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Analysis Of The Impact Of Financial Ratios On The Financial Performance Of Islamic Banking During The Pandemic Period

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Abstract: The objective of this research investigate the impact of five distinct financial elements, specifically BOPO, FDR, NPF, NPM, and ROE, regarding The monetary outcomes of Sharia-compliant banking institutions throughout the widespread health crisis caused by the coronavirus outbreak. The approach used involves quantitative analysis, Assembling data from the financial disclosures of Sharia-compliant banks that are active in Indonesia. The findings suggest that the BOPO variable has no substantial influence on the fiscal outcomes of Shariacompliant banking institutions, contradicting previous research. These results indicate that although BOPO is often considered an important indicator of bank performance, its influence is not significantly felt in this context. Additionally, The FDR variable does not significantly influence financial performance, although it is expected to serve as an indicator of liquidity and financing efficiency. These results align with some prior studies that note that in certain contexts, FDR does not provide a significant impact. This research offers insights into the challenges faced by Islamic banks during the pandemic and emphasizes the importance of considering external factors in future research that may influence analysis outcomes.

Keyword: Financial Performance, Islamic Banks, COVID-19.

INTRODUCTION

In the realm of economic aspects, banks play a crucial role. Banks have transformed into organizations that serve as a means of channeling funds from parties with financial surpluses to those in need of additional capital. There are two categories of banks in the current financial system: commercial banks and Islamic banks (Jannah & Sa'diyah, 2022). The growth and advancement of Indonesia's Islamic banking sector have accelerated significantly. The emergence of various corporate entities aligned with Islamic principles reflects the improvements achieved in the Islamic Banking sector, including Islamic Commercial Banks (BUS), Islamic Business Units (UUS), and Sharia Rural Banks (BPRS). The operational mechanisms of Islamic Commercial Banks, which now number 12 in total, represents independent Islamic banking institutions that operate without being under the protection of conventional banks as their parent institutions. Islamic banking (Arabic: al-Mashrafiyah Al-Islamiyah) refers to a banking system that functions in alignment with Islamic law (sharia). This approach is developed based on Islamic law, which prohibits lending money or Imposing fees on borrowed funds (usury), In addition to investing in certain types of businesses (haram).

Conventional banking systems have not been able to guarantee that their investments are compliant. Examples can be found in companies producing media or entertainment content that contradicts Islamic values, as well as in illegal food or beverage businesses, among others.

On the international stage, The idea of Islamic banking originated initially proposed by Egypt in December 1970. Egypt initially suggested the establishment of a global Islamic bank for trade and development at that time. Subsequently, Egypt also proposed the creation of a federation of Islamic banks. The core idea behind this concept is to replace the interest-based financial system with a collaborative system that includes profit and loss sharing arrangements. Finally, in October 1975, the Islamic Development Bank (IDB) was established with 22 founding Islamic countries. This bank supports its members financially and facilitates the establishment of Islamic banks in their own countries while making significant contributions to the analysis of Islamic banking, finance, and economics. Today, more than 56 countries are members of this banking institution based in Jeddah. Data from OJK reports indicate that efforts to establish Sharia-based banks in Indonesia began in 1980, leading to discussions about Islamic banking as a foundation for an Islamic-based economy. After a conference in 1990, the Indonesian Ulema Council (MUI) formed a team specifically dedicated to pioneering the creation of organizations grounded in Islamic law principles. The MUI was instrumental in establishing Indonesia's inaugural Sharia-compliant bank, PT Bank Muamalat Indonesia (BMI). The Muamalat Indonesia Bank officially began operations on November 1, 1991, based on its founding deed. BMI commenced operations with a capital base of IDR 106,126,382,000 recorded on May 1, 1992.

Since the establishment of Islamic banking in Indonesia thirty-two years ago, significant achievements have been made regarding institutional infrastructure and support, control mechanisms, and public understanding and education about Sharia financial accommodation. The performance of Islamic finance is also recognized as one of The most all-encompassing and superior globally. The World Health Organization (WHO) designated COVID-19 as a global pandemic. affecting the entire globe, affecting people worldwide, including Indonesia. TThe societal elements related to social, economic, and welfare aspects have been severely impacted by the COVID-19 outbreak, resulting in many casualties. The World Bank projects that the pandemic's economic impacts will be significant could lead to around Approximately 24 million individuals residing in East Asia and the Pacific ceasing their business operations, with the most dire situation possible predicting 35 million individuals are expected to remain in a state of poverty (Ais Robiatul Adawiyah, 2022). Almost all industries have been seriously impacted by the COVID-19 outbreak, featuring Islamic banking as a component, that is essential as a bridge between surplus and deficit funds. In response, several important adjustments have been quickly implemented to help the industry survive in the battle against The global outbreak of the coronavirus disease in 2019. The significance of Islamic banking has grown as major sectors.. require faster and simpler access to capital.

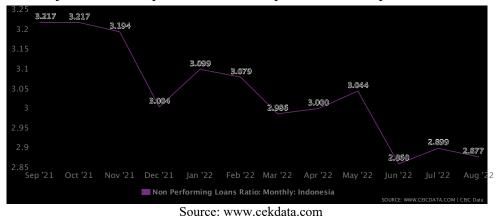


Figure 1. Non Performing Loans Ratio Monthly: Indonesia

The panic in the financial sector related to the pandemic has impacted banking in Indonesia (HS et al., 2022). This occurred because the banking industry acts as an intermediary institution to meet the investment capital demands from the business sector (Fakhri et al., 2019). A decline in sales has resulted in reduced financing income, while fixed costs have remained, although not entirely (Felani et al., 2020). The performance and capacity of Islamic bank debtors (IB) have weakened due to COVID-19. Furthermore, there has been an increase in credit risk, leading to financial instability and disruptions for IB (Rahman & Santoso, 2019). The success of collecting third-party funds and financing in IB has also been affected by the weakening of MSME and other business sectors (Ais Robiatul Adawiyah, 2022). One of the most widely read articles in reputable publications around the world is research on Islamic banking. However, when related to studies on sharia-based banking systems during the COVID-19 pandemic, we observe that there is still a scarcity of research addressing this issue. Several recent studies, including those conducted by Agustin Tri Lestari (2021) and Syachreza & Mais (2020), reveal that at the beginning of 2020, all banks, including Islamic banks, experienced disturbances in their intermediary functions due to the aggressive trend of declining amounts of money collected and distributed. Other studies, such as the one by Irma Br Hotang et al., (2021), indicate that the effects of the COVID-19 epidemic varies depending on the bank, as their research reveals striking variations in ROA ratios, The percentage of financing that is not being repaid, and the comparison between operational expenses and income generated by Islamic banking institutions in Indonesia.

In this research, there are several issues that need to be analyzed in depth. First, The objective of this study is to establish whether BOPO Affects the economic outcomes of Islamic financial institutions. Additionally, evaluating The effect of the FDR factor on financial outcomes is crucial. In addition, this research seeks to evaluate whether the NPF variable affects financial performance. Moreover, the NPM variable will also be a focus to assess the influence on fiscal results. Finally, this research will assess the impact of Return on Equity (ROE) on the financial outcomes of Islamic banks. The objectives of this research are quite diverse. This research aims to ascertain how BOPO can affect financial performance, as well as to evaluate the influence of FDR in this regard. Additionally, The objective of this study is to evaluate the effect of NPF, NPM, and ROE regarding the financial impacts of Shariacompliant banking entities. The advantages of this study are also notably substantial. For Islamic banking, the results of this study may offer significant insights. resources and recommendations for implementing better policies, particularly those related to The financial results of institutions in the Islamic finance sector. For academics, this research can provide an opportunity to connect the theories taught in the classroom with practical applications in the field, especially in Islamic finance. Academically, this research is expected to offer useful insights for future research, thereby enriching knowledge and understanding in this area.

METHOD

This research aims to explore and explain the variations in monetary outcomes among The ten Islamic banks operating in Indonesia. The study will focus on NPL, ROE, NOM, BOPO, and FDR of the ten financial institutions that provide banking services. This research will concentrate on Islamic financial institutions that are listed n collaboration with the regulatory body for financial services (OJK). To gather the essential information needed or samples for this study, we plan to utilize purposive sampling techniques. This sampling method is chosen because it is suitable for quantitative studies, particularly in contexts where there are limitations in generalizing results, as explained by (Sugiharto et al., 2021). The sample will consist of commercial Islamic banks registered with the OJK that have complete annual report records from 2019 to 2021. Furthermore, the banks under investigation are those that report

their annual reports every December 31. These annual reports must include relevant data for this research, including information on operational costs, income from main activities, financing-to-deposit ratios, non-performing loans, net operating margins, and return on equity. With these criteria, The study aims to deliver a thorough and precise Assessment of the operational effectiveness of Islamic financial institutions. throughout the designated timeframe.

This research uses ROA as the dependent variable, with BOPO, FDR, NPF, NPM, and ROE serving as the independent variables. The independent variable (BOPO) is calculated by dividing operational expenses by operational revenue. The independent variable (FDR) is determined by distributing the financial resources amount using the funds sourced from external parties. The outcome of This variable (NPF) is calculated by splitting the overall funding by the overall loan value, The independent variable (ROE) is determined by dividing the net profit after taxes by the total shareholder equity (Riyanto, 2022). The independent variable is determined by splitting the overall profit after taxes by the overall net sales (Junjunan et al., 2022). The independent variable is determined by performing a division of net earnings against total assets (Firdausia & Syamsiah, 2022). Sugiharto et al., (2021) The study recognized four frequently applied techniques for gathering data, which include observation, interviews, document analysis, and the combination of these three approaches. The approach used for gathering data in this research is documentation, which consists of a collection of records regarding events that have occurred and can include writings, images, or artworks held by individuals or organizations (Junjunan et al., 2022). The required documentation includes financial reports from general Islamic banks for the years 2019 to 2021, which can be accessed through each bank's website

This research uses quantitative data analysis with the Eviews 12 statistical software for data calculations. Eviews 12 is specifically designed for statistical analysis. Descriptive statistical analysis serves to describe the research objects without drawing conclusions. In this analysis, the obtained data includes total data, he lowest and highest figures, mean value, and measure of spread, aligned with Sugiharto et al (2021). Classical assumption tests are essential for obtaining accurate parameter estimates of the model through the Conventional Least Squares (CLS) approach. This approach guarantees that the model adheres to the essential classical assumptions. Normality tests are carried out to evaluate if the error or residual variables in a regression model conform to a normal distribution. A good regression model should demonstrate a typical distribution curve. The Jarque-Bera (J-B) test assesses whether a data distribution Adheres to a typical sequence. If the Jarque-Bera value is below the critical value and the likelihood exceeds 0.05, the information set can be considered to follow a normal distribution (Ghozali, 2021). Conversely, If the Jarque-Bera statistic surpasses the critical value with a likelihood below 0.05, The information stands as declared non-normal. The heteroscedasticity test aims to assess the presence of non-constant variance in a dataset how the residuals' variability differs across various data points in the regression model. When the remaining variation remains consistent across observations, this condition is known as homoscedasticity; conversely, inconsistent variation indicates heteroscedasticity (Ghozali, 2021). The Glejser test is used to identify the occurrence of heteroscedasticity, one can perform a regression analysis using the absolute magnitudes of the residuals against the independent variables. Decisions are made According to the likelihood measure; Should the value fall below 0.05, the starting hypothesis is dismissed, suggesting the existence of heteroscedasticity.

The multicollinearity test aims to evaluate the relationships among Factors that are not affected by other factors in the regression model. In an effective model, independent variables should not exhibit strong relationships. An intense connection between the independent factors suggests the existence of multicollinearity. The autocorrelation test shows the relationship between residuals from different time periods in the regression model. The goal is to assess if A relationship exists between the disturbance errors at time t and those at time t-1. The Durbin-

Watson test serves to identify first-order autocorrelation, and decisions are made according to the d value derived from the test (Jannah & Sa'diyah, 2022). Panel data analysis is conducted using three models: Common Effect, Fixed Effect, and Random Effect. The Common Effect model is a basic method that integrates both time series and cross-sectional data, disregarding both time-related and individual factors. The Fixed Effect model suggests that the intercept and slope are consistent across all units in both the momentary and temporal data, The Random Effect model incorporates Artificial variables to represent the unseen characteristics within the framework and permits residual interactions both across individuals and over time (Agustin Tri Lestari, 2021).

In the context of panel data examination, the Chow, Hausman, and Lagrange Multiplier (LM) tests are employed to identify the appropriate model. The Chow test helps assess which model, the Common Effect or the Fixed Effect, is better suited for the analysis. Following the Chow test, The Hausman test is employed to determine whether the Fixed Effect or Random Effect model should be selected. The Lagrange Multiplier test evaluates how well the Random Effect model fits compared to the Common Effect model. Hypothesis testing aims to analyze how independent variables affect the dependent variable, which is influenced by other factors. The F test examines the overall impact of all independent variables. A p-value lower than 0.05 indicates that the independent variables, when considered together, Affect the outcome variable. The t-test evaluates the separate effect of each independent factor on the dependent variable. When the p-value falls under 0.05, it reveals a considerable influence of the independent variable (Ghozali, 2021). The Adjusted R² value measures the percentage of variation within the dependent variable, clarification is provided by the independent variables. it spans between 0 and 1, with numbers nearing 1 signifying a stronger explanatory power of the independent variables (Ghozali, 2021).

RESULTS AND DISCUSSION

Descriptive Statistics

The examination employing descriptive data analysis was conducted using data processed with Eviews 12. This research involves two groups of variables: independent variables consisting of BOPO, FDR, NPF, NPM, and ROE, and the dependent variable, which is ROA. The table presenting the summary statistics represent shown in Table 1 below:

BOPO NPM ROE **FDR** NPF ROA 0,892586 0,057595 0.035285 0,038027 -0.025685 Mean 0,835899 0,825116 0,831044 0,032031 0,054522 0,022459 0,006829 Median 3,178846 1,802461 0,343444 0,434534 0,274282 0,090986 Maximum Minimum 0,342298 0,094350 0,002648 -1,155093 -0,355401 -0,802829 Std Dev. 0.264394 0.544568 0.067254 0.296371 0.130502 0.160935 Ν 30 30 30 30 30 30

Table 1. Descriptive Statistics

Source: Secondary data processed, 2023

Table 1 presents observational data consisting of 30 entries. The BOPO variable's the average value is 0.835899, having a variance of 0.264394, indicating that Islamic banks, on average, incur operational costs of 83.59% over the past three years. According to the OJK assessment, this value is classified as very good since it is below 85%. However, The lowest BOPO value is 0.342298, while the highest reaches 1.802461, indicating the existence of Islamic banks with very poor health due to high operational costs during the pandemic. The FDR variable's average value is 0.831044, having a variability of 0.544568, suggesting that Islamic banks have operated well over the past three years. This value is also below 85% according to OJK, indicating good health. However, the lowest FDR value is 0.094350, while

the highest reaches 3.178846, indicating that some banks are experiencing health issues due to failures in fund allocation.

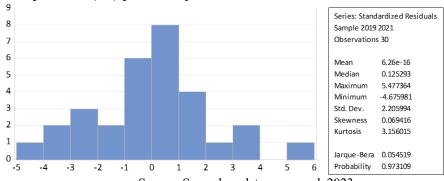
The NPF variable shows an approximate value of 0.035285 and a variability measure of 0.067254, meaning that Islamic banks operated well during the pandemic, as its value falls under 5% threshold set by Bank Indonesia. The lowest NPF value is 0.002648, while the highest is 0.343444, indicating the borrowers' ability to make timely installment payments. The NPM variable holds a mean value of 0.035295 and a variation of 0.130502 in the spread from the mean, indicating poor performance according to Bank Indonesia's criteria, with The lowest value recorded is -1.155093, while the highest stands at 0.434534. Lastly, the ROE variable shows an average of 0.038027 and a variation of 0.130502from the average, which also indicates poor performance over the past three years, the lowest value is -0.355401, while the highest is 0.274282.

Classical Assumption Test

Before testing the hypotheses of this research, it is necessary to conduct a The traditional assumption tests, covering normality, multicollinearity, heteroscedasticity, and autocorrelation, are outlined as enumerated here:

a. Normality Test

The aim of the standardization assessment focuses on deciding if the distribution of the outcome and predictor factors in the regression model aligns with a standard distribution pattern. An effective model exhibits a standard distribution of data. EViews offers two approaches to assess normality: utilizing histograms and conducting the Jarque-Bera test. The Jarque-Bera test is a statistical technique employed to assess whether the data exhibits a normal pattern. According to Ghozali (2021), The Jarque-Bera test tends to approach a limiting distribution as the sample size increases, meaning it applies to large samples with squared residuals estimated employing the technique of Ordinary Least Squares. This test is performed by taking into account the probability of the Jarque-Bera (JB) probability:



Source: Secondary data processed, 2023 Figure 2. Results of Normality Test

Figure 2 shows he Jarque-Bera measure is 0.054519, with an associated likelihood of 0.973109, The research model is functioning as expected, as The statistical probability surpasses 0.05.

b. Heteroskedasticity Test

In a regression framework, the test for heteroskedasticity aims to identify differences the fluctuation in residuals across different observation phases. In the case where the variation in leftover values between one observation and another remains the same or changes, the variable is known as homoscedasticity. Conversely, if this criterion is not met, the variable is referred to as heteroscedasticity. Homoscedasticity indicates that the regression model is of high quality. The Glejser test is employed to examine each independent variable individually, In conjunction with the total deviations as the dependent variable. The absolute residuals represent the disparities

between the actual values and the predicted values, and they can be analyzed through regression against the independent variables using the Glejser test. Heteroskedasticity is considered absent if the confidence level of the Glejser test exceeds 0.05.

Dependent Variable: ABS(RESID) Method: Panel Least Squares Date: 08/03/24 Time: 18:27 Sample: 2019 2021 Periods included: 3 Cross-sections included: 10 Total panel (balanced) observations: 30 Coefficient Std. Error Prob. -0.028823 0.046437 -0.620689 0.5407 воро 0.045667 0.072530 1.588218 0.1253 0.033351 0.198487 -0.211278 0.019292 0.171632 1.728709 1.156466 0.0967 0.2589 NPM 0.105056 -2.011102 0.0557 0.251044 0.710675 0.4841 R-squared 0.584788 Mean dependent var Adjusted R-squared 0.498286 0.054720 S.D. dependent var S.E. of regression Akaike info criterion -2.796322 0.071862 47.94483 Schwarz criterion -2.516082 Hannan-Quinn criter -2.706671 Log likelihood 6 760364 Durbin-Watson stat Prob(F-statistic)

Figure 3. result of the dependent Variable : ABS (RESID)

Table 2. Results of the heteroskedasticity test for independent variables

Variabel Independen	Prob.	There is no heteroscedasticity
BOPO	0,1253	There is no heteroscedasticity
FDR	0,0967	
NPF Source	e: 0.2589 ch	There is no heteroscedasticity Here is no heteroscedasticity
NPM	0,0557	Tidak Terjadi Heteroskedastisitas
ROE	0,4841	Tidak Terjadi Heteroskedastisitas

The outcomes of the heteroscedasticity assessment utilizing the Glejser approach show that the variables BOPO, FDR, NPF, NPM, and ROE do not experience heteroscedasticity issues, as the p-values exceed 0.05. As a result, the null hypothesis (H0) is retained, meaning that these variables do not show indications of heteroscedasticity.

c. Multicollinearity Test

The correlation between independent variables can be used to identify multicollinearity. The purpose of multicollinearity testing is to measure the high interrelationship among independent variables in a regression model, which indicates a significant or perfect relationship. According to (Ghozali, 2021), the decision on multicollinearity testing is as follows:

- 1) If the correlation value is greater than 0.80, the null hypothesis (H0) is rejected, indicating the presence of multicollinearity issues.
- 2) If the correlation value is less than 0.80, the null hypothesis (H0) is considered valid, indicating no indications of multicollinearity.

	Table 3. Results of the Multicollinearity Test					
	ВОРО	FDR	NPF	NPM	ROE	
ВОРО	1,000000	-0,260160	0,384830	-0,192197	-0,334794	
FDR	-0,026016	1,000000	-0,056895	-0,201066	-0,202140	
NPF	0,384830	-0,056895	1,000000	-0,305850	-0,369711	
NPM	-0,192197	-0,201066	-0,305850	1,000000	-0,936423	
ROE	-0,334794	-0,202140	-0,369711	-0,936423	1,000000	

Source: research results, 2024

The results of the multicollinearity test indicate that the null hypothesis is accepted, as the correlation values between the independent variables (BOPO, FDR,

NPF, NPM, and ROE) are below 0.80. Thus, it can be concluded that this regression model does not face multicollinearity issues among the independent variables.

d. Autocorrelation Test

Autocorrelation occurs when the residuals from one event influence the subsequent event, where the errors made by one individual can impact the future. This issue often arises in time-series data. To detect autocorrelation in panel data, the Durbin-Watson test is used.

Table 4. Results of the Autocorrelation Test

N	K	DL	Dυ	4-D _L	4-D υ	dw	Conclusion
30	5	1,0706	1,832600	2,922940	2,167400	0,986168	Positive Autocorrelation Occurred

Source: research results, 2024

The results of the autocorrelation analysis using the Durbin-Watson test showed a DW value of 2.025481. The upper limit (4 - dU) is 2.1674, while the lower limit (4 - dL) is 2.9294. Therefore, the DW value falls within the range of $2.1674 \le 2.025481 \le 2.9294$, indicating that the regression model can be used without the constraint of autocorrelation.

Selection of Panel Data Regression Model

Three types of analysis models common, fixed, and random effects can be applied to panel data regression, each having its own advantages and disadvantages. The choice of the appropriate model depends on the researcher's assumptions and the fulfillment of requirements for accurate statistical analysis. Therefore, the initial step that must be taken is to determine the most suitable model among the three options

a. Chow Test

By adding a dummy variable, a more optimal model for testing panel data can be evaluated using Chow's statistical analysis. This test aims to determine whether the fixed effects regression approach is superior to the regression method without the dummy variable, known as common effects. The table below presents the calculation results from the Chow Test:

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.879943	(9,15)	0.1344
Cross-section Chi-square	22.654995	9	0.0070

Source: research results, 2024
Figure 4. Results of the Chow Test

Based on the results of the data test, a Probability Cross-section Chi-square value of 0.0070 was obtained, which is below 0.05. This supports the acceptance of H1, which is the Fixed Effect Model, while H0 (the Random Effect Model) is rejected. Therefore, it can be concluded that the Fixed Effect Model is a more appropriate choice compared to the Random Effect Model.

b. Hausman Test

The Hausman Test is utilized to compare the Fixed Effect Model and the Random Effect Model. The aim of this test is to evaluate if the panel data regression model employing the Least Square Dummy Variable method (Fixed Effect Model) outperforms the panel data regression model that utilizes the Generalized Least Square

method (Random Effect Model). The following table displays the outcomes of the Hausman Test computations.

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.258746	5	0.0682

Source: research results, 2024

Figure 5. Results of the Hausman Test

The results of the calculation indicate a cross-sectional probability for the random effect of 0.0682, indicating high significance at a 95% confidence level ($\alpha = 5\%$) using the Chi-Square distribution (Gujarati, 2012). According to the Hausman Test, the null hypothesis (H0) is accepted since the P-value is greater than 0.05, showing that the Random Effect model is more suitable compared to the Fixed Effect model.

c. Lagrange Multiplier Test

The results of the calculation indicate a cross-sectional probability for the random effect of 0.0682, indicating high significance at a 95% confidence level (α = 5%) using the Chi-Square distribution (Gujarati, 2012). According to the Hausman Test, the null hypothesis (H0) is accepted (P-value > 0.05), suggesting that the Random Effect model is more suitable than the Fixed Effect model.

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided

(all others) alternatives

	Test Hypothesis		
-	Cross-section	Time	Both
Breusch-Pagan	0.503560 (0.4779) Source: research resu	0.062304 (0.8029) ults, 2024	0.565863 (0.4519)

Figure 6. Results of Lagrange Multiplier Test

The single effect model proved to be superior, as shown in Table 4 through "the test using the Lagrange multiplier. The Breusch-Pagan cross-sectional analysis resulted in a value of 0.4779, which is equal to or exceeds 0.05, this leads to the acceptance of the null hypothesis (H0).

Linear Regression Analysis of Panel Data

The Common Effects Model (CEM) was selected as the method for linear regression analysis on panel data, following Chow, Hausman, and Lagrange multiplier tests, which also considered the Fixed Effects Model (FEM) and the Random Effects Model (REM). The estimation results from this model produced the following regression equation: ROA = 0.230557 - 0.286827*BOPO - 0.028917*FDR - 0.024344*NPF + 0.217277*NPM + 0.080530*ROE + e...

The results derived from the linear regression evaluation indicate that the asset profitability (ROA) has a constant value of 0.230557. The coefficients for the independent variables are as follows:

- a. BOPO (-0.286827): An increase in BOPO by 1% decreases ROA by approximately 29%, and conversely, a decrease in BOPO by 1% increases ROA by about 29%.
- b. FDR (-0.028917): An increase in FDR by 1% reduces ROA by around 3%, and a decrease in FDR by 1% raises ROA by approximately 3%.

- c. NPF (-0.024344): An increase in NPF by 1% lowers ROA by roughly 3%, while a decrease in NPF by 1% raises ROA by about 3%.
- d. NPM (0.217277): An 1% increase in NPM raises ROA by approximately 21%, and a 1% decrease in NPM lowers ROA by about 21%.
- e. ROE (0.080530): An increase in ROE by 1% increases ROA by around 8%, while a decrease in ROE by 1% reduces ROA by approximately 8%.

In conclusion, the variables BOPO, FDR, and NPF has an adverse impact on ROA, while NPM and ROE positively influence ROA.

Hypothesis Testing

Hypothesis testing includes the adjusted coefficient of determination (Adjusted R²), simultaneous test (F-test), and partial test (t-test). Estimation of linear regression using panel data is conducted using the Common Effect Model (CEM):

a. Results of the F Test

The F test, conducted at a statistical significance cutoff of 0.05, is employed to determine if the independent variables jointly impact the dependent result. As stated by Ghozali (2021), the guidelines for decision-making are presented here:

- 1) Should the chance value be under 0.05, The independent variables collectively exert an influence on the dependent variable.
- 2) Should the probability value exceed 0.05, the independent variables do not have a simultaneous impact on the dependent variable.

Table 5. Results of the F Test				
		Average outcome		
R- squared	0,560591	variable	-0,02569	
		Standard deviation of		
Modified R-squared	0,469048	the response variable	0,160935	
Standard Error of		Akaike's information		
Regression	0,117268	criterion	-1,27186	
Total of squared		Schwarz Information		
residuals	0,330042	Criterion	-0,09916	
Logarithmic		Hannan-Quinn		
probability	25,07784	criterion	-1,18221	
		Durbin-Watson		
F-statistic	6,123772	statistic	0,986168	
Probability value (F-				
test)	0,000862			

Table 5. Results of the F Test

The findings from the F-test indicate a probability of 0.000862 and an F value of 6.123772, both of which are below the significance threshold of 0.05 (0.000862 < 0.05). This suggests that the BOPO variables, FDR, NPF, NPM, and ROE jointly influence ROA at the significance level of $\alpha = 0.05$. In other words, these there is a notable effect of the independent variables on the dependent variable, ROA (return on assets), that signifies profitability. Therefore, Islamic banks need to promote the variables that influence profitability to maximize it. The findings of this F-analysis offer valuable insights for both researchers and Islamic banking institutions regarding the significant effects of these factors on the company's value.

b. T-Test Analysis Results

The effect of the independent factor on the dependent outcome is assessed using a T-test analysis carried out with a threshold of 0.05 for significance. According to Ghozali (2021) perspective, the following decisions can be made:

- 1) Should the p-value be under 0.05, It shows that The independent variable autonomously alters the dependent variable.
- 2) Should the p-value be above the 0.05 mark, it indicates there is an absence of impact from the independent variable on the dependent variable.

Table 6. Results of the t Test

		Standard Deviation of	t-test	
Variable	Coefficient	the Error	result	Prob.
С	0,230557	0,099517	2,316749	0,0294
ВОРО	-0,286827	0,097868	-2,930756	0,0073
FDR	-0,028917	0,041344	-0,699415	0,4910
NPF	-0,024344	0,367817	-0,066185	0,9478
NPM	0,217277	0,225140	0,965076	0,3441
ROE	0,080530	0,538001	0,149684	0,8823

Source: research results, 2024

The following conclusions can be drawn from the outcomes derived from the t-test analysis:

- 1) Pertaining to the variable associated with BOPO, The outcome of the t-test is -2.930756, This value is less compared to the t-value of 2.04841 from the table. At a likelihood of 0.0073, That is less than 0.05, H0 is accepted, suggesting that BOPO significantly affects sharia financial performance.
- 2) The t-statistic for the FDR factor is -0.699415, This falls short of the t-table threshold, which is 2.04841 and the probability is 0.4910, exceeding the 0.05 threshold. This suggests that H0 is dismissed, The results suggest that FDR has no impact sharia financial performance.
- 3) The t-statistic corresponding to the NPF variable is -0.066185, That is less than the t-table figure of 2.04841, and the probability is 0.9478, exceeding 0.05. The null hypothesis (H0) is consequently rejected, suggesting NPF does not influence sharia financial performance.
- 4) The NPM variable exhibits a the t-statistic equals 0.965076, which falls below the critical threshold of 2.04841 from the t-distribution table, and likelihood of 0.3441, greater in value than 0.05. This indicates that H0 is rejected, suggesting that NPM does not influence sharia financial performance.
- 5) Finally, for the ROE variable, the t-statistic equals 0.149684 falls below the threshold t-value of 2.04841, the probability of 0.8823 exceeds 0.05. This suggests that H0 cannot be rejected, implying that ROE does not influence sharia financial performance.
- c. Determination Coefficient (Adjusted R-square)

The Modified R-Squared, often recognized as the indicator of determination, evaluates the extent to which a model successfully accounts for The fluctuations in the outcome measure. A importance of Adjusted R-Square near one suggests that the independent variables possess the ability to completely elucidate the differences observed within the outcome factor, making accurate predictions possible.

Table 7. Results of the Coefficient of Determination (Adjusted R-square)

		Average value of the	
R- squared	0,560591	dependent variable	-0,02569
Refined R-squared		The dependent	
value	0,469048	variable in question	0,160935
The standard error of		The Akaike	
regression	0,117268	information criterion	-1,27186

The sum of squared		Schwarz's statistical	
residuals	0,330042	criterion	-0,09916
Logarithmic		The Hannan-Quinn	
probability measure	25,07784	criterion	-1,18221
		The Durbin-Watson	
F-test statistic	6,123772	statistic	0,986168
The probability			
associated with the F-			
statistic.	0,000862		

Source: research results, 2024

Table 7 shows an R² coefficient of 0.560591, This suggests that the independent variable accounts for 56.05% of the impact on the outcome variable. Therefore, the variables that are not dependent in this model. can provide a rough explanation 56.05% of the fluctuations in the dependent variable, while other 43.95% is impacted by factors outside the scope of the analytical framework for regression.

Discussion of Results

The Impact of the BOPO Factor on Financial Outcomes

The Operational Cost to Operating Income Ratio (BOPO) serves as an efficiency metric that evaluates the ability of bank leadership to oversee operations. expenses relative to the income produced. A high ratio suggests that the bank faces challenges in managing its operational costs effectively, which can lead to inefficiency and a decline in revenue. Conversely, a low ratio indicates effective cost management, reducing the likelihood of the bank facing financial difficulties. The first hypothesis test results indicate a meaningful correlation between Outlays for operations and profits from ongoing activities (BOPO) alongside earnings relative to assets (ROA). The findings align with the study conducted by Felani et al. (2020) and Candera & Indah (2021), which indicate that a high BOPO ratio reflects the inefficiency of banks in managing operational costs, contributing to the decline in revenue for sharia-based commercial banks.

The Influence of the FDR Variable Regarding Financial Standing

The impact of the Lending to Deposit Proportion (FDR) after returning on Assets (ROA) has garnered interest of academics in the fields of finance and economics. Research indicates a correlation between FDR and ROA, although other variables such as Non-Performing Financing (NPF) along with proportion of operational Expenses in relation to operation revenue (BOPO) are also crucial factors influencing the financial performance of institutions. A high FDR can reflect riskier lending behavior, especially when there is a significant difference between financing and deposits (Fauziah et al., 2022). However, some studies suggest which the impact of FDR, concerning Equity-Based Returns (ROE) may not be significant, consistent with the findings of Chrystella & Susanto (2024) and Kharazi (2022). NPF contributes significantly to ROA, where an increase in problematic financing negatively affects profitability, as noted by Chrystella & Susanto (2024) and Kharazi (2022). Operational efficiency also influences ROA, emphasizing the importance of cost control to enhance outcomes (Denziana et al., 2024). The impact of FDR on ROA remains a topic of debate among experts; however, improving bank performance heavily relies on effective management of Non-Performing Loans (NPL) and operational efficiency. On the other hand, some argue that excessive focus on this metric may overlook other important factors influencing bank performance, such as market dynamics and regulatory changes.

CONCLUSION

This research seeks to explore and evaluate The impact exerted by five variables regarding the economic outcomes of Sharia-compliant financial institutions throughout the COVID-19 pandemic era, which include BOPO, FDR, NPF, NPM, and ROE. The analysis yields several important conclusions to consider. First, the BOPO variable indicates that it does Exert little to insignificant impact concerning the monetary results of Islamic banking institutions. This outcome suggests that, while BOPO is frequently seen As a primary indicator of how well a bank is performing, under the framework of this analysis, its influence is not felt significantly. The findings of this research contradict grounded in prior research carried out by Felani et al., (2020) and Candera & Indah (2021), where they stated that BOPO significantly influences The financial standing of banking institutions. This hints at the possibility that there are differences in conditions and contexts that may affect the research outcomes in each period. Furthermore, the FDR variable also does not show a major influence on financial performance in this research. This indicates that although FDR is expected to be an indicator of liquidity and financing efficiency, the results are inconsistent with several prior studies. Fauziah et al., (2022) and Chrystella & Susanto (2024) It was discovered that FDR substantially and strongly impacts The financial results of Sharia-compliant banking institutions. However, This outcome is n alignment with the research outcomes by Kharazi (2022) and part of the findings from Chrystella & Susanto (2024), which demonstrate that in certain contexts, FDR has minimal influence regarding the financial outcomes.

in conclusion, the outcomes of this research present intriguing insights into the analyzed variables and the challenges faced by Islamic banks during the pandemic. The differences between this research and previous studies indicate that changing economic contexts and conditions can influence analysis outcomes. Therefore, it is essential for future research to consider external factors that may contribute to differing results regarding the significance of a financial elements influencing Islamic bank's efficiency.

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