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## Research Article

### The Effect of Ownership Structure and Audit Quality on Firm Performance

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#### ABSTRACT

The study examined the effect of ownership structure and audit quality on firm performance of listed companies in Ghana. The research employed a quantitative research approach; secondary data was extracted from various annual reports and financial statements of the selected companies. The target population was all 42 listed companies on the Ghana Stock Exchange. The sample size was 20 companies selected from all industries. The study period was 2013-2018 resulted in 160 firm-yearly empirical observations. The study used return on asset (ROA) and return on equity (ROE) as the performance measure. Ownership structure was measured using managerial ownership and institutional ownership, audit quality was also measured with the auditor's reputation, audit committee size and audit committee independence. The control variables used were board size and firm size. The researcher found a weak positive correlation between institutional and managerial ownership and firm performance. Moreover, there was a positive effect of audit quality on firm performance. It implies that the engagement of the services of the Big 4 audit firms has an incremental effect on firm performance. Audit committee size posited a positive effect on firm performance whereas audit committee independence was seen to harm firm performance. Similarly, board independence showed a positive effect on ROE and a negative effect on ROA. Board size, however, indicated a positive effect on firm performance. The researcher recommended the pressing need of diversifying shareholdings in firms as a sweetener to attract more skills and expertise among shareholders that can be tapped to enhance the performance of firms. However, managers should be protected from unnecessary shareholding meddling.

*Keywords:* Ownership structure, Audit quality, Firm performance

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## **Introduction**

The ownership structure of every business or company is viewed as a structured and productive solution to the sharing of risk and incentive problems (Thomsen and Pedersen, 2000). Singh and Davidson (2003) opined that the firm ownership framework is/are considered among the key internal mechanisms and structures of corporate governance and corporate finance. Scholars such as Bruton et al., (2010), Douma et al., (2006) have examined the diverse forms of ownership structure in different states and countries particularly on managerial, foreign, and domestic, institutional, and individual shareholders. An auditor is task with the responsibility of averting, disclosing, and reporting of unlawful acts and fraud in an organization (Oluwagbemiga, 2010). This debate has heightened by the collapse of both large and small corporations worldwide. The independence of auditors is to ensure the enhancement of the financial reporting quality by increasing the effectiveness and efficiency of the process of auditing and making sure an auditor is not too acquainted with the client to not imperil their integrity thus diminishing the opinion of their independence (Tobi et al, 2016). Users usually have confidence in the audited financial statements when auditors are independent. The exploration resulted that, varied forms of ownership may positively or negatively impact the financial performance of a firm when all things are being equal. Almajali et al., (2012) posits that ownership structure has a linear effect on the stockholders and investment in a firm that however is a factor of a firm's financial performance. Matoke and Omwenga (2016), indicated that there is a positive and insignificant effect of audit quality on financial performance and the greater the auditor's independence, the higher the propensity of the firm making substantial net profit margins. Elewa (2019) postulated that audit quality has an insignificant impact on return on asset and return on equity of firms. Heugens et al., (2009) and Grosfeld (2006) conceptualize that ownership structure can be defined from two perspectives notably, ownership concentration and ownership identity. According to Jiang et al., (2011) and Pedersen and Thomsen, (1999)

ownership concentration specify shares of the biggest owner influenced by monitoring cost and absolute risk i.e. the size of the firm (larger size firms attract handsome capital funds and huge value-to-sale rates) factored by the Herfindahl index, which, indicates the percentage shareholding. Kim (2011) stated in his report that, foreign ownership is characterized by the number of shares controlled by all foreign investors that is been cut down by the total number of shares outstanding for that firm at the end of an accounting period expressed as a percentage.

## **Literature Review**

Ongore (2011) examines the relation between a firm's ownership structure and its performance. His study focuses on 42 out of 54 firms that are listed in Kenya. His research categorizes ownership structure into state ownership, foreign ownership, diffuse ownership, corporate ownership, insider ownership and ownership concentration. The study considers return on equity, return on assets and dividend yield as indicators for measuring the performance of a firm. The research employs the Pearson's correlation and logit regression to analyze how the different variables relate. The results of the analysis show that ownership concentration and state ownership are negatively linked to the performance of a firm. His research shows that government-owned business typically does poorly because they are characterized by tribalism, unnecessary bureaucracy, nepotism, and favoritism, no respect for rules and regulations and influence from the politicians. The research demonstrates once again that when the firm's ownership is left in a few hands of around five or less major shareholders, there is the likelihood of the shareholders exerting much pressure on management in terms of monitoring. This therefore hinders the willingness of executives to be imaginative and innovative and this usually results in the firm performing poorly. However, corporate ownership, insider ownership and foreign ownership are all positively related to performance of a company. The research therefore implies that companies should go in for diffuse ownership rather than concentrated

ownership since that is a way of reducing the pressure exerted by the major shareholders on managers and also to attract new shareholders with diverse skills and knowledge. He also suggests that firms should also be interested in insider ownership because managers become much more committed to the firm if they own shares in the business. Again, he recommends that the government should advocate for partnership with private individuals and institutions to own a part of the state-owned companies as this will help boost the performance of those companies.

Tsegba and Ezi-herbert (2011) analyze the association a firm's performance and how its ownership is structured of Nigerian listed companies. The study focuses on 73 listed firms during the years of 2001 to 2007. Their research considers earnings per share and share price as performance indicators and categorizes ownership structure into insider ownership, concentrated ownership, dominant ownership and foreign ownership. They employ ordinary least squares to examine the association between the different variables. The results of their findings prove that there is no substantial correlation between concentrated ownership, foreign ownership, dominant ownership structures and the overall performance of a company. They in addition monitor that insider ownership is negatively associated with the overall performance of a firm. Their research suggests that corporate administrative bodies should reconsider foreign ownership, concentrated ownership, dominant ownership structures as governance mechanisms since they do not have any significant relationship on the overall performance of a company. They again suggest that there should be monitoring by shareholders on their firms' management activities in the situation where the firm is characterized by insider ownership as the performance of companies is negatively affected by insider ownership.

Al-matari, Al-matari and Saif (2017) also analyze the association that exists between the performance of a company and how its ownership is being structured. Their study considers 81 organizations recorded on the Omani stock

trade for the time of 2012 to 2014. Their study uses secondary data by extracting information from the yearly reports of those organizations. The paper categorizes ownership structure into foreign, governmental and institutional ownership and also uses return on assets to estimate the performance of a company. The study uses regression analysis to check the connection between the ownership structure and the overall performance of the firm. The findings of the research show a significant positive connection between governmental ownership and foreign ownership structures and the general performance of companies. Likewise, the study reveals that there is a positive connection between the general performance of a firm and institutional ownership structure but it was not substantial.

## **Methods**

### ***Sample and Data***

The population of the study encompassed of all listed companies on the Ghana Stock Exchange. The target population is focused on listed firms due to data accessibility as they are all public companies and are authorized by regulations to publish their annual reports for accessibility by the general public as well as its members. Purposive sampling method was employed in the study for the selection of the companies' base on the following outlined conditions:

- (1) Comprised firms with complete annual report and was available to the researcher.
- (2) Companies with full annual report but not for the period of study were accepted.
- (3) Companies without information on any of the variables for a particular year was excluded despite having their annual reports published.

Based on the above conditions, 20 companies were selected for the study. Information on the research variables were obtained from secondary data sources, in particular the analyzed firms' annual reports from the 2012-2018 periods. Which resulted in 160 firm-yearly empirical observations?

**Description of Measurement Variables**

**Dependent variable**

The dependent variable as indicated above is firm performance.

The primary performance measures of firms are return on assets (ROA) and return on equity (ROE). (Demsetz and Villalonga, 2001; Krivogorsky, 2006; Maury, 2006; Aggarwal et al., 2011).

Table 1. Dependent variable description

PERFORMANCE	ACCRONYMS	DEFINITION	SOURCE
Return on Asset	ROA	With one unit of assets, ROA calculates how much income a company can generate. This helps to determine the result of management decisions on the use of properties that were entrusted to them. Return on asset is computed by dividing net income by total asset.	Appiah, and (2015) Asamoah Narkotey, Hillier et al. (2010) Krivogorsky (2006)
Return on Equity	ROE	ROE tests the earnings over a period of time produced by the shareholders' equity, normally one year. This contains three key tools that can be used by management to maintain the company's health: profitability; asset management; and financial flexibility.	Hillier et al. (2010) Krivogorsky (2006) Maury (2006)

**Independent Variable**

The independent variables will be ownership structure, audit quality and audit committee. Ownership structure was proxied by insti-

tutional and managerial ownership. Audit quality was also measured by external auditor reputation and audit committee by the size and independence of audit committee of various companies.

Table 2. Independent variable description

Variables	Accronyms	Definitions	Source
<b>Ownership Structure</b>			
- Institutional Ownership	INSOWN	Institutional Shareholding (percentage as given shown in the annual report)	Demsetz and Villalonga, 2001 Krivogorsky, 2006
- Managerial Ownership	MANOWN	Managerial Shareholding (percentage as given shown in the annual report)	Demsetz and Villalonga, 2001 Krivogorsky, 2006
<b>Audit Quality</b>			
- External Auditor Reputation	AUDQ	Proxied by the reputation of the external auditor where 1 if the company is audited by a Big 4 accounting firms and 0 otherwise	Hoag et al., 2017 Mohamed and Habib, 2013 Nnadi et al., 2017

Variables	Accronyms	Definitions	Source
<b>Audit Committee</b>			
- Audit Committee Size	ACSIZE	The number of audit committee size	Alzeban, 2015 Oussii and Taktak, 2018 Zhang et al., 2007
- Audit Committee Independence	ACIND	Proportion of external or non-executive directors on the audit committee	Baxter, 2010; Van der Zahn and Tower, 2004

**Control Variables**

In testing whether the effect is caused by other variables, control variables are used to in testing this effect. Control variables warrant that

the model is not subject to omitted variable bias. Firm size and board size were employed as the control variables.

Table 3. Control Variable Descriptions

Variables	Accronyms	Definitions	Source
Firm Size	FSIZE	Book value of total asset. It was derived by finding the natural logarithm of the firm’s total assets.	Renneboog, 2000 Maury, 2006 Aggarwal et al., 2011
Board Size	BSIZE	The number of corporate boards on the firm’s main corporate boards.	Krishnan, 2005

**Data Analysis**

The data was employed in the analysis to critically estimate the effect of audit quality and audit committee on firm performance.

Says (1998) cited in Afriyie and Akotey (2015), explained panel data as a longitudinal data which encapsulates the observation of a given sample economic variables over a given period of time. Furthermore, (Hsiao,2003) emphasized that panel data is more effective in examining variables econometrically. He further stated that, panel data minimizes the extent of collinearity among the explanatory variables. Several researchers have employed similar method in evaluating the effect of certain economic variables on firms over time (Baldavoo and Nomlala, 2019; Akotey, Sackey, Amoah and Manso, 2013; Afriyie and Akotey, 2015). Therefore, this method is appropriate for the study.

Consider a simple panel data regression model;

$$Y_{it} = \alpha + \beta_1 X1_{it} + \beta_2 X2_{it} + \mu_{it} \dots\dots\dots (a)$$

Where  $Y_{it}$  represents the dependent variable of listed firm  $i$  at time  $t$ ,  $\alpha$  denotes the constant term.  $\beta_1$  and  $\beta_2$  represent the coefficients of the independent variables and control variables respectively,  $X1_{it}$ , and  $X2_{it}$  denotes the independent and control variable of firms  $i$  at time  $t$  and  $\mu_{it}$  represent the stochastic disturbance term.

**Model Specification**

From equation (a) above, the following equations as models for my estimation to assess the effect of audit quality and audit committee on firm performance of listed firms on the Ghana Stock Exchange.

$$ROA_{it} = \alpha + \beta_1 INSOWN_{it} + \beta_2 MANOWN_{it} + \beta_3 AUDQ_{it} + \beta_4 ACSIZE_{it} + \beta_5 ACIND_{it} + \beta_6 FSIZE_{it} + \beta_7 BSIZE_{it} + \mu_{it} \dots\dots (1)$$

$$ROE_{it} = \alpha + \beta_1INSOWN_{it} + \beta_2MANOWN_{it} + \beta_3AUDQ_{it} + \beta_4ACSIZE_{it} + \beta_5ACIND_{it} + \beta_6FSIZE_{it} + \beta_7BSIZE_{it} + \mu_{it} \dots \dots \dots (2)$$

Where;

- ROA<sub>it</sub> = Return on Assets of firm *i* at time *t*
- ROE<sub>it</sub> = Return on Equity of firm *i* at time *t*
- INSOWN<sub>it</sub> = Institutional Ownership of firm *i* at time *t*
- MANOWN<sub>it</sub> = Managerial Ownership of firm *i* at time *t*
- AUDQ<sub>it</sub> = Audit Quality of firm *i* at time *t*
- ACSIZE<sub>it</sub> = Audit Committee Size of firm *i* at time *t*
- ACIND<sub>it</sub> = Audit Committee Independence of firm *i* at time *t*
- FSIZE<sub>it</sub> = Firm Size of firm *i* at time *t*
- BSIZE<sub>it</sub> = Board Size of firm *i* at time *t*
- μ<sub>it</sub> = Stochastic Disturbance term also known as the residual has been fused to cater for any error that have the potency to affects the estimates as a result of unobservable events, human error, noisy financial data and also the need to be parsimonious.

According to (Eisenhart, 1947; Kreft and de Leeuw, 1998; Gelman, 2005; Akotey et al, 2013), there are two main models of panel data analysis. These are fixed effect and random effect model.

However, (Akotey et al, 2013), postulated that these two models are independent of each other. Fixed effect model is suitable when it is assumed that all time invariant events that might affect the independent variable are constant. On the other hand, when time invariant variables are interrelated at random, random effect model is used (Gelman, 2010). In order to decide which of the models is appropriate, the Durbin-Wu-Hausman (DWH) specification test is conducted (Hausman, 1978). To facilitate the

test, two hypotheses are set: the null hypothesis (H<sub>0</sub>) and alternative hypothesis (H<sub>1</sub>).

H<sub>0</sub> = Random model is appropriate

H<sub>1</sub> = Fixed model is appropriate

The thumb rule for the test state that, if the chi - square statistic (*p*-value) is greater than 5% significant level, the null hypothesis (H<sub>0</sub>) is accepted, implying that the random effect estimator was appropriate for modelling the data. On the other hand, if the chi - square statistic (*p*-value) is less than 5% significant level, the alternative hypothesis (H<sub>1</sub>) is accepted, meaning fixed effect model was used (Greene, 2008). The statistical software used in deriving the estimators of my analysis was (STATA 15.0).

## Analysis and Result

### Descriptive Analysis

Table 4. Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum Value	Maximum Value
ROA	.0462818	0.1338617	-.3281	0.9164096
ROE	.1839334	0.3767431	-1.320982	1.879938
INSOWN	41.96	24.68383	1	82
MANOWN	29.2809	18.16277	1	62
AUDQ	.9159664	0.2786113	0	1
ACSIZE	3.850575	1.006129	2	6
ACIND	3.511364	1.508553	1	9
BSIZE	9.058824	1.643137	6	13
FSIZE	60.5	34.78505	1	120

Source: Research Data 2020.

Inferring from table 3 above, it can be observed that over the 6-year period, the maximum ROA is 0.9164096 representing 91.64096% after tax income to total assets and a minimum value of 32.81 losses in profit. Companies on the average earned a return of 4.62818% on their total assets employed during the period of consideration, and a standard deviation of 13.39% which indicate a marginal difference of best performing companies and non-performing ones. The maximum ROE is 1.879938 amounting to 187.9938% profit to the overall equity and a minimum value of 132.0982% loss. On the average, the companies earned a total return of 18.39% for shareholders on their investment. Nevertheless, the standard deviation of 37.67% significantly indicates that, there is a notable difference between performing and non-performing companies.

The maximum institutional ownership is 82% and a minimum of 1%. The average institutional ownership for the companies during the period of consideration is 41.96%, and a standard deviation of 24.68%. Averagely, the managerial ownership of the companies for the year of consideration is 29.28%, with a standard deviation of 18.16%. The maximum managerial ownership is 62% and lowest ownership of 1%.

The average audit quality is 0.9159664 representing 91.60% that means that more than half of the companies were audited by the big 4 auditing firms. In addition, the audit committee size is averaged with 4 members with a maximum and minimum member of 6 and 2 respectively. The average audit committee independence is 4 members. This means that on the average the proportion of external directors on the audit committee is 4 members for the companies during the period of consideration, with a maximum member of 9 and minimum member of 1.

Furthermore, the average board size is 9 members with a minimum and maximum member of 6 and 13 respectively. In addition, the average firm size is 60.5 billion cedis, with maximum and minimum values of 1 billion and 120 billion cedis respectively. With a standard deviation 34.79 billion cedis suggests that there is a smaller difference among firms with respect to their

#### Correlation Analysis

Correlation basically measures the inter relationship among two or more variables. It determines the linear dependency among variables and the mutual relationship between variables. However, correlation associations do not mean causality i.e. if x affect y or vice versa.

Table 5. Correlation Matrix

Variable	ROA	ROE	INSOWN	MANOWN	AUDQ	ACSIZE	ACIND	BSIZE
ROA	1.00							
ROE	0.27*	1.00						
INSOWN	0.07	-0.11*	1.00					
MANOWN	0.02	-0.21	0.18	1.00				
AUDQ	0.03	0.06	0.30*	-0.11	1.00			
ACSIZE	-0.1	0.13	-0.27*	-0.31*	0.00	1.00		
ACIND	-0.22*	0.10	-0.27*	-0.24*	0.00	0.75*	1.00	
BSIZE	-0.19*	0.12	-0.09	-0.31*	0.08	0.51*	0.65*	1.0000
FSIZE	0.10	0.20	-0.02*	-0.13	0.03	0.14	0.12	-0.12

Source: Research Data 2020.

\* 5% Significant level

Table 4.2 outlines the correlation analysis between ROA and ROE on the selected independent variables (institutional ownership, managerial ownership, audit quality, audit committee size and audit committee independence) and the control variables (board size and firm size). From the results, ROA is negatively and significantly related with ACIND ( $r = -0.22$ ;  $p < 0.05$ ) and BSIZE ( $r = -0.19$ ;  $p < 0.05$ ). However, ROA is positively and correlated with INSOWN ( $r = 0.07$ ), MANOWN ( $r = 0.02$ ), AUDQ ( $r = 0.03$ ) and FSIZE ( $r = 0.10$ ). On the other hand, ROA posits a negative correlation with ACSIZE ( $r = -0.1$ ).

ROE is negatively and significantly correlated with INSOWN ( $r = -0.11$ ;  $p < 0.05$ ). Also, there is negative correlation between ROE and MANOWN. ROE is positively related with AUDQ, ACSIZE, ACIND, BSIZE, FSIZE with a correlation coefficient of ( $r = 0.06$ ;  $r = 0.13$ ;  $r = 0.10$ ;  $r = 0.12$ ;  $r = 0.20$ ) respectively. Similarly, there exists a significant correlation among the independent variables and control variables. Also, the highest correlation coefficient of 0.75 is recorded between ACSIZE and ACIND, indicating that there is no substantial concern of multicollinearity among independent variables.

### Regression Analysis

Table 6. Hausman Specification Table

Prob > chi2	0.9524
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From the table above, null hypothesis ( $H_0$ ) cannot be rejecting, implying that fixed effect model is not appropriate. This is simply because the prob > chi2 (0.9524) is greater than 5% significant level. Therefore, random effect model was used for the estimate.

#### ROA as Dependent Variable

The estimated model used for the study is indicated below:

$$ROA_{it} = \alpha + \beta_1INSOWN_{it} + \beta_2MANOWN_{it} + \beta_3AUDQ_{it} + \beta_4ACSIZE_{it} + \beta_5ACIND_{it} + \beta_6FSIZE_{it} + \beta_7BSIZE_{it} + \mu_{it} \dots \dots \dots (1)$$

Table 7. Regression Analysis with ROA as Dependent Variable

ROA	COEFFICIENTS	STANDARD ERROR	T-STATISTICS	P-VALUE
INSOWN	-.0003119	.0009501	-0.33	0.743
MANOWN	.0004623	.0010362	0.45	0.655
AUDQ	.0458890	.0458562	1.00	0.317
ACSIZE	.0078058	0364012	0.21	0.830
ACIND	-.0015926	.0342733	-0.05	0.963
BSIZE	-.0169355	.0114548	-1.48	0.139
FSIZE	.0001075	.0003512	0.31	0.760
CONSTANT	.1735090	.1232764	1.41	0.159
OVERALL R-SQUARE				0.0726
PROB > F				0.3765

1%\*, 5%\*\* , 10%\*\*\* SOURCE: Research Data (2020).

Using random effect regression model with ROA as independent variable, the results are presented in the table below. The overall R-Square which indicates the variation of the ROA

explained by the independent variables is 0.07. The lower R-Square value can be explained by the type of data set we used, panel data, which



encompass a cross section of firms over a period of time. The p-value (0.3765) also indicates that all the variables are significant in the explaining ROA jointly.

From the estimates, it can be deduced that there is a positive effect of MANOWN, AUDQ, ACSIZE and FSIZE on ROA. This means that a marginal change in ROA will be predicted by a rise in the co-efficient of determination of the variables. This is represented as follows accordingly; 0.0004623, 0.045889, 0.0078058 and 0.0001075.

On the other hand, INNOWN, ACIND and BSIZE posit an inverse effect on ROA. This implies that, a marginal change in ROA can be explained by a fall in the variables. This is evidenced by the negative co-efficient of determination of the variables as indicated below; -0.0003119,-0.0015926 and -0.0169355.

The p-value and the t-statistics of the individual variables which measures how significant each independent variable affect the ROA statistically all indicates that INSOWN, MANOWN, AUDQ, ACSIZE, ACIND, BSIZE, FSIZE are all not statistically significant individually in affecting ROA. This is because the p-values are more than all the confidence interval (1%, 5% and 10%) and the t-statistics are also less than 2 as the thumb rule indicates.

*ROE as the Dependent Variable*

The estimated model used for the study is indicated below:

$$ROE_{it} = \alpha + \beta_1INSOWN_{it} + \beta_2MANOWN_{it} + \beta_3AUDQ_{it} + \beta_4ACSIZE_{it} + \beta_5ACIND_{it} + \beta_6FSIZE_{it} + \beta_7BSIZE_{it} + \mu_{it}..... (1)$$

ROE	COEFFICIENTS	STANDARD ERROR	T-STATISTICS	P-VALUE
INSOWN	-.0036951	.0027438	-1.35	0.178
MANOWN	-.0023664	.0030659	-0.77	0.440
AUDQ	.0762314	.1697644	0.45	0.653
ACSIZE	.0495711	.113574	0.44	0.662
ACIND	-.0654066	.1034131	-0.63	0.527
BSIZE	.0140091	.0353563	0.40	0.692
FSIZE	.0018594	.0011187	1.66	0.097***
CONSTANT	.2078402	.3795912	0.55	0.584
OVERALL R-SQUARE				0.1845
PROB > F				0.3486

1%\*, 5%\*\* , 10%\*\*\* SOURCE: Research Data (2020).

The table above represent random effect model with ROE as the dependent variable. The overall R-Square value is 0.1845 which imply that the variation in ROE can be explained by only 18.45% of the explanatory variables. The p-value of 0.3486 means that all the independent variables are not statistically significant jointly in explaining the dependent variable

INSOWN, MANOWN, ACIND shows a negative impact on ROE. This implies that a change in ROE will be predicted by a fall in the variables by the following co-efficient of determination respectively; -0.0036951, -0.0023664 and -0.0654066.

On the other hand, the co-efficient of determination of AUDQ, ACSIZE, BSIZE, and FSIZE indicate a positive impact on ROE. This means that a 1% change in ROE will be explained by an increase of the variables by the following values respectively, 0.0762314, 0.0495711, 0.0140091 and 0.0018594.

The p-value and the t-statistics of the individual variables which measures how significant each independent variable affect the ROE statistically all indicates that INSOWN, MANOWN, AUDQ, ACSIZE, ACIND, BSIZE, are all not statistically significant individually in affecting ROE, except for FSIZE with a p-value of 0.097.

This is because the p-values are more than all the confidence interval (1%, 5% and 10%) and the t-statistics are also less than 2 as the thumb rule indicates.

### Discussion of Findings

The study examined the effect of ownership structure and audit quality of firm performance in Ghana. From the results above, it can be inferred that MANOWN, AUDQ, ACSIZE and FSIZE had a positive impact on ROA. Also, AUDQ, ACSIZE, BSIZE and FSIZE can predict ROE positively. However, INSOWN, MANOWN, AUDQ, ACSIZE, ACIND, BSIZE and FSIZE negatively affect ROA. In addition, INSOWN, MANOWN and ACIND negatively affected ROE

### Conclusion

The conclusions that can be drawn from the findings in Ghana is that managerial ownership can offer direct economic motivation which will improve active monitoring by managers engagement. In addition to this, managerial ownership can align ownership and control via considerable shareholding ownership. Additionally, firms should increase the level of institutional ownership which will revamp their purchasing of audit services to ensure quality audit. Firms should notice that quality of audit rallies the quality of financial reporting, agency cost arising from managerial manipulation as a result of their self-centeredness motive are reduced and lessening in information asymmetry.

### References

Akotey, J.O., Sackey, F.G., Amoah, L., and Manso, R.F. (2013). The financial performance of life insurance companies in Ghana. *Journal of Risk Finance*, 14(3), 286-302.

Almajali, A. Y., Alamro, S. A., and Al-Soub, Y. Z. (2012). Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. *Journal of Management research*, 4(2), 266.

Al-matari, E. M., Al-matari, Y. A. and Saif, S. A. (2017) 'Association Between Ownership Structure Characteristics And Firm Performance', 21(1), pp. 1-10.

Douma, S., George, R., and Kabir, R. (2006). Foreign and domestic ownership, business groups, and firm performance: Evidence from a large emerging market. *Strategic Management Journal*, 27(7), 637-657.

Elewa, M. M. (2019). The effect of audit quality on firm performance: A panel data approach. *International Journal of Accounting and Financial Reporting*, 9(1), 2162-3082

Gelman, A. (2010). Analysis of variance- why it is more important than ever. *The Annals of Statistics* Vol 33, No. 1 pp. 1-53.

Greene, W. H. (2008). *Econometrics Analysis*, 6<sup>th</sup> Edition, Upper saddle River, N.J: Prentice Hall

Hsiao, C. (1986). *Analysis of panel data, vol. 11 of econometric society monographs*. New York: Cambridge University Press.

Jiang, H., Habib, A., and Hu, B. (2011). Ownership concentration, voluntary disclosures and information asymmetry in New Zealand. *The British Accounting Review*, 43(1), 39-53.

Kim, B. (2011). Do foreign investors encourage value-enhancing corporate risk taking? *Emerging Markets Finance and Trade*, 47(3), 88-110.

Krivogorsky, V. (2006). Ownership, board structure, and performance in continental Europe. *The International Journal of Accounting*, 41: 176-197.

Matoke, N. V., and Omwenga, J. (2016). Audit quality and financial performance of companies listed in Nairobi securities exchange. *International Journal of Scientific and Research Publications*, 6(11), 2250-3153.

Oluwagbemiga, A. (2010). *The Role of Auditors in Fraud Detection, Prevention and Reporting in Nigeria*.

Ongore, V. O. (2011) 'The relationship between ownership structure and firm performance : An empirical analysis of listed companies in Kenya', 5(6), pp. 2120-2128.

Sayrs, L. (1989). *Pooled Time Series Analysis*. New Bury Park, Ca:Sage, pp.10,32

Shleifer, A. and Vishny, R.W. (1986) 'Large shareholders and corporate control', *Journal of Political Economy*, 94: 461-488.

Tsegba I. N., and Ezi-Herbert, W. (2011). The relationship between ownership structure and firm performance: Evidence from Nigeria. *African Journal of Accounting Economics, Finance and Banking Research*, 7(7).

- Pedersen, T., and Thomsen, S. (1999). Economic and systemic explanations of ownership concentration among Europe's largest companies. *International Journal of the Economics of Business*, 6(3), 367-381.
- Singh, M., and Davidson III, W. N. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, 27(5), 793-816.
- Thomsen, S., and Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689-705.
- Tobi, B. A., Osasrere, A. O., and Emmanuel, U. (2016). Auditor's Independence and Audit Quality: A Study of Selected Deposit Money Banks in Nigeria. *International Journal of Finance and Accounting*, 5(1), 13-21.