performance: Evidence from Italian family firms," *J. Corp. Financ.*, vol. 14, no. 1, pp. 17–31, 2008.
28. R. C. Anderson, S. A. Mansi, and D. M. Reeb, "Founding family ownership and the agency cost of debt," *J. financ. econ.*, vol. 68, no. 2, pp. 263–285, 2003.
29. S. Slotte, "The influence of ownership type and ownership concentration on earnings quality in Nordic listed firms," 2018.
30. L. A. Alaryan, "Relationship between ownership structure and earnings quality," *Basic Res. J. Bus. Manag. Accounts*, vol. 4, no. 8, pp. 200–205, 2015.
31. Apriada & Suardikha, "Pengaruh Struktur Kepemilikan Saham, Struktur Modal dan Profitabilitas Pada Nilai Perusahaan," *E-Jurnal Ekon. dan Bisnis Univ. Udayana*, vol. 5, no. 2, pp. 201–218, 2016.
32. N. P. Y. Wulandari and I. K. Budiarta, "Pengaruh Struktur Kepemilikan, Komite Audit, Komisaris Independen dan Dewan Direksi terhadap Integritas Laporan Keuangan," *E-Jurnal Akunt.*, pp. 574–586, 2014.
33. J. Tirole, *The Theory of Corporate Finance*. Princeton University Press; Princeton and Oxford, 2006.
34. [34] T. Pedersen and S. Thomsen, "Ownership structure and value of the largest European firms: The importance of owner identity," *J. Manag. Gov.*, vol. 7, no. 1, pp. 27–55, 2003.
35. P. S. Koh, "On the association between institutional ownership and aggressive corporate earnings management in Australia," *Br. Account. Rev.*, vol. 35, no. 2, pp. 105–128, 2003.
36. D. S. Jenkins, G. D. Kane, and U. Velury, "Earnings quality decline and the effect of industry specialist auditors: An analysis of the late 1990s," *J. Account. Public Policy*, vol. 25, no. 1, pp. 71–90, 2006.
37. N. Adebisi and J. Olowookere, "Ownership structure and the quality of financial reporting: Evidence from Nigerian deposit money banks," *Int. J. Econ. Commer. Manag.*, vol. 4, no. 1, pp. 541–553, 2016.
38. S. Alves, "Ownership structure and earnings management Evidence from Portugal," *Aust. Account. Bus. Financ. J.*, vol. 6, no. 1, pp. 57–74, 2012.
39. D. S. Dhaliwal, G. L. Salamon, and E. D. Smith, "The effect of owner versus management control on the choice of accounting methods," *J. Account. Econ.*, vol. 4, no. 1, pp. 41–53, 1982.
40. R. Morck, A. Shleifer, and R. W. Vishny, "Management ownership and market valuation. An empirical analysis," *J. financ. econ.*, vol. 20, no. C, pp. 293–315, 1988.
41. N. Teshima and A. Shuto, "Managerial ownership and earnings management: Theory and empirical evidence from Japan," *J. Int. Financ. Manag. Account.*, vol. 19, no. 2, pp. 107–132, 2008.
42. S. Han, "Ownership Structure and Quality of Financial Reporting," *SSRN Electron. J.*, 2011.
43. Y. Saftiana, Mukhtaruddin, K. W. Putri, and I. S. Ferina, "Corporate governance quality, firm size and earnings management: Empirical study in Indonesia stock exchange," *Invest. Manag. Financ. Innov.*, vol. 14, no. 4, pp. 105–120, 2017.
44. C. E. Crutchley and R. S. Hansen, "A test of the agency theory of managerial ownership, corporate leverage, and corporate dividends," *Financ. Manag.*, pp. 36–46, 1989.
45. A. (Tassos) Elemes, "Studies on Determinants and Consequences of Financial Reporting Quality," 2015.
46. L. E. DeAngelo, "Auditor size and audit quality," *J. Account. Econ.*, vol. 3, no. 3, pp. 183–199, 1981.
47. M. S. Islam, "Impact of non-audit services and tenure regulations on auditor independence and financial reporting quality: evidence from the UK," 2016.
48. M. L. DeFond, D. H. Erkens, and J. Zhang, "Do Client Characteristics Really Drive the Big N Effect? Evidence from Matching Methods," *SSRN Electron. J.*, 2014.
49. P. D. Palmer, "Audit quality and financial report disclosure," *Flinders Bus. Sch. Res. Pap. Ser.*, pp. 1–29, 2008.
50. K. M. Eisenhardt, "Agency theory: An assessment and review," *Acad. Manag. Rev.*, vol. 14, no. 1, pp. 57–74, 1989.
51. O. G. Emmanuel, R. Okon, and H. Afor, "Effect of Ownership Structure on Earnings Management of Listed Industrial Goods Companies in Nigeria Effect of Ownership Structure on Earnings Management of Listed Industrial Goods Companies in Nigeria," no. January, 2019.
52. P. M. Healy, "The effect of bonus schemes on accounting decisions," *J. Account. Econ.*, vol. 7, no. 1–3, pp. 85–107, 1985.
53. L. E. DeAngelo, "Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders," *Account. Rev.*, vol. 61, no. 3, p. 400, 1986.

54. J. J. Jones, "Management during import relief investigations," *J. Account. Res.*, vol. 29, no. 2, pp. 193–228, 1991.
55. J. Miettinen, "The effect of audit quality on the relationship between audit committee effectiveness and financial reporting quality," Doctoral dissertation, University of Vaasa, 2008.
56. S. P. Kothari, A. J. Leone, and C. E. Wasley, "Performance matched discretionary accrual measures," *J. Account. Econ.*, vol. 39, no. 1, pp. 163–197, 2005.
57. U. Gujarati & Porter, *The McGraw-Hill Series Economics*. 2009.
58. I. Ghozali, "SPSS 21 Aplikasi Analisis Multivariate Dengan Program SPSS," *Univ. Diponegoro, Semarang*, 2013.
59. P.-S. Koh, "On the association between institutional ownership and aggressive corporate earnings management in Australia," *Br. Account. Rev.*, vol. 35, no. 2, pp. 105–128, 2003.
60. D. Agustia, "Pengaruh Faktor Good Corporate Governance, Free Cash Flow, dan Leverage Terhadap Manajemen Laba," *J. Akunt. dan Keuang.*, vol. 15, no. 1, pp. 27–42, 2013.

AUTHORS PROFILE



Hamza Kamel Qawqzeh is a PhD student in Universiti Sultan Zainal Abidin, Malaysia. His research interests include External Auditing, Accounting, Corporate Governance, Tax Planning, Financial Reporting Quality and Earnings Management. He also has an extensive skill & knowledge in the econometric analyses using secondary data approach within Eviews.



Dr. Wan Anisah Endut is a senior lecturer at Faculty of Business and Management, Universiti Sultan Zainal Abidin, Malaysia. She received her Doctor of Philosophy from Universiti Sains Malaysia, Malaysia. She has published numerous scientific articles related to the Accounting, Financial Reporting and Management Accounting issues. Her research interests include Zakah Accounting, Financial Reporting and Management Accounting

(Including Strategic Management Accounting and Performance Management).



has a PhD in the Forensic Accounting from Universiti Teknologi MARA, Malaysia. He is an expert in the Financial Fraud & Tax Planning studies. Previously, he was the Head of Accounting School in the Universiti Sultan Zainal Abidin, and currently is the Deputy Dean of Research in this university. He is also serves a member of the Deans Accounting Counsel in Malaysia promoting new development in accounting studies for at Tertiary Education level in Malaysia. He has published numerous scientific articles related to the Financial Fraud & Tax Planning issues and presently supervising 20 postgraduate's students. In terms research methodology approach, he also has an extensive skill & knowledge in the econometric analyses using secondary data approach.



Mohammad Mustafa Dakhllalh is a PhD student in Universiti Sultan Zainal Abidin, Malaysia. His research interests Financial Accounting, Accounting, Corporate Governance, and Earnings Management. He also has an extensive skill & knowledge in the econometric analyses using secondary data approach.