

INTERNAL AND EXTERNAL FACTORS AFFECTING ISLAMIC BANKS PERFORMANCE IN NIGERIA

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ABSTRACT

The purpose of the paper is to analyze the internal and external factors affecting the performance of Islamic banking in Nigeria. The study is quantitative research that applies generalized least square (GLS) regression to measure the effect of independent variables on the dependent variables. Data is generated from the published financial statements of the bank from the year of inception, 2012 to 2020. The dependent variables used to measure the performance are return on assets (ROA) and return on equity (ROE). The independent internal variables are measured using the financial deposit ratio (FDR) and operational efficiency ratio (OER), while the external factors are measured using gross domestic product (GDP) and inflation. The findings for the internal factors show that FDR has a positive and significant effect on performance, indicating the availability of liquidity when required by depositors. OER also showed a significant positive effect on ROA and ROE, meaning that high operational efficiency can increase efficiency and performance. Meanwhile, the external factor, GDP, shows a significant negative effect on performance, implying that an increase in GDP per person will increase the population, decreasing real GDP. More so, inflation also shows a negative and significant effect on performance, implying that when there is inflation, the central bank increases the interest rate to slow down the inflation rate. However, interest is not permissible in an Islamic bank's operation, hence not affecting its performance.

INTRODUCTION

Non-interest banking and finance generally came into the limelight in the 1960s after it was ignored by Muslims and Islamic states for centuries, mostly due to colonialism and capitalism's growth (Ahmad, 1984). Since then, Islamic banking has grown fast and generated many studies and research globally. This growth has been supported by banks' presence in nearly 72 countries and about 520 Islamic banks across the globe (Muhammad & Yusoff, 2021), including the United States of America, the United Kingdom, Canada, the GCC Countries, Malaysia, China, South Africa, Nigeria, Kenya, Sudan, and others with windows in some leading Global Banks like Citibank and HSBC.

The pioneer Islamic banks started in Mit-Ghamr, Egypt, in 1963, then followed by Nasser Social Bank also in Egypt in 1972 (Ahmad, 1987). However, the continuous occurrence of the global financial crisis has made individuals and corporations seek an alternative to conventional financing, with the industry projected to reach \$3.69 trillion by 2024 (Islamic Finance Development Report, 2021).

In Sokoto, Nigeria, the International Islamic Economic Conference held in 1985 triggered much research on Islamic banking and finance. More so, having one of the largest Muslims in sub-Saharan Africa, with about 54% of its population as Muslims (CIA Factbook, 2021), which is about 110 million people, shows the presence of a huge market for Islamic banking. In 2003, Jaiz International Plc was formed by a merger of Halal Group and Jaiz Group with a common goal of establishing non-interest banking. In 2012, Jaiz started operation as a fully-fledged regional non-interest financial service provider licensed by the Central Bank of Nigeria (CBN). After that, several banks provided non-interest windows, such as Key Stone Bank (former Habib Bank), Stanbic IBTC, Guarantee Trust Bank, and Sterling Bank. However, Taj bank, another non-interest banking was established in 2019, now making two fully-fledged banks in Nigeria with several non-interest banking windows.

Islamic banking in Nigeria has been growing steadily, as shown in Figure 1, in terms of assets and customer deposits. These Islamic banking's assets are growing from \$89.72 million in 2012 to \$613.11 million by 2020, and customer deposits are rising from \$20.91 million in 2012 to \$460.66 million in 2020. Figure 1 revealed the bank's profit, but it is not high enough compared to its assets and customer deposits. However, it is pertinent to note that the main goal of Islamic banking is to achieve economic and social welfare (Saleh & Zeitun, 2006).

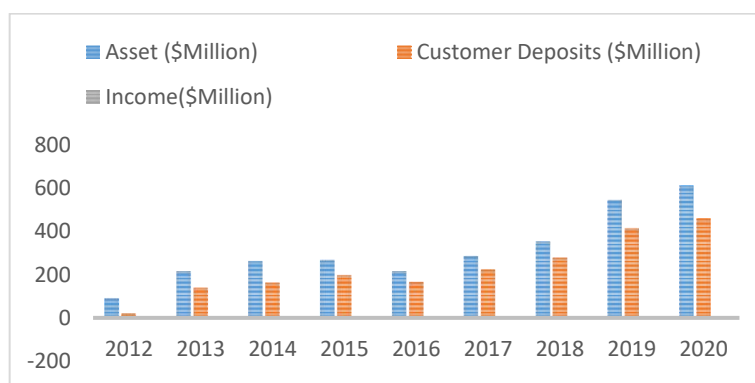


Figure 1. Bank Asset, Deposit, and Income Growth of Jaiz Bank

Source: Jaiz Bank Annual Report

Bank performance assessment is an essential tool in understanding and assessing the achievement or otherwise of an institution. Despite having a large Muslim population, Nigeria has only two fully-fledged Islamic banks, namely Jaiz Bank and Taj Bank; it is essential to understand its performance. The slow phase in the

growth of the Islamic banking industry in Nigeria triggered the need to examine the internal factors and external factors that can affect the performance of Islamic banking in a country with the fifth largest Muslim population in the world after Indonesia, Pakistan, India, and Bangladesh. The study's objective is to understand internal and external factors that affect the performance of Islamic banks in Nigeria using the only Islamic banks with more than five years of financial record at the time of this research. There are similar studies in Indonesia which have a majority of its population as Muslims. However, this study is unique to Nigeria, a country with only a mixed population of different religions, nonetheless with considerable potential in Islamic banking, which is duly underrepresented.

This research will contribute immensely to understanding the external factors (at the macroeconomics level) and internal factors (within the bank) that influence the performance of Islamic banks in Nigeria. The findings of this study can be of great benefit to management in setting strategic policies that can help in mitigating risk and which will improve performance. Also, the study gives good acumen to policymakers and regulators to improve the effectiveness and profitability of Islamic banking in Nigeria.

LITERATURE REVIEW

Theory Development

The study uses the classical growth and Keynesian theories to understand the macroeconomics concept. The classical growth theory hypothesized that an increase in the gross domestic product (GDP) per person could lead to an increased population and hence decrease real GDP. On the other hand, the Keynesian theory stipulates that a functioning government monetary policy can affect aggregate spending, which in turn affects inflation.

The modern portfolio theory (MPT) is used to understand internal factors. The theory recommends how banks diversify their portfolios to optimize their returns. In the long run, using MPT provides a higher rate of return for the banks, with the primary objective of developing the ideal investment portfolio that produces the highest rate of return while mitigating risk.

Previous Study

There are several studies on Islamic bank performance across the globe, with a concentration in the Gulf Cooperation Council (GCC) countries, such as Pakistan, Bangladesh, Malaysia, and Indonesia. Islamic banks differ from conventional banks in the prohibition of *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling). Furthermore, the objective of Islamic banking is to provide beneficial products that will bring about justice, equity, and fairness.

There are many types of literature about conventional banks' performances all around the globe over the years. However, the literature on Islamic banks has

been gaining attention recently due to the growth of the industry. In measuring the performance of Islamic banks, Akhter et al. (2011) examined their efficiency and compared them to conventional banks in Pakistan. The finding shows no difference in the profitability and income statements of Islamic and conventional banks.

Akhter et al. (2011) examined the efficiency and performance of Islamic banks compared to conventional banks in Pakistan. The findings show that there is no difference in profitability and income statements between the two banks. Bilal et al. (2013) examined the effect of bank specifics and macro-economic factors on the profitability of commercial banks in Pakistan. They found that bank size, net interest margin (NIM), GDP, and production growth rate have a positive and significant effect on performance. While non-performing loan to total assets and inflation has a negative and significant effect on performance. Tanko et al. (2016) analyzed the performance of the only Islamic bank in Nigeria using data envelopment analysis (DEA) and financial ratio analysis. The result shows that Islamic banks in Nigeria have performed better than some conventional banks in utilizing their resources.

There are several studies on internal and external factors as determinants of bank performance (Dietrich & Wanzenried, 2014; Muda et al., 2013; Ramadan et al., 2011). Hanif et al. (2012) compared the performance of Islamic banks and conventional banks in Pakistan using external (customer behavior and perception) and internal (profitability, liquidity, credit risk, and solvency) factors. The findings suggested that the profitability and liquidity of conventional banks are higher than Islamic banks, while credit risk management and solvency maintenance of Islamic banks is higher than conventional banks.

The financial deposit ratio (FDR), as explained by Hasbi and Haruman (2011), is a ratio that shows the ability of a bank to pay depositors' withdrawals. Yulianto and Solikhah (2016) analyzed the influence of FDR and non-performing loans (NPL) on *mudharabah* deposits of the Indonesian Islamic bank. The findings showed that NPL affected *mudharabah* while FDR did not. More so, the customers focus more on Islamic compliance than profits.

On the other hand, the operational efficiency ratio (OER) measures the ability of a bank to generate income from a specific asset. The findings of Muda et al. (2013) reported a positive and significant relationship between OER and performance. However, Francis (2013); Kosmidou et al. (2005) found a negative relationship. In line with these findings, the following hypotheses were developed.

H₀: Internal factors do not significantly influence Islamic banks' performance in Nigeria.

H₁: Internal factors significantly influence the performance of Islamic banks in Nigeria.

On external factors, Bilal et al. (2013) examined the effect of bank specifics and macro-economic factors on the profitability of commercial banks in Pakistan. They found that bank size, NIM, GDP, and production growth rate have a positive and significant effect on performance, while the non-performing loan to total assets and inflation negatively and significantly affect the performance. Setyawati et al. (2017) studied the internal and external factors affecting the performance of Islamic banking in Indonesia. The findings showed that Islamic banks' performance was significantly affected by non-performing finance and inflation. In addition, the performance of Islamic banks is relatively better after the crisis. Istan and Fahlevi (2020) also studied the effect of internal and external factors on the performance of Islamic banks in Indonesia. The results showed that GDP positively and significantly affected Islamic banks' performance, while FDR was positive but insignificant. Meanwhile, inflation negatively and insignificantly affected the performance of Islamic banks, and OER negatively but significantly affected the performance of Islamic banks in Indonesia. In line with these findings, the following hypotheses were developed.

H₀: External factors do not significantly influence Islamic banks' performance in Nigeria

H₂: External factors significantly influence the performance of Islamic banks in Nigeria

Bank size was used as a control variable, and the natural logarithm total asset of the bank was used as the bank size. Ameur and Mhiri (2013) mentioned that larger banks are more capable of attaining economies of scale, lowering costs, and increasing performance. The findings of Khan et al. (2013); Rao and Lakew (2012) asserted that bank size positively affected performance. However, the study of Ameer and Mhiri (2013) found a negative relationship between bank size and performance.

Therefore, this study will use internal and external factors to measure the performance of Islamic banks in Nigeria. The performance will be measured using the most widely used measure of performance (ROA and ROE) so that the research will have a broader view of performance. Internal factors will be measured using FDR and OER as the internal measures, and the external factors using GDP and inflation in order to achieve the objective of this study.

RESEARCH METHODS

The study used quantitative descriptive research to achieve the research objectives. Quantitative research collects and analyzes data that uses numerical data to find statistical relationships between variables. On the other hand, descriptive research is designed to find evidence of a scientifically defined situation. Therefore, quantitative descriptive research aims to seek answers to real-life phenomena.

The population of this study is fully-fledged Islamic banks in Nigeria, including Jaiz Bank and Taj Bank. However, only Jaiz bank was used for the study because of the unavailability of data in Taj bank, as it is just in its second year of operation. The data used for the study is secondary data, which is obtained from the annual reports of Jaiz bank. Both dependent and independent (internal factors) variables are obtained from the bank's annual report from inception in 2012 to 2020. At the same time, the external variables were from the World Bank database. STATA statistical package was used in data analysis. The variables are explained below:

Table 1
Summary of Variables

Variables	Category	Symbol	Definition
Return on Asset	Dependent	ROA	Net Income/Total Asset
Return on Equity	Dependent	ROE	Net Income/Shareholder's Equity
Financial Deposit Ratio	Independent (Internal)	FDR	Loan/Deposit
Operational Efficiency Ratio	Independent (Internal)	OER	Operating Expenses/Revenue
Gross Domestic Products	Independent (External)	GDP	Country's Gross Domestic Products
Inflation	Independent (External)	INF	Country's Inflation

Source: Several Literature Edited by Author

A Generalized Least Squared (GLS) regression was employed to examine the relationship between internal and external factors with performance. A GLS is a statistical technique used to estimate unidentified parameters in a linear regression model with the existence of relationships between variables. GLS is known to tackle the problem of heteroskedasticity, outliers, and bias in data, unlike OLS, which only gives a robust result when there are no missing values and outliers in data. A simple GLS is shown as:

$$Y = \alpha + \beta\chi \dots\dots\dots(1)$$

However, this study used more than one independent variable. Therefore, the model is stretched to contain the remaining variables as follows:

$$Y_i = \alpha + \beta_1\chi + \beta_2\chi + \beta_3\chi + \beta_4\chi + \beta_5\chi + \epsilon_i \dots\dots\dots(2)$$

Note: Y = dependent variable; α = the intercept, which signifies the value of the independent variable when the dependent variable is zero; β = the n coefficient for the dependent variable (χ), which indicates the change in Y that is associated with the change in χ ; χ = is the independent variable; ϵ = the error term.

The model used for the study is further detailed below:

$$\text{Performance} = \alpha + \beta_1 \text{Financial Deposit Ratio} + \beta_2 \text{Operational Efficiency Ratio} + \beta_3 \text{GDP of Country} + \beta_4 \text{Inflation Rate of Country} + \epsilon_{it} \dots\dots\dots(3)$$

Note: Performance use ROA and ROE measurement as independent variables; α = fixed variable; β_1 - β_4 = coefficient of independent variables; i = number of banks; t = period for the study, from year 2012 – 2020; ϵ = error term.

RESULT AND ANALYSIS

Descriptive statistics have been conducted as the first data processing. Table 2 below shows the mean of 6.2144, meaning that the ROA of Islamic banks in Nigeria is approximately 6.2%. The minimum and maximum are -7.05 and 18.34, respectively. The mean of 0.6522 shows that the ROE of the Islamic banks in Nigeria is approximately 0.65%, with a minimum and maximum of -3.09% and 1.87%, respectively. The mean of FDR is 0.562, and the minimum and maximum are 0.4292 and 0.7725. The mean of 2.459156 was recorded for OER with a minimum of 0.5187 and a maximum of 14.975. At the same time, GDP and IFL have a mean of 2.37664 and 11.6503, respectively.

Table 2
Descriptive Statistics

	ROA	ROE	FDR	OER	GDP	IFL	BS
Mean	6.2144	0.6522	0.5625	2.4591	2.3766	11.6503	9.3329
Maximum	18.34	1.87	0.7725	14.975	6.671	16.523	9.787
Minimum	-7.05	-3.09	0.429	0.518	-1.794	8.062	8.426
Std. Dev.	8.083033	1.54533	0.1158759	4.709579	3.030489	2.969041	0.4189203
Observations	9	9	9	9	9	9	9

Source: Data Processed by STATA

Correlation Matrix

The correlation between the dependent and independent variables is presented in Table 3 below. It shows the relationship between all pairs of variables in the regression model, the relationship between all explanatory variables individually with explained variable, and the relationship between all the independent variables. The test gives an insight into the magnitude of the pairs of the independent variables.

Table 3
Correlation Matrix of the Dependent and Independent Variables

	ROA	ROE	FDR	OER	GDP	IFL	BS
ROA	1.0000						
ROE	0.7920	1.0000					
FDR	-0.2110	0.3765	1.0000				
OER	-0.3540	-0.2336	0.0885	1.0000			
GDP	-0.5198	-0.4225	0.1863	0.2828	1.0000		
IFL	0.0045	0.1026	-0.0002	0.0396	0.6981	1.0000	
BS	0.3919	0.0204	-0.4231	-0.3551	-0.2838	0.2370	1.0000

Source: Data Processed by STATA

Table 3 shows the correlation coefficients on the relationship between the dependent variable (ROA and ROE), both internal (FDR and OER) and external (GDP and inflation) independent variables, as well as the control variable (bank size). The values of the correlation coefficient range from -1 to 1. The correlation results presented in Table 3 also show that the explanatory variables (FDR, OER, and GDP) are negatively correlated with ROA. In contrast, inflation and bank size are positively correlated. On the other hand, FDR, inflation, and bank size are positively correlated with ROE, while OER and GDP are negatively correlated with ROE.

Regression Result

GLS regression results are shown in Table 4 for ROA and ROE, respectively, showing both dependent and independent variables.

Table 4
Regression Result for ROA

ROA				
Variables	Coef.	Std. Err.	t	P> t
FDR	9.2138	28.8652	0.32	0.077
OER	0.1549	0.7384	0.21	0.085
GDP	-2.7283	1.5341	-1.78	0.173
IFL	-2.1868	1.5329	-1.43	0.249
BS	7.3311	8.5594	0.86	0.045
_cons	-35.8084	85.3153	0.42	0.007
Obs Parm	9			
R-squared	0.6172			
F	2.97			
P-Value	0.05471			
ROE				
Variables	Coef.	Std. Err.	t	P> t
FDR	8.1982	6.023308	1.36	0.0267
OER	0.0171	.1540715	0.11	0.919
GDP	-0.4578	3201288	-1.43	0.248
IFL	-0.2959	.3198895	-0.93	0.423
BS	0.6600	1.786091	0.37	0.0736
_cons	-5.6257	17.80274	-0.32	0.773
Obs Parm	9			
R-squared	0.5440			
F	2.72			
P-Value	0.6538			

Source: Data Processed by STATA

Table 4 above provides the regression results of the study. It shows R-squared values of 0.6172 and 0.5440 for ROA and ROE, respectively. It means that 62% of the variation in ROA and 54% in ROE of Nigerian Islamic banking is accounted for by FDR, OER, GDP, inflation (IFL), and bank size (BS).

FDR shows a positive coefficient of 9.2138 and a P-value of 0.077, meaning that it has a positive and significant effect on ROA. FDR again showed a positive and significant effect on ROE with a coefficient of 8.1982 and a P-value of 0.0267. This result implies that there is the availability of liquidity in the bank when requested by depositors. The findings align with modern portfolio theory, which shows that the banks can diversify in different businesses to keep their liquidity. This finding contradicts the findings of Yulianto and Solikhah (2016), whose results showed a negative relationship between FDR and *mudharabah* in Indonesian Islamic banks. However, it is supported by the findings of Istan and Fahlevi (2020), whose study finds a positive but insignificant relationship between FDR and ROA in Indonesia.

OER also indicates a positive coefficient of 0.1549 and a P-value of 0.0847, which indicates that this variable positively and significantly affects ROA. OER also

shows a positive but insignificant relationship to ROE, with a coefficient of 0.01705 and a P-value of 0.019. The findings are in line with Al-Tamimi (2010); Loke et al. (2015); Wasiuzzaman and Tarmizi (2010).

Based on the results, this implies that high operational efficiency can increase efficiency and performance. This result also aligns with the recommendations of the modern portfolio theory because efficiency implies that businesses are efficiently done and diversified. This finding is contrary to the finding of Francis (2013); Istan and Fahlevi (2020), that showed a significant negative relationship between OER and ROA. The result indicates that internal factors significantly influence the performance of Islamic banks in Nigeria. Therefore, the null hypothesis is not accepted.

However, GDP shows a negative coefficient of -2.7284 and a P-value of 0.173 with ROA. At the same time, it also shows a negative coefficient of -0.4578 and a P-value of 0.248 with ROE. The finding is similar to Sufian (2009), who reported a negative and significant relationship between GDP and the performance of Islamic banks in Malaysia. The result affirms the classical theory hypothesis, which states that an increase in GDP per person leads to an increase in population, which further decreases real GDP. Furthermore, a reduction in real GDP will reduce bank demand and supply. This finding is contrary to the findings of Almazari (2014); Istan and Fahlevi (2020); Obamuyi (2013), whose findings showed a positive and significant relationship between GDP and performance. GDP increases demand and lending in banks, hence, influencing performance. A positive GDP may have a positive result on demand for banking products and services; nonetheless, it will either have a positive or negative influence on performance. A negative relationship may occur due to unstable economic conditions and continuous financial crises around the globe, especially in Nigeria.

Inflation shows a coefficient of -2.1868 and a P-value of 0.249 for ROA. Also, inflation concludes a negative and insignificant relationship with ROE with a coefficient and P-value of -0.2959 and 0.423, respectively. This fact indicates that inflation, similar to GDP, has a negative and insignificant effect on both ROA and ROE. Hence, it aligns with Pasiouras and Kosmudou (2007), which means that high prices of goods and services will reduce borrowing from banks. The result also agrees with the findings of Bilal et al. (2013), which showed a significant negative effect on ROA in Pakistan commercial banks. The findings of Istan and Fahlevi (2020) also showed a negative effect on the ROA of banks in Indonesia. A positive relationship occurs when inflation is expected (Chua, 2013).

On the other hand, it contradicts the findings of Loke et al. (2015); Setyawati et al. (2017), whose findings showed that inflations have a positive and significant effect on the performance of Islamic banks. Nevertheless, the result indicates that external factors negatively influence the performance of Islamic banks in Nigeria. Therefore, the null hypothesis is not rejected.

However, bank size shows a positive coefficient of 7.331127 with a P-value of 0.044. The result indicates a positive and significant relationship with ROA. Bank size also shows a positive and significant relationship with ROE, with a coefficient of 0.6600 and a P-value of 0.0736. This finding aligns with Javaid et al. (2011); Khan et al. (2013); Rao and Lakew (2012). In comparison, it contradicts the findings of Ameer and Mhiri (2013); Bilal et al. (2013), which shows that bank asset has a negative and significant effect on ROA. This means that larger banks are more likely to diversify their investments, thereby increasing their market power and boosting profit from economies of scale and improved performance.

CONCLUSION

The need to examine the growth and performance of Islamic banking in Nigeria cannot be over-emphasized due to the large market available. The paper examined the internal and external factors that could affect the performance of Islamic banking in Nigeria. The findings show that internal factors positively and significantly affect the bank's performance. The external factors, however, show a negative relationship; this could be due to the conventional environment in which this bank operates and the hyperinflation being experienced in the country in recent times.

The results imply a need for bank managers, policymakers, and investors to pay more attention to internal and macroeconomic factors affecting banking operations. Moreover, Islamic banks in Nigeria will have to consider the conventional environment in which it operates and ensure strict adherence to Islamic law in providing their goods and services. Banks managers should also ensure diversification into Islamic-compliant products to avoid Islamic non-compliance risk.

Thus, this research will add to Islamic banking literature in Nigeria and give more ideas on other factors that could affect performance. This study will be good for new entrants into Islamic banking in Nigeria, as the second Islamic banking started less than two years ago. The study's findings can help investors understand factors that could influence performance when making investment decisions.

The study's limitations revolve around the unavailability of another fully-fledged Islamic bank with at least five years of data; this limited this research to only using one fully-fledged bank in Nigeria. Another limitation is for the periods covered, as at the time of conducting the analysis, the data for 2020 was available. Hence, the research was conducted for the period from the inception of the bank from the year 2012 to 2020.

Further research can be conducted to understand how the conventional system affects Islamic banking in Nigeria, comparing these performance measures with conventional banks. Moreover, research with a longer period of not less than ten years can be conducted to have a sufficient period that will give a more robust

explanation. Lastly, on the methodology, another method, for example, ordinary least square (OLS), can be used to give a dissimilar result.

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REFERENCES

- Ahmad, A. (1987). *Development and Problems of Islamic Banks*. Islamic Research and Training Institute.
- Ahmad, Z. (1984). *Concept and Models of Islamic Banking: An Assessment*. International Institute of Islamic Economics.
- Akhter, W., Raza, A., Orangzab, O., & Akram, M. (2011). Efficiency and Performance of Islamic Banking: The Case of Pakistan. *Far East Journal of Psychology and Business*, 2(2), 54–70.
- Al-Tamimi, H. A. H. (2010). Factors Influencing Performance of The UAE Islamic Conventional National Banks. *Global Journal of Business Research*, 4(2), 1–9. <https://ssrn.com/abstract=1633110>
- Almazari, A. A. (2014). Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan. *Journal of Applied Finance & Banking*, 4(1), 125–140.
- Ameur, I. G. B., & Mhiri, S. M. (2013). Explanatory Factors of Bank Performance: Evidence from Tunisia. *International Journal of Economics, Finance and Management*, 2(1), 143–152.
- Bilal, M., Saeed, A., Gull, A. A., & Akram, T. (2013). Influence of Bank Seppecific and Macroeconomic Factors on Profitability of Commercial Banks: A Case Study of Pakistan. *Research Journal of Finance and Accounting*, 4(2), 117–126.
- Chua, Z. (2013). *Determinants of Islamic Banks Profitability in Malaysia*. <https://doi.org/10.2139/ssrn.2276277>
- Dietrich, A., & Wanzenried, G. (2014). The Determinants of Commercial Banking Profitability in low-, middle-, and high-, Income Countries. *The Quarterly Review of Economics and Finance*, 54(3), 337–354. <https://doi.org/10.1016/j.qref.2014.03.001>
- Francis, M. E. (2013). Determinants of Commercial Bank Profitability in Sub-Saharan Africa. *International Journal of Economics and Finance*, 5(9), 134–147. <https://doi.org/10.5539/ijef.v5n9p134>
- Hanif, M., Tariq, M., Tahir, A., & Wajeeh-ul, M. (2012). Comparative Performance Study of Conventional and Islamic Banking in Pakistan. *International Research Journal of Finance & Economics Issue*, 82. <https://ssrn.com/abstract=1959950>
- Hasbi, H., & Haruman, T. (2011). Banking: According to Islamic Syaria Concepts and Its Performance in Indonesia. *International Review of Business Research Paper*, 7(1), 60–76.

- Istan, M., & Fahlevi, M. (2020). The Effect of External and Interbal Factors on Financial Performance of Islamic Banking. *Jurnal Ekonomi & Studi Pembangunan*, 21(1). <https://doi.org/10.18196/jesp.21.1.5036>
- Javaid, S., Anwar, J., Zaman, K., & Ghafoor, A. (2011). Determinants of Bank Profitability in Pakistan: Internal Factor Analysis. *Journal of Yasar University*, 23(6), 3794–3804.
- Khan, M. A., Akhtar, W., Ullah, A., Iqbal, Z., & Riasat, I. (2013). Islamic Banking: An Appraisal of Insolvency Hazzard. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(4), 1–10. <https://doi.org/10.6007/IJARAFMS/v3-i4/269>
- Kosmidou, K., Tanna, S., & Pasiouras, F. (2005). Determinants of Profitability of Domestic UK Commercial Banks: Panel Evidence from the period 1995-2002. *Money, Macro and Finance (MMF) Research Group*, 1–27.
- Loke, J. C., Ong, E. P., Lim, S. Sen, & Yeoh, S. C. (2015). *Factors Affecting Performance of Islamic Banks and Conventional Banks: Evidence from Malaysia* [Universiti Tunku Abdul Rahman]. <http://eprints.utar.edu.my/id/eprint/1523>
- Muda, M., Shaharuddin, A., & Embaya, A. (2013). Profitability Determinants and The Impact of Global Financial Crisis: A Panel Data Analysis of Malaysian Islamic Banks. *Research Journal of Finance and Accounting*, 4(7), 121–130.
- Muhammad, A. U., & Yusoff, M. (2021). *Shari'ah Non-Compliance Risk and Performance of Islamic Banks in Africa*. Universiti Sains Malaysia.
- Obamuyi, T. M. (2013). Determinants of Banks' Profitability in A Developing Economy: Evidence from Nigeria. *Organizations and Markets in Emerging Economies*, 4(2), 97–111. <https://www.cceol.com/search/article-detail?id=269858>
- Pasiouras, F., & Kosmudou, K. (2007). Factors Influencing the Profitability of Domestic and Foreign Commercial Banks in the European Union. *Research in International Business and Finance*, 21(2), 222–237. <https://doi.org/10.1016/j.ribaf.2006.03.007>
- Ramadan, I. Z., Kilani, Q. A., & Kaddumi, T. A. (2011). Determinants of Bank Profitability: Evidence from Jordan. *International Journal of Academic Research*, 3(4), 180–191.
- Rao, K. R. M., & Lakew, T. B. (2012). Determinants of Profitability of Commercial Banks in a Developing Country: Evidence from Ethiopia. *International Journal of Accounting and Financial Management Research*, 2(3), 1–20.
- Saleh, A. S., & Zeitun, R. (2006). *Islamic Banking Performance in the Middle East: A Case Study of Jordan*. <https://ro.uow.edu.au/commwkpapers/157>
- Setyawati, I., Suroso, S., Suryanto, T., & Nurjannah, D. S. (2017). Does Financial Performance of Islamic Banking is Better? Panel Data Estimation. *European Research Studies Journal*, 20(2A), 592–606.
- Sufian, F. (2009). Factors Influencing Bank Profitability in a Developing Economy: Empirical Evidnce from Malaysia. *Global Business Review*, 10(2), 225–241. <https://doi.org/10.1177/097215090901000206>
- Tanko, M., Alhaji, Y., & Dabo, Z. (2016). *An Empirical Analysisi of The Performance of Islamic Banking in Nigeria: A DEA Approach*. <https://doi.org/10.2139/ssrn.2838637>
- Wasiuzzaman, S., & Tarmizi, H.-A. B. A. (2010). Profitability of Islamic Banks in

Malaysia: An Empirical Analysis. *Journal of Islamic Economics, Banking and Finance*, 6(4), 53–68.

Yulianto, A., & Solikhah, B. (2016). The Internal Factors of Indonesian Sharia Banking to Predict the Mudharabah Deposits. *Review of Integrative Business & Economics*, 5(1), 210–218.