JAT

Journal of Accounting and Taxation

e-ISSN 2808-7127

Volume 2 No 1 March 2022

The Determinants of Islamic Bank Performance: An Assessment of Jaiz Bank Plc Nigeria

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Abstract

The paper assessed whether the bank-specific factors (internal) and economic (external factors) determine the financial performance of Jaiz bank Nigeria as an Islamic bank. Secondary data from the bank's financial statements and world banks Development indicators were extracted for the period of 8 years (2011 to 2018). After description analysis, OLS regression was utilized to determine the effect of independent variables (GDP, Inflation, Interest, capital adequacy, credit risk, deposit ratio, and cost efficiency) have on the dependent variables (ROA, ROE, and ROI) financial performance. It was established that; GDP as an external factor has a significant positive association with financial performance, cost efficiency was discovered to have a weak positive relationship with the financial performance, while inflation rate, interest rate, capital adequacy, deposit ratio, and credit risk were found to have no significant effect on the bank's financial performance. It was recommended that; Islamic banks need to give more consideration to the economic factors in their policies and programs as they may influence their profitability. More studies are also needed to compare the determinants of Islamic banks with that of Money Deposit Banks.

Keywords; Islamic Bank, Financial Performance, Internal and External Factors

How to Cite:

Abdullahi, A., and Yusuf, Y. (2022). The Determinants of Islamic Bank Performance: An Assessment of Jaiz Bank Plc Nigeria**.** *Journal of Accounting and Taxation, 2*(1). 1 – 17. DOI. https://doi.org/10.47747/jat.v2i1.609

1. Introduction

Jaiz Bank Plc was the first Islamic bank established in Nigeria. The bank was license on 11th November 2011 as a foundation trust to operate only in the northern region with majority Muslims, later upgrade to a full nation bank with branches in all the geopolitical zone of the country on the 12th of May 2016. The bank emerged out of the quest for a banking system free of *Riba* (usury), Maysir (gambling) and haram investment (investment forbidden in Islam) as a substitute to the dominant convention banking system. In addition to other regulatory requirements, the bank, operations, products and activities are all guided by *sharia law*, i.e. (the Islamic legal system). It begins operation on 1st January 2012 with only 3 branches in Kano, Kaduna and Abuja, as of the year ended 2019 the bank has more than 39 branches across Nigeria. Since its inception in 2012 the assets base, deposits, and profit after tax of the bank continue to grow at an appreciable rate from ₦14 billion to ₦170 billion, from ₦ 21billion to over ₦130 billion, and from ₦0. 9 billion to ₦1.796 billion respectively.

However, notwithstanding these remarkable growth and performance shown by the bank, the bank similar to other financial institutions is bound to face several issues and challenges that include; management strategic planning, performance improvement, upward and downward movement in the economy, monetary and fiscal policies, wining more deposits and dealing with competitors. Thus, makes it important to appreciate the relevant internal (bank-specific) characteristic or external (environmental) factors that might determine the performance of the bank and use as ingredients for mitigation of the effect of these (economic, policies and competitors) challenges.

Several studies have been conducted on the determinants of profitability of Islamic banks around the world, but mostly in Asia which housed the Islamic bank's formation and development, these studies include; Ijaz, Akmal, and Gillani, (2015), Pakistan. Mhanna and Al-Ammar (2017) from Syria. Ramadan (2011) Jordan. Al-Damir (2014) from Gulf Cooperation Council (GCC) Countries consists of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirate (UAE). Likewise, Wasiuzzaman, and Tarmizi (2014) and Sahari and Ubaidillah (2017) from Malaysia.

Furthermore, the evidence obtained from the review of this related literature has led to many questions; What factors determine the performance of which Islamic banks, as the bank's responses differently to most of the factors. For instance, Jordan Ramadan (2011) found that Islamic banks are positively responding to capital adequacy, deposit ratios, bank management efficiency and credit risk management, and negatively influenced by bank size, expenses management and non-interest earnings, while Obeidat, et al (2013), discovered another set of variables that include, market share and money supply (M2), cost of deposit, total deposit, total expenditure, restricted investment deposit and mudaraba loan, followed by total loans as the major factors influencing the performance of Islamic banks within the same country. From Pakistan Ijaz, et al (2015) Khan, et al (2014) and Kanwal and Nadeem (2013) found internal

bank-specific financial, operating and external economic factors that include operating efficiency, non-performing loans, banks size, leverage and consumer price index, real interest rate, GDP and inflation as the most important determinants of Islamic banks profitability in the Pakistan.

Equally, the same mixed pattern of behavior was reported by studies from Malaysia where Husain, et al (2015) found a positive relationship between Islamic banks performance and financial determinants, whereas to the contrary, Wasiuzzaman, and Tarmizi (2014), Khan, Ijaz, and Aslam (2014), and Kanwal and Nadeem (2013), found a negative relationship between deposit, asset quality, capital adequacy, and profitability, while bank size and liquidity were found to be positively associated with profitability. Additionally, this study was justified by the absence of studies on the issue of determinants of performance of Jaiz bank in Nigeria as well as its importance to the growth, development, and survival of the bank.

2. Literature Review

According to the Global Islamic Finance Markets report 2018, the Middle East and North Africa remain the major based and market host for Islamic banking as it has more than 14 % of banking assets in the region, while in the GCC countries the market share of Islamic Banking is up to 25%. This makes studies from the region to be of greater benefit in understanding the nature and dynamics of Islamic banking. Part of these studies includes but is not limited to the following; Ramadan (2011) in an empirical effort aimed at identifying the specific firms (Bank) internal and external variables that influence Islamic bank profitability in Jordan. Secondary data from the Central Bank of Jordan, Amman Stock Exchange, and Department of Statistics of Jordan were utilized in the study, where unbalanced panel regression was employed for the analysis. It was discovered that ROA (Performance variable) is significantly and positively influenced banks' management efficiency, capital adequacy, investment to deposit ratio, equity book value, and credit risk exposure. The study further documents that, bank size, expenses management and non-interest earning do not significantly affect profitability.

Equally, Obeidat, El-Rimawi, Masa'deh, Maqableh, and Al-Jarrah, (2013) conduct another study on the determinants of performance of Jordanian Islamic banks. The study attempts at identifying the most important internal and external factors influencing the profitability of Islamic banks in a country. The study collects secondary data from financial reports of the 2 Islamic banks operating in Jordan for the period 10 years 1997 to 2006. The dependent variable profitability was proxied by ROA, while Bank size, Capital adequacy ratio, Loan ratio, Total deposits over total assets ratio; Cost of deposit ratio, Total expenditure, Murabaha Loans ratio, defined as the total of funds invested in mark-up principle loans (Murabaha loans) as a percentage of total assets; Mudaraba Loans, defined as total funds invested in profit-sharing modes (Mudaraba or Musharaka) as a percentage of total assets; Ratio of direct-shared investments to total assets; Current account ratio, Unrestricted Investment Deposits Ratio, as independent variables in the study. Also, additional external factors were considered as part of explanatory variables which

includes; The market share ratio is employed and measured by the total bank deposits (excluding inter-bank deposits) as a percentage of the banking system total deposits; The rediscount interest rate (INT) which is declared by Central Bank of Jordan is employed; The consumer price index (CPI), measured by the percentage increase in CPI is employed.

After employing the appropriate pre estimation test multiple regression analysis was employed for the analysis, it found that, except for total loan the other five internal factors of total deposit ratio, cost of deposit ratio, total expenditures ratio, Mudaraba loan ratio, bank size, and Restricted investment deposits ratio all show a significant positive relationship with the bank's profitability. On the external determinants, it was revealed that money supply growth (M2) and consumer price index (CPI) are positively associated with ROA, but negatively correlated with market share and inflation, but the rediscount interest rate shows a positive, but insignificant correlation with profitability. In summary, the study concludes that the most important internal factor sensitive to profitability is the cost of deposit, total deposit, total expenditure, restricted investment deposit, and mudaraba loan, followed by total loans. On the external factors, market share and money supply (M2) is found to be the most positively influential, while the consumer price index and discounted interest rate show a positive but insignificant impact. Mhanna and Al-Ammar (2017) Impact on Bank characteristics on Financial Performance of Islamic Banks: Evidence from Syria. The study was aimed at determining whether the selected firms' characteristics have a significant effect on the financial performance of the sampled banks. In the study performance, the dependent variable was proxied by ROA and ROE, while capital adequacy, liquidity, deposit, bank size and efficiency as firm characteristics were considered as independent variables. A panel design in form of a fixed effect was utilized for the analysis. Deposit and efficiency were found to have a negative effect on ROA and ROE, while bank size turns out to have a positive influence on the two variables, Furthermore, liquidity and capital adequacy have a positive significance on ROA along at 10%. Although these studies used a diverge variables and are conducted at a different time using different samples and periods of coverage, they concord that, the financial performance of Islamic banks are determined by mostly by internal specific bank characteristics and external (economic) for factor.

Specifically, the studies found that the financial performance of Islamic banks is determined by management factors (management efficiency, expenses management), credit risk management (deposit, investment, and performance ratios) and financial ratios (liquidity, banks size and capital adequacy), However, the usual problem is what factors determine the performance of which Islamic bank as the bank's responses differently to most of the factors as shown by the studies. For instance, Ramadan (2011) found the banks are positively responding to capital adequacy, deposit ratios, bank management efficiency and credit risk management, and negatively influenced by bank size, expenses management and non-interest earnings, while discovered, deposit ratios, while Obeidat, et al (2013), discovered that, market share and money supply (M2), cost of deposit, total deposit, total expenditure, restricted investment deposit, and mudaraba loan, followed by total loans as the major factors influencing the performance of Islamic banks within the same country,i.e. Jordan.

Furthermore, Al-Damir (2014) attempted to determine the factors affecting the profitability of Islamic Banks in Gulf Cooperation Council (GCC) Countries which consist of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE). The study assessed the impact of both internal and external bank factors (characteristics) on the profitability of Islamic banks in GCC countries. Secondary data from financial reports of the sampled banks from the GCC countries. The study considered ROA, ROE, and net interest income (NIM) as dependent variables, while bank size, management efficiency, capital adequacy, loan, and asset management as internal factors; GDP and inflation as external factors all as the explanatory variables. Finally, a panel regression was used for the analysis. The study found a positive relationship between capital adequacy and asset management with all the profitability variables, while inflation only influences ROA and NIM. Also, GDP, loan, and management efficiency are found to be positive and significantly associated with ROE, Bank size was also identified to have a negative impact on the profitability of the banks.

Several studies were also conducted in Non-Arab-Asia countries that include; Malaysia, Pakistan and Bangladesh. Starting with Kanwal and Nadeem (2013) assess the extent to which some macroeconomic variables determined the profitability of Islamic banks in Pakistan. External Factors: inflation rate, real gross domestic product (GDP), and real interest rate on profitability indicators as independent variables, while return on assets (ROA), return on equity (ROE), and equity multiplier (EM) ratios as profitability measures were treated as dependent variables. Data on these variables were collected for 10 years (2001- 2010) and analyzed using pols fixed effect regression on a sample of 18 Islamic banks in the country. The study found that the real interest rate has a strong positive influence on all the profitability variables, followed by GDP with insignificant but positive influence, while inflation is negatively associated, the study opined that the three external factors have no substantial impact on the profitability of the banks. Therefore, less attention to bank policymaking is expected on these external factors due to their lack of significant effect on profitability.

In another study on the determinants of profitability of Islamic Banks in Pakistan, Khan, Ijaz, and Aslam (2014). Kanwal and Nadeem (2013) concentrated on internal bank-specific characteristics, where in addition to GDP, Capital Adequacy, Consumer price index, bank size gearing ratio, operational efficiency, asset management, asset composition, and non-performing loan were considered as independent variables. On the other hand, ROA, ROE and EPS were used as proxies for banks' performance. The study found that profitability (ROA) of Islamic banks in Pakistan is usually influenced by: Capital adequacy, non-performing loans, operating efficiency, deposits, and consumer price index. ROE and EPS on the other hand shows a positive relationship with asset management, gearing ratio, deposit, non-performing loan, while asset composition only affect NPS

Ijaz, Akmal, and Gillani, (2015). The study investigates the impact of some internal banks characteristics on the profitability of Islamic banks in Pakistan. Secondary data on bank's size, gearing ratio, operational efficiency, asset management, and capital adequacy ratios as

independent variables were scaled against return on asset (ROA) and return on equity (ROE) as performance measures for the period 2006-2013. To a certain extent the study agreed with Khan, Ijaz, and Aslam (2014), that ROE is influenced by operating efficiency, capital adequacy ratio, and leverage ratio, while ROE is affected by leverage (gearing) ratio, size of banks, operational efficiency, and asset management ratio, but the more significant effect was found with capital adequacy.

Two years later, Aslam, Inamullah, and Ismail (2016) using ROE and ROA as proxy's financial performance and classified the independent variables into internal factors: bank size, deposits and financing; market share as an industry-specific factor than; an external factor that include economic growth (GDP) and inflation rate. They established that financing & investment share, GDP, and Inflation have an insignificant effect on profitability, while bank Size and market share positively impact profitability whereas Deposits, GDP, and Inflation impacted negatively profitability. A bit more recent, Asadullah, (2017) makes another effort by collecting secondary data from a sample of 5 Islamic Banks operating in Pakistan for a period of 10 years (2006 to 2015). The study utilized liquidity, inflation, GDP, and bank size as independent variables, while ROA was chosen as a dependent, where panel regression with the help of STATA was employed for the analysis. The result of the analysis shows a significant relationship exists between Bank size, liquidity, and banks performance, while for liquidity it was discovered to positive, for bank size it was negative. on other hand, the external factors of GDP and inflation are haven insignificant relationship with the bank's profitability.

Malaysia is another Asia country that has a vibrant Islamic banking system and several studies on the determinants of profitability of banks that include but are not limited to the following have been conducted; Wasiuzzaman, and Tarmizi (2014). Using return on assets (ROA) as a proxy for profitability which was scaled against 7 independent variables that include; bank size, asset quality, operating efficiency, liquidity, capital adequacy, inflation and GDP. The study collects secondary data from 16 banks operating Islamic windows in Malaysia for 4 years 2005 to 2008 and OLS regression was employed for the analysis. It was discovered that operational efficiency, liquidity, GDP, and inflation have a positive relationship with profitability while asset quality and capital adequacy are negatively related to profitability. Moreover, bank size shows an insignificant effect on profitability. Based on these findings, the banks shall focus more attention on the internal characteristics to be more profitable as they turned out to be positively and negatively significant with the profitability except for bank size. In a similar study, Husain, Affandi, and Abdul Shukur, (2015). Utilizing also a sample of 16 Islamic banks operating in Malaysia for the 5 years (2008-2012) with the help of Pooled Generalized Least Method (PGLS) of analysis, contrary to many studies; Wasiuzzaman, and Tarmizi (2014), Khan, Ijaz, and Aslam (2014), and Kanwal and Nadeem (2013), they found a negative relationship between deposit, asset quality, capital adequacy, and profitability, while bank size and liquidity were found to be positively associated with profitability.

The findings of this study have to a certain extent also disagree with Sahari and Ubaidillah (2017) who conducted another study on Malaysian Islamic banks where they employed both internal and external characteristics for the period of 5 years 2011 to 2015, based on risk-return and signaling theories. Bank size, liquidity, credit risk, level of capital, and economic condition (GDP) as independent variables, while ROA and ROE as dependent variables in the study. A regression model was applied for the analysis. The study established a moderate relationship between the internal firm's characteristics, while GDP as an external factor has a significant association with the bank's performance.

Quan, Ramasamy, Rasiah, Yen, Pillay, (2017). Also assesses the determinants of Islamic bank's performance in Malaysia. The study unlike Husain, *et, al* (2015), Sahari and Ubaidillah (2017) and Wasiuzzaman, and Tarmizi (2014), collects data for 10 years from a sample of 10 Islamic banks operating in Malaysia. Similar to other studies, the study proxied banks' performance with ROA and ROE as dependent variables. The independent variables employed include bank size, capital adequacy, liquidity, credit risk, and management expenses as (internal factors) while inflation and Gross Domestic Product (GDP) are treated as external independents factors. Furthermore, fixed effect OLS regression was employed for the analysis.

The findings show only capital adequacy and inflation significantly affect the Islamic bank's performance. However, bank size, liquidity, credit risk, management expenses, and Gross Domestic Product were found to be insignificantly affecting the Islamic bank's performance. The analysis was carried out by applying ordinary least square model (OLS) regression and the fixed-effect model. According to the findings of the study inflation and capital- adequacy was found to be the most significant factors affecting the performance of Islamic banks in Malaysia within the period. While liquidity, expense management, bank size, GDP, and credit risk were found to be insignificant. The study called on investors and bankers to improve the level of the investment, deposits to improve the capital of banks and also mitigate the effect of inflation in the decision-making processes.

Samail, Zaidi, Mohamed and Kamaruzaman, (2018), also attempted to unveil the determinants of Islamic bank's financial performance in Malaysia. They collect secondary data from financial reports of 12 sampled Islamic banks in the country for a period of 6 years 2010 to 2015. In the study financial performance as, the dependent variable was measure by ROA which was scaled against three independent variables that include asset quality, capital adequacy and liquidity management (internal factors). After conducting the necessary pre and post-estimation test pool OLS regression was employed for the analysis. It reveals that asset quality is the most important determinant of profitability followed by liquidity management, while capital adequacy shows no relationship with financial performance. The mixed nature of findings of these studies from Malaysia may not be unconnected with variation in sample size, the period covered by the study and sources of data used by the studies. For instant, Wasiuzzaman, and Tarmizi (2014), utilized a sample of 16 banks, while Samail, et, al (2018) used only a sample of 10 banks. For the period covered by the study, only Quan, et al (2017) covered 10 years period while, Sahari and

Ubaidillah (2017) and Husain, et al (2015) cover 5 years only. However, this lack of consensuses among the studies from Malaysia as a country justifies the need for more studies from other economies where Islamic banking is been practice.

Bangladesh has been identified as one of the Asia countries that practice Islamic Banking in addition to Malaysia, from where Noman (2015), investigates the effect of macroeconomic variables on the profitability of Islamic banks in the country. Secondary data from financial reports of a sample of 8 Islamic banks operating in Bangladesh were utilized in the study covering a period of 10 years (2003 to 2013), considered ROA, ROE, and net interest margin as dependent variables, while credit risk ratios of nonperforming loan to gross loan, equity to total asset, capital adequacy (liquidity) ratios, the cost to income ratio (cost efficiency) loan to total assets, they also include real GDP growth rate (GDP), inflation rate (INF), real interest rate (RIR) and stock market turnover (STV) as independent variables. For the analysis, pool-penal regression and general motion moment were employed. The results indicate ROA to be the most prepared measure of profitability. profitability of Islamic Banks in Bangladesh was significantly affected by the firm-specific variables of bank size, equity capitalization, investment, and cost efficiency and also On the risk ratios, it was found that the profitability of the banks is positively influenced by the rate of loan ratio, cost efficiency and credit risk management, while the negative association was discovered with equity capitalization. The result suggests that Islamic banks in Bangladesh need to improve credit risk management, portfolio management, cost efficiency and reduce the reliance on equity capitalization to improve their profitability. Furthermore, the relationship between real GDP growth rate, stock market and profitability was found to be negative, while a positive effect was also discovered between inflation, interest rate and profitability. The overall macroeconomic variables are found not to be significantly affecting the profitability of the banks.

Chowdhury and Rasid (2015) attempted to empirically review the determinants of Islamic banking performance across Africa and Asia as the most hots communities for Islamic banking in the world. The study collects data on banks specific, macroeconomic, and industry characteristics from 44 Islamic banks operating across the two regions for the year 2013. ROA was utilized as dependent variables, while inflation, GDP, natural log total asset, equity to total asset, total loan to total asset, the cost to income ratio and loss loan provision to the total asset. A dummy variable 1 for Africa and 0 for Asia was introduced in the model. The study confirmed a significant impact of equity financing operational efficiency (cost to income) and capital adequacy on the profitability of Islamic banks. Meanwhile, liquidity and quality of assets are not significant. For the banks to be profitable they need to increases their equity financing instead of debt, the banks shall focus attention on contacts such as Mudaraba and Musharaka that are based on risk-sharing principles rather than debt financing. The banks recommended improving on loan management through improvement on loan screening, monitory and control. To be profitable, Islamic are required to be more conscious of macroeconomic variables of GDP and inflation in their decision-making process. also need to reduce expense.

In summary, these agreed that internal factors of bank-specific factors that include operating efficiency, non-performing loans, banks size, leverage and consumer price index as the most important determinants of Islamic banks profitability. On the other hand, external factors such as real interest rate GDP and inflation do not have much influence on the profitability of Islamic banks in the country.

3. Research Method

The study collects time-series data from financial reports of Jaiz Bank limited for a period of 8 years (2011 to 2018). The data collected covers financial performance parameters of Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI) on one hand banks internal factors of credit risk, capital adequacy, cost efficiency and deposit ratio. Another set of time series on Gross Domestic Product (GDP), Interest Rate and Inflation was also collected for the same period of 8 years (2011 to 2018) from UNDP. In addition to descriptive test ordinary least square (OLS) regression and correlation after the conduct of Heteroskedasticity Test.

However, to determine the factors that influence the financial performance of Jaiz bank limited, the performance ratios of ROA, ROE and ROI were considered as dependent variables, while credit risk, capital adequacy, cost efficiency, deposit ratio, GDP, Interest Rate and Inflation as independents variables, which were presented in 6 econometric models as follows;

$$ROA_t = \beta_0 + \beta_1 CRT\ rst_t + \beta_2 COST\ eff_t + \beta_3 Dept\ rt_t + \beta_4 Cap\ ade_t + \varepsilon_t \quad \ldots\ldots 1$$

$$ROE_t = \beta_0 + \beta_1 CRT\ rst_t + \beta_2 COST\ eff_t + \beta_3 Dept\ rt_t + \beta_4 Cap\ ade_t + \varepsilon_t \quad \ldots\ldots 2$$

$$ROI_t = \beta_0 + \beta_1 CRT\ rst_t + \beta_2 COST\ eff_t + \beta_3 Dept\ rt_t + \beta_4 Cap\ ade_t + \varepsilon_t \quad \ldots\ldots 3$$

$$ROA_t = \beta_0 + \beta_5 GDP_t + \beta_6 INF_t + \beta_7 INT\ rt_t + \varepsilon_t \quad \ldots\ldots 4$$

$$ROE_t = \beta_0 + \beta_5 GDP_t + \beta_6 INF_t + \beta_7 INT\ rt_t + \varepsilon_t \quad \ldots\ldots 5$$

$$ROI_t = \beta_0 + \beta_5 GDP_t + \beta_6 INF_t + \beta_7 INT\ rt_t + \varepsilon_t \quad \ldots\ldots 6$$

Where ROA = is the returns on assets, it is giving by Net income divided by total assets

ROE= Return on equity is expressed as net income divided by total equity

ROI= Returns on an investment expressed as earnings before interest and tax divided by total assets

CRT rst. = Stand for credit risk, it is expressed as non-performing loans divided by gross loan

Cost eff. = Cost efficiency expressed as cost/income

Dept. rt= Deposit ratio, it is expressed as total deposit divided by total assets

Cap. Ade= Capital Adequacy is equity divided by total assets

GDP= Gross Domestic Product

INF= inflation rate

INT= interest rate

4. Results and Discussion

This section presents the out of descriptive and regression analysis conducted to determine the effect of bank-specific and economic variables on the profitability of Islamic bank

4.1 Result of Descriptive Statistics Result

Table 1 provides results of the descriptive test conducted on the three-dependent variable, i.e. return on assets (ROA), return on equity (ROE), and return on investment (ROI) on one hand, and independent variables that include external economic variables which include; Gross domestic product (GDP), inflation rate and interest rate and internal bank-specific variables that include; capital adequacy, credit risk, cost efficiency and deposit ratio on the other hand.

Table 1. Descriptive Statistics Result for Dependents and Independent Variables

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Obs.
ROA	-0.003	0.0061	0.01729	-0.0516	0.0250	-1.194	2.9879	1.6633	0.4353	-0.021	0.0037	7
ROE	0.0195	0.0392	0.07979	-0.0721	0.0640	-0.6768	1.7667	0.9780	0.6132	0.1366	0.0245	7
ROI	-0.0107	0.0051	0.01508	-0.0755	0.0342	-1.1702	2.7437	1.6167	0.4455	-0.075	0.0070	7
GDP	6.71E+13	6.87E+13	7.05E+13	5.99E+13	3.83E+12	-1.0835	2.7278	1.3912	0.4987	4.70E+14	8.78E+25	7
Inflation Rate	11.722	12.094	16.5235	8.0624	3.4243	0.3108	1.5841	0.6974	0.7055	82.059	70.356	7
Interest Rate	8.0929	7.9988	9.37281	7.2031	0.8088	0.3370	1.8926	0.4901	0.7826	56.650	3.9253	7
Capital Adequa	0.2835	0.2167	0.7156	0.1208	0.2014	1.6180	4.2399	3.5029	0.1735	1.9849	0.2434	7

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Credit Risk	0.0452	0.0282	0.1086	0.0000	0.0400	0.4257	1.7607	0.6593	0.7191	0.3167	0.0096	7
Cost Efficiency	2.2821	0.8905	9.1064	0.7926	3.0721	1.8855	4.7785	5.0702	0.0792	15.974	56.627	7
Deposit Ratio	0.6514	0.7356	0.7839	0.2330	0.1955	-1.611	4.1809	3.4348	0.1795	4.5600	0.2293	7

Table 1 shows an average negative ROA of -0.0030 and ROI of -0.010, these indicate a lack of profitability about assets employed by the bank and returns from the bank's investment. The ROE shows an encouraging average figure of 1.95% which is above the accepted percentage of 1.22% for a bank with less than $ 1 billion in the total asset. This is because the bank was in its early days to the extent that returns generated cannot cover its assets and investments. The GDP shows an average of 6.71 after log with an inflation rate of 11.72 % and the average interest rate which are all above the normal rate of 1 to 3 %. Notwithstanding the age of the bank, it still shows an average positive value of 28% for capital adequacy, 45 for credit risk 2.28 times for cost efficiency, and 65% deposit ratio. The Table also shows negative skewness for five variables of ROA, ROE, ROI, GDP, and deposit ratio, meaning the data for these variables are skewed toward the left, this may not be unconnected with the fact that the data was generated from a single sample, i.e. Jaiz bank. While the 3.1 and 3.37 % skewness indicates a right tail for the data. On the Jarque-Bera result even though not close to zero, but still non-negative, which indicates a normal distribution match between skewness and kurtosis.

4. 2 Results of Correlation Test

The Correlation Test was conducted for all the variables (dependent and independent) to determine whether there is a relationship among them.

Table 2. Correlation

	Capital Adequacy	Credit Risk	Cost Efficiency	Deposit Ratio	Gross Domestic Product	Inflation Rate	Interest Rate	ROA	ROE	ROI
Cap. Ady	1.0000	-0.6927	0.9764	-0.9853	-0.9479	-0.1510	0.2619	-0.9062	-0.7731	-0.9296
C. Risk	-0.6927	1.0000	-0.5558	0.7171	0.6558	0.7752	0.0259	0.4686	0.4404	0.6171
Cost. Eff	0.9764	-0.5558	1.0000	-0.9590	-0.9184	-0.0155	0.2441	-0.9373	-0.7650	-0.9274
D. Ratio	-0.9853	0.7171	-0.9590	1.0000	0.9148	0.1987	-0.1273	0.8561	0.6991	0.8959
G. D. P.	-0.9479	0.6558	-0.9184	0.9148	1.0000	0.1749	-0.3967	0.9572	0.9249	0.9866
In. Rate	-0.1510	0.7752	-0.0155	0.1987	0.1749	1.0000	0.3906	-0.0134	0.0390	0.1672
In. Rate	0.2619	0.0259	0.2441	-0.1273	-0.3967	0.3906	1.0000	-0.4361	-0.6140	-0.3640
ROA	-0.9062	0.4686	-0.9373	0.8561	0.9572	-0.0134	-0.4361	1.0000	0.9298	0.9804
ROE	-0.7731	0.4404	-0.7650	0.6991	0.9249	0.0390	-0.6140	0.9298	1.0000	0.9279
ROI	-0.9296	0.6171	-0.9274	0.8959	0.9866	0.1672	-0.3640	0.9804	0.9279	1.0000

The result of the correlation test in Table 2 indicates positive 1 which means a perfect correlation among the variables

4.3 Result of Regression Analysis

In this section results of regression analysis between the three dependents variable of ROA, ROE and ROI and seven independent variables were presented in Table 3 and 4. Table 3 shows regression results of GDP, inflation and interest rate as independent variables runs against ROA, ROE and ROI as dependent variables, while Table 4 provide regression results between the dependent variables (ROA, ROE and ROI) and four bank-specific internal independent variables that include; capital adequacy, credit risk, cost efficiency and deposit ratio.

Table 3 Regression Result between dependent variables and external economic independent variables

Independent Variable	Dependent Variables		
	ROA Coeffisien	ROE Coeffisien	ROI Coeffisien
GDP	6.62E-15 (0.0067)	1.34E-14 (0.0221)	9.04E-15 (0.0026)
Inflation Rate	-0.001527 (0.2587)	0.000317 (0.9319)	-0.000283 (0.8103)
Interest Rate	0.001456 (0.7893)	-0.023948 (0.2204)	0.002030 (0.7071)
Diagnostic Tests			
R Square	0.951335	0.928032	0.974793
Adjusted R Square	0.902669	0.856064	0.949587
F-Statistic	19.54848 (0.017957)	12.89504 (0.032059)	38.67215 (0.006742)
Jarque-Bera	0.046226 (0.977152)	0.856115(0.651774)	0.570230 (0.751928)
Serial Correlation LM	3.268379 (0.1951)	3.413792 (0.3574)	3.906278 (0.1418)
Heteroskedasticity Test	1.252671 (0.4287)	1.252671 (0.4287)	1.129026 (0.4614)

***Source**: Author's calculation (2020). **Note;** The figures outside the bracket are the coefficient of the regression while the figures in the bracket are the probability value.*

The Diagnostics result from Table (3) indicates an adjusted R square value of 0.902669, 0.856064, and 0.974793. Approximately, the three models are 90%,85%, and 94% correct in predicting the relationship between the dependent and independent variables in the analysis, and since the values are above 60% then the null hypothesis for the test is maintained. Similarly, the same null hypothesis cannot be rejected for the F- Statistics as it shows a p-value of (0.017957), (0.032059), and (0.006742) for the three models of ROA, ROE and ROI individually, which are all significant at less than 5% and this confirmed the independent variables can jointly predict the dependent variable.

Moreover, the Jarque-Bera test for normality of residual shows,98%, 65% and 75% which are more than 5% significant values. This implies that the residuals are normally distributed in the models. The serial correlation results also display a higher P-value of 19%, 35% and 14% which are all above the 5% level of significance. This indicates the absence of serial correlation among the residuals in the models. The same pattern was also discovered in the heteroskedasticity test, it shows homoscedastic among the residual because the models reveal a probability value of 42%, 42%, and 46 % separately, i.e. more than 5% significant level.

However, the regression results as contained in Table 4 shows GDP as an independent variable has a p-value of 0.0067 for ROA, 0.0221 for ROE, and 0.0026 for ROI which are all less than a 5% level of significance. In essence, GDP as an external economic factor influenced the financial

performance of Jaiz bank to the extent that, a single percentage change in GDP positively led 6.62 % percentage change in ROA, 1.34 % in ROE, and 9.04 % change ROI correspondingly. On the other hand, inflation rate and interest rate have a p-value of (25, 78%), (93,22%) (81,70%) for ROA, ROE, and ROI respectively that are all above the 5% level significant which suggest the variables have no influence the bank financial performance.

Table 4 Regression Result between dependent variables and Bank Specific (Internal) Independent Variables

Dependent Variables / **Independent Variable**	**ROA Coefficients**	**ROE Coefficients**	**ROI Coefficients**
Capital Adequacy	-0.065701 (0.3525)	-0.613430 (0.2012)	-0.037031 (0.5446)
Credit Risk	0.090663 (0.3545)	-0.624118 (0.2673)	-0.099069 (0.3430)
Cost Efficiency	0.045839 (0.0889)	-0.096730 (0.2024)	-0.029212 (0.1449)
Deposit Ratio	-0.081216 (0.2117)	-0.201517 (0.3833)	-0.029212 (0.4349)
Diagnostic Tests			
R Square	0.997832	0.992392	0.994923
Adjusted R Square	0.989160	0.961960	0.974615
F-Statistic	115.0675 (0.069791)	32.61051 (0.130503)	48.99236 (0.106698)
Jarque-Bera	0.400303 (0.818607)	0.400303 (0.818607)	0.400303 (0.818607)
Serial Correlation LM			
Heteroskedasticity Test	1.539855 (0.5345)	1.539855 (0.5345)	1.539855 (0.5345)

***Source**: Author's calculation (2020). **Note;** The figures outside the bracket are the coefficient of the regression while the figures in the bracket are the probability value.*

The regression results from Table 4 indicate among the four independent variables of Deposit ratio, credit risk and capital adequacy only cost efficiency has a significant influence on ROA at an 8% level of significance which is not a strong effect. This weak and absence of influence among the independent variables on the dependent variables may not be unconnected with the age of the bank which is still young (less than 10 years) compared to some of the big money deposit banks in the country which were in operation for more than 5 decades. Furthermore, the results of the diagnostic tests show a higher adjusted R square above 60%, absence of serial correlation, normality of residuals distribution, homoscedastic and correctness, and ability of independent variables to jointly predict or influence the dependent variables, in a nutshell, the

models are appropriate. From here it can be deduced that GDP as an external factor has a significant positive effect on the financial performance (ROA, ROE, and ROI) of Jaiz bank, whereas inflation and interest rate were discovered to not affect the banks' financial performance. Cost efficiency was revealed to have a weak positive effect on ROA only, while capital adequacy, credit risk and deposit ratio do not affect either of the dependent variables.

This result has disagreed with the findings from several previous studies that include; Pakistan Ijaz, et al (2015) Khan, et al (2014) and Kanwal, Nadeem (2013), Obeidat, et al (2013), and Ramadan (2011), who established that Islamic banks financial performance is positively influenced by GDP, inflation rate interest rate (as external economic factors) as well as capital adequacy, deposits ratio, credit risk and cost-efficiency. However, notwithstanding the unexpected nature of this result, the study has occurred with some previous studies that include; Wasiuzzaman, and Tarmizi (2014), Khan, Ijaz, and Aslam (2014), and Kanwal, Nadeem (2013) and Noman (2015) who on the overall found neither economic no bank-specific variables to have a significant effect on the Islamic bank's performance. This agreement maybe as a result of the nature of the data which was down from a single sample bank, the age of the bank which is still less than a decade, the nature of the bank operating income, i.e. profit-sharing instead of interest income.

5. Conclusion

The result suggests that Islamic banks in Nigeria need to improve credit risk, portfolio management, cost efficiency and reduce the reliance on equity capitalization to improve their profitability. On the economic determinants, the study suggests that Islamic banks have given enough emphasis on economic policies as their profitability may be responding to these variables over time. More studies are also to compare the determinants of Islamic banks with that of Money Deposit Banks and covering more bank-specific and economic variables in the country.

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