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The Impact of Firm Level and External Characteristics on the comparative performance between Islamic and Conventional Banks in Nigeria

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Abstract

This study investigates the impact of firm level and external characteristics on financial performance of Islamic banks in Nigeria. The study determined the financial performance of Islamic banking in Nigeria against conventional banking services between 2012 and 2020. In this study, regression diagnostics such as multi-collinearity and heteroscedasticity were carried out to determine whether an assumption of linear regression were violated. These helped to check the robustness or otherwise of the regression results. Furthermore, both fixed and random effect tests were conducted. On the comparison between the financial performance of DMBs and Islamic banks in Nigeria, the study concludes that DMBs in Nigeria have better financial performance when compared to Islamic Banks in Nigeria within the periods under review. This better performance may be due to better corporate governance practices, better technology, smaller operating costs, availability of more products. and robust risk management practices. In line with the findings, the study recommends a better corporate governance practice, better technology, reduced operating costs, more diverse products, and robust risk management practices for Islamic banks in Nigeria, whist the conventional banks are advised to do more in this regard with a view to enhance financial performance.

Keywords: *Islamic banking, Banking profitability, Service GAP, Banking performance, Nigeria.*

1. Introduction

The nature of any nation's regulations and supervision of its financial system largely determines the scope and extent of its economic challenges. It is imperative to recognize that a nation's financial system continues to play a vital role in achieving socio-economic development (IMF, 2023). It turns out that some disturbances observed in the financial sphere of the economy may exert a very significant behaviour and long-term impact on the behaviour of the real economy. However, the financial sector is believed to catalyse economic growth if it is adequately supervised, controlled, and monitored.

The Islamic banking and finance system is coveted for its prohibition of interest, despising uncertainty, and denouncing speculation. With an emphasis on resource mobilization for active partnership with entrepreneurs and real sector operators of the economy, the Islamic financial system could stimulate real growth by forging cooperation in risk-taking and profit and loss sharing (Alam, et al., 2017). In addition, the Islamic financial system is admired for fostering economic development, social progress, and distributive justice, which is why, unlike the conventional system, it is more concerned with the viability of the business proposal and, equally, its profitability, as against the size of the collateral, business cash flow and rate of return, that is, interest. Islamic banks, therefore, can attract a large pool of investors and entrepreneurs, especially in the informal sector, which the conventional banking system has alienated (Iqbal and Mirakhor, 2011).

There is ongoing debate within the Islamic community regarding the effectiveness of interest-based banking systems. While it is acknowledged that banks play a pivotal role in developing a country as financial intermediaries, there is even some debate about whether an interest-based system contributes to cyclical fluctuations. A new banking system known as Profit-Loss-Sharing (PLS) emerged, most likely in response to the interest-based banking system debate but more due to religious beliefs in the Islamic community. Despite the sterling features, wide benefaction, and tremendous successes recorded by the Islamic system of banking and finance globally, the adoption of the Islamic banking system by the apex

financial institution – the Central Bank of Nigeria (CBN), as an alternative system of financial intermediation was greeted with steep resistance in certain quarters in the country.

In the last eight years, the performance of Islamic banks in Nigeria compared to their conventional counterparts and Islamic banks in the Middle East and North Africa (MENA) region has raised questions. This study aims to investigate this disparity and identify potential factors contributing to the observed differences. By examining various performance indicators and operational challenges, the research will provide a comprehensive analysis to determine if Islamic banks in Nigeria are indeed underperforming or if other contextual factors are at play (Olokoyo, Taiwo & Oladejo, 2021; Abdul-Majid, 2018). Islamic banking has not been well-accepted by most of the non-Muslims and some of the elite capitalists (including some of the Muslim capitalists) in the country, which could probably be due to their lack of understanding of the Islamic financial system or due to the negative religious and political perceptions.

Islamic banks in Nigeria, unlike their conventional counterparts, are not expanding their operations and are still offering a limited range of products and services (Fitch Ratings, 2023). Islamic banks in Nigeria are exposed to a much bigger risk profile than their conventional counterparts, and such a risk could have hindered the bank's robust expansion. The conventional banking system in Nigeria has been a long-time banking institution that has captured the hearts and patronage of all and sundry, void of religious inclination. It has come to stay because of its acceptability and the secular nature of Nigerian society.

This research aims to investigate the impact of firm level and external characteristics on the financial performance of Islamic banks in Nigeria. The significant contributions of this paper include the following: First, this study will contribute to expanding the frontier of knowledge in Islamic finance in Nigeria and the world. Second, the findings of the study will also be beneficial to significant players in the Islamic finance industry by assisting them in knowing where there is a need for improvement in their service delivery, innovations, and novel ideas to cater for new demands and short- and long-term strategic plans to compete well with their conventional counterparts within the Nigerian financial industry.

The other sections of the study are organized as follow: Section 2 presents the review of prior literature and provides the theoretical perspective of the Study; Section 3 provides the methodological approach for the Study; Section 4 focuses on the study's analysis and discussions; and Section 5 summarizes and concludes the Study.

2. Literature Review

2.1 Asset Quality and Financial Performance

Asset quality is a strong determinant of financial institution performance because it influences the interest incomes while at the same time reducing the cost burden of bad debts management as per the law requirements. The banks are required to set aside cash, which is deductible as an expense, to ensure they can absorb any losses that they may incur from loan defaults. The higher the NPA ratio to the gross/net assets, the lower the asset quality and vice versa and therefore it means that the trade-off between assets quality and financial performance is expected to be negative (Tsai & Huang, 2017).

Asset quality management is considered extremely important by the banking sector at home and abroad. The Basle Committee on Banking Supervision in 1997 issued an important document "Core Principles for Effective Banking Supervision," which has been endorsed by the Central Bank governors of several countries, to present a comprehensive set of twenty-five core principles. Of , one-fourth are designed to address the relevant issues of bank asset quality (Tsai & Huang, 2017), suggesting that asset quality is a general concern for the financial supervisory authorities n every country throughout the world.

Asset quality is an aspect of bank management that entails the evaluation of a firm's assets to facilitate the measurement of the level and size of credit risk associated with its operation it relates to the left-hand side of a bank balance sheet and focused on the quality of loans which provides earnings for a bank. Asset quality and loan quality are two terms with basically the same meaning while its management is considered extremely important by the banking sector. According to the Basle Committee on Banking Supervision, the core principles for effective banking supervision comprised twenty-five core principles out of which seven are designed to address the relevant issues of bank asset quality or credit risk management (Basle, 1997).

Olarewaju and Akande (2021) specified that the problems of asset quality may become the future time bomb for banks, just as the standards for safety and soundness which were established by the United States Federal Reserve Board, became effective in 1995 which required U.S. financial institutions to set up asset quality monitoring systems for identifying possible emerging problems of bank asset quality, and demanding banks to regularly present the asset quality reports to the board of directors to evaluate the risks associated with asset quality deterioration.

Asset quality also referred to as loan quality has been defined as the risk attached to the various assets held by an individual or institution. It is most commonly used by banks to determine how many of their assets are at financial risk and how much allowance for potential losses they must make. The most common assets requiring a strict

determination of asset quality are loans, which can be non-performing assets if borrowers default on repayment obligations. Risk managers often assess the quality of assets by assigning a numerical ranking to each asset depending on how much risk is involved (Ombaba, 2013). Tobin (2008) asserts that asset quality measures how well a financial institutions predicts the credit risk of its assets and how well they manage them. On the other hand, financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's financial health over a given period and can be used to compare smlar frms across the same industry or to compare dusters or sectors in aggregation.

2.2 Capital Adequacy and Financial Performance

According to Onoh (2012), a bank's capital is adequate if it can cover the bank's operational expenses and satisfy customers with their various needs and protect depositors against total or partial loss of deposits n the event of the collapse or laudation of the bank. In any business firm and indeed the bank, capital adequacy s seen as a very important element/tool and it spurs business exertion, better performance and standards in any business environment.

Olalekan and Adeyinka (2013) opine that the minimum rate of capital to total risk-weighted assets should remain at 10% as prescribed in circular BSD/11/2003 dated 4th August 2003. The circular also stated that at least one-half of a bank's capital should comprise of pad-up capital and reserves, while every bank should maintain a ratio of not less than 1: 10 between its adjusted capital and total credit net provisions. As a result, banks in Nigeria are advised to maintain a higher level of capital which is commensurate with their risk profiles. This according to (BCBS) is to ensure that financial institutions have adequate capital on account to meet their obligations and absorb financial, operating and reputational losses, (Eyo & Amenawo, 2015). According to Olalekan and Adeyinka (2013), in line with the Basel Accord's level of capital adequacy ratio as an acceptable limit, a deposit money bank may be classified into under-capitalized; significantly under-capitalized; critically under-capitalized; and insolvent. The CBN further requires all banks to disclose their credit ratings from reputable credit rating agencies on a regular basis as an indicator of the state of health of such banks and this must be included in their annual reports (CBN, 2010). Adequate capital no doubt represents a major element in shaping the perception on the solidity of the bank and with the active involvement of banks in the financial markets, the public's view of the bank's capital has acquired immense importance in that it has become the basic reference for classifying the bank's standing vis-a-vis its competitors (Nzotta, 2014).

Functionally, adequate capital is the amount of capital that can effectively discharge the primary capital functions of preventing bank failures by absorbing unusual losses. Adequate capital provides the ultimate protection against insolvency and liquidation arising from the risks inherent in banking. Adequate capital provides the customer, the public, and the regulatory authority with confidence in the continued financial viability of the banks; confidence to the depositors that their monies are safe; the public that the bank will be in a position to consider their withdrawal and credit needs and to the regulatory authority that the bank will remain in business. (Nwankwo, 2013).

2.3 Bank Size and Financial Performance

The size of a business means the ability it possesses, the variety and number of production capabilities or the quantity and multiplicity of services or businesses it can offer concomitantly to its customers. In a simpler way, the best indication of the largeness of a firm is the size of its management, group or the number of assets it possesses compared to others in the same industry (Sritharan, 2015). Size is commonly measured by gross sales or gross value of assets, the logarithm of total assets, the number of employees and sales turnover. Growth in the size of a firm can be in terms of revenue, profits, assets or number of employees which are all essential for increased financial health and profitably. Form size has been remarkably considered an important determinant of firm profitably. Larger firms are sad to be able to produce goods more cheaply as compared to small firms. This is because the former has achieved more learning, and greater cumulative experience and they are able to spread their fixed costs over a greater amount of production (Kigen, 2014).

In the existing literature, size has been considered a fundamental variable n explaining firm profitably and many studies on the relationship between these two conclude that the impacts of size on profitably can be negative or positive. Results by Mule et al. (2015), indicated that there is a positive significant relationship between firm size and profitably, that is return on equity, implying that a unit change in firm size leads to an increase in return on equity of firms. Contrarily, some authors clam that size may have no negative impact on profitably. Shepherd (2012) found that growth in size causes a diseconomy of scale whereas Niresh and Velnampy (2014), had results showing that firm size has no profound impact on the profitability of firms. Redmond and Bonhnsa (2017) studied the effect of bank size on profitability. They categorized banks into 5 categories according to their size of assets, the ROE ratio is used as a measure of profitability and found that there is a negative significant relationship between profitability and the volume of assets. Kosmodo and Doumpos (2016) in another study when testing the banks effectiveness in the UK using the bank size as a key factor categorized UK bans into two types,

large and small according to assets volume. The results of their study concluded that small banks showed higher performance in comparison to large ones. Further, the size of the bank was proved to affect profitability besides other factors such as liquidity. Banks performance and usefulness of investments are always being evaluated through the trend and pattern of profitability. Murthy (2008) tested banks income and profitability in the gulf cooperation council countries (GCC). Data from 78 banks were used for the years 2002 to 2008. The study assumed that many factors might affect the profitability results in the Gulf region. Bank size was assumed one of the important factors that influence profitability for Gulf banks. The size of the total assets was found with a significant effect on banks profitability. Some banks appeared to have high profitability relative to other banks according to some clusters created by the researcher. Recently, almost all banks were forced to enhance their services and profits due to the high increase in local and international competition between banking markets and due to the changes in the banking environment. These challenges that are imposed on banks locally and internationally have recently been considered an important issue in an emerging market to reconsider their bank ratios.

2.4 Gross Domestic Product and Financial Performance

Tijjani and Babajide (2015), examined the nexus between Economic Growth and insurance Business in Nigeria, using economic growth as measured by the GDP as a dependent variable and insurance activates (contribution of the insurance sector to GDP), Inflation Rate (Inflate) and Real Exchange Rate (rerate) as the Independent Variable, least-square regression result shows that the s a link between insurance and economic growth n Nigeria.

Outrevlle (1990) defined GDP as the market value of goods and services produced within a selected geographic area (usually a country) in a selected interval in time (often a year). Rightly or wrongly, this has become the standard by which we measure the size and health of a country. Bag and/or growing is good. Small and/or shrinking are bad. it’s the market value of all the final goods and services produced when a country in a given period.

Imeokpria (2014) posits that GDP measures the monetary value of final goods and services— that is, those that are bought by the final user—produced in a country in a given period of time (say a quarter or a year). it counts all the output generated within the borders of a country. GDP is composed of goods and services produced for sale in the market and also includes some non-market production, such as defense or education services provided by the government. Not all productive activity is included in GDP. For example, unpaid work (such as that performed in the home or by volunteers) and black-market activates are not included because they are difficult to measure and value accurately. That means, for example, that a baker who produces a loaf of bread for a customer would contribute to GDP, but would not contribute to GDP if he baked the same loaf for his family.

2.5 Inflation and Financial Performance

Mankiw and Reis (2021) defined inflation as a sustained increase n the general price level of goods and services in an economy over a period of time." They emphasize that inflation involves a continuous rise in prices, rather than a one-time increase. This affects the purchasing power of money, leading to a decrease in the value of currency.

Blanchard (2020) sees inflation as the rate at which the general level of prices for goods and services is rising and, subsequently, eroding the purchasing power of currency. Accordingly, inflation reflects the overall rate at which prices increase, impacting consumers' ability to buy the same amount of goods with the same amount of money.

According to Riseishkin (2019), inflation is the process by which the cost of a basket of goods and services rises over time, leading to a decline in the purchasing power of money. Mishkin focuses on the basket of goods and services, indicating that inflation measures the change in cost for a standard set of items, thus affecting economic stably and purchasing power.

Roubini and Mihm (2020) see inflation as the ongoing rise in the price level of the economy's goods and services, often driven by demand-pull or cost-push factors. Accordingly, the causes of inflation, such as increased demand or rising costs of production, and how these contribute to the overall increase in prices.

Krugman and Wells (2018) defined inflation as when there is a sustained upward movement n the average level of prices, reducing the real value of money. According to them, the point out that inflation is characterized by a consistent rise in prices across the economy, which diminishes the real value of money over time.

According to Auerbach and Gorodnichenko (2021), inflation is the persistent increase in the price level of an economy's goods and services, typically measured by the Consumer Price Index (CP) or the Producer Price Index (PP). Auerbach and Gorodnichenko emphasize the measurement tools used to gauge inflation, such as CP and PP, to monitor changes in the price level over time.

Taylor (2019) defined inflation represents the rate at which the general level of prices for goods and services are increasing, eroding purchasing power and affecting economic decision-making. Taylor underlines the impact of inflation on economic decisions, highlighting how it can influence spending, saving, and investment behaviors.

3. Research Methods

The study is descriptive quantitative research. Quantitative research is relevant because it employs statistical analysis, a comparative methodological discipline that uses mathematical ideas for descriptive data analysis, point inference, and hypothesis testing. It is the mainstay of research because it generally allows the researchers to make comprehensive inferences about the investigated variables in the target populations (Burns *et al.*, 2000). The study will adopt ex-post factor and causal research designs using panel data from eight years (2012 -2020) to explore the effect of independent variables on the dependent variable and the nature of the relationship between the variables.

In this study, secondary panel data in the form of banking financial reports will be used together with primary data obtained from the survey administered to the selected banking customers. The population of the study, therefore, comprised banking institutions in Nigeria as well as banking customers in the Republic.

The first category of the population of the study consisted of twenty-three (23) Deposit Money Banks (DMBs) and two (3) Islamic Banks (IB) operating in Nigeria as of the end of 2023. The study has selected ten (10) banks listed on the Nigerian Stock Exchange, comprising one (1) Islamic Bank and the remaining nine (9) conventional banks. The average performance of the 9 conventional banks was compared with the performance of the Islamic bank using regression analysis. The justification for the use of these banks is that they have the necessary data needed for the number of years for the analysis. The banks included Access Bank, Guaranty Trust Bank, Sterling Bank, Zenith Bank, Union Bank, Fidelity Bank, Unity Bank, Wema Bank, and Jaíz Bank.

As of 2023, there are twenty-six (26) commercial banks in Nigeria. Among them, twenty-three (23) are conventional banks, and three (3) are Islamic banks. In choosing the banks for the study, listing status on the Nigeria Exchange was considered. The sample size consists of average of the nine (9) conventional banks listed on the Nigerian Exchange and one (1) Islamic Bank that is listed on the Exchange. The banks selected for the study are Access Bank, Guaranty Trust Bank, Sterling Bank, Zenith Bank, Union Bank, Fidelity Bank, Unity Bank, Wema Bank, and Jaíz Bank.

The data were extracted from the banks' published financial statements, covering ten (9) years from 2012 to 2020. This was supported, where required, with the financial information of the sampled banks as contained in the Nigeria Exchange (NSE) fact book. The study also collected data, where necessary, from the CBN Statistical Bulletin and the Nigerian Bureau of Statistics.

The effect of factors affecting the performance of conventional and deposit money banks in Nigeria will be estimated in this study using the ordinary least square method of regression. The individual models are stated below.

$$ROA_{tdmbs} = \alpha + \beta_1 CAR_{tdmbs} + \beta_2 AQ_{tdmbs} + \beta_3 BS_{tdmbs} + \beta_4 GDP + \beta_5 INF + \mu_{tdmbs} \text{ --- i}$$

$$ROA_{tib} = \alpha + \beta_1 CAR_{tib} + \beta_2 AQ_{tib} + \beta 4_3 BS_{tib} + \beta_4 GDP + + \beta_5 INF + \mu_{tib} \quad \text{---- ii}$$

Where:
ROA = Profitability
CAR = Capital Adequacy
AQ = Asset Quality
SIZE = Bank Size
RGDP = real GDP
INF = Inflation
$\beta 0$ = Constant
$\beta 1 \ldots \beta n$ = Regression Coefficients
ε = error term.

4. Results and Discussions

4.1.1 Preliminary Analysis

To examine the inter-relationships of the variables, this section begins by evaluating the summary statistics as well as the correlation matrix. This gives a good idea of the patterns in the data. The summary statistics, graphs and correlation matrix are presented below:

Table 4.1
Descriptive Statistics Results

	ASSET_QUALITY	BANK_SIZE	CAR	INF	RGDP	ROA
Mean	0.387576	11.50554	0.21033	0.118789	10.83311	0.018629
Median	0.400029	11.68294	0.157306	0.1209	10.84014	0.017877
Maximum	0.508806	12.44726	0.715693	0.165	10.8579	0.051621
Minimum	0.13863	10.14968	0.076393	0.0805	10.78297	0.004712
Std. Dev.	0.087072	0.749712	0.143896	0.029312	0.023189	0.010248
Skewness	-1.25643	-0.28979	2.532253	0.196877	-1.17656	1.715533
Kurtosis	4.872753	1.57027	9.617865	1.851415	3.190818	7.173388
Jarque-Bera	7.366232	1.785031	52.08402	1.105717	4.180187	21.89203
Probability	0.025145	0.409624	0.000000	0.575303	0.123676	0.000018
Sum	6.976367	207.0998	3.785941	2.1382	194.996	0.335323
Sum Sq. Dev.	0.128885	9.555161	0.352003	0.014607	0.009141	0.001786
Observations	18	18	18	18	18	18

Source: Researcher's Computations (2021)

Table 4.1 shows the summary of descriptive statistics of the variables included in the model. The above table reveals that asset quality has a mean of 38.76% over the study period, with maximum and minimum values of 50.88% and 13.86%, respectively. This connotes that average, Islamic and commercial banks' asset quality ratio was below 50%. On the other hand, bank size as proxied by the natural log of total assets has an average return of N2.08b, the maximum value of N8.68b and minimum value of N14.11m.

Capital adequacy has a mean value of 21.03%, with a maximum value of N71.57% and a minimum value of 7.16%. Inflation ranges from 8.05% and 11.88%, with a mean value of 12.09%. Return on assets ranges from 0.47% and 1.08%, with a mean value of 1.18%. Jarque-Bera test showed that the residuals are normally distributed variables for asset quality, capital adequacy and return on assets. In comparison, non-normal distribution has been revealed for bank size, inflation and actual gross domestic product.

4.1.2 Correlation Matrix: Table 4.2

Covariance Analysis: Ordinary

Date: 10/10/21 Time: 17:30

Sample: 2012 2020

Included observations: 18

Covariance / Correlation	ASSET_QUALITY	BANK_SIZE	CAR	INF	RGDP	ROA
ASSET_QUALITY	0.007160					
	1.000000					
BANK_SIZE	0.027035	0.530842				
	0.438507	1.000000				
CAR	-0.007141	-0.047761	0.019556			
	-0.603495	-0.468759	1.000000			
INF	0.000405	0.002163	7.83E-06	0.000811		
	0.168137	0.104235	0.001964	1.000000		
RGDP	0.000919	0.004730	0.001622	0.000113	0.000508	
	0.481865	0.288087	0.514545	0.175407	1.000000	
ROA	-0.000547	-0.000679	0.001148	-4.86E-05	0.000141	-9.92E-05

	-0.648564	-0.093527	0.824240	-0.171133	-0.627031	1.000000

Source: Researcher's Computations (2021)

The above matrix depicts the degree and direction of the association between each pair of variables being analyzed. A correlation coefficient with a negative sign reveals that there is an opposite or inverse relationship between the two variables. The correlation result indicates that only capital adequacy is positively correlated to return on asset. This implies that the return on assets increases as capital adequacy increases. However, a negative correlation is revealed between asset quality, bank size, inflation and real GDP and return on asset.

4.1.3 Summary of Regression Result - Model 1 (Deposit Money Banks)

The study conducted ordinary least square (OLS) regression to determine the financial performance of deposit money banks in Nigeria. The dependent variable is the return on assets, while the independent variables include asset quality, bank size, capital adequacy, inflation and real gross domestic product. The OLS regression result can be shown in Table 4.3 below:

Table 4.3
OLS Regression Results

Dependent Variable: ROA

Method: Least Squares

Date: 10/10/21 Time: 17:18

Sample: 1 9

Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.548962	2.158759	-0.254295	0.8157
ASSET_QUALITY	0.016178	0.066134	0.244625	0.8225
BANK_SIZE	-0.032679	0.033321	-0.980730	0.3990
CAR	-0.023226	0.050044	-0.464106	0.6742
INF	-0.003361	0.100054	-0.033590	0.9753
RGDP	0.088953	0.237461	0.374602	0.7329

R-squared	0.814232	Mean dependent var	0.018644
Adjusted R-squared	0.504619	S.D. dependent var	0.004319
S.E. of regression	0.003040	Akaike info criterion	-8.519382
Sum squared resid	2.77E-05	Schwarz criterion	-8.387899
Log likelihood	44.33722	Hannan-Quinn criter.	-8.803122
F-statistic	2.629839	Durbin-Watson stat	3.033665
Prob(F-statistic)	0.227948		

Source: Eviews (2021)

Table 4.3 depicts the OLS regression model. Thus, the regression line of ROA = -0.548962 + 0.016178ASSET_QUALITY – 0.032679BANK_SIZE – 0.023226CAR – 0.003361INF + 0.088953RGDP indicates that return on assets of deposit money banks in Nigeria decreases as asset quality and real GDP increase. However, it decreases with a decrease in bank size, capital adequacy, and inflation. The respective p-values indicate insignificant effects of all the independent variables at a 5% level of significance. The R-Squared of 0.8142 indicates that about 81% of the variation in return on assets of DMBs in Nigeria can be explained by asset quality, bank size, capital adequacy, inflation and real GDP. The remaining 19% is captured by the disturbance or error term. The F-statistics of 2.63 with its p-value of 0.23 indicates that the model is not fit the regression model. However, the focus of this analysis is to compare the R-squared from the two models – deposit money banks and Islamic banks. The table also shows the result of Schwarz Criterion for DMBs as -8.387899. This will be compared with the result for Islamic Banks to determine the financial performance.

Summary of Regression Result - Model 2 (Islamic Banks)

The study conducted ordinary least square (OLS) regression to determine the financial performance of Islamic banks in Nigeria. The dependent variable is the return on assets, while the independent variables include asset quality,

bank size, capital adequacy, inflation and actual gross domestic product. The OLS regression result can be shown in Table 4.4 below:

Table 4.4
OLS Regression Results

Dependent Variable: ROA

Method: Least Squares

Date: 10/10/21 Time: 17:24

Sample: 1 9

Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.495521	1.571457	-1.588030	0.2105
ASSET_QUALITY	-0.033659	0.025670	-1.311180	0.2811
BANK_SIZE	0.013074	0.015946	0.819884	0.4724
CAR	0.100353	0.024835	4.040766	0.0273
INF	-0.092390	0.044122	-2.093959	0.1273
RGDP	0.218760	0.157399	1.389847	0.2588

R-squared	0.991111	Mean dependent var	0.016885
Adjusted R-squared	0.976296	S.D. dependent var	0.014171
S.E. of regression	0.002182	Akaike info criterion	-9.182591
Sum squared resid	1.43E-05	Schwarz criterion	-9.051108
Log likelihood	47.32166	Hannan-Quinn criter.	-9.466331
F-statistic	66.89917	Durbin-Watson stat	3.053102
Prob(F-statistic)	0.002823		

Source: Eviews (2021)

Table 4.4 depicts the OLS regression model. Thus, the regression line of ROA = -2.495521 – 0.033659ASSET_QUALITY + 0.013074BANK_SIZE + 0.100353CAR – 0.092390INF + 0.218760RGDP indicates that, return on assets of Islamic banks in Nigeria increase as bank size, capital adequacy and real GDP increase. However, it decreases with a decrease in asset quality and inflation. The respective p-values indicate insignificant effects of all the independent variables, except capital adequacy at a 5% level of significance. The R-Squared of 0.9911 indicates that about 91% of the variation in return on assets of Islamic banks in Nigeria can be explained by asset quality, bank size, capital adequacy, inflation, and real GDP. The remaining 9% is captured by the disturbance or error term. The F-statistics of 66.89917 with its p-value of 0.002823 indicates that the model is fit the regression model. The tables also show Schwarz Criterion result for the Islamic Bank as -9.051108

4.2 Discussions

The R-Squared of 0.8142 indicates that about 81% of the variation in return on assets of DMBs in Nigeria can be explained by asset quality, bank size, capital adequacy, inflation and real GDP. The remaining 19% is captured by the disturbance or error term. The respective p-values indicate insignificant effects of all the independent variables at a 5% level of significance. The R-Squared of 0.9911 indicates that about 91% of the variation in return on assets of Islamic banks in Nigeria can be explained by asset quality, bank size, capital adequacy, inflation, and real GDP. The remaining 9% is captured by the disturbance or error term. The respective p-values indicate insignificant effects of all the independent variables, except capital adequacy at a 5% level of significance.

However, the focus of this analysis is to compare the R-squared from the two models – deposit money banks and Islamic banks. The table also shows the result of Schwarz Criterion for DMBs as -8.387899. This will be compared with the result for Islamic Banks to determine the financial performance. The tables also show Schwarz Criterion result for the Islamic Bank as -9.051108. We, therefore, conclude that that DMBs in Nigeria have better financial performance when compared to Islamic Banks in Nigeria within the periods under review, using the Schwarz Criterion. This better performance may be due to better corporate governance practices, better technology, smaller operating costs, availability of more products. and robust risk management practices.

5 Conclusions

The study determined the financial performance of Islamic banking in Nigeria against conventional banking services between 2012 and 2020. In this study, regression diagnostics such as multicollinearity and heteroscedasticity were carried out to determine whether an assumption of linear regression were violated. These helped to check the robustness or otherwise of the regression results. Furthermore, both fixed and random effect tests were conducted.

On the comparison between the financial performance of DMBs and Islamic banks in Nigeria, the study concludes that DMBs in Nigeria have better financial performance when compared to Islamic Banks in Nigeria within the periods under review. This better performance may be due to better corporate governance practices, better technology, smaller operating costs, availability of more products. and robust risk management practices.

In line with the findings, the study recommends a better corporate governance practice, better technology, reduced operating costs, more diverse products, and robust risk management practices for Islamic banks in Nigeria, whist the conventional banks are advised to do more in this regard with a view to enhance financial performance.

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