



## The Effect of Ownership Concentration on the Performance of Nigerian Banking Industries, An Empirical Investigation

I.G. Okafor<sup>1</sup>, Ugwuegbe, S. Ugochukwu<sup>2</sup>, and Ezeaku Hillary C<sup>3</sup>  
<sup>1-3</sup>Department of Banking and Finance, Caritas University, Enugu, Nigeria.

### Abstract

This study investigated the effect of ownership concentration on the performance of the Nigerian banking sector for the period of 2008 to 2014. The study employed a sample of 5 major commercial banks in Nigeria selected on the bases of size. The data for the study was generated from the annual report of each of the banks under study for the period covered. We employed pooled panel data regression analysis to empirically evaluate the data. Both accounting and market based performance were employed with ROA and ROE as the key variable to proxy accounting based performance while EVA were used for market based performance. The result of the pooled panel data analysis reveals that ownership concentration has positive but insignificant effect on both the accounting and market based performance measures employed in the model. On the same vain, firm size which was used as a control variable has a positive and significant effect on both accounting and market based measure of banks performance. We therefor recommend that as concentrated owners seek to increase their interest, appropriate legal and control measures should be put in place to ensure that major owners don't control the banks to their own advantage and to the expense of minority shareholders and the public at large.

**Keywords:** Ownership Concentration; Bank Performance and Agency Theory.

### 1. Introduction

The objective of any profit oriented organization is to maximize the wealth of their shareholders. And to achieve this, management is expected to put the interest of the owners above their personal interest in piloting the activities of the organization. The separation between the management and the owners most often than none create a conflict between them as the owners constantly demand that management should undertake as well as implement strategic decisions that will enhance the value of the shares. But management on the other hand may want to select strategic options that will improve their earnings at the expense of the shareholders. This conflict was effectively captured by "Agency Theory", which presupposes that, if management is left uncontrolled, they will operate in such a way that their personal interest will override the interest of the owners of the organization. This theory however, emphasized the impotent of effective monitoring of the management, if they must operate in a manner that will enhance the value of the shareholders.

Meanwhile, the effective monitoring of the management team to ensure they increase the value of the shareholders wealth depends largely on the ownership structure of the organization. A diffused ownership structure with no investor controlling at least 5% of the total shareholdings limits the capacity of the shareholders in controlling and effectively monitoring the management team. This is so because no individual shareholder or a group of shareholders control a significant volume of outstanding shares that will warrant their concerted effort to demand compliance by the managers of the organization. And so, managements carry on the operations of the organization, making strategic choices, and investment selections that will only enhance their position exposing the owners to different kinds of risks. Since the management is away that the ownership of the organization is diffused and that no individual shareholder will be interested in controlling the management because of the insignificant shareholding, they will be more likely to act contrary to the wealth maximization objective.

Moreover, ownership structures that create concentration of shareholding to a few shareholders create incentive to the shareholders because they control the management through their voting right. A concentrated ownership structure is a situation in which one or a few of the shareholders controls at least 5% of the outstanding shareholding, giving them power to control the operations of the firm through their voting right. Concentration of ownership to a few individuals or institutional investors provides the controlling shareholders with the power to protect their investment and therefore reduce agency cost as the management is left with no option but to act in the interest of the shareholders so as to enhance the value of their wealth. An understanding of the controlling power of the shareholders will compel the management to make strategic choices and investment selections that will increase the value of the shareholders wealth. This however will result in effective accountability and stewardship on the part of the management.

Apart from the above classified ownership structure, a firm can also be classified as institutionally or individually owned, as well as Government or foreign owned. A firm is said to be institutionally owned if at least 20% of the outstanding shares are in the hand of an institution. On the same vain when more than 20% of the shareholding of a firm is in control by an individual or a group of individuals, then the firm is said to be individually owned. The same situation applies to government and foreign ownerships of more than 20%.

In this study, we shall be examining the effects of ownership concentration and structure on the performance of an organization looking at key accounting performance indicators as well as market based indicators of performance. This is to enable us understand whether ownership structure has any effect on the performance of the firm. Meanwhile, this study will be structured into five sections. Immediately following this introduction is section tow which will look at literature review, followed by methodology which will be section three, section four will be data analysis and interpretation and section five will be conclusions and recommendation.

## 2. Literature Review

### 2.1 Theoretical Review

The two main theories that will form the basis of this study are the agency theory and the stewardship theory. The agency theory presupposes that the management of an organization will not work on their own to achieve the overall objective of the shareholders which is wealth maximization if they are not monitored by the shareholder. According to Athula and Anura (2013), Central to the issue of corporate governance of any organization is agency theory, which explains the conflict of interest between inside owners (directors of the firm who own shares in the firm) and outside owners (shareholders other than directors in the firm).

Agency theoretic research has studied the impacts of conflicts between behaviors of owners and managers on performance of companies. They focus specially on diversification motive of managers and controls of owners to avoid them. One of the indications of best corporate governance control over managers' decisions is how far ownership of the firm is concentrated on major shareholders and its impact on finance performance. This has been studied recently by many researchers (e.g., Tomsen and Pedersen, 2000; Leng, 2004).

### 2.2 Empirical Review

Athula and Anura (2013), investigated the effect of the structure of corporate ownership and firm performance, evidence from Sri Lanka. Employing pooled data generated from a sample of listed firms in Sri Lanka, estimated the impact of ownership concentration and structure on firm performance using regression analysis. The study adopted both accounting based and market based performance measures in determining the performance of the firms based on agency theory. The result of their study indicates that ownership concentration has a positive impact on the firm performance under accounting measures. The result also reviles no significant relationship between market-based performance measures and ownership concentration. This according to them suggests the existence of market inefficiencies and anomalies.

Abbas, Naqvi, & Mirza, (2013), in their study examined the impact of large ownership on firm performance with a particular reference to non- finance companies listed on the Pakistan stock exchange. The study employed the ordinary least square regression analysis on the data generated from a sample of 100 listed non finance companies in Pakistan. Their study employed only accounting based measurement of performance by adopting Return on Assets (ROA) and Return on Equity (ROE). The result of their study indicates that there is a positive and significant impact between large ownership and firm performance proxied by ROA and ROE. They went further to state that if the ownership concentration grows beyond 50%, the effect on firm performance will turn to negative. It may be so according to them because of the hypothesis of private benefit of control by large owners.

Pathirawasam & Wickremasinghe, (2012), investigated the impact of ownership concentration on the financial performance of companies in Sri Lanka with a particular reference to companies listed in Colombo Stock Exchange. Their study employed both pooled and ordinary least square regression in analyzing the data generated. The result of their findings indicates that ownership concentration dose have a statistical significant and positive effect on the accounting performance of the firm. They also noted that other variables included in the model such as firm size, quick ratio and ratio of inventory investment to total assets indicates a positive impact on the ROA but debt ratio which is also

one of the variables included in the model shows a negative relationship with the accounting performance measures of the listed firms under consideration.

The study on the impact of ownership structure on the performance of firm in Netherland was conducted by Marinke (2014), who employed a data sample of two annual observations of 2011 and 2012 for 80 Dutch listed companies and found that ownership concentration has a positive and significant impact on the performance of firms in Netherland proxied by ROA. He also noted that ownership concentration will continue to positively impact on the firm's performance if the concentration is kept at around 48% threshold, and that concentration above this threshold will adversely affect the performance of the firm. On the other hand the result of the insider's ownership concentration according to them was less convincing but also statistically significant impact on the performance of the firms under consideration.

Moreover, the effect of ownership concentration on company performance among listed companies in Malaysia was investigated by dividing ownership concentration into three categories which are: institutional or individual owned companies, foreign and non-foreign holding companies and government or non-government holding companies. The result of the study indicates that companies in Malaysia with foreign or government ownership prefers institutional types of ownership. Meanwhile companies with foreign stakeholders have higher Economic Value Added (EVA) as against companies with non-foreign ownership. The result also found that individual type of ownership has a higher EVA as against institutional type of ownership (Issham 2013).

Blanva, Txomin and Amaia (2009), studied the impact of ownership structure and firm performance in non-listed firms in Spain. Employing data from 586 non-listed Spanish firms under agency theory, the result shows that firms with large ownership concentration enjoy greater incentives in monitoring management activities. They also noted that large ownership concentration increases the position of the shareholder to extract private benefit at the expense of the small shareholder.

Javid & Iqbal, (2008), examined the effect of ownership concentration and corporate governance on the firm performance in Pakistan economy with a sample of 50 firms from different manufacturing sector for the period of 2003 to 2008. The result reveals that ownership concentration has a positive effect on the firm performance. The researcher went further to note that large ownership concentration of shareholder is a result of weak legal environment in the economy even though the effect of the ownership concentration indicates a positive impact on the profitability of the firms under consideration.

Chandrapala (2013), in his study analyzed the internal factors which determines financial performance of firms with special reference to ownership concentration, using both pooled and ordinary least square (OLS) regression on the annual data generated from 102 listed companies Colombo stock exchange over a period of two from 2008-2009. The study employed only accounting performance measures (ROA) and found that ownership concentration does not have a significant positive relationship with ROA of the companies under consideration. The result of other variables included in the model indicates that firm size, quick ratio and inventory have a positive impact on firm performance proxied by ROA.

In a study conducted by Nor, Shariff, & Ibrahim, (2010), in which they examined the effect of concentration of ownership on the performance of firms, with more emphasis on the external shareholding and board structure. The study analyzed the role played by concentrated ownership of firms shareholding by looking at ten top shareholders of 2608 non-financial firms listed on the KL stock exchange market. The result of the studies indicates that, concentration of ownership contributes positively to the performance of the firms under consideration. The result according to them also provides evidence that typically equity owned by the corporations, government, nominees and individual are directly influencing the financial structure of the firm.

Wu and Cui (2002) found a positive relationship between ownership concentration and accounting profits, indicated by return on assets (ROA) and return on equity (ROE), but the relationship is negative with respect to the market value measured by the price-earnings ratio (P/E) and market-to-book-value ratio (MBR).

### 3. Methodology

This study investigated the effect of ownership concentration on the performance of the Nigerian banking sector for a period of 2005 to 2014. A sample of 5 banks out of the banking financial institution in Nigeria was selected for this study based on size and age. The sampled banks included First Bank plc, Guaranteed Trust Bank plc, Zenith Bank plc, Diamond Bank plc, and UBA Plc. The study looked at the performance of the banking sector from accounting and market point of view. The key accounting performance indicators employed in this study are, Return on Assets (ROA), and Return on Equity (ROE) while the market based performance indicators employed is Economic Value Added (EVA). The data were sourced from the annual report of various banks under consideration as well as Nigeria Stock Exchange (NSE) fact book various years. This study in measuring ownership concentration adopted the approach employed by Athula and Anura (2013), who proxied ownership concentration with percentage of share held by the largest shareholders

irrespective of their number. Meanwhile we modified this approach a little by limiting the number of the largest share to a maximum of 1% of the total shareholders. By this however we mean that when 1% or less of the total shareholders control about 50% of the total shareholding of the firm, then the ownership is said to be concentrated. It important to note at this point that different people uses different variable in measuring ownership concentration among which are: (1) the percentage of shares held by first three-largest shareholders (SH3); (2) the percentage of shares held by first five-largest shareholders (SH5); (3) the percentage of shares held by first ten-largest shareholders (SH10); and (4) the Herfindahl Index (HERF). The HERF index is the sum of squared percentage of shares controlled by each of the top-five shareholders.

### 3.1 Description of Variables

#### 3.1.1 Ownership Concentration

There are different opinions as to what constitute large shareholding in a firm. According to Asad et al (2013), a shareholder is said to have a large shareholding if it directly or indirectly holds 10% or more of a firms total shares. In other words if the cumulative shareholding of a shareholder to that of the total shareholding of a firm amount to 10%, the shareholder is regarded a large shareholder. Contrary to this ICAN (2014) noted that a firm is said to have a controlling interest in another firm if the firm directly or indirectly controles 5% of the total outstanding share of the other firm. It is also important to note that when less than 1% of the total shareholders controls more than 50% of a firms total outstanding shares, the firm is said to have a concentrated ownership. Various studies have been conducted on the impact of ownership concentration on firm performance and this has lead to the addoption of different proxies for the measurment of ownership concentration in a firm. Thomsen and Pedersen (2000), in their study proxied ownership concentration with percentage of voting rights owned by large shareholders, while Fazlzadeh, et al (2011), used voting and cash flow right of two largest shareholders to measure ownership concentration in their study. Shleifer and Vishny (1986) employed ownership interest of three largest shareholders, as a proxy for ownership concentration in the study on the impact of ownership concentration on performance. Demsetz and Lehn (1986) in their study measured ownership concentration by examining the ownership interest of five largest shareholders in the firm. For the purpose of this study ownership concentration will be measured by the percentage of the share held by the largest shareholders irrespective of their numbers provided they are not more than 1% of the total shareholders.

#### 3.1.2 Return on Assets

This is one of the key accounting measures of performance that looks at the rate of return generated by the total assets employed by the firm in doing their business. It shows the rate of return generated by each one Naira employed in assets. In other words return on assets measures how efficient a firm can manage its assets in generating profit during a given period. This ratio helps both management and investors to see how well the company can convert its investment in assets into profit. More so, Return on Assets (ROA) is a financial ratio that shows the percentage of profit that a company earns in relation to its overall resources (total assets). Return on assets is a key profitability ratio which measures the amount of profit made by a company per naira of its assets. It shows the company's ability to generate profits before leverage, rather than by using leverage. Unlike other profitability ratios, such as return on equity (ROE), ROA measurements include all of a company's assets – including those which arise from liabilities to creditors as well as those which arise from contributions by investors. So, ROA gives an idea as to how efficiently management use company assets to generate profit, but is usually of less interest to shareholders than some other financial ratios such as ROE.

Return on assets gives an indication of the capital intensity of the company, which will depend on the industry. Capital-intensive industries will yield a low return on assets, since they must possess such valuable assets to do business. Shoestring operations (such as software companies and personal services firms) will have a high ROA: their required assets are minimal. The number will vary widely across different industries. This is why, when using ROA as a comparative measure, it is best to compare it against a company's previous ROA figures or the ROA of a similar company.

#### Calculation (Formula)

Return on assets is calculated by dividing a company's net income (usually annual income) by its total assets, and is displayed as a percentage. There are two acceptable ways to calculate return on assets: using total assets on the exact date or average total assets:

$ROA = \text{net income after tax} / \text{total assets (or average total assets)}$ .

#### 3.1.3 Return on Equity

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders equity. It reveals how much profit a company earned in comparison to the total amount of shareholder equity found on the financial position. ROE is one of the most important financial ratios and profitability metrics. It is often said to be the ultimate ratio or the 'mother of all ratios' that can be obtained from a company's financial statement. It measures how profitable a company is for the

owner of the investment, and how profitably a company employs its equity. ROE is also one of the accounting measures of performance that has been used popularly in determining a firm's financial performance.

#### Calculation (Formula)

Return on equity is calculated by taking a year's worth of earnings and dividing them by the average shareholder equity for that year, and is expressed as a percentage:

$$\text{ROE} = \text{Net income after tax} / \text{Shareholder's equity}$$

Return on equity may also be calculated by dividing net income by the *average* shareholders' equity; it is more accurate to calculate the ratio this way:

$$\text{ROE} = \text{Net income after tax} / \text{Average shareholder's equity}$$

Average shareholders' equity is calculated by adding the shareholders' equity at the beginning of a period to the shareholders' equity at the period's end and dividing the result by two. For the purpose of this study we will adopt average shareholder's equity as a denominator in calculating ROE.

#### 3.1.4 Economic Value Added

In corporate finance, Economic Value Added (EVA) is an estimate of a firm's economic profit, or the value created in excess of the required return of the company's shareholders. Quite simply, EVA is the net profit less the opportunity cost of the firm's capital. The idea is that value is created when the return on the firm's economic capital employed exceeds the cost of that capital. This amount can be determined by making adjustments to GAAP accounting. There are potentially over 160 adjustments but in practice only several key ones are made, depending on the company and its industry.

#### Calculation of EVA

EVA is net operating profit after taxes (NOPAT) less a capital charge, the latter being the product of the cost of capital and the economic capital. The basic formula is:

$$EVA = (r - c).K = NOPAT - c.K$$

Where:

$r = \frac{NOPAT}{K}$ , = the Return on Invested Capital (ROIC);

$c$  = the weighted average cost of capital (WACC);

$K$  = the economic capital employed;

NOPAT = the net operating profit after tax, with adjustments and translations, generally for the amortization of goodwill, the capitalization of brand advertising and other non-cash items.

Alternatively EVA can be calculated as follows:

EVA = net operating profit after taxes – a capital charge [the residual income method]

Therefore **EVA = NOPAT – (c × capital)**, alternatively

**EVA = (r × capital) – (c × capital)** so that

**EVA = (r-c) × capital** [the spread method, or excess return method]

Where:

$r$  = rate of return, and

$c$  = cost of capital, or the weighted average cost of capital (WACC).

NOPAT is profits derived from a company's operations after cash taxes but before financing costs and non-cash bookkeeping entries. It is the total pool of profits available to provide a cash return to those who provide capital to the firm.

Capital is the amount of cash invested in the business, net of depreciation. It can be calculated as the sum of interest-bearing debt and equity or as the sum of net assets less non-interest-bearing current liabilities (NIBCLs).

The capital charge is the cash flow required to compensate investors for the riskiness of the business given the amount of economic capital invested.

The cost of capital is the minimum rate of return on capital required to compensate investors (debt and equity) for bearing risk, their opportunity cost.

Another perspective on EVA can be gained by looking at a firm's return on net assets (RONA). RONA is a ratio that is calculated by dividing a firm's NOPAT by the amount of capital it employs ( $RONA = NOPAT/Capital$ ) after making the necessary adjustments of the data reported by a conventional financial accounting system.

$$EVA = (RONA - \text{required minimum return}) \times \text{net investments}$$

If RONA is above the threshold rate, EVA is positive.

It is important to note that for the purpose of this study the Economic Value Added that was adopted is the residual income method which states that  $EVA = \text{net operating profit after taxes} - \text{a capital charge}$ .

### 3.2 Model Specification

The model employed for this work is a pooled panel data model adopted from the work of Asad et al (2013). This is important because the data generated for this study comprised of both time series and cross sectional data and this data can only be analyzed using panel data model. This type of model enables us to pool together all the variables from various firms to a single variable which can now be regressed against one another using Ordinary Least Square (OLS) technique. This model provides opportunity for cross sectional variation (between variations) as well as time dimension variation (within variation) by employing both the fixed effect and random effect panel data model. For the purpose of this study we will be restricting our self to pooled panel data modeling only for easy analysis and better understanding. The pooled data model is specified as follows:

$$ROA_{it} = \beta_0 + \beta_{i1}OWC + \beta_{i2}FSIZE + \epsilon_{it} \dots \dots \dots (1)$$

Where:

ROA = return on assets at time t and for each firm.

OWC = Ownership Concentration

FSIZE = Firm Size which was included as a control variable and it is proxied by the natural logarithm of total Assets of the firm.

$\beta_0$  = constant term,  $\beta_{i1} - \beta_{i2}$  = the coefficient of the independent variables.

$\epsilon_{it}$  = the error term

$$ROE_{it} = \delta_0 + \delta_{i1}OWC + \delta_{i2}FSIZE + \epsilon_{it} \dots \dots \dots (2)$$

Where:

ROE = Return on Equity at time t and for each firm.

OWC = Ownership Concentration

FSIZE = Firm Size which was included as a control variable and it is proxied by the natural logarithm of total Assets of the firm.

$\delta_0$  = constant term,  $\delta_{i1} - \delta_{i2}$  = the coefficient of the independent variables.

$\epsilon_{it}$  = the error term

$$EVA_{it} = \gamma_0 + \gamma_{i1}OWC + \gamma_{i2}FSIZE + \mu_{it} \dots \dots \dots (3)$$

Where:

EVA = Economic Value Added at time t and for each firm.

OWC = Ownership Concentration

FSIZE = Firm Size which was included as a control variable and it is proxied by the natural logarithm of total Assets of the firm.

$\gamma_0$  = constant term,  $\gamma_{i1} - \gamma_{i2}$  = the coefficient of the independent variables.

$\mu_{it}$  = the error term

#### 4. Data Presentation and Analysis

The Result of Pooled Panel Data Regression Analysis Involving ROA, OWC and FSIZE				
Dependent Variable: ROA				
Method: Panel Least Squares				
Date: 02/06/16 Time: 00:19				
Sample: 2008-2014				
Periods included: 7				
Cross-sections included: 5				
<b>Total Panel (Balanced) Observations: 35</b>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.325329	0.431732	-3.069794	0.0043
OWC	0.001133	0.001079	1.049519	0.3018
LOG(FSIZE)	0.097538	0.030173	3.232605	0.0028
R-squared	0.268244	Mean dependent var		0.120774
Adjusted R-squared	0.222509	S.D. dependent var		0.107050
S.E. of regression	0.094392	Akaike info criterion		-1.800910
Sum squared resid	0.285114	Schwarz criterion		-1.667594
Log likelihood	34.51592	Hannan-Quinn criter.		-1.754889
F-statistic	5.865200	Durbin-Watson stat		1.743865
Prob(F-statistic)	0.006759			

Source: Eview Result

The result of the E-view analysis as show in the table above indicate that the coefficient of OWC is 0.001133 while that of the prob. Value Is 0.3018 which is greater than 0.05. This however implies that OWC positively but insignificantly affect Banks performance proxied by ROA. It also means that an increase in OWC will lead to an increase in Banks performance proxied by ROA. This result however corroborated the findings of Athula and Anura (2013), Wu and Cui (2002), Vinten, (2002); Sarre, (2003) OECD, (2009); Kirkpatrick, (2009). On the other hand the result of FSIZE which was used as a control variable indicates that FSIZE has a positive and significant effect on Banks performance proxied by ROA. The result implies that a percentage increase in FSIZE will lead to about 0.097538 percent increase in Banks performance proxied by ROA. The result of the  $R^2$  and that of the  $Adj.R^2$  indicates that about 26% of the variation in Banks performance proxied by ROA was attributed to the variation in the variables included in the model. This however shows that the line of best fit is poorly fitted. The result of the Durbin-Watson stat is 1.743865 which is approximately 2 indicating the absence of autocorrelation in the model. The result of F-stat is 5.86520 and the prob(F-stat) is 0.006759 which is less than 0.05 indicates that the overall regression is statistically significant at 5% level of significant. It therefor suggests that all the variables included in the model when taken together significantly affect Banks performance for the period under consideration.

The Result of Pooled Panel Data Regression Analysis Involving ROE, OWC and FSIZE				
Dependent Variable: ROE				
Method: Panel Least Squares				
Date: 02/06/16 Time: 00:19				
Sample: 2008 2014				
Periods included: 7				
Cross-sections included: 5				
Total Panel (Balanced) Observations: 35				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.128676	0.068562	-1.876786	0.0697
OWC	0.000128	0.000171	0.745997	0.4611
LOG(FSIZE)	0.010027	0.004792	2.092641	0.0444
R-squared	0.135552	Mean dependent var		0.020580
Adjusted R-squared	0.141524	S.D. dependent var		0.015641
S.E. of regression	0.014990	Akaike info criterion		-5.481052
Sum squared resid	0.007190	Schwarz criterion		-5.347737
Log likelihood	98.91842	Hannan-Quinn criter.		-5.435032
F-statistic	23.58931	Durbin-Watson stat		1.513815
Prob(F-statistic)	0.000234			
Source: Eview Result				

The result of the pooled panel data analysis shown above indicates that the coefficient of OWC is 0.000128 while the probability value of t-stat is 0.4611 which is greater than 0.05. This however implies that OWC has a positive but insignificant effect on Banks performance proxied by ROE. It therefore suggests that an increase in ownership concentration will lead to increase in the performance of the banking sector even though the effect is shown to be insignificant. This result is also in agreement with the findings of Attiya and Robina (2009), Chandrapala (2013), Fauzias, Faizah and Izani (2010). On the other the result above also indicates that the coefficient of FSIZE which was used as a control variable is 0.010027 while the probability is 0.0444 which is less than 0.05 implying that firm size proxied by log of total assets has a positive and significant effect on Banks performance for the period under consideration. This however shows that a percentage increase in the size of the firm will lead to about 0.010027% increase in the Banks performance. On the same note, the result of the  $R^2$  and that of the  $Adj.R^2$  of about 14% indicates that the line of best fit is poorly fitted. This however implies that 14% of the variation in the Banks performance proxied by ROE was attributed to the variation in ownership concentration and firm size for the period under consideration. The result of the Durbin-Watson stat which is approximately 2 indicates that there is no autocorrelation in the model. This however indicates that the model was properly structured. The result of the overall regression indicates that all the independent variables included in the model when taken together significantly affect the dependent variable.

The Result of Pooled Panel Data Regression Analysis Involving EVA, OWC and FSIZE

Dependent Variable: EVA  
Method: Panel Least Squares  
Date: 02/06/16 Time: 00:20  
Sample: 2008 2014  
Periods included: 7  
Cross-sections included: 5

Total Panel (Balanced) Observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-353171.4	78008.82	-4.527327	0.0001
OWC	214.8663	194.9854	1.101961	0.2787
LOG(FSIZE)	26628.80	5451.934	4.884284	0.0000
R-squared	0.442111	Mean dependent var		36748.38
Adjusted R-squared	0.407243	S.D. dependent var		22152.62
S.E. of regression	17055.45	Akaike info criterion		22.40814
Sum squared resid	9.31E+09	Schwarz criterion		22.54146
Log likelihood	-389.1425	Hannan-Quinn criter.		22.45416
F-statistic	12.67956	Durbin-Watson stat		1.881173
Prob(F-statistic)	0.000088			

Source: Eview Result

The result of pooled panel data analysis shown above indicates that the coefficient of OWC is 214.8663 while the probability value of t-stat is 0.2787 which is greater than 0.05 and this implies that Ownership concentration has a positive and insignificant effect on EVA which was used as market based measure of Bank performance for the period under consideration. This however shows that an increase in Ownership concentration will lead to about 214.8663 increases in the EVA although the effect is insignificant. The result also reveals that firm size proxied by log of total assets has a positive and insignificant effect on EVA which was used as market based measure of Bank performance for the period under consideration. This however shows that an increase in the size of the firm will lead to increase in the EVA. The effect is shown to be statistically significant. On the other hand the result of the  $R^2$  and that of the Adj. $R^2$  of about 44% indicates that the line of best fit is moderately fitted. This however implies that 50% of the variation in the EVA was attributed to the variation in the OWC and firm size for the period under consideration. The result of the Durbin-Watson stat which is approximately 2 indicates that there is no autocorrelation in the model. This however indicates that the model was properly structured. The result of the overall regression indicates that all the independent variables included in the model when taken together have significant effect on the dependent variable.

## 5. Conclusions

In this study we investigated the effect of ownership concentration on the performance of the Nigerian banking sector with particular reference to accounting and market base measures of performance. The key parameters employed in evaluating accounting measures of performance include ROA and ROE while EVA was used as a market based measure of performance. The effect of size was controlled for by including the log of total assets as a control variable in the model. The result of the study revealed that ownership concentration has positive but insignificant effect on both the accounting and market based measures of performance employed in the model. This however is an indication that regulatory measures put in place by the authorities has hindered the increase in ownership concentration hence the insignificant effect it has on performance. There has been argument that concentration of ownership in the first instance is as a result of ineffective legal environment. Meanwhile it is important to note at this point that helps to reduce agency cost and by so doing enhance the commitment of the directors which in turn contribute to the overall growth of the firm. Based on this, we therefor recommend that ownership of banks should be more concentrated as this will likely provide

the ever increasing failure of banks in Nigeria. On the other hand appropriate legal measures should be put in place to see that concentrated owners (major shareholders) don't use their powers to the detriment of the minority shareholders and the public in general.

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