

# THE MODERATING ROLE OF AUDIT COMMITTEE ON THE RELATIONSHIP BETWEEN CONCENTRATED OWNERSHIP AND FINANCIAL PERFORMANCE: EVIDENCE FROM MENA COUNTRIES

Ayat Qasim Almasri, University Sains Islam Malaysia (USIM)  
Nathasa Mazna Ramli, University Sains Islam Malaysia (USIM)

## ABSTRACT

*This study investigates the effect of concentrated ownership on financial performance. It also examines the moderating effect of the audit committee (financial experts) on the relationship between concentrated ownership and financial performance in MENA countries. The theoretical framework is based on agency theory. This study analyzes 1,932 firm-year observations of non-financial firms listed in nine MENA countries from 2014 to 2019. This study uses the panel data method. OLS, FEM, and system GMM estimators were used to analyze the data. The finding of this study showed that concentrated ownership has a significantly positive relationship with financial performance (ROE and MTBR). Furthermore, the audit committee (financial experts) plays a significant moderating role in the relationship between concentrated ownership and the financial performance of MENA firms. This study provides valuable insight into the impact of concentrated ownership as a corporate governance mechanism in MENA countries. The findings may assist investors, managers, and policymakers in MENA markets, as well as those in other emerging countries with similar environmental characteristics, in making their respective decisions. Additionally, they may be useful for regulators to revise and update corporate governance regulations to ensure the greatest possible oversight to attract more investments. In addition, this study provides new evidence within the context of MENA on the moderating role of the audit committee on the relationship between concentrated ownership and firm performance.*

**Keywords:** Concentrated Ownership, Agency Theory, Audit Committee, Financial Performance, MENA Countries.

## INTRODUCTION

Little empirical research has explained the impact of ownership structure on the financial performance of non-financial firms in the emerging markets of the Middle East and North Africa (MENA). Ownership structure is a key mechanism of corporate governance. It is determined by the characteristics of corporate governance at the state level, such as state intervention in companies, corporate regulations, and stock market development. It is an important area of study because different ownership structures exert different forms of control over the company with the goal of maximizing shareholder (owner) wealth (Jensen & Meckling, 1976). The agency theory emphasises the critical relationship between agent and principal, as well as the issue of conflict of interest between the two. When shareholders' and managers' contractual relationships are incomplete or there is information asymmetry between the two, their interests diverge. Managers are assumed to be opportunistic, and they are thus motivated to achieve their own goals at the expense of shareholders in such cases. For example, Managers may enforce

investment and financial plans or spend more on initiatives that fulfil their personal interests rather than the interests of the company.

In developed countries, the shares of a firm is distributed across a large number of shareholders who are difficult to recruit at the same time to manage the company. Small shareholders thus appoint a person (“manager” or “agent”) who acts on their behalf in the management of the company. However, these managers may strive to promote their own interests benefits at the expense of the firm or its shareholders. This creates an agency problem in this relationship. Berle & Means (1991) anticipate conflicts of interest between shareholders and owners in a dispersed ownership structure, whereas Jensen & Meckling (1976) argue that the separation of ownership and management leads to a conflict of interest between the two parties. The core of the agency problem is the separation among managers who run the business and shareholders who provide funds. The managers rely on the owners to provide the funds needed, while the owners rely on the managers to organize the company, make decisions, and generate profits. The agency problem arises as a result of these two parties' competing interests (Jensen & Meckling, 1976). Claessens et al. (2000) argue that the concentration of ownership in the hands of a particular type of owners could influence how the company's activities are managed, as each type of ownership may have different rights, incentives, and objective. For instance, a state-controlled enterprise may prioritize the welfare of the population over profits, yet it could also be a political tool by which the ruling party can exert economic control. Ownership concentration may create conflicts of interest between majority and minority shareholders. As these conflicts intensify, the financial position of the company may be weakened.

Most shares in emerging capital markets are concentrated in the hands of a small number of owners (concentrated ownership). According to Ahmed & Hadi (2017), More than 50% of firms in nine MENA countries are characterized by concentrated ownership. The conflict of interest between majority and minority shareholders creates an agency problem in firms with concentrated ownership (Shleifer & Vishny, 1997). Concentrated (majority) shareholders prioritize personal goals over profit maximization, especially when they are also managers. Minority stockholders may suffer because of this. Type II agency problem or principal-principal problem refers to the conflict of interest between majority and minority owners (Shleifer & Vishny, 1997). Concentrated shareholders ownership, especially when they are also managers, are likely to pursue personal objectives that differ from the general objective of profit maximization. This tendency can be detrimental to the interests of minority shareholders and managers. These conflicts of interest may affect the financial performance of the firm.

The audit committee is a governance mechanism that can align the interests of shareholders and managers and resolve agency conflicts (Garba & Mohamed, 2018). According to Issaa & Siam (2020) the audit committee has a crucial role of supervising financial reporting and providing information to the board of directors, which may lead to improved financial performance. Furthermore, according to Daoud et al. (2015), the audit committee is responsible for ensuring the quality of the firm's financial reporting. The financial expertise of the audit committee can reduce agency costs by overseeing financial reporting practices. The audit committee thus must carry out its responsibilities to provide a fair and accurate financial report that will assist the company to improve its performance.

Most research on ownership structure, large shareholders, and financial performance has been carried out in developed markets, particularly the U.S and the U.k. Nevertheless, in the Middle East, little is known about the concentrated ownership-firm performance relationship, whose cultural and economic background differ from those of developed markets. Previous

empirical research has also not found any conclusive evidence on the relationships between the variables; some reveal the positive effect of concentrated ownership on firm performance, while others otherwise. This study attempts to fill these gaps by examining how concentrated ownership may affect the financial performance of non-financial firms in nine MENA countries. Additionally, it examines the moderating effect of audit committee (more precisely, an audit committee of financial experts) on the relationship between concentrated ownership and financial performance.

The paper is structured as follows. Section two discusses related empirical studies and develops research hypotheses. Study's methodology, sample, and model are discussed in Section three. Section four provides the empirical findings and their analysis. Finally, Section five concludes by outlining the study's limitations and areas for further research.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Concentrated Ownership and Financial Performance

Concentrated ownership may have more incentive to improve firm performance and monitor management actions as their controlling interest increases (Shleifer & Vishny, 1997). On the other hand, as the expropriation of minority shareholders hypothesis suggests, ownership concentration may encourage large investors to serve their own interests and expropriate the interests of minority shareholders, resulting in negative financial performance (La Porta et al., 1999). However, some studies, such as Al Farooque et al. (2020), find no link between concentrated ownership and financial performance.

Alsamhi et al. (2020) analyze a panel data of 73 firms listed on the Indian National Stock Exchange between 2009 and 2016 to examine the impact of ownership structure on financial performance. They find a significant positive relationship between concentrated shareholders and performance (ROA and ROE). Hossain et al. (2021) examine 15 firms enlisted on the Dhaka Stock Exchange in 2011-2020 and find that financial performance is positively influenced by a higher concentration of ownership in the hands of concentrated ownership. Peng et al. (2021) find that the concentration of ownership in the hands of large shareholders improve the financial performance (ROA) of Chinese listed firms. According to the monitoring hypothesis, concentrated ownership have the desire and ability to control firms, which can reduce agency costs. Rashid Khan et al. (2020) observe that in Chinese listed firms, as the ownership of large shareholders increase, their monitoring over managerial activities increases, agency problem decline, and financial performance increases.

Some studies find the negative relationship between concentrated ownership and financial performance. Abdullah et al. (2019) report that concentrated shareholders ownership in Pakistan have decision-making authority, and they typically make decisions that are helpful to themselves but not to the firm and other shareholders. This leads to the principal-principal problem, which may weaken the firms' financial performance. Queiri et al. (2021) report that an increase in concentrated shareholder ownership leads to negative performance. This is because concentrated ownership are likely trying to serve their own interests, which conflicts with the interests of minority shareholders, especially due to the lack of effective oversight from independent directors. Furthermore, they argue that concentrated large shareholder ownership can lead to type II agency problem, in which majority shareholders engage in activities that serve their own interests at the expense of minority owners. In Thailand, Al Farooque et al.(2020).use system GMM to study the impact of ownership structure on financial performance. The findings

suggest that concentrated ownership have no significant impact on the financial performance of listed firms.

In the case of MENA countries, Mertzanis et al. (2019) use a sample of 225 firms listed in nine MENA countries to investigate the impact of ownership structure on financial performance in 2007-2017. Using OLS regression, the result show that concentrated ownership increases control and monitoring over managerial activities, which reduce agency problem and enhance financial performance. Based on these findings, this study proposes the following hypotheses:

*H<sub>1</sub>: Concentrated ownership is positively related to the financial performance of MENA countries firms.*

### **Moderating Role of Audit Committee on the Relationship between Concentrated Ownership and Financial Performance**

Studies on the moderating effect of the audit committee on the relationship between concentrated ownership and financial performance remain limited (Garba & Mohamed, 2018; Saha et al., 2018). Corporate governance theory expects the audit committee to be positively associated with firm performance. The audit committee also monitors the quality of financial reports by playing a dynamic oversight role that allows it to hold the firm accountable. The main function of the audit committee is to oversee and monitor the financial reporting and performance of firms (Klein, 2002). Garba & Mohamed (2018) used a sample of 29 listed institutions in Nigeria from 2006 to 2015 to examine the moderate role of an audit committee between ownership structure and ROA and ROE. The findings show a positive significant relationship between the audit committee and (ROA and ROE). These findings are thought to be due to the role of audit committees in the assurance that management acts in the best interests of shareholders. Saha et al. (2018) use multiple linear regression analysis to investigate the audit committee's moderating role in the relationship between ownership structure and ROA, and Tobin's Q. The sample consists of 81 DSE-listed firms from 2013 to 2017. The findings indicate that the audit committee (financial experts) reduces agency costs, improves the quality of information flow between principal and agent, and raises other shareholders' confidence in financial performance.

Amer (2016) In his examination of Egyptian listed firms, asserts that the presence of audit committee with financial expertise in the firm's can improve its financial performance by reducing information asymmetry between agents and principals and rising detection of material misstatements in financial reports. Kipkoech & Rono (2016) argue that the members of the audit committee must have experience in the field of finance. Financial expert members of an audit committee are related to better financial performance and quality of financial reports and inversely related to material misstatements and the likelihood of fraud.

It is supposed that financial expert auditors provide high-quality auditing services based on their professional competence (demonstrated by participation in auditor training programs and professional certificates), which can avoid client interference. This study suggests that the financial expert of the audit committee improves the credibility of company financial statements. As a result, the following hypothesis are proposed in this research:

*H<sub>2</sub>: The audit committee positively moderates the relationship between concentrated ownership and financial performance.*

## METHODOLOGY

### Sample and Data Collection

The research sample is 322 non-financial firms listed in nine MENA countries, namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Jordan, Egypt, and Morocco. The sample period is 2014-2019 for a total firm-year observation of 1,932. The sample must satisfy three criteria. First, following Mertzanis et al. (2019), financial firms (insurance and banks) are excluded from the sample. These companies are exposed to a legislative structure that does not apply to non-financial firms. Second, firms that lack liquidity or are bankrupt are excluded. Finally, firms with missing data during the sample period are excluded. Table 1 summarizes the research sample. Data are collected from Refinitiv DataStream and Eikon, annual financial reports, and other pertinent documents.

Country	Listed non-financial firms between 2014 -2019	Final sample	Observation	%
Saudi Arabia	720	62	372	51.66
UAE	237	26	156	65.82
Jordan	540	30	384	71.11
Qatar	103	17	102	99.03
Bahrain	112	27	90	80.35
Kuwait	391	15	180	46.03
Oman	468	64	162	34.61
Morocco	237	22	132	55.69
Egypt	876	59	354	40.41
<b>Total</b>	<b>3684</b>	<b>322</b>	<b>1932</b>	<b>48.57</b>

### Variables

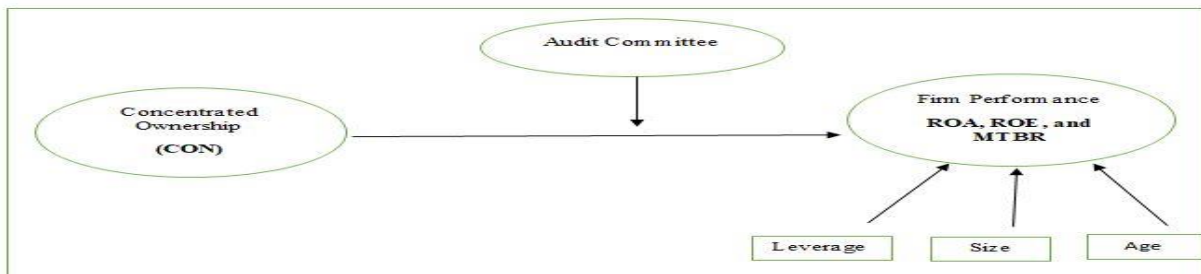
Financial performance is measured using accounting-based (ROA and ROE) and market-based performance indicators (MTBR). The former is indicators of performance from the perspective of insiders (managers), whereas the latter from the perspective of outsiders (investors). ROA is the ratio of net operating profit after tax to total assets, while ROE is the ratio of net operating profit after tax (net income) to total shareholder equity. MTBR is the ratio of market value of equity to its book value.

The independent variable concentrated ownership (CON) is the percentage of shares held by the large (top) shareholder. This definition has been extensively used in related research (Abdullah et al., 2019; Alsamhi & Barakat, 2020). This study also uses three control variables: (i) firm AGE, measured as the number of years since the firm's establishment; (ii) firm SIZE, measured as the natural logarithm of total assets; and (iii) financial leverage (LEV), which is the ratio of total debt to total assets. Leverage assesses the potential control that creditors may impose to reduce agency costs. The moderator variable is audit committee, which is measured as the ratio of audit committee members with financial expertise to the size of the committee. Table 2 summarizes the measurement of the variables used in the study.

Table 2 MEASUREMENT OF VARIABLES				
No	Variable	Acronym	Measurement	
Dependent variables				
1	Return on Assets	ROA	Operating profit after tax (net income) to book value of total assets	(Alsamhi, Barakat and Alahdal, 2020; Peng et al., 2021)
2	Return on Equity	ROE	Net operating profit after tax to total shareholder equity	(Alsamhi, Barakat and Alahdal, 2020; Peng et al., 2021)
3	Market to Book Ratio	MTBR	Market value of equity to its book value	Rashid Khan et al. (2020)
Independent variable				
3	Concentrated Ownership	CON	Percentage of shares held by the large shareholder (top shareholder)	Alsamhi et al. (2020)
Control variables				
6	Firm Age	AGE	Natural logarithm of years since the firm's establishment	(Al Farooque, Buachoom and Sun, 2020)
7	Firm Size	SIZE	Natural logarithm of total assets	(Al Farooque, Buachoom and Sun, 2020)
8	Leverage	LEV	Ratio of total debt to total assets	(Al Farooque, Buachoom and Sun, 2020)
Moderator variable				
9	Audit Committee	AC	Proportion of audit committee members with financial expertise over the total number of audit committee members	(Garba and Mohamed, 2018)

### Conceptual Framework

This section illustrates the interrelationships between the study variables. Concentrated ownership is assigned as the independent variable, while the dependent variables are accounting-based and market-based financial performance indicators (ROA, ROE, and MTBR). Leverage, firm size, and firm age are used as control variables. Audit committee is expected to moderate between the independent and dependent variables. Figure 1 illustrates this relationship.



**FIGURE 1  
CONCEPTUAL FRAMEWORK**

## Model Specification

This study models the relationship between Concentrated ownership and financial performance and investigates the moderating role of the audit committee between the two variables. To examine the impact of large shareholder ownership on financial performance, this study uses several empirical estimators. First, ordinary least squares (OLS) and fixed effects (FE) estimators, which cannot account for dynamic endogeneity, causation, or simultaneity. Second, system GMM is the primary estimator capable of accounting for dynamic endogeneity, simultaneity, and causation. Endogeneity issues in regression models can be caused by omitted variable bias, inaccuracy in measurement, and simultaneity/reverse causation. Both OLS and FE estimators suffer from endogeneity or causality problems between endogenous study variables, resulting in biased and inconsistent parameter estimates, whereas GMM produces more consistent and efficient parameter estimates.

Since variables on both sides of the equation (firm performance and ownership structure) are simultaneously driven in theory, creating a model for this study could pose an endogeneity challenge (Wooldridge, 2010). In other words, firm performance can influence corporate governance mechanisms (ownership structure) processes and vice versa. The dynamic system GMM model is used to solve this problem since it addresses dynamic endogeneity, simultaneity, and unobservable heterogeneity in the OLS and FE estimators. In circumstances where autocorrelation and heteroscedasticity are unknown, the GMM estimator is an efficient estimator. Furthermore, the GMM estimator can avoid issues with error correlation. Instead of using external instrumental variables, Arellano & Bond (1991), Arellano & Boverb (1995), and Blundell & Bond (1998) use lagged variables as internal instrumental variables to reduce the difficulty of obtaining suitable instrumental variables.

The Durbin–Wu–Hausman test is used in this study to examine whether the model has an endogeneity problem (Hausman, 1978). This test is used to determine which models are more aligned with the data's features. Individual coefficients are tested using t-test, while multiple coefficients are tested using chi-square or F-test. The null hypothesis states that random-effects model are consistent and best, while the alternative hypothesis suggests that the fixed effects model is more consistent and accurate. The probability of the chi-square value ( $\text{prob} > \text{chi}^2 = 0.00$ ) is used to determine whether to choose the null or alternative. If the null hypothesis is not accepted, the model may have endogeneity issue, hence the FE model is more appropriate. The characteristics of system GMM make it a useful estimator for interacting with the endogeneity issue in simultaneous equations with causation running in both directions, particularly when unknown the form of autocorrelation and heteroscedasticity. Therefore, the lagged dependent variable is recommended by the GMM system used in this study (Arellano & Bond, 1991; Blundell & Bond, 1998). Two models are used to examine and test the hypotheses.

Model I examines the impact of Concentrated ownership (CON) and other control variables on financial performance. The model is expressed as follows:

### Model I

$$FP_{it} = \alpha_{it} + \beta^1 CON_{it} + \beta^2 SIZE_{it} + \beta^3 AGE_{it} + \beta^4 LEV_{it} + \beta^5 Industry + \varepsilon_{it} \quad 1$$

where *FP*: financial performance (ROA, ROE, and MTBR), *a*: the intercept; *CON*: concentrated ownership; *SIZE*: firm size; *AGE*: firm age; *LEV*: firm leverage; *i*: firm; *t*: period; and  $\varepsilon$ : the error term.

## Model 2

Multiple hierarchical regression analysis is used to test the moderating role of the audit committee. The model is expressed as:

$$FP_{it} = \alpha_{it} + \beta^1 CON_{it} + \beta^2 SIZE_{it} + \beta^3 AGE_{it} + \beta^4 LEV_{it} + \beta^5 Industry + \beta^6 AC + \beta^7 (AC * CON)_{it} + \varepsilon_{it}$$

where *FP*: financial performance (ROA, ROE, and MTBR), *a*: the intercept; *LARGE*: large shareholder's ownership; *SIZE*: firm size; *AGE*: firm age; *LEV*: firm leverage; *AC*: audit committee; *i*: firm; *t*: period; and  $\varepsilon$ : the error term.

## RESULTS AND ANALYSIS

### Descriptive Statistics

Table 3 below describes the descriptive statistics of the concentrated ownership, financial performance, and control variables for the 1,932 observations of non-financial firms listed in nine MENA countries. On average, concentrated ownership is present in more than one-third of the sample firms (M = 0.385, Md = 0.341, SD = 0.238). Compared to Asia, the percentage of large shareholders in MENA is lower, but it is not lower than those in the UK. The mean ROA and ROE are 4.276 and 8.784, their median are respectively 3.62 and 7.395, and their standard deviation are 8.196 and 25.66. Moreover, mean MTBR is 1.865, while its median and standard deviation are 1.26 and 2.0455. On average, financial experts constitute 40 percent of audit committee members (Md = 0.34, SD = 0.197). The highest share of financial experts in an audit committee is 75 percent, while the lowest is 0.

With regards to the control variables, the mean SIZE is 9.257, with a SD of 4.345. AGE has a mean of 33.915 years, with a SD of 18.705. The table also shows the skewness and kurtosis of the variables after transformation. Skewness and kurtosis are used to assess normality in this study. According to Orcan (2020), the criteria to assess normality with absolute skewness and kurtosis are: low (1), moderate (1-2.3), and extreme (> 2.3). The absolute values of all variables are lower than 2.3, and as such the data are normally distributed.

	CON	AGE	SIZE	LEV	ROA	ROE	MTBR	AC
M	0.3857	33.915	9.257	9.946	4.2764	8.7844	1.9065	0.40115
Md	0.3411	31	7.72	4.5	3.62	7.395	25.66	0.34
SD	0.2386	18.705	4.345	14.51	8.196	25.66	3.33	0.1968
Max	100	147	39.62	167	73.7	252.66	93.7	0.75
Min	0.25	3	0.53	-84.2	-66.45	-388	0.0104	0
Observ	1,932	1,932	1,932	1,932	1,932	1,932	1,932	1,932
Skewness	0.7038	1.023	0.5381	0.4777	0.7188	0.4411	0.2768	1.379
Kurtosis	-0.2297	1.754	1.312	1.283	1.356	1.556	1.097	0.5819



## Correlation Analysis

Table 4 below shows the correlation between the independent, control, and dependent variables. The correlation matrix indicates the absence of multicollinearity because all correlation coefficients are  $< 0.8$ . ROA, ROE, and MTBR are strongly correlated with *LARGE*, *AGE*, and *SIZE*. ROA, ROE, and MTBR are significantly and negatively correlated with *AC*.

	ROA	ROE	MTBR	CON	Age	Size	Leverage	Committee
ROA	1							
ROE	0.525178	1						
MTBR	0.105565	0.164117	1					
CON	0.067365	0.074673	0.069333	1				
Age	-0.05912	0.055964	0.062862	0.016337	1			
Size	0.089251	0.104484	0.104915	0.039314	-0.02971	1		
Leverage	-0.09488	-0.11533	-0.15234	0.069901	-0.05828	-0.2342	1	
Committee	-0.01735	-0.0067	-0.03013	-0.01344	0.03373	-0.0374	0.033847	1

## Diagnostic Tests

One of the most significant corporate governance mechanisms is the ownership structure, seeing that the type of agency conflict can be determined by the ownership structure. By looking at the ownership structure, it is possible to see whether the conflict of interest occurs between agents and principals or between majority and minority shareholders. This study investigates the effect of concentrated ownership on financial performance, as well as the moderating role between concentrated ownership and financial performance. According to Wintoki et al. (2012), system GMM is the most effective technique to analyze corporate performance because it resolves the constraints of OLS and FE estimators. Following this recommendation, this study employs the system GMM model developed by Arellano and Boverb (Blundell & Bond, 1998). Using reliable internal instruments during estimation, it is possible to overcome estimation issues such as unobservable heteroscedasticity, simultaneity, and dynamic endogeneity, and obtain unbiased and consistent results. The following subsections describe a series of pre-estimation tests (diagnostic tests).

## Pre-Estimation Tests

*Multicollinearity.* The linear relationship between the independent variables in a regression model is known as multicollinearity. One way of detecting multicollinearity is computing and analyzing the variance inflation factor (VIF). If the explanatory variable is correlated, it reveals how much the variance of the projected regression coefficient is inflated. A VIF of between 0 and 10 is acceptable. A VIF of 1 indicates that the independent variables are unrelated; a VIF of 1 to 5 indicates that they are moderately related; a VIF between 5.1 to 10 indicates that they are highly related; and a VIF of  $> 10$  indicates the presence of multicollinearity. Tolerance and VIF of the independent variables are shown in Table 5. All tolerance values are  $> 0.1$ , and all VIF values are  $< 10$ .

<b>Variables</b>	<b>Tolerance</b>	<b>VIF</b>
<b>CON</b>	0.2196	2.55
<b>AGE</b>	0.7573	1.32
<b>SIZE</b>	0.6434	1.55
<b>LEVERAGE</b>	0.8837	1.13
<b>INDUSTRY</b>	0.8101	1.23

Heteroscedasticity. According to Berenguer-Rico & Wilms (2021), heteroscedasticity is the systematic variation of the variance of residuals over a range of measured values. It is a prevalent issue in regression. The Breusch-Pagan test is a way to detect heteroscedasticity and assist in model selection. It calculates the chi-square test statistic and the p-value. If the p-value is less than a certain threshold (popular choices are 0.01, 0.05, and 0.10), heteroscedasticity exists. The findings of the Breusch-Pagan test are shown in Table 6. The null hypothesis is accepted because the prob > chi2 for all dependent variables is > 0.05. This indicates that there is no heteroscedasticity in the data. As a result, OLS regression is appropriate to run.

<b>Variable</b>	<b>Chi2</b>	<b>Prob &gt; chi2</b>
<b>ROA</b>	0.277	0.1032
<b>ROE</b>	0.415	0.146
<b>MTBR</b>	0.597	0.363

Autocorrelation When the error components in a regression model correlate over time or are dependent on each other, autocorrelation (serial correlation) occurs. The OLS assume that the error terms are uncorrelated. If autocorrelation is ignored, the estimation of coefficients and their standard errors may be erroneous (Uyanto, 2020). The Breusch-Godfrey test is used to detect autocorrelation. If the prob > chi2 value is < 0.05, autocorrelation is present. Table 7 shows that autocorrelation is not found because all prob > chi2 is > 0.05.

<b>Dependent Variable</b>	<b>Lags(p)</b>	<b>Chi(2)</b>	<b>Prob &gt; Chi(2)</b>
ROA	1	2.205	0.105
ROE	1	2.293	0.261
MTBR	1	2.924	0.314

## RESULTS

### Concentrated Ownership and Financial Performance

Table 8 shows the results of the three estimators (OLS, FE, and system GMM) on the effect of concentrated ownership on financial performance (ROA, ROE, and MTBR). The OLS model is significant for all three dependent variables, ROA ( $F = 35.329$ ,  $p < 0.01$ ), ROE ( $F = 56.022$ ,  $p < 0.01$ ), and MTBR ( $F = 35.329$ ,  $p < 0.01$ ), indicating that all models are valid. CON has a negative effect on ROA in the OLS ( $B = -3.066$ ,  $t = -1.14$ ,  $p < 0.01$ ) and system GMM models ( $B = -2.326$ ,  $t = -1.33$ ,  $p < 0.01$ ). This implies that concentrated ownership in MENA countries pursue their own interests at the expense of the firms. The high concentration of ownership raises the risk of type II agency problem, which could decrease financial performance (Shleifer & Vishny, 1997). This finding is consistent with Queiri et al. (2021), who find that concentrated ownership may induce principal-principal conflict and weaken financial performance. Concentrated ownership are powerful and have the capacity to take minority shareholders' interests.

CON also has a positive effect on ROE in both OLS ( $B = 4.936$ ,  $t = 1.65$ ,  $p < 0.01$ ) and GMM regression models ( $B = 3.862$ ,  $t = 1.06$ ,  $p < 0.01$ ). However, it has a positive effect on MTBR only in the system GMM model,  $B = 1.162$ ,  $t = 1.68$ ,  $p < 0.05$ . A possible reason for these findings is that concentrated ownership in MENA are likely to exert control over management, resulting in more efficient management and higher financial performance. Furthermore, results indicate that concentrated ownership increases the performance of the company by increasing supervision and coordination over management. Furthermore, due to their substantial investment, concentrated ownership are more likely to lose money as a result of expropriation than smaller shareholders. As a result, concentrated ownership have a greater incentive and ability to monitor management effectiveness, resulting in improved MENA firms' performance. These findings are consistent with Hossain et al. (2021), who discover that concentrated ownership reduces type II agency problems and improves financial performance, and that increased ownership concentration in the hands of concentrated shareholders ownership improves profitability in developing countries. On contrary, these finding is inconsistent with Queiri et al. (2021), who found that the presence of concentrated ownership leads to negative performance. This may due to the fact of that concentrated ownership are most likely trying to serve their own interests, which may conflict with the interests of minority shareholders, particularly given the lack of effective oversight by independent directors. Moreover, they assert that (Queiri et al., 2021) concentrated ownership can result in a type II agency problem, in which majority shareholders engage in activities that benefit themselves at the expense of minority owners.

With regards to the control variables, the study fails to find a significant association between firm *AGE* and ROA. Firm *AGE* has a significant negative effect on ROE and a positive significant effect on MTBR. In addition, the finding reveals that firm *SIZE* has a positive significant effect on ROE and a negative effect on MTBR. *LEV* has a positive significant effect on ROA and MTBR.

### The Moderating Role of Audit Committee on the Relationship between Concentrated Ownership and Financial Performance

Table 9 shows the results of the moderation analysis. Employing system GMM, the results show that AC positively moderates between concentrated ownership and financial performance. The findings confirm that the audit committee is critical in improving the quality of financial reports and the availability of information. A possible interpretation of these findings is that most MENA countries firms have concentrated owners who want accurate financial reports, thus they appoint an audit committee of financial experts. The audit committee evaluates the accuracy of the management's financial statements and offers a true financial report to help the company improve its performance. This lowers agency problems and improves financial performance. This result is consistent with Garba & Mohamed (2018), who confirm that the presence of an audit committee (financial experts) in the firm can help to reduce agency costs and improve the quality of information flow between principal and agent, as well as increasing other shareholders' confidence in the financial performance. This finding is also consistent with the agency theory, which states that the audit committee can reduce the agency problem.

In terms of control variables, the findings indicate that firm's SIZE has a significant negative impact on ROE, but not on MTBR. Firm's AGE has a positive significant effect on ROA, a negative significant on ROE, and a non-significant effect on MTBR, implying that as the AGE of firms in MENA countries rises, so will their ROE. LEV has a significant impact on ROA and MTBR while having a non-significant impact on ROE.

	ROA			ROE			MTBR		
	OLS	FE	System GMM	OLS	FE	System GMM	OLS	FE	System GMM
<b>Variables</b>									
CON	- 3.066** *	-1	- 2.326* **	4.936** *	1.9	3.862* **	-0.39	0.0152	1.162* *
	(-1.14)	(-0.36)	(-1.33)	-1.65	-0.5	-1.06	(-0.39)	-0.01	-1.68
AGE	0.9412* *	-0	0.71	0.493** *	-0.83	0.587* **	3.406*	-21.17	13.66* **
	-2.71	(-1.09)	-1.39	-1.65	(-0.67)	(-1.28)	-2.27	(-0.53)	-3.4
SIZE	-0.722	-0	-0.41	-0.761**	-0.29	0.767* *	-0.873	-0.714	- 3.84** *
	(-1.09)	(-0.30)	(-1.14)	(-1.03)	(-0.41)	(-2.00)	(-0.36)	(-0.29)	(-4.56)
LEV	0.483	0.3	0.471* *	-1.93	0.55	-2.29	2.241**	2.512**	2.946* **
	-2.19	-1	-2.58	(-0.75)	-0.2	(-0.79)	-2.59	-2.68	-4.09
IND	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	5.6022* *	6.5271**	5.583* **	6.145**	5.372**	6.013* *	5.672** *	5.328** *	5.421* **
	-4.31	-5	-4.46	-4.63	-4.12	-4.24	-3.16	-3.64	-3.22
Lag.ROA			0.288* **						
			-4.44						
Lag.ROE						0.573* **			

						-4.16			
Lag.MTBR									0.344* **
									-3.05
N (observations)	1932	##	1932	1932	1932	1932	1932	1932	1932
N (firms)	322	322	322	322	322	322	322	322	322
R <sup>2</sup>	0.623	0.6		0.737	0.66		0.843	0.691	
Adj-R <sup>2</sup>	0.61	0.5		0.714	0.62		0.802	0.614	
F-statistic	35.329* **	48.921** *		56.022* **	65.271* **		35.329* **	48.921* **	
AR 1 p-value			0.03			0.027			0.031
AR 2 p-value			0.29			0.582			0.291
J statistic, p-value			0.32			0.686			0.32

Note: t statistics in parentheses. \* p < 0.1 \*\* p < 0.05, \*\*\* p < 0.01.

	ROA			ROE			MTBR		
	OLS	FE	System GMM	OLS	FE	System GMM	OLS	FE	System GMM
<b>Variables</b>									
CON	-3.066*** (-1.14)	-1 (-0.36)	- 2.326* ** (-1.33)	4.936** * #	2 -1	3.862* ** -	-0.39 (-0.39)	0 -	1.162* * -
AGE	0.9412**	-0 (-1.09)	1 #	0.493** * #	-1 (-0.67)	0.587* ** (-1.28)	3.406* -2.27	# (-0.53)	13.66* ** -3
SIZE		-0 (-1.09)	# (-1.14)	-0.761** -1.03	-0 (-0.41)	0.767* * (-2.00)	-0.87 (-0.36)	-1 (-0.29)	- 3.84** * (-4.56)
LEV		0.3 -1	0.471* * #	# (-0.75)	1 -0	-2 (-0.79)	2.241** -2.59	2.512** -3	2.946* ** -4
IND	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	5.6022**	6.5271* *	5.583* **	6.145**	5.372**	6.013* *	5.672** *	5.328** *	5.421* **
Lag.ROA		-5	# 0.288* **	#	-4	-4	-3.16	-4	-3
Lag.ROE			#			0.573*			

						**			
						-4			
Lag.MTBR									0.344* **
									-3
N (observations)		##	#	#	#	##	1932	#	#
N (firms)		322	#	#	#	##	322	#	#
R <sup>2</sup>		0.6		1	1		0.84	1	
Adj-R <sup>2</sup>		0.5		1	1		0.8	1	
F-statistic	35.329***	48.921* **		56.022* **	65.271* **		35.329* **	48.921* **	
AR 1 p-value			0			0			0
AR 2 p-value			0			1			0
J statistic, p-value			0			1			0

**Note: t statistics in parentheses. \* p < 0.1 \*\* p < 0.05, \*\*\* p < 0.0**

## CONCLUSION AND LIMITATIONS

This study has accomplished two objectives. The first objective is to examine the impact of concentrated ownership as a corporate governance mechanism on the financial performance of listed non-financial in nine MENA countries in 2014-2019. The second objective is to explore the moderating effect of an audit committee (financial expert) on the relationship between concentrated ownership and financial performance. These relationships are tested using linear regression and multiple hierarchical regression analysis.

Relying primarily on the system GMM estimator, the findings demonstrate that concentrated ownership has a positive influence on the financial performance (ROE and MTBR) of listed non-financial firms in MENA countries. This result could be explained by the fact that large shareholders in MENA are likely to exert control over management, resulting in reduced agency problem and enhanced financial performance. However, it has a significant negative effect on ROA. The results also show that the audit committee can align the interests of shareholders and managers and is responsible for ensuring the financial reporting quality of the company. The findings are consistent with the agency theory, that the audit committee (financial expert) lowers agency costs by overseeing financial reporting practices. The audit committee has the role to carry out its responsibilities to provide a true financial report that will help the company to improve its performance.

This study has several limitations. As previously stated, this study investigates the impact of concentrated ownership on firm performance. Therefore, we recommend researchers to investigate other corporate governance variables, such as board characteristics, board diversity, and internal audit characteristics, that could improve financial performance. Furthermore, the study only examines the effect of a single type of ownership structure on financial performance, namely concentrated ownership. Future works may examine other forms of ownership such as institutional ownership, family ownership, and government ownership. In addition, this study

excludes banks, insurance companies, and other financial companies because they are subject to a specific regulatory framework that does not apply to non-financial firms. Future studies can consider financial companies to obtain more insights, new details, and unique features in the relationship between these variables. Finally, the study only investigates the moderating effect of the audit committee on the relationship between concentrated ownership and firm performance. Future researchers should examine the impact of other moderator variables, such as audit quality and board diversity, on the ownership structure-performance relationship.

## REFERENCES

- Abdullah, M. I., Sarfraz, M., Qun, W., & Chaudhary, M. (2019). Ownership concentration impact on firm financial performance. *LogForum*, 15(1), 107-118.
- Ahmed, N., & Hadi, O. A. (2017). Impact of ownership structure on firm performance in the MENA region: an empirical study. *Accounting and Finance Research*, 6(3), 105-115.
- Al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance—emerging trends from Thailand. *Pacific Accounting Review*, 32(1), 54-81.
- Alsamhi, M. H., & Barakat, M. S. (2020). The Effect of Ownership Structure on Company Performance: Evidence from Emerging Market. *Studies in Economics and Business Relations*, 1(1), 27-36.
- Amer, M. M. (2016). *Measuring the effect of the board of directors and audit committee characteristics on firm financial performance in Egypt* (Doctoral dissertation, Cardiff Metropolitan University).
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- Berenguer-Rico, V., & Wilms, I. (2021). Heteroscedasticity testing after outlier removal. *Econometric Reviews*, 40(1), 51-85.
- Berle, A. A., & Means, G. G. C. (1991). *The modern corporation and private property*. Transaction publishers.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143.
- Claessens, S., Djankov, S., & Xu, L. C. (2000). Corporate performance in the East Asian financial crisis. *The World Bank Research Observer*, 15(1), 23-46.
- Daoud, K., Al-Sraheen, D., & Alslehat, N. (2015). The moderating effect of an audit committee on the relationship between non-audit services and corporate performance. *Research Journal of Finance and Accounting*, 6(14), 170-179.
- Garba, S., & Mohamed, M. B. (2018). Ownership Structure and Profitability: The Moderating Effect of Audit Committee Financial Expertise. *The Journal of Social Sciences Research*, 396-401.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the econometric society*, 1251-1271.
- Hossain, S. K., Sultan, M. I., & Ahmed, M. M. (2021). Ownership structure and firm performance: Evidence manufacturing companies listed in Dhaka Stock Exchange. *International Journal of Financial, Accounting, and Management*, 3(3), 227-243.
- Issaa, G., & Siam, Y. A. (2020). Audit committee characteristics, family ownership, and firm performance: evidence from Jordan. *management*, 14(4).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower.
- Kipkoech, S. R., & Rono, L. (2016). Audit committee size, experience and firm financial performance: evidence Nairobi securities exchange, Kenya. *Research Journal of Finance and Accounting*, 7(15).
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of accounting and economics*, 33(3), 375-400.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The journal of finance*, 54(2), 471-517.
- Mertzanis, C., Basuony, M. A., & Mohamed, E. K. (2019). Social institutions, corporate governance and firm-performance in the MENA region. *Research in International Business and Finance*, 48, 75-96.

- Orcan, F. (2020). Parametric or non-parametric: Skewness to test normality for mean comparison. *International Journal of Assessment Tools in Education*, 7(2), 255-265.
- Peng, H., Zhang, J., Zhong, S., & Li, P. (2021). Corporate governance, technical efficiency and financial performance: Evidence from Chinese listed tourism firms. *Journal of Hospitality and Tourism Management*, 48, 163-173.
- Queiri, A., Madbouly, A., Reyad, S., & Dwaikat, N. (2021). Corporate governance, ownership structure and firms' financial performance: insights from Muscat securities market (MSM30). *Journal of Financial Reporting and Accounting*, 19(4), 640-665.
- Rashid Khan, H. U., Khidmat, W. B., Hares, O. A., Muhammad, N., & Saleem, K. (2020). Corporate governance quality, ownership structure, agency costs and firm performance. Evidence from an emerging economy. *Journal of Risk and Financial Management*, 13(7), 154.
- Saha, N. K., Moutushi, R. H., & Salauddin, M. (2018). Corporate governance and firm performance: the role of the board and audit committee. *Asian Journal of Finance & Accounting*, 10(1), 210-225.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Uyanto, S. S. (2020). "Power Comparisons of Five most Commonly Used Autocorrelation Tests." *Pakistan Journal of Statistics and Operation Research*, Vol. 16 No. 1, pp. 119–130.
- Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of financial economics*, 105(3), 581-606.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.

**Received:** 10-Feb-2024, Manuscript No. jmids-24-14534; **Editor assigned:** 12-Feb-2024, Pre QC No. jmids-24-14534(PQ); **Reviewed:** 23-Feb-2024, QC No. jmids-24-14534; **Published:** 24-Feb-2024