

# Company Shareholding and Financial Performance of Quoted Commercial Banks in Nigeria with Bank Size as a Moderating Variables

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**Abstract:** Shareholding structure is an aspect of corporate governance that has come to mitigate the agency problem inherent in the business relationship between the principal and the agent and has therefore becomes a determinant of bank performance that demands attention. Against this background, this study determines the relationship between company shareholding and financial performance of quoted deposit money banks in Nigeria from 2013-2018. The independent variable (company shareholding) is represented by managerial shareholding and foreign shareholding, while, the dependent variable (financial performance) is measured by return on assets (ROA). The panel data used for the study were sourced from the financial statements of the sampled banks. The diagnostic test conducted were correlation matrix, descriptive statistics and the Shapiro-Wilk test for normality of data. The data were analysed with robust regression technique using STATA 12 software. The results of the analysis show that managerial shareholding has a significant effect on financial performance while foreign shareholding has an insignificant but positive effect on the financial performance of Nigerian banks. The results further revealed that bank size has a significant moderation effect on the relationship between managerial shareholding and financial performance of Nigerian bank during the six (6) year period studied. The study recommends that foreign shareholding should be encouraged as it brings expertise and resources in the operation of Nigerian banks and improve their performances.

**Keyword:** bank size, company shareholding, deposit money banks, financial performance, moderating variables

## Introduction

Shareholding refers to the manner the shares which are the basic units of any company are owned and it is determined by the corporate governance practices prevalent in the country. A firm's shareholding structure also rightly referred to as ownership structure comprises institutional shareholding, Block-shareholding, managerial shareholding or director shareholding, foreign shareholding and family shareholding. Corporate governance involves a set of relationship between a company's management, its board, its shareholders and other stakeholders, also the structure through which objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Corporate governance is a theme that endeavors to align interest of managers with those of shareholders through initiatives like - voting rules, board composition, directors salary, the separation between chairman and Chief Executive Officer, woman on board of directors, dividend policy and ownership structure among others. (Malik, Thanh & Shah, 2015). Corporate Governance is the system by which companies are directed and controlled.

In Nigeria, the 2000–2010 banking reform led to bank mergers, acquisition and consolidation activities intended to strengthen the banking sector, and these activities led to significant changes in bank ownership to permit various ownership systems including wealthy families and rich individuals, institutional, managerial or insider ownership and foreign interests in an attempt to reduce government's control of banks. This liberal policy consequently resulted in a greater number of individual shareholders with large direct equity holding in Nigerian banks. Moreover, large direct equity ownership by controlling shareholders can have serious consequences for bank profitability depending on whether controlling shareholders have private control benefits or whether there are shared control benefits that accrue to both controlling and non-controlling owners, and this effect also depend on the levels of ownership concentration in Nigerian banks (Ozili & Uadiale, 2017). Ownerships should be expanded to include directors/managers, employees, and even customers and suppliers.

Managerial or director shareholding refers to an ownership fraction or stake in a firm that is held by those managing the entity including the chief executive officer (CEO). Managerial ownership is not only meant to increase the equity of the organization but also to serve as incentives to managers to align managers' interests with those of the owners. Managerial shareholding is measured by natural logarithm of equity held by managers as shareholders in a firm. Board ownership affects the degree of congruence between the interests of owners and the board or management. Shareholding by officers and board members gives them an incentive to improve the financial performance (Brickley, Lease & Smith, 1988). Booth, Cornett and Tehranian (2002) conclude

that when officers and board members have considerable holdings in a company's stock, their decisions impact their own wealth and they will act in the best interest of the firm.

Foreign shareholding refers to ownership in domestic firms by foreigners who are either individual or multinationals. These shareholders prefer strategies of exit rather than voice to monitor management (Aguilera & Jackson, 2003). When the foreign shareholding is higher, the foreign partners, as the majority stockholders, will appoint foreigners to serve as members of board of directors, thus, the alignment of goals to maximize the company's performance will be achieved because the equality of principle between foreign shareholders and management, which is also occupied by foreigners, is part of the governance of company management.

Bank size is used as the variable to moderate the relationship between company shareholding and financial performance of firms. Moderation is used when the effect of an independent variable on a dependent variable varies according to the level of a third variable that is, the moderating variable which relates with the independent variable (Edwards & Lambert, 2007). Hair, Anderson, Tatham and Black (1998) opine that a variable is regarded as a moderator if the relationship between two (or more) other variables is a function of the level of that variable. Moderating effect occurs when a third variable changes the relationship between two related variables. Lai (2013) notes that a moderator is an independent variable that affects the strength and/or direction of the connotation between another independent variable and an outcome or dependent variable. In this work, company shareholding represented by managerial shareholding and foreign shareholding was moderated by bank size which has a direct and indirect relationship with shareholding structure and financial performance of any firm.

### **Statement of the Problem**

Explaining the impact of company's shareholding in Deposit money bank's value is one of the primary objectives of contemporary researches for more than fifty years starting with the seminar paper of Modigliani and Miller in 1958. However, this role remains a questionable subject which attracts the attention of many researchers. Indeed, researchers attempt to determine whether optimal equity ratios exist or not, and whether equity financing impacts on firms performance. Conclusions and findings from the works of earlier researchers have remained polarized on the exact effect of shareholding/ownership structure on firms' performance. Abdullah, Sarfraz, Qun and Chaudhary (2019).

The preliminary search for empirical literature on the moderating effect of a variable or variables on the relationship between the structure of shareholding and the financial performance of quoted firms led the researcher to make inference which is related to the paucity of studies, adopting Company Shareholding and Financial Performance of Quoted Commercial Banks in Nigeria with Bank Size as a Moderating Variable.

### **Research Objectives**

The main objective of this study is to determine the relationship between Company shareholding and financial performance of quoted commercial banks in Nigeria with bank size as a moderating factor, while the specific objectives are to:

- i) investigate the relationship between Managerial shareholding (MGRSHD) and return on asset of quoted Nigerian commercial banks;
- ii) evaluate the relationship between foreign shareholding (FRNSI-ID) and return on asset of quoted Nigerian commercial banks;
- iii) investigate the moderating effect of bank size on the relationship between managerial shareholding and return on assets of quoted commercial banks of Nigeria;

### **Research Hypotheses**

In order to achieve the stated objectives of this study, the following Null Hypotheses were formulated.

HO<sub>1</sub>: Managerial shareholding has no significant relationship with return on assets of quoted commercial banks in Nigeria.

HO<sub>2</sub>: Foreign shareholding has no significant relationship with return on assets of quoted commercial banks in Nigeria; and

HO<sub>3</sub>: Bank size has no significant moderating effect on the relationship between managerial shareholding and return on assets of quoted commercial money banks in Nigeria.

## **Review of related literature**

### **Company Shareholdings**

Abel and Okafor (2010) define ownership structure as the percentage of share held by managers (managerial ownership), institutions (institutional ownership), and government (state ownership). foreign investors (foreign ownership), and family (family ownership), while Jensen and Meckling (1976), define ownership structure as the distribution of equity with regards to votes and capital as well as the identity of the equity owners. Ownership structure of any company, they added, is a serious factor for company's financial performance as it borders on control. A bank's shareholding structure influences its performance because differences in ownership type: concentration, diversity, and resource endowments among shareholders determine their incentives and ability to monitor bank managers. Shareholdings by state, state owned enterprise, domestic private and foreign investors have divergent interest, consequently, they have different impacts on bank behavior and performance (Mamatzakis. Zhang & Wang. 2017).

### **Financial Performance**

Shareholding is widely accepted in the finance and economics study as an instrumental determinant of bank performance. Ogega (2014) points out that there are three major indicators used to measure performance of commercial banks. The first one is Return on Assets (ROA) which is a ratio of Income to the total assets of the bank. ROA indicates the ability of the bank to realize return on its sources of fund to generate profits. Secondly, Return on Equity (ROE) is the net profit divided by shareholders' equity and is expressed in percentage. It indicates how efficient the bank is utilizing funds invested by the shareholder. Thirdly, Net Interest Margin (NIM) indicates the difference between interest income and interest expense as a percentage of total assets. It reflects the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds (Khrawish, 2011).

### **Managerial Shareholding and Return on Asset (ROA).**

Managerial shareholding refers to an ownership fraction or stake in a firm that is held by the managers of the company. Also called director ownership, managerial shareholding is not only meant to increase the equity of the organization but also to serve as incentives to those managing the firm to encourage them to align their interests with those of the interests of the organization. Elderink (2014) argues that managerial shareholding can encourage risk taking, which could damage the firm's profitability instead of improving it, reporting that there exists no significant relation between managerial ownership and performance. Ozili and Uadiale (2017) assert that the propensity for managers to misappropriate profit in the short-term to benefit themselves at the expense of controlling and non-controlling shareholders tend to be greater if managers do not have substantial ownership stake in firms they manage, particularly in widely-held firms, (that is, firms with dispersed ownership) that would negatively affect the level of reported profit of the firm.

Ogega (2014) opines that the relationship between managerial shareholding and agency costs is linear and the optimal point for the firm is achieved when the managers acquires all of the shares of the company adding that managers owning substantial shares in the firms they manage would be motivated to perform better due to incentive alignment. A director/manager who owns a fraction of the firm's shares bears the consequences of managerial action that either create or destroy value and as a consequence, managers with shareholding are likely to work harder and make better investment decisions and such firms should have better performance (Khan, Balachandran & Mather, 2007).

### **Foreign Ownership and Return on Asset (ROA)**

Foreign shareholding also known as foreign ownership is the percentage of total outstanding shares held by foreigners (Farooque, Zijl, Dunstan & Karirn, 2007). Lin and Zhang (2009) find out that banks with foreign ownership show a better financial performance than the domestically owned banks. The foreign shareholders or investors are more likely than domestic ones to force a firm to create value addition, that is, in terms of value-added to output, labour productivity and capital intensity (Ferreira & Matos, 2008). Baba (2009) maintains that foreign shareholders extract higher dividends, benefit from technology, experience, and better organization which implies greater financial discipline and, consequently, higher firm performance.

Nakano and Nguyen (2013) illustrate that the influence of foreign ownership on operating profit would be initially insignificant but that, it will start to show up strongly in the later period. Ongore (2011) finds that foreign ownership has positive and significant relationship with corporate performance adding that foreign investors can help to enhance management system and easy access to massive resources needed for enhanced operations and improve general performance. Barbosa and Lourí (2005) suggest that multinational firms do not make difference with respect to firms' performance in respect of the technology advantages they enjoy over their domestic competitors.

### **The Moderating Variable: Bank Size**

Bank size is taken as the total value of a company's assets and is preferably measured by the natural logarithm of its total assets. For a variable to be qualified for use as a moderating variable in a relationship between an independent and a dependent variable, certain conditions including that, there must be an already established relationship between the independent and dependent variable to be moderated. Secondly, the choice of the independent variable must be done in a manner depicts clear justifications to the importance of the moderating variable on the independent variable. Thirdly, that there is an established consistent relationship existing between independent and dependent variable and that the moderating variable must be such that it can independently assess the dependent variable even in the absence of the independent variable (Kenny, 2008).

This study recognized these facts and adopts bank size as the moderator in the direct relationship between company shareholding and financial performance of Nigerian banks, and appreciate the fact that bank size has a direct influence on shareholding arrangements in addition to having a relationship with the performance of banks.

### **Theoretical Review**

#### **Resource Dependency Theory**

According to Haslinda and Benedict (2009), whilst the stakeholder theory focuses on relationships with many groups for individual benefits, resource dependency theory concentrates on the role of board directors in providing access to resources needed by the firm. Resource dependency theorists contend that the theory focuses on the role that directors play in providing or securing essential resources to an organization through their linkages to the external environment, indeed, Johnson. Daily and Ellstrand, (1996) concur that resource dependency theorists provide focus on the appointment of representatives of independent organizations as a means for gaining access in resources critical to firm success. For example, outside directors who are partners to a law firm provide legal advice, either in board meetings or in private communication with the firm executives that may otherwise be more costly for the firm to secure. It has been argued that the provision of resources enhances organizational functioning, firm's performance and its survival (Daily, Dalton, & Canella, 2003). According to Hillman, Canefla and Pacizold (2000), the directors bring resources to the firm; such as information, skills, access to key constituents such as suppliers, buyers, public policy-makers, social groups as well as legitimacy.

#### **Theory of Anchorage: The Agency Cost Theory**

This study is anchored on the agency theory propounded by Jensen and Meckling, (1976), which is based on the idea of separation of ownership (principal) and management (agent). The theory discusses issues which arises due to lack of control by owners. Berle and Means [1932] states that in modern corporations share ownership is widely dispersed and so managers start taking actions that are far different from those required to maximize shareholder returns.

### **Empirical Review**

Dakhlallh. Mohd-Rashid, Abdullah and Dakhlallh (2019) attempt to provide empirical evidence concerning the relationship between the ownership structure and firm performance of the shareholding companies listed on the Amman Stock Exchange (ASE). Ownership structure was measured by institutional and block shareholders ownership. Firm performance was measured by using Tohin's Q (TQ). This work also used a moderating variable which is board independence. The panel data were analysed by ordinary least square multiple regression for a sample of 180 companies listed on Amman Stock Exchange (ASE) for the period from 2009 to 2017. The findings show that the ownership structure mechanisms have a significant influence on firm performance measure by (TQ). So, institutional ownership shows a significant positive relationship with (TQ), however, the findings show block holders ownership have a significant negative relationship with (TQ). On another hand, the moderating effect of board independence has a significant positive effect on the relationship between block holders ownership and (TQ) and has a significant negative on the relationship between institutional ownership and (TQ). They recommended further researches that should examine

the moderating or mediating influence of other variables on the relation between chosen variables and firm performance, such as audit committee mechanisms and that future researchers can also use different performance measure, such as ROA, ROE and market share.

Saidu and Gidado (2018) investigate the effect of managerial ownership on financial performance of quoted manufacturing firms in Nigeria. The non-survey method of research was adopted where data were generated from annual reports and accounts of quoted manufacturing firms in Nigeria. The study cover the forty (40) manufacturing firms quoted on the floor of Nigeria Stock Exchange (NSE) as 31st December, 2016 out of which ten (10) were selected as sampled size. The technique of analysis adopted for this study was correlation and OLS regression techniques. The study found that managerial ownership has negative and significant impact on financial performance of quoted manufacturing firms in Nigeria. The study concludes that managerial ownership impact negatively on the financial performance of manufacturing firms quoted in Nigeria as managers of firms sometimes manipulate the accounting numbers in the financial statement in order to have a private gain. They recommended that the board of directors in the Nigerian manufacturing firms should ensure that shareholding of the insider managers should be at the minimum in other to better the performance of manufacturing firms quoted in Nigeria.

### Gap in Literature

The paucity of studies with moderating factor in the relationship between shareholding structure and financial performance of firms in the banking subsector provides a yawning gap for further studies which this study fills. Additionally, this study used a methodology that involves pre-estimation tests such as Shapiro-Wilk normality which showed that the ordinary least square (OLS) assumption of normal distribution was violated leading to the use of Robust regression method. The use of a moderator, the inclusion of 2018 data and the conduct of relevant pre-estimation tests constitute the gaps this studies fills in literature.

## METHODOLOGY

### Research Design

This study uses *ex-post facto* research design because the data are historical in nature having been generated through past corporate activities. The panel data managerial shareholders (MGRSRD), foreign shareholders (FRNSHD) and return on assets (ROA) were used in this study as variables. The population of the study consist of all the twenty-one (21) deposit money banks (DMB) operating in Nigeria. List is attached as appendix A. The sample size of this study comprises the fourteen (14) deposit money banks quoted in Nigeria for six (6) years from 2013-2018. Filtering sampling technique was used to separate the quoted banks from the population as those not quoted do not publish their annual reports for public consumption. The data for this study were sourced from the financial statements and annual reports of the 14 quoted deposit money banks (DMBs) used for this study. The data were analysed using Correlation, Variance inflation factor (VIF), Descriptive Statistics, Shapiro-Wilk normality test and pooled ordinary least square multiple regression technique to test the formulated null hypotheses. The pooled OLS method of estimation were chosen because it is the best for estimating cross-sectional or longitudinal data as in this study.

### Model Specification

The dependent variable for the study is financial performance proxied by return on asset (ROA), while the independent variables which is company shareholding is represented by managerial shareholding and foreign shareholding. Bank size was used as the moderating factor.

The specified linear model as used as follows:

$$ROA=f(MGRSHD + FRNSHD + BKSZ.....)1$$

Econometrically, the above equation is represented as:

$$ROA_{it}=\beta_0 + \beta_1 MGRSHD_{it} + \beta_2 FRNSHD_{it} + \beta_3 BKSZ_{it} * FRNSHD_{it} + \mu_{it}.....2 \text{ (Model)}$$

Where:

ROA= a predictor representing return on asset (a proxy for financial performance);  $\beta_0$  = a constant;

$B_{1-3}$  = coefficients of the proxies of the independent variables;

MGRSHD = a predictor representing managerial shareholding (a proxy for independent variable);

FRNOWN = a predictor representing foreign shareholding (a proxy for independent variable);

$L\_BKSZ\_MGRSHD$  = a predictor representing managerial shareholding moderated by bank size (the moderating variable);

$\mu$  = Error term (Residual);

$it$  = Dated panel data; and

$f$  = a Functional relationship

### Data Presentation

The data set for this study which comprise return on assets, managerial shareholding, foreign shareholding and bank size which is the moderating factor are in the list attached as appendix A.

### Data Analysis

#### Correlation Matrix

Table 1 below shows the results of the correlation matrix to test for the presence of multicollinearity.

	ROA	MGRSHD	FRNSHD	I_BKSZ
ROA	1.0000			
MGRSHD	-0.2079	1.0000		
FRNSHD	0.2197	-0.0131	1.0000	
i_BKSZ	0.5412	-0.3651	-0.1860	1.0000

Source: Researcher's Computation, 2020.

The result from the Table 1 above indicates that there is clearly no problem of multicollinearity in the model as no two of the proxies of the independent variable correlate above 0.85 (Hair, Tatham and Anderson, 2005).

#### Descriptive Statistics

Table 2 below presents the summary of the data set used for this study.

Variable	Obs	Mean	Std.Dev.	Min	Max
ROA	84	.0132	.0213	-.0953	.509
MGRSHD	84	14.3526	36.0352	0	301.8324
FRNSHD	84	.0876	.1762	0	.607
i_BKSZ	84	9.1851	.3532	8.1945	9.7916



Results from the Table 2 above shows that ROA, MGRSHD, FRNSHD and Logged BKSZ all have mean (0.0132; 14.3526; 0.0876; and 9.1851 respectively) which all lie between their respective Minimum (-0.0953; 0; 0; and 8.1945) and their Maximum (0.0509; 301.8324; 0.607; and 9.79 16 respectively). That the mean lie within the range of the Minimum and the Maximum is an indication that the series is evenly spread.

Furthermore, the table 2 above shows that the standard deviation of ROA, MCJRSHI and FRNSHD are higher than their respective means indicating that these variables increased during the period under study. However, 1 BKSZ has a standard deviations (0.3 532) that is lower than the mean which signifies that it had had a slower growth rate during the period under review among deposit money banks in Nigeria.

### Shapiro-Wilk W Test for Normal Data

Table 3 below presents the results of the normality test conducted using the Shapiro-Wlik W method.

Variable	Obs	W	V	z	Prob>z
ROA	84	0.68877	22.237	6.815	0.00000
MGRSHD	84	0.37354	44.760	8.352	0.00000
FRNSHD	84	0.77500	16.076	6.102	0.00000
i_BKSZ	84	0.96995	2.147	1.679	0.04659

Source: Researcher's Computation, 2020.

Results from Table 3 above revealed that all the variables except 1\_BKSZ have prob. values that are significant at 1% level of significance, while 1\_BKSZ is significant at 5%. That the prob. values are all significant implies that the null hypothesis that there is no abnormal distribution is rejected. The implication of this results is that one of the basic assumption of ordinary least square (OLS) has been violated and so OLS cannot be adopted for estimation in this study. Consequently, this study will adopt robust regression technique for estimation.

### Regression Analysis Using Robust Method

Table 4 below shows that results of the Robust regression conducted using STATA software.

ROA	Coef.	Std. Err.	t	P> t
MGRSHD	-.01472	.00834	-1.76	0.078*
FRNSHD	.02326	.01711	1.36	0.174
i_BKSZ*MGRSHD	.00172	.00097	1.77	0.076*
_cons	.00335	.00772	0.43	0.664
R-Squared Overall	= 0.2022			
Wild chi <sup>2</sup>	= 49.49			
Prob>chi <sup>2</sup>	= 0.0000			

Source: Researcher's Computation, 2020. Note: \* significant @ 10%

Results from Table 4 above revealed that the coefficient for determination adjusted for the degree of freedom is approximately 20% which implies that the independent variables namely: managerial shareholding (MGRSHD), foreign shareholding (FRNSHD) and bank size-moderated managerial shareholding (1 BKSZ\*MGRSHD) have a 20% relationship with return on assets (ROA) of commercial banks in Nigeria from 2013-2018. Table 4 also revealed that the model is fit with the Wild chi<sup>2</sup> and prob>chi<sup>2</sup> of

49.49 and 0.0000 respectively. Furthermore, the results on Table 4 revealed that MGRSHD has a significant relationship with ROA, FRNSHD has an insignificant relationship with ROA, while, bank size moderated managerial shareholding (I BKSZ\*MGRSHD) has a significant moderating effect on the relationship between managerial shareholding and ROA.

### Test of Hypotheses

The study reveals that managerial shareholding (MGRSHD) has a significant (0.078) relationship with return on assets (ROA) at 10% level of significance. This result implies that the null hypothesis One (HO1) which states that managerial shareholding (MGRSHD) has no significant relationship with return on assets (ROA) is rejected.

The study also reveals that foreign shareholding has an insignificant (0.178) relationship with return on assets (ROA) at all levels of significance. This result implies that the null hypothesis Two (HO7) which states that foreign shareholding (FRNSHD) has no significant relationship with return on assets (ROA) is accepted.

The study reveals that bank size has a significant moderating effect (0.076) on the relationship between managerial shareholding and return on assets (ROA) at 10% level of significance. This result implies that the null hypothesis Three (HO3) which states that bank size has no significant moderating effect on the relationship between managerial shareholding (MGRSHD) and return on assets (ROA) is also rejected.

### Discussion of Findings

The results of this study revealed that managerial shareholding (MGRSHD) has a significant negative (-1.76) effect on financial performance represented by return on assets (ROA) in a manner that if all other variables are kept constant, a unit increase in managerial shareholding (MGRSHD) will reduce ROA.

The results of this study revealed that foreign shareholding (FRNSHD) has an insignificant positive (1.36) effect on financial performance of Nigerian banks represented by return on assets (ROA), such that, holding all other variables stationary, a unit increase in foreign shareholding (FRNSHD) will bring about a slight increase on financial performance.

The results of this study further revealed that bank size has a significant positive moderating Positive (1.77) effect on the relationship between managerial shareholding and return on assets of deposit money banks in Nigeria, and that if all other independent variables are kept unchanged, a unit increase of the moderating effect of bank size on the relationship between managerial shareholding will lead to improved financial performance of banks in Nigeria.

### Conclusions and Recommendations

From the findings of this study, it can be concluded that managerial shareholding is not a factor to be encourage in the Nigerian banking sector as the involvement of the owners in managing the banking business will lead to indiscipline in resource control since the monitoring mechanism is inherently weakened. Furthermore, foreign shareholding is beneficial to the Nigerian banks as the expertise and resources made available by the foreign investor has the potential of increasing profitability and general performance.

Based on the findings, the following recommendations are made:

- i) Managerial shareholding should not be encourage in the Nigeria banking subsector as it has shown to be a factor that reduces performance because when owners are managers, monitoring will be greatly hampered.
- ii) Bank regulators should encourage the formation of banks with substantial foreign shareholding in order for the foreign shareholders to bring in their expert knowledge and resources into the economy as foreign shareholding engenders better bank performance.

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**Appendix A**

Bank Name	id	Year	ROA	MGRSHD	FRNSHD	BKSZ	L_BKSZ
ACCESS BANK PLC	1	2013	0.019776	9.711673	0.06	1.84E+09	9.263746
	1	2014	0.020422	7.023444	0.36	2.1E+09	9.32312
	1	2015	0.025419	10.83418	0.06	2.59E+09	9.413523
	1	2016	0.020506	9.915691	0.068	3.48E+09	9.542061
	1	2017	0.015111	9.801927	0	4.1E+09	9.613021
	1	2018	0.019172	11.25	0	4.95E+09	9.69497
DIAMOND BANK	2	2013	0.018793	22.72528	0.1477	1.52E+09	9.181517
	2	2014	0.013183	13.59971	0.0923	1.93E+09	9.28626
	2	2015	0.003226	0.369783	0	1.75E+09	9.243839
	2	2016	0.001707	31.03729	0	2.05E+09	9.311711
	2	2017	0.005255	30.94513	0	1.71E+09	9.234215
	2	2018	0.003863	32.01	0	1.37E+09	9.137104
ECOBANK PLC	3	2013	0.00798	0	0	1.46E+09	9.164594
	3	2014	0.016771	0	0	1.77E+09	9.24869
	3	2015	0.0063	0	0	1.79E+09	9.253907
	3	2016	0.003196	0	0	1.81E+09	9.257319
	3	2017	0.011042	0	0	1.83E+09	9.262394
	3	2018	0.002826	0	0	1.89E+09	9.275711
FIDELITY BANK PLC	4	2013	0.007141	4.430897	0	1.08E+09	9.033913
	4	2014	0.011622	4.488903	0	1.19E+09	9.07446
	4	2015	0.011288	1.595837	0	1.23E+09	9.090513
	4	2016	0.007498	1.782682	0	1.3E+09	9.113321
	4	2017	0.013672	1.360305	0	1.38E+09	9.139632
	4	2018	0.01333	1.567	0	1.72E+09	9.235499
FBN PLC	5	2013	0.018246	1.603406	0	3.87E+09	9.587823
	5	2014	0.019076	1.536446	0	4.34E+09	9.637756
	5	2015	0.003636	2.315097	0	4.17E+09	9.619739
	5	2016	0.002585	2.296987	0	4.74E+09	9.675486
	5	2017	0.007641	2.4285	0	5.24E+09	9.79044
	5	2018	0.010712	2.428	0	5.57E+09	9.745724
FCMB PLC	6	2013	0.01587	1.051968	0	1.01E+09	9.003581
	6	2014	0.018928	1.062623	0	1.17E+09	9.06795
	6	2015	0.004106	1.066269	0	1.16E+09	9.064284
	6	2016	0.012226	1.123098	0	1.17E+09	9.069216
	6	2017	0.007933	2.102204	0	1.19E+09	9.07415
	6	2018	0.010551	2.129	0	1.43E+09	9.15573
GTB PLC	7	2013	0.042811	0.261732	0	2.1E+09	9.322808
	7	2014	0.041893	0.252059	0	2.36E+09	9.372153
	7	2015	0.039387	0.258279	0	2.52E+09	9.40219
Bank Name	id	Year	ROA	MGRSHD	FRNSHD	BKSZ	L_BKSZ
GTB PLC	7	2016	0.042447	0.666972	0	3.12E+09	9.493652
	7	2017	0.05087	0.212401	0	3.35E+09	9.525187
	7	2018	0.0238	0.322	0	3.29E+09	9.516845
STANBIC IBTC BANK	8	2013	0.027224	2.154893	0.607	7.63E+08	8.882551
	8	2014	0.033948	12.59577	0.6066	9.45E+08	8.975221
	8	2015	0.020149	12.60891	0.6067	9.38E+08	8.972001
	8	2016	0.027071	0.719405	0.6067	1.05E+09	9.022644
	8	2017	0.034896	11.57227	0.6064	1.39E+09	9.141894
	8	2018	0.044701	13.33	0.6064	1.66E+09	9.221065
STERLING BANK PLC	9	2013	0.011691	37.75027	0.12	7.08E+08	8.849909
	9	2014	0.010921	28.1568	0.34	8.25E+08	8.916211
	9	2015	0.012875	33.72565	0.34	7.99E+08	8.902792

	9	2016	0.006188	31.29379	0.3386	8.34E+08	8.921265
	9	2017	0.007947	31.42587	0.3386	1.07E+09	9.030276
	9	2018	0.008357	31.426	0.3386	1.1E+09	9.042544
UBN PLC	10	2013	0.003825	0.0171	0	1E+09	9.001195
	10	2014	0.026582	0.017069	0.21	1.01E+09	9.003959
	10	2015	0.01336	0.017076	0.21	1.05E+09	9.019902
	10	2016	0.01229	0.062673	0.2089	1.25E+09	9.097703
	10	2017	0.010036	0.28733	0.2401	1.46E+09	9.163024
	10	2018	0.02441	0.277	0.25	1.46E+09	9.165499
UBA PLC	11	2013	0.017637	1.995584	0	2.64E+09	9.421981
	11	2014	0.017341	5.44349	0	2.76E+09	9.441314
	11	2015	0.021672	6.519418	0	2.75E+09	9.439747
	11	2016	0.020621	6.214091	0	3.5E+09	9.544622
	11	2017	0.019312	7.160105	0	4.07E+09	9.609538
	11	2018	0.0124	8.111	0	4.87E+09	9.687506
UNITY BANK PLC	12	2013	-0.05595	34.71055	0	4.04E+08	8.605983
	12	2014	0.025871	301.8324	0	4.13E+08	8.616271
	12	2015	0.010577	71.59746	0	4.43E+08	8.646718
	12	2016	0.004432	71.59751	0	4.93E+08	8.692566
	12	2017	-0.09532	71.59751	0	1.57E+08	8.194532
	12	2018	-0.08526	71.593	0	2.36E+08	8.372868
WEMA BANK PLC	13	2013	0.004825	4.47E-05	0	3.31E+08	8.519661
	13	2014	0.006201	0.030379	0	3.83E+08	8.582702
	13	2015	0.005866	0.024618	0	3.97E+08	8.59851
	13	2016	0.006038	4.538528	0	4.24E+08	8.62741
	13	2017	0.005811	4.538398	0	3.88E+08	8.589004
	13	2018	0.0068	4.538	0	4.89E+08	8.689135
ZENITH BANK PLC	14	2013	0.030326	0.348001	0	3.14E+09	9.497363
<b>Bank Name</b>	<b>id</b>	<b>Year</b>	<b>ROA</b>	<b>MGRSHD</b>	<b>FRNSHD</b>	<b>BKSZ</b>	<b>L_BKSZ</b>
ZENITH BANK PLC	14	2014	0.026484	9.510788	0	3.7E+09	9.57464
	14	2015	0.026371	9.52927	0	4.01E+09	9.602802
	14	2016	0.027354	9.551288	0	4.74E+09	9.675762
	14	2017	0.031801	14.6439	0	5.6E+09	9.74782
	14	2018	0.033022	15.002	0	6.19E+09	9.791596

Source: Financial Statements (2013-2018).

**Appendix 2**

Random-effects GLS regression

Group variable: id

Number of obs = 84

Number of groups = 14

R-sq: within = 0.5168

between = 0.0653

overall =

Obs per group: min = 6

avg = 6.0