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# CORPORATE DIVERSIFICATION AND PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA: EVIDENCE FROM MACROECONOMIC VARIABLES

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#### Abstract

Aim/purpose—In order to increase financial performance and reduce financial risk exposure, most deposit money banks in Nigeria embraced corporate diversification within the ambit of macroeconomic factors. This paper, therefore, examines effect of corporate diversification and selected macroeconomic factors on the performance of deposit money banks.

**Design/methodology/approach**-The purposive sampling technique was adopted in this paper and data were sourced from sampled deposit money banks audited financial statements and central bank of Nigeria statistical bulletin of diverse publications for the macroeconomic variables. The panel regression technique was used in estimating the variables in addition with hausman test.

**Findings-**The result reveals that subsidiary diversification, income diversification and exchange rates are central factors that increase performance of DMBs in Nigeria regardless if random effect or fixed effect is considered. In the same vein, foreign diversification and interest rate shows negative impact on the performance of DMBs in Nigeria.

**Research implications/limitations**-The intention was to use the entire deposit money banks in Nigeria, but unfortunately some of the banks are not still listed in the Nigerian stock exchange. The banks not listed on the bourse are not compelled by the voluntary sustainability report guidelines to disclose all relevant data about their operations.

Originality/value/contribution-`This research focused on the effect of corporate diversification, macroeconomic factors and performance of deposit money banks in Nigeria. This study is novel because it was able to inculcate macroeconomic factors as explanatory variables which prior studies did not consider and it has also added to the body of literature of corporate diversification.

Keywords: Deposit Money Banks, Corporate Diversification, Exchange Rate, Hausman Test, Performance

JEL Classification: G21;F31; H11.

### 1. Introduction

The ability of the banking industry to mobilize idle funds from surplus economic unit to the deficit sector makes them a fundamental component in an economy. They assemble the biggestquantity of fund since they have the capacity and ability to accept deposits of any nature from the general banking public, government and its agencies. They alsogenerate credit via extending of loans, overdraft and project financing which are all ingredients for economic performance in improving economic growth and by extension; development (Onoh, 2002). The

various aspects of the operations of deposit money banks are germane to corporate diversification and performance.

The governor of the Central Bank of Nigeria (CBN) in 2009 introduced novel significant changes in the Nigerian banking architecture. The major shift was the gradual dismantling of the universal banking system after its implementation for about a decade. The discontinuation of the universal banking made most of the DMBS in Nigeria to look elsewhere to shore up their income. Deposit money banks in Nigeria started to open and operate branches of their

banks in other countries (foreign diversification) by so doing competing with other banks in the globe and increasing their income which ultimately will impact on the general profitability of the DMBs. The regulation of the universal banks also gave numerous opportunities for the various managers of DMBS to invest in other sectors of the economy which include but not limited to agricultural sector, real estate, insurance, oil and gas, stock market, brokerage, this again will boost their revenue and cushion DMBs exposure to risk. This is a form of subsidiary diversification. These subsidiaries will again impact on the general performance of the DMBs in Nigeria.

Given the importance of banks in a financial system, the performance of deposit money banks and its forecast are of great interest to researchers. There exists a wealth of research of how bank performance is affected by central bank regulation, competition and credit risk management. However, few studies (World Bank Group, 2015; Broad stock, Shu, &Xu, 2011), had focused on macro-economic factors such as interest rate on the performance of Deposit Money banks. This is surprising, considering that interest rate has the potential to bring the financial sector and in extension the economy to its knees. Several studies (Aburime, 2008; Khan &Sattar 2014) have been reviewed which sought to establish the impact of macroeconomic factors on performance commercial banks. The researcher notes that majority of these studies have been carried out in Europe and America. Studies assessing corporate diversification, macro-economic factors and bank performance are scarce in Nigeria. Due to the variance in economic levelsbetween Nigeria and developed countries, majority of the findings of the said studies cannot be wholly applied in Nigeria. A study is therefore needed on corporate diversification, macroeconomic variables and bank performance. The rest of this paper is arranged accordingly as; section 2 is literature review, methodology is section 3, while sections 4 and 5 are presentation and analysis of results and conclusion and recommendations respectively.

#### 2. Literature Review

In finance literature, corporate diversification has been viewed in terms of the diverse markets, services and products (Berry, 1975). In another view, it is defined in regards to the ways and processes that facilitate firms to accomplish development and diminish overall risk (Markowitz, 1952). Generally, corporate diversification is the increase of business lines by a firm in terms of lines it runs whether there

is a correlation between such lines or not but the entire risk of the firm is reduced and performance is enhanced (Penrose, 1959). In banking, to be diversified implies the coming together of firms whether related or not to form a conglomerate, and this may include but not limited to retail banking, capital market activities, risk and insurance and other financial services (Baele, De Jonghe, &Vennet, 2007). Corporate diversification can take the form of income diversification, foreign diversification and subsidiary diversification. Foreign diversification is measured as Ln [1 + number of foreign subsidiaries]; subsidiary diversification is measured as Ln [1 + number of foreign subsidiaries + domestic subsidiaries] and income diversification is measured as [ 1- net interest income minus other operating income divided by total operating income.

Brealey, Myers and Marcus (2009) characterize organization's performance as a measure of how well a firm uses its assets from its center operations and revenues over given creates a timeframe. Organizational performance is likewise a portion of organizational effectiveness that incorporates three regions of performance which incorporate financial, market performance and shareholder value. Kirkendall (2013) attests that there are several diverse measures for organizational performance valuation. One of these measures incorporates the utilization of financial for example, profitability organization. Under this measure the result to input proportion is resolved utilizing ratio, for example, the Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI) and Tobin's Q.

Uniamikogbo, Okoye and Amos (2021) in their study carried out in Nigeria, x-rayed income diversification on the financial performance of selected deposit money banks licensed by the regulatory authority. Foreign exchange income and commission income were used as explanatory variables while Tobin Q was adopted as the dependent variable. The scope of the study was for eleven years (2008-2018) using a total of eight deposit money banks. The data was analysed using panel estimated generalised least squares (EGLS), and the findings revealed that commission income has a significant and positive effect on bank financial performance as measured by Tobin Q, whereas foreign exchange income has a considerable negative impact.

The effect of geographic diversification on bank value using mega banks across the globe (developed and emerging) within the scope of 2004-2013 was carried

out by Yildirim and Efthyvoulou (2018) using System GMM technique for the analysis of collected data. The study showed that international diversification is a function of the value effect on a bank's home country. Salma and Hussain (2018) indicate a robust correlation between corporate diversity and firm performance; diversification has the potential to reduce a corporation's business risk. The study employed two stage regression analyses on four hundred and sixty-five firms from selected Asia countries (India, Sri-lanka and Pakistan). The data for the study were derived from the audited financial statements of a variety of corporations and stock exchanges, which are freely available on their respective websites. The study covered the years 2001 to 2016.Sammeh, Houssam and Slaheddine (2017) using 244 sampled French banks, examined the effect of activity and geographic diversification on financial performance. The findings of the study established negative relationship; however this relationship is significantly positive when institutions adopt a twofold diversification strategy. Krivokapic, Njegomir and Stojic (2017) examine the effects of corporate diversification on firm performance within the scope of 2004-2014 using financial firms in Serbia. The study adopted the panel regression technique using the pooled least squares method. The study discovered a substantial and positive association between returns on assets and returns on equity, as well as line-ofbusiness diversification and performance, implying diversified insurance firms outperform undiversified insurance firms.

Combey and Togbenou (2017) examined the relationship between macroeconomic fundamentals (GDP growth, real effective exchange rate, and inflation) and banking sector performance using the panel ARDL technique. In the short run, empirical evidence indicated that there was no association between macroeconomic factors and performance. However, the long-run link between the real exchange rate and bank performance was shown to be considerable and negative. The inflation rate was shown to have no meaningful effect on the performance of banks. Nonetheless, macroeconomic variables (GDP, real exchange rate, and inflation) were found to have a negative effect on banks' return on equity.

Saghi-Zadek (2016) examined product diversification and performance of banks using 710 European commercial banks. The scope of study covered a period of 1998-2014 using panel regression estimating technique. The study show that banking institutions

and all corporate shareholders benefit from diversification economies by higher profits coupled with low earnings variations and minimum default risk. Muneer, Jahanzeb, and Suwandi (2016) evaluate the income diversification and performance of banks in Pakistan from 2007 to 2013, utilizing a sample of 20 commercial banks and five Islamic banks and a simple regression model to estimate the study. The data indicate that revenue diversification had no effect on the performance of commercial banks or Islamic banks.

There are diverse theories that are linked to corporate diversification and performance of deposit money banks. Theories like market power theory, stakeholder theory, internal capital theory, resource base theory and modern portfolio theory. The theoretical framework of this study is the modern portfolio theory (MPT) developed by Harry Markowitz in 1952. This theory is of the view that investors and corporate firms should have different assets and securities in other to reduce risk and maximize the wealth of shareholders.

# 3. Methodology

The study relied on available data sourced from the annual audited financial statements of the sampled twelve (12) deposit money banks in Nigeria and Central Bank of Nigeria statistical bulletin of various editions for selected macroeconomic variables (interest rate and exchange rate). Purposive sampling technique was adopted to choose our sample banks (Access Bank, Guarantee Trust Bank, Diamond Bank, First Bank of Nigeria, FCMB, Fidelity Bank, Sterling Bank, StanbicIBTC, UBA, Union Bank, Wema Bank and Zenith Bank) owing to the fact that they possessed the required corporate diversification variables. The scope of this study is 2007-2017.

# 3.1 Model Specification

Based on the theoretical consideration discussed under the literature review section, the following two models were specified for this study;

$$\begin{split} & \text{Tobins}Q_t = F(INCD_t, SUBD_t, FORD_t, INTR_t, EXTR_t)..1 \\ & ROA_t = F(INCD_t, SUBD_t, FORD_t, INTR_t, EXTR_t)..2 \\ & \text{Structurally the model will be presented as follows:} \\ & \text{Tobins}Q_{t-1} = \beta 0 \end{split}$$

 $+\beta 1INCD_{it} + \beta 2SUBD_{it} + \beta 3FORD_{it} + \beta 4INTR_t + \beta 5EXTR_t + \epsilon \\ ....3$ 

ROA<sub>t</sub>-

 $_{1}\text{=}\beta0+\beta1INCD_{it}+\beta2SUBD_{it}+\beta3FORD_{it}+\beta4INTR_{t}+\beta5EXTR_{t}\\+\epsilon......4$  Where:

Tobins Q = Tobin Q

ROA = Return on asset

INCD = Income diversification

SUBD= Subsidiary diversification

FORD = Foreign diversification

INTR = Interest rate

EXTR = Exchange rate

 $\beta$  = M co-efficients

 $\varepsilon = Model error term$ 

# 3.2 Method of Data Analysis

This study used panel data regression analysis. The hausman test enables the study to be examined using either a fixed model effect or a random effect model. Preliminary tests on the data included descriptive statistics, a correlation matrix, and a panel unit root test. The descriptive statistics were used to determine whether the data were normal, the panel unit root test was used to determine whether the data were stationary, and the co-integration test was used to determine whether the data were co-integrated.

# 4.0 Presentation and Analysis of Results

# **4.1Descriptive Analysis**

The descriptive statistic is presented in Table 1 below. The average value of the series is represented by the mean value while the standard deviation shows the dispersion of the series from their mean. The kurtosis

and skewness highlights the distribution of the variables. Specifically, the skewness identifies the asymmetry of the distribution while the kurtosis focuses on the curve of the distribution. The JaqueBera test ascertains whether or not the series forms a normal distribution.

In Table 1, it was found that foreign diversification, which is measured by exchange rate, and Tobin's Q, which measures subsidiary diversification, had a positive skewness, while Income diversification, which is measured by interest rate, and Interest diversification, which is measured by return on asset, had a negative skewness in the distributions. Income diversification, interest rate, returns on asset and Tobin's Q suggested a leptokurtic trend. However, whereas overseas diversification and subsidiary diversification tend to be mesokurtic, exchange rate is found to be platykurtic.

Furthermore, all the variables (dependent and independent variables) in the Nigerian banking industry averaged 178.38, 0.8, 2.26, 8.14, 1.5, 1.66 and 1.05, whereas their standard deviations were 58.1, 0.97, 2.92, 6.78, 2.74, 0.89 and 0.22 respectively during the estimation period. Consequently, this study had 132 observations which are in consonance with the Statistical law of large samples. Table 1 reports the descriptive statistics of the study.

Table 1: Descriptive Statistics of all Variables Employed

Stat	Mean	Median	Maxi	Minim	Std.	Std. Skewn Kurto		Sum	Obs
			mum	um	Dev.	ess	sis		
Exchange rate	178.38	156.22	306	118.57	58.1	1.28	3.23	23546.31	132
Foreign diversification	0.8	0.00	3.04	0.00	0.00	0.85	2.35	105.18	132
Income diversification	2.26	2.55	7.51	-19.89	2.92	-3.92	28.52	298.26	132
Interest rate	8.14	9.09	23.7	-42.3	6.78	-6.15	47.66	1074.1	132
Return on asset	1.5	1.79	9.54	-20.23	2.74	-3.93	33.13	198.04	132
Subsidiary diversification	1.66	1.79	3.22	0.00	0.89	-0.7	2.59	219.76	132
Tobin's Q	1.05	0.98	2.07	0.85	0.22	2.44	9.45	138.21	132

Source: Authors' Computation, 2019

# 4.2 Analysis of Correlation Matrix

According to the correlation analysis, the two variables utilized in the study are related to one another. From the result, Return on Assets was positively related to all other variables, except interest rate. In addition, Tobin's Q was negatively related to exchange rate, foreign diversification and interest rate. However, with respect to the issue of

income diversification, the alliance did show a favorable trend when it came to return on assets and subsidiary diversification.

It thus suggests that, a considerable improvement in these variables employed in the study would not only enhance the overall banking sector performance in the country, but also translate into some degree of financial strength in the long

run. The correlation statistics of all variables employed are reported in Table 2 below.

Table 2: Correlation Statistics of All Variables Employed

Correlation	EXCH	FORD	INCD	INTR	ROA	SUBD	TOBINQ
Exchange rate	1.00	0.08	-0.02	0.05	0.00	-0.02	-0.35
Foreign diversification	0.08	1.00	0.19	0.01	0.15	0.66	-0.10
Income diversification	-0.02	0.19	1.00	-0.19	0.96	0.13	0.17
Interest rate	0.05	0.01	-0.19	1.00	-0.22	-0.03	-0.04
Return on asset	0.00	0.15	0.96	-0.22	1.00	0.10	0.14
Subsidiary diversification	-0.02	0.66	0.13	-0.03	0.10	1.00	0.08
Tobin's Q	-0.35	-0.10	0.17	-0.04	0.14	0.08	1.00

Source: Authors' Computation, 2019

# 4.3 Stationarity Test

Study by Granger and NewBold (1977) indicate that most of the variables in a Regression model usually trend in a non-stationary manner. Therefore, the use of such non-stationary series may lead to estimates that are not suitable for policy coverage. It is therefore appropriate to review the stationary status of such variables for further estimations (Levin & Lin, 1992, 1993; Breitung & Meyer, 1994; Quah, 1994; Pesaran& Smith, 1995; Hall &Urga, 1996; Im,Pesaran& Shin, 1997; Maddala& Wu, 1998; Hall, Lazarova & Urga, 1999).

Table 3 display the results of the stationary tests performed on the dependent and

explanatory variables used for the Nigerian banking industry. The entire variables were stationary at levels from the stationarity test result. This again validates the aptness of our option of assessment procedures since the theoretical argument of efficient, unbiased, consistent and asymptotic estimates is established on stationarity assumption. Tests in this section were consistent with the ADF-Fisher and PP-Fisher approaches that are described in Levin, Lin and Chu; Im, Pesaran and Shin; and ADF-Fisher and PP-Fisher, respectively. Additionally, the ADF-Fisher and PP-Fisher tests were shown to have good functionality. Unit root tests yield results that are presented below;

Table 3: Panel Unit Root Test at Levels- The Levin, Lin and Chu; Im, Pesaran and Shin; ADF - Fisher and PP - Fisher Approaches

St.	Levin, Lin and Chu  Null Hypothesis: Unit root (assumes common unit root process)			Im, Pes	aran and	Shin W-stat	ADF -	Fisher C	hi-square	PP - Fisher Chi-square			
ariabk				Null Hypothesis: Unit root (assumes individual unit root process)				thesis: Unit ual unit roc	root (assumes ot process)	Null Hypothesis: Unit root (assumes individual unit root process)			
>	Stat	Prob	Remark	Stat	Prob Remark		Stat	Prob	Remark	Stat	Prob	Remark	
EXCH	19.3	0.00	Stationary	19.00	0.00	Stationary	10.13	0.00	Stationary	10.09	0.00	Stationary	
FORD	-4.59	0.00	Stationary	-4.16	0.00	Stationary	56.20	0.00	Stationary	45.33	0.01	Stationary	
INCD	-4.39	0.00	Stationary	-5.74	0.00	Stationary	73.23	0.00	Stationary	75.80	0.00	Stationary	
INTR	-12.2	0.00	Stationary	-9.77	0.00	Stationary	114.7	0.00	Stationary	114.7	0.00	Stationary	
ROA	-5.36	0.00	Stationary	-5.81	0.00	Stationary	74.15	0.00	Stationary	69.9	0.00	Stationary	
SUBD	-14.5	0.00	Stationary	-5.28	0.00	Stationary	58.98	0.00	Stationary	58.98	0.00	Stationary	
TOBINQ	-51.8	0.00	Stationary	-32.69	0.00	Stationary	169.4	0.00	Stationary	186.21	0.00	Stationary	

Note: Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality. Source: Authors' Computation, 2019

# 4.4 Empirical Analysis of the Relationship between Corporate Diversification, Macroeconomic Factors and Banks Performance in Nigeria

The panel data estimation technique was used to assess corporate linkage between diversification, macroeconomic factors and banks performance in Nigeria. Table 4.4 shows the result findings of the entire Nigeria Banking industry. The primary objective of investigating the association between Corporate Diversification, Macroeconomic Factors, and Bank Performance in Nigeria was accomplished through the use of panel data. The panel estimation outcome for the entire Nigerian banking industry is accounted for in Table 4.4. For all intents and purposes, results from the traditional estimation (fixed effects and random effects) procedures are engendered and reported for comparative analysis.

Furthermore, the Hausman specification test in the lower section of Table 4.4 failed to reject the random-effects model (REM) in favour of the fixed-effects model (FEM). The implication of the above finding is that, some variables may be fixed over time, but *vary between banks*, and others may be fixed between banks, but *vary over time*. The inference that can be drawn from the Hausman specification test is that the REM is preferred to the FEM for the levels regression estimates for both the ROA and TOBINQ models as reported in Table 4.4.

The results in Table 4.4 showed that the coefficient of subsidiary diversification was positive in all the estimation (random effects and in fixed effects models) results for both Returns on Asset and Tobin's Q models. It was statistically significant at 1% in the ROA fixed effects model and at 5% in both the random effects and fixed effects models of Tobin's Q. Surprisingly, the outcome is consistent with our a priori anticipation.

Specifically, the result implies that a unit increase in subsidiary diversification will occasionally corresponding increase in ROA and Tobin's Q in the Nigerian banking sector by 0.03 unit and 0.06 unit respectively.

ROA; REM and FEM, the coefficient reflecting income diversification was likewise favorable, as shown in Table 4.4. In the case of Tobin's Q; REM and FEM, however, it became revealed a negative result. In both ROA REM and FEM, it was only statistically significant at the 1% level. The results show that a unit increase in income diversification leads to a 0.93 unit rise in ROA in the Nigerian banking sector and a 0.003 unit fall in Tobin's Q.

Tobin's Q model's fixed effects result and the coefficient of one-period lagged income diversification were also negative. In Tobin's Q random effects model, it became positive. It was also barely 1% significant in both ROA random effects and fixed effects models. Explicitly, a unit increase in one-period lagged income diversification results in a 0.22 unit fall in ROA in the Nigerian banking sector and an increase in Tobin's Q 0.002 unit respectively. The implication of the above findings is that, previous year dynamics in income diversification have the tendency to influence both current and future performance activities of the Nigerian banking sector.

In both ROA and Tobin's Q models, the coefficient indicating international diversification was negative in all estimate outcomes (random effects and fixed effects). It was also 1% in the ROA fixed effects and random effect models. In Tobin's Q random effects models, it became statistically significant at 10% level. The finding shows that for every unit rise in international diversification, the Nigerian banking sector's ROA and Tobin's Q fall by 0.29 and 0.03 units, respectively.

However, the coefficient of one-period lagged foreign diversification was positive in all the estimation (random effects and in fixed effects models) results for both ROA and Tobin's Q models. Additionally, it was statistically significant at the 1% level in both the ROA fixed effects and random effects models, as well as at the 5% level in the Tobin's Q fixed effects model. However, under the Tobin's Q random effects model, it became statistically significant at the 10% level. Clearly, the result indicates that a unit increase in one-period delayed international diversification results in a 0.30 unit and 0.021 unit rise in ROA and Tobin's Q in the Nigerian banking sector, respectively. This suggests that the impact of the previous shocks in foreign diversification among deposit money banks in Nigeria create positive spillover effects, which translate into present circumstances and future opportunities of the financial sector.

Furthermore, in both the ROA random effects and fixed effects models, the interest rate coefficient was negative. In the case of Tobin's Q random effects and fixed effects models, however, it became positive. In all fixed effects and random effects models, its associated one-period lagged values were found to preserve a positive connection with both ROA and Tobin's Q. Furthermore, it was statistically significant at the 1% level in both the ROA and Tobin's Q random effects models, as well as at the 5% level in the ROA fixed effects model and the 10% level in the Tobin's Q fixed effects model.

However, in both ROA random effects and fixed effects models, one-period lagged interest rates were found to preserve statistical significance at the 1% level, whereas similar impacts became statistically insignificant in Tobin's Q models' random effects and fixed effects estimations. Specifically, the result indicates that a unit increase in interest rate will result in a 0.01 unit fall in ROA and a 0.002 unit increase in Tobin's Q in the Nigerian banking sector, ceteris paribus. On the other hand, the result signifies that a unit increase in one-period lagged interest rate, *ceteris paribus*, will translate into to a corresponding rise in ROA and Tobin's Q in the Nigerian banking sector by 0.01 unit and 0.001 unit respectively.

The coefficient signifying exchange rate was positive in both fixed effects and random effects models for the ROA and Tobin's Q equations. Additionally, it was statistically significant at the 1% level in Tobin's Q random effects and fixed effects models, as well as at the 5% level in ROA random effects and fixed effect models. Explicitly, the data indicates that a one-unit decline in the value of the native currency results in a 40.79-unit and 7.21-unit increase in the ROA and Tobin's Q of the Nigerian banking industry, respectively. Table 4.4 illustrates the outputs of the outcomes concurrently.

**Table 4: Panel Data Estimation Results** 

Variable		I	Dependent V	ariable: R	OA	Dependent Variable: TOBINQ							
	Random Effects Model			Random Effects Model Fixed Effects Model			Rande	om Effect	s Model	Fixed Effects Model			
	Coeff	t-stats	Prob.	Coeff	Coeff t-stats Prob.		Coeff	t-stats	Prob.	Coeff	t-stats	Prob.	
С	-7491	-2.04	0.04**	-11535	-2.44	0.02**	-1324	-3.39	0.00***	-867	-2.77	0.01***	
SUBD	0.03	0.63	0.53	0.26	3.12	0.00***	0.063	2.34	0.02**	0.05	2.06	0.04**	
INCD	0.93	31.05	0.00***	0.94	41.49	0.00***	-0.003	-0.67	0.50	-0.01	-1.56	0.12	
INCD(-1)	-0.22	-3.04	0.00***	-0.21	-2.81	0.01***	0.002	0.48	0.63	0.00	-0.39	0.70	
FORD	-0.29	-8.03	0.00***	-0.67	-2.98	0.00***	-0.033	-1.89	0.06*	0.00	-0.19	0.85	
FORD(-1)	0.30	8.59	0.00***	0.27	4.88	0.00***	0.021	1.82	0.07*	0.03	2.14	0.04**	
INTR	-0.01	-8.42	0.00***	-0.01	-2.35	0.02**	0.002	4.77	0.00***	0.00	1.90	0.06*	
INTR(-1)	0.01	3.23	0.00***	0.02	2.97	0.00***	0.001	0.90	0.37	0.00	0.75	0.45	

EXCH	40.79	2.04	0.04**	62.81	2.44	0.02**	7.21	3.39	0.00***	4.73	2.77	0.01***	
D.W stat		2.08			2.21			1.99			2.14		
R-squared		0.97			0.97			0.28			0.59		
Adjusted R-squared		0.96			0.96			0.16			0.47		
F-statistic		185.72			112.90			2.34			4.75		
Prob(F- statistic)		0.00			0.00			0.00			0.00		
Obs		120			120			120			120		
Hausman Test	Chi^2 (7) = 0.23 (0.81)								Chi^2 (7) = 1.04 (0.36)				

NB: \*Significant at 10%, \*\*Significant at 5%, \*\*\*Significant at 1%.

Source: Author's Computation, 2019

### 5.0 Conclusion and Recommendations

It is essential to evaluate the impact of bank productivity at both the micro and macro levels of the economy. Money markets are essential to the overall financial system, and are the primary location where financial intermediation occurs. In the event that banks fail to accomplish their cardinal objective of profit making, it becomes increasingly hard-hitting to gain unflinching access external means of financing. The empirical findings of this study revealed that, the extent to which income, subsidiaries and foreign assets are diversified in the Nigerian banking sector goes a long way in dictating the performance of the money market in general.

The implication is that, when issues relating to corporate diversification are poorly handled, the deteriorating outcomes can be devastating and it can be felt both at the individual bank levels as well as the financial sector at large. This has evidently led many banks to fold up and other eventually taken over by those with robust performance trends. It therefore become a matter of necessity for the various financial actors in the Nigerian money market to carefully implement corporate

diversification in order to adequately tap from the huge benefits from such activities.

It is expedient for every DMB to carefully examine its credits policy by targeting viable segments of the nation's economy so that the benefits of income diversification can be fully reaped. It is also obligatory for deposit money banks to employ appropriate environmental analysis and inspection of assets in ensuring that, their funds go into appropriate channels in the foreign sphere.

Multiple exchange rate windows should therefore be eliminated. Also, more resolute to create an enabling environment for businesses to thrive; they should focus on policies and programs that will foster financial sector growth and eradicate constraints stemming from high lending interest rates, as this will encourage investors to take more credit facilities for further financial expansion.

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