

Analysis of the influence of liquidity, capital adequacy ratio, and operational efficiency on profitability in the sustainability of Bank Mega Syariah

Sarah Salsabila^{1⊠}, Anriza Witi Nasution², Marlya Fatira AK³, Rahmadani⁴, Ermyna Seri⁵

¹Politeknik Negeri Medan, Indonesia, <u>sarahsalsabila2411@gmail.com</u>

ARTICLE INFO

Article history:

Received October 27th
Revised November 27th
Accepted December 10th

Author's Corespondence[⊠]:

Sarah Salsabila Politeknik Negeri Medan, Indonesia sarahsalsabila2411@gmail.com



© 2025 Sarah Salsabila, Anriza Witi Nasution, Marlya Fatira AK, Rahmadani, Ermyna Seri. Published by Accounting Study Program, Indonesian Cooperative Institute. This is an open access article under the CC BY NC license (https://creativecommons.org/licenses/by/4.0/)

ABSTRACT

This study aims to determine the effect of liquidity (NPF and FDR), Capital Adequacy Ratio (CAR) and operational efficiency (BOPO) on profitability (ROA) in the sustainability of Bank Mega Syariah. The sample in this study includes the financial statements of Bank Mega Syariah for the period 2010 to 2024 quarter I to IV with total of 60 periods. This study uses secondary data from OJK and Bank Mega Syariah publications. Data collection techniques with documentation studies. Data processing technique used a multiple linear regression test with a significant level of 5 percent ($\alpha = 5\%$). Based on the results of the study, it shows that NPF had an significant effect on the profitability of Bank Mega Syariah with a very low and inverse relationship, FDR had an significant effect on the profitability of Bank Mega Syariah with a low and inverse relationship, CAR had no significant effect on the profitability of Bank Mega Syariah with a very low relationship and inversely proportional, BOPO had an effect on the profitability of Bank Mega Syariah in a significant with a strong relationship and inversely proportional, NPF, FDR, CAR, and BOPO simultaneously had an significant effect on the profitability of Bank Mega Syariah.

Keywords: Liquidity, Capital Adequacy Ratio, Operational Efficiency, Profitability, Sharia Bank

²Politeknik Negeri Medan, Indonesia, <u>anrizanasution@polmed.ac.id</u>

³Politeknik Negeri Medan, Indonesia, <u>marlyafatira@polmed.ac.id</u>

⁴Politeknik Negeri Medan, Indonesia, <u>rahmadani@polmed.ac.id</u>

⁵Politeknik Negeri Medan, Indonesia, <u>ermynaseri@polmed.ac.id</u>

1. INTRODUCTION

Islamic banking has the goal of achieving common prosperity and improving the level of community welfare through economic activities in accordance with Islamic teachings (Melina et al., 2023). PT Bank Mega Sharia, known as Bank Mega Sharia (BMS) since 2010, is a business entity that is committed to creating the nation's common prosperity through the development of the sharia economy in synergy with all stakeholders (Bank Mega Syariah, 2020).

Shared welfare can be realized if banks are able to manage their finances to obtain profitability so that operational activities are carried out optimally. For this reason, BMS implements an ALMA-based liquidity management strategy by forming an ALCO that focuses on managing bank liquidity and profitability to increase profitability while achieving sustainability through the Sustainable Finance Action Plan (RAKB) (Bank Mega Syariah, 2023).

In managing liquidity and RAKB's strategy, BMS also strives to ensure that every step aligns with the principles of maqashid al-sharia, which aims to bring maximum benefits to the ummah and avoid losses in social, economic and environmental aspects (Bank Mega Syariah, 2020). The health of the bank can be identified through the implementation of an evaluation annual financial report which describes bank financial condition in a period (Kimin & Nasution, 2022; Simbolon et al., 2025). Bank Indonesia (BI) stipulates that a financial institution is said to be healthy if it meets a number of certain financial ratio indicators as stated in Bank Indonesia Circular Letter (SEBI) No. 13/24/DPNP/2011 (Bank Indonesia, 2011).

SEBI Regulation No. 13/24/DPNP/2011 has been updated through Financial Services Authority Regulation (POJK) No.8/POJK.03/2014 concerning the Health Level Assessment of Islamic Commercial Banks and Sharia Business Units, along with the Financial Services Authority Circular Letter (SEOJK) No. 14/SEOJK.03/2017 regarding the Assessment of the Soundness Level of Commercial Banks (Otoritas Jasa Keuangan, 2014; Otoritas Jasa Keuangan, 2017). The use of SEBI No.13/24.DPNP/2011 and SEOJK No. 14/SEOJK.03/2017 in the context of this study remains relevant. This is because the two regulations provide an explicit classification scheme and quantitative limits on financial ratios such as ROA, FDR, CAR and BOPO.

Meanwhile, POJK No. 8/POJK.03/2014 is more general and does not directly contain numerical scoring but remains a crucial basis for evaluating the soundness of Islamic banks as a whole. Therefore, the ratio criteria applied in this study come from the merger of SEBI No.13/24.DPNP/2011, SEOJK No. 14/SEOJK.03/2017 and the assessment framework in POJK No. 8/POJK.03/2014 which is adjusted to the needs of analysis systematically.

At the beginning of the 2023 period, BMS managed to achieve an achievement at the 3rd Indonesia Syariah Awards 2023 as the top Sharia Business Unit in the Bank Group category based on Core Capital (KBMI) 1. This award was given to Bank Mega Syariah for achieving good financial performance growth based on total assets, liabilities, comprehensive profit equity, return on assets and equity (Bank Mega Syariah, 2023). However, this achievement does not make the bank independent of various existing phenomena.

One of them is the phenomenon of non-achievement of the ROA indicator at the financial target at the end of 2023, which is realized at 1.96%, although this shows bank performance returning assets is good, but this realization is still lower than the expected target of 2.29%.

The non-performing financing ratio or NPF was realized at 0.98% of the target of 1.35%, this shows the bank able to maintain and maximize the quality of financing better than the expected target. On the other hand, FDR was realized by 71.85% higher than the target, which was 56.10%. The achievement of FDR's target indicates that the bank has successfully used third-party funds for financing distribution more effectively than the set target. In addition, the phenomenon of a decrease in asset value in 2023 of IDR 1.5 trillion caused by an increase in bank liabilities (liabilities), makes the bank have to transfer deposits from BI to loans to meet bank obligations (Bank Mega Syariah, 2023).



Some other indicators to consider in a bank's profitability are CAR and operational efficiency. In BMS, CAR was realized 30.86% above the target of 27.55%, which means that the bank has capital to face financial risks of 30.86% greater than the previously estimated target. In addition, BMS is also experiencing challenges in managing its operational costs, as evidenced through a rise value of the BOPO ratio from 2023 to 76.69% and increasing in 2024 to 77.64% (Bank Mega Syariah, 2024). Until 2024, banks have also not reached the ROA target despite an increase in asset value of IDR 1.4 trillion with profit growth current year before tax of IDR 18.5 billion, the value of ROA only reaches 2.04%.

This failure is a significant issue in sustaining banks' operations amid growing competition within the Islamic finance sector (Bank Mega Syariah, 2024). When viewed from the existing data for 15 years, the trend of ROA fluctuates which indicates that the condition of BMS ROA is not stable enough.

At the end of several years, namely 2014, 2015 and 2021, the ROA ratio was below the standard of sound banking finances of 0.29%, 0.30% and 0.17%. The small value of ROA is due to the inefficiency of BMS in managing its operational costs and third-party funds that have not been optimally channeled to financing. In addition, at the beginning of 2015 BMS also suffered a loss of 1.21% which was also caused by inefficiencies in managing operational costs.

The NPF and FDR ratios also tend to fluctuate, until in 2024 the NPF ratio will reach 0.91%, This shows that the quality of financing has improved from the previous year, with the FDR ratio expected to reach 77.89%, which indicates that banks are still less effective in using third-party funds. Regarding the CAR ratio in the last 15 years, there is a tendency to increase every year. Even though it had decreased, the CAR value remained above eight percent. This situation indicates that the bank maintains a fairly healthy condition, as it possesses adequate capital to meet its obligations. BOPO in BMS in the last 15 years tends to fluctuate until in 2024 the value of BOPO will increase to 77.64%, this states that banks have not been efficient in controlling their operational costs.

A bank can continue to conduct operational if bank pays attention to and maintains its financial health. From the above description, it is evident that liquidity, CAR, and operational efficiency cannot be separated in assessing the bank's profitability Research indicates that financial ratios significantly influence profitability as measured by ROA. According to Kirani and Hudaya, the CAR ratio does not have a significant effect and shows a negative direction towards ROA (Kirani & Hudaya, 2025).

Putri and Indrarini's research found that the liquidity ratio shown by FDR had a significant and positive influence on ROA, while NPF had no and negative effect, and operational efficiency (BOPO) had a significant and negative effect on ROA (Putri & Indrarini, 2024). Lufianda and Syafri found that the FDR ratio had a significant but negative effect on ROA, while NPF and BOPO had no significant and negative effect on ROA, then the CAR ratio showed a significant and negative effect on ROA (Lufianda & Syafri, 2023).

Meanwhile, findings from other studies state that the ratio of CAR, FDR and NPF doesn't have a significant effect on profitability proxied with ROA, while BOPO has a significant and negative influence (Astuti, 2022). In contrast to others, Prihatin found that the liquidity ratio proxied with NPF had a significant and negative effect on ROA, while BOPO didn't have a significant effect but showed a positive direction towards ROA (Prihatin, 2024). Different results were found by Lestari et al., which showed that the NPF ratio didn't have a significant effect but showed a positive direction on ROA, the BOPO ratio had a significant and negative effect on ROA, CAR had a significant and negative effect on ROA, while FDR did not have a significant and positive effect on ROA (Lestari et al., 2022). Based on the phenomena and gaps that have been stated above, this study aims to analyse the influence of liquidity, Capital Adequacy Ratio (CAR), and operational efficiency on profitability in the context of Bank Mega Sharia sustainability.

Bank Sustainability

In it's implementation in banking, the sustainability of the bank is measured by the auditor by assessing the feasibility of the assumption of going concern through an analysis egarding the

company's financial health metrics in line with SEBI No. 13 of 2011 and SEOJK No. 14/SEOJK.03/2017 as well as a comprehensive analysis as reported in the company's annual financial statements, which is generally carried out during the period of January to March using the previous year's financial statements to audit and Auditing Standard Statement (PSA) number 30 as a guideline in providing a going concern opinion that applies within a reasonable period of time (12 months forward) following the date of issuance of financial statements (IAPI, 2011; Junaidi & Nurdiono, 2016). The audit results, presented as an opinion, indicate an unqualified or clean opinion or known as WTP (unqualified opinion) which indicates that there is no problem of going concern of the company (Higar & Djazuli, 2010; Junaidi & Nurdiono, 2016).

Bank Sustainability in an Islamic Perspective

The sustainability Islamic banks are evaluated not only from a financial perspective, but also from the application of sharia principles that are consistent with the maqashid al-sharia, which includes the protection of faith (*faith*), soul (*self*), Akal (*mind*), descendents (*prosperity*) and treasure (*wealth*) (Prasetiyo, 2022). Bank health assessment based on SEBI regulation No.13/24/DPNP of 2011 which has been updated with POJK regulation No.8/POJK.03/2014 concerning the Health Level Evaluation of Islamic Commercial Banks and Sharia Business Units, as well as SEOJK No. 14/SEOJK.03/2017 (Otoritas Jasa Keuangan, 2014; Otoritas Jasa Keuangan, 2017). Sharia principles also emphasize justice, transparency, and the prohibition of riba as stated in QS. Al-Baqarah verse 275 (Indrayani & Mawardi, 2025)

Profitability

Profitability (مَنْفَعَةُ) in banking is measured by the ROA ratio, where a value above 0.5% explains the effectiveness of management management in maximizing the use of assets to generate revenue and support the bank's sustainability (Bank Indonesia, 2011; Otoritas Jasa Keuangan, 2017). Internal factors that can affect profitability include core capital, mudharabah funds and wadiah deposits (Hasibuan & Nofinawati, 2021), Meanwhile, external factors influencing a bank's profitability include interest rates, inflation, exchange rates, and market share (Anggraini & Jamain, 2018; Isman, 2024).

Profitability in an Islamic Perspective

Islamic banking emphasizes the principles of justice, transparency and the prohibition of the practice of usury, with the obligation to obtain profits halal in accordance with QS Al-Jumu'ah verse 10 (Elcavi et al., 2013; Taufiq et al., 2021). The management of profits is directed to balance economic needs and spiritual responsibilities through the Islamic utility function, which maximizes material and ukhrawi benefits through pious deeds and social contributions, with a proportionate allocation to basic needs and social activities (Muhammad, 2019).

Liquidity

Liquidity in Islamic banking is the ability to meet immediate and maintained obligations if banks are able to maintain primary and secondary reserves (Hakim, 2021). Liquidity measurement can be used using the NPF ratio and the FDR ratio, where the NPF shows the level of losses suffered by banks due to non-performing financing in the categories of less current (91 to 120 days), doubtful (121 to 180 days), and bad (>180 days), and is rated good if <5% (Wahyuningtyas et al., 2021; Sarmigi et al., 2022). FDR compares financing allocations to capital and public funds, with a maximum limit of 110% to avoid potential liquidity problems (Bank Indonesia, 2011; Otoritas Jasa Keuangan, 2017; Sarmigi et al., 2022).

Liquidity in an Islamic Perspective

Islamic banks that can fulfill their obligations and provide the best service will increase client confidence and commitmen, thereby contributing to the bank's sustainability. Banking practices have existed since during the era of Prophet Muhammad SAW, with the foundation of the Qur'an and hadith (Maharani & Hidayat, 2020), where QS. Al-Baqarah verse 283 emphasizes transparency and



fairness in the recording and witness of every economic transaction, and QS. Al-Baqarah verse 280 explains the principle of justice in handling problematic financing (Elcavi et al., 2013; Fatihudin, 2015; Indrayani & Mawardi, 2025).

Capital Adequacy Ratio

Islamic banks' capital sufficiency is measured through the CAR ratio, serving as an indicator of the ability to support risky productive activities, strengthen performance and increase public confidence (Darmawan, 2020; Wahyuningtyas et al., 2021). The calculation of the CAR takes into account the principal and secondary capital (Abdullah & Wahjusaputri, 2018) and ATMR which includes financing risks, operational risks and market exposure (Otoritas Jasa Keuangan, 2014). A healthy financial institution is one that has a CAR value above eight percent (Darmawan, 2020; Wahyuningtyas et al., 2021).

Capital Adequacy Ratio in Islamic Perspective

In an Islamic perspective, the use of assets in Islamic banks must be based on the principles of prudence, usefulness, and justice as in QS. Al-Isra verse 27 which condemns waste pemborosan (Elcavi et al., 2013; Yuniarti & Wahab, 2023). Excessive capital management can cause difficulties in meeting financial obligations, so banks need to manage capital efficiently, minimize expenses, and invest wisely. On QS. Az-Zariyat verse 19 affirms the social responsibility of Islamic banks in capital management "pemborosan" (Elcavi et al., 2013; Yuniarti & Wahab, 2023).

Islamic banks are not only financially but also socially obligated, by allocating funds for financing that reduces social inequality and improves living standards. Hadith narrated by Bukhari number 6443 and Muslim number 94 remind that wealth is a means to do good, not an end goal (Asnah et al., 2023). For this reason, the bank implements comprehensive risk mitigation to ensure that the value of the CAR remains above the minimum limit, in line with the principles of prudence and the basic values of fairness, sustainability, harmony and comprehensiveness (*rahmatan lil 'alamin*) (Dahlan et al., 2022).

Operational Efficiency

The BOPO ratio, measuring the proportion of operating expenditures to total operational revenue, is used to assess banks' operational efficiency, where expenses arise from bank activities and income comes from fund distribution (Wahyuningtyas et al., 2021). A good BOPO score is below 85%. Increased revenue has a positive impact, but it needs to be accompanied by effective cost control to prevent an increase in operating expenses (Gina et al., 2025).

Operational Efficiency in an Islamic Perspective

Islam commands wise wealth management, where banks are able to manage finances effectively so that they can contribute to economic stability and business sustainability (Muhazir, 2021). In QS. Al-Furqan verse 67 emphasizes balance in spending, which is in line with the concept of israf as a prohibition of excessive and disproportionate consumption behavior (Elcavi et al., 2013; Raziqi & Masruroh, 2025). In Islamic banking, operational cost efficiency is the implementation of Islamic values that prohibit israf, to deliver optimal service to customers and maximize profits (Ariga et al., 2025).

2. METHOD

This study employs a quantitative approach, utilizing data presented as ratio values contained in BMS's financial statements for the first to fourth quarters of the period 2010 to 2024 with a total of 60 periods. Data was obtained by the documentation study method through a second (secondary) source, namely the official BMS website and the official OJK website. The data analysis was conducted through several testing stages, including descriptive statistics, classical assumption tests, multiple linear regression and determination coefficient tests, using a significance level of 5 percent ($\alpha = 5\%$).

3. RESULTS AND DISCUSSION

3.1 RESULT

Descriptive Statistical Analysis

Table 1. Descriptive Statistical Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
NPF	60	0,91	4,86	2,4598	1,14626
FDR	60	50,18	104,23	84,5747	14,1795
CAR	60	11,16	31,41	20,3372	5,79829
BOPO	60	64,64	110,53	85,8600	9,63852
ROA	60	-1,21	4,86	1,8625	1,24972
Valid N (listwise)	60				

Source: Data processed through SPSS version 26

Referring to Table 1 aforementioned, it can be seen that four independent variables and one bound variable have a mean value > a standard deviation value which indicates that the data are considered homogeneous as they are distributed around the mean. The data is homogeneous means that the risk in BMS is low, meaning that if BMS suffers losses, the losses faced are small, as well as if BMS makes a profit, the profits obtained are not large.

Results of Descriptive Statistical Test of Non-Performing Financing (NPF)

The figure below present a graph illustrating the outcome of the descriptive statistical examination of the NPF variable:

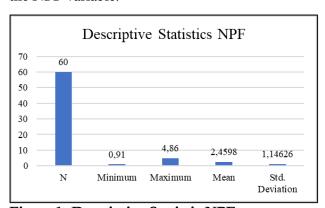


Figure 1. Descriptive Statistic NPF

Referring to Figure 1 aforementioned, the NPF variable exhibits a minimum of 0.91% in quarter III and quarter IV of 2024, and a maximum of 4.86% in quarter 2 of 2015. The minimum value of 0.91% occurred due to the improvement in financing quality, which was marked by BMS's ability to reduce the NPF ratio to 0.91% in the third and fourth quarters of 2024, increasing from 0.95% and 0.98% in the corresponding quarters of 2023. The maximum value of 4.86% occurred due to the decline in the quality of financing which was marked by the weakening of BMS's ability to reduce the NPF ratio to 4.86% in the quarter II of 2015 from 1.81% in the quarter II of 2014.

Containing a mean measurement of 2.4598 exceeding the standard deviation of 1.14626, indicating that the data are homogeneous, as the values are distributed around the mean. This homogeneous nature suggests that the fluctuations in NPF values in the observation period are relatively low or not spread too far from the mean values. In the context of financing risk management, this homogeneity indicates that BMS is consistently able to maintain non-performing financing ratios within a stable range. If there is a decrease and increase in the NPF ratio during the observation period, the level of variation is still within reasonable limits.



Results of Descriptive Statistical Test Financing to Deposit Ratio (FDR)

The figure below presents a graph illustrating the outcomes of the descriptive statistical examination of the FDR variable:

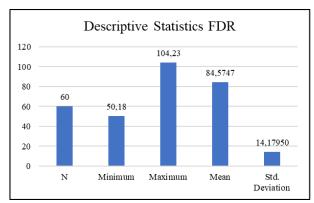


Figure 2. Descriptive Statistic FDR

Referring to Figure 2 aforementioned, It can be observed that the FDR variable reached a minimum of 50.18% in quarter I 2023 and a maximum of 104.23% in quarter II 2013. The minimum value of 50.18% reflects suboptimal allocation of third-party funds in financing, indicating a decline in the effectiveness of third-party fund distribution compared to 84.16% in quarter I 2022.

Meanwhile, the maximum value of 104.23% in the second quarter of 2013 shows that BMS has disbursed financing exceeding the portion of third-party funds allocated to non-performing financing, as it exceeds the optimal range. Both conditions indicate that FDR ratios that are too low and too high both indicate an imbalance in the function of distributing third-party funds allocated as financing.

The mean value of 84.5747 exceeds the standard deviation of 14.17950, indicating that the data are homogeneous, as the values are distributed around the mean. The homogeneity of FDR data shows that the variability of the distribution of funds in the form of financing by BMS over time tends to be stable and does not experience extreme fluctuations. In other words, BMS's performance in managing third-party funds through financing is relatively consistent. This stability is important in maintaining the liquidity of Islamic banks, as irregularities in FDR ratios can reflect high liquidity risks. Therefore, the homogeneity of FDR shows that BMS has a fairly maintained pattern of financing fund allocation, although it still needs to be watched out for if it is close to the upper or lower limit of the optimal ratio.

Results of the Descriptive Statistical Test of Capital Adequacy Ratio (CAR)

The figure below displays a graph representing the result according to the descriptive statistical results for the CAR variable:

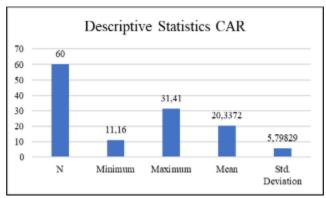


Figure 3. Descriptive Statistic CAR

Referring to Figure 3 aforementioned, it is evident that the CAR variable has the minimum value of 11.16% during the third quarter of 2012, reaching a peak of 31.41% in the quarter III of 2024. The minimum value of 11.16% indicates that in the third quarter of 2012 the ability of BMS to absorb the risk of loss is quite low compared to the previous period, which was 13.77% in the third quarter of 2011, although it is still above the minimum limit of 8%. Meanwhile, the maximum value shows that in the quarter III of 2024 the CAR value was 31.41%, which shows that the bank has a fairly high excess capital, so that capital is very strong in dealing with financial risks.

The mean exceeds the standard deviation of 20.3372 > 5.79829 which indicates showing that the data are homogeneous because the data distribution is around the mean. This homogeneity shows that BMS is able to maintain the stability of its capital level over time, which reflects relatively consistent and controlled capital management in the face of changes in financial conditions or external risks.

Results of Descriptive Statistical Test of Operating Costs of Operating Income (BOPO)

The figure below displays a graph representing the result as revealed by the descriptive statistical analysis of the BOPO variable:

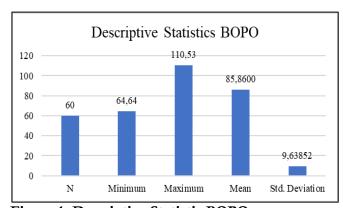


Figure 4. Descriptive Statistic BOPO

Referring to Figure 4 aforementioned, it is evident that the BOPO variable has a minimum value of 64.64% during the fourth quarter of 2021, reaching a maximum of 110.53% in the first quarter of 2015. The minimum value of 64.64% occurs due to the improvement in the management of the use of operational costs to operating income which is marked by BMS's ability to reduce the BOPO ratio to 64.64% in the fourth quarter of 2021 from 85.52% in quarter IV of 2020. Meanwhile, the maximum value of 110.53% occurred due to the decline in the management of the use of operational costs on operating income which was marked by the weakening of BMS's ability to reduce the BOPO ratio to 110.53% in the first quarter of 2015 from 89.92% in the first quarter of 2014.

The mean value of 85.8600 exceeds the standard deviation of 9.63852, indicating that the data are homogeneous, as the values are distributed around the mean. This homogeneity reveals indicating the degree of operational efficiency of BMS is relatively stable during the period 2010 to 2024, although there are fluctuations from time to time. In the operational context, BOPO homogeneity shows that banks tend to experience a pattern of operating expenses that are consistent with their operating income, both when efficiency increases and decreases. This indicates that the risk of inefficiency or waste of operational costs can be controlled quite well.

Return on Assets (ROA) Descriptive Statistical Test Results

The figure below displays a graph representing the result as revealed by the descriptive statistical analysis of the ROA variable:



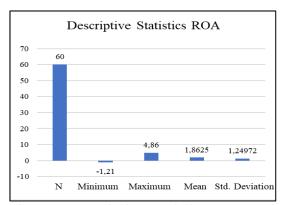


Figure 5. Descriptive Statistic ROA

Referring to Figure 5 aforementioned, It can be observed that the ROA variable reached a minimum of -1.21% in quarter I 2015 and a maximum of 4.86% in quarter I 2016. The minimum value of -1.21% in the first quarter of 2015 occurred because there was an increase in BOPO of 110.53% from 89.92% in the 2014 quarter which caused a decrease in ROA from the previous year. The maximum value of 4.86% in the first quarter of 2016 occurred because the values in the NPF, FDR, CAR and BOPO ratios were in the good category of 4.18%, 95.85%, 22.22% and 84.92%.

The mean value of 1.8625 exceeds the standard deviation of 1.24972, indicating that the data are homogeneous, as the values are clustered around the mean. This homogeneous nature shows that the risk in BMS is low, it can be interpreted that if BMS suffers a loss, the loss faced is small, as well as if BMS makes a profit then the profit obtained is not large, because the average ROA value is still at 1.8625%, which is above 1.25%. This is in accordance with SE BI number 13 of 2011 concerning Bank Health Level Criteria which states that an ROA value above 1.25% is good.

Classical Assumption Analysis

1. Normality and Heterokedasticity Test

Table 2. Normality and Heterokedasticity Test

	ij unu meteronea			
	Nor	mality Test	Heterokedasticity Test	
	Statistic	Df	Sig.	Sig.
NPF	0,987	60	0,797	0,061
FDR	0,962	60	0,056	0,531
CAR	0,978	60	0,362	0,329
BOPO	0,981	60	0,473	0,249
ROA	0,996	60	0,999	,
Constant	•		•	0,235

Source: Data processed through SPSS version 26

Referring to Table 2 in the normality test and the heterokedasticity test, a Sig. value was obtained for each variable exceeding 0.05, indicating that the data are normally distributed and free from heterokedasticity symptoms.

This is also reinforced by the following Scatterplot diagram:



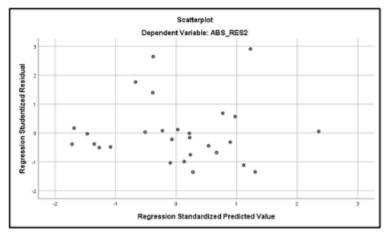


Figure 6. Scatterplot Diagram

The aforementioned scatterplot illustrates that the sample points are randomly distributed, without forming any definite systematic pattern. This random distribution pattern indicates that the data is free from the symptoms of heterokedasticity, therefore the regression model used can be said to be valid in terms of the stability of its residual variance.

2. Collinearity Statistics and Autocorrelation Test

Table 3. Collinearity Statistics and Autocorrelation Test

	Collinearity Statistics	Autocorrelation Test
	VIF	
NPF	1,901	Predictors: (Constant)
FDR	2,360	Predictors: (Constant)
CAR	1,588	Predictors: (Constant)
ВОРО	2,211	Predictors: (Constant)
ROA	Dependent Variable	Dependent Variable
Constant	_	NPF, FDR, CAR, BOPO
DW		1,731
Adjusted R Square		0,611

Source: Data processed through SPSS version 26

Referring to Table 3 in the multicollinearity test of the VIF value of the fourth independent variable < 10.00, this finding represents that the data has been free from the symptoms of multicollinearity. The results of the autocorrelation test showed a Durbin Watson value (DW) of 1.731 where the number met the DU<DW<4-DU requirements which was 1.7274<1.731<2.2726. This condition indicates that the data is free from autocorrelation symptoms.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Analysis

Cofficients*						
	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	Т	Sig.	
Constant	11,699	1,149		10,184	0,000	
NPF	0,254	0,122	0,233	2,080	0,042	
FDR	0,022	0,011	0,250	2,006	0,050	
CAR	-0,041	0,022	-0,191	-1,871	0,067	
BOPO	-0,134	0,016	-1,032	-8,546	0,000	

*Dependent Variable: ROA

Source: Data processed through SPSS version 26

The multiple linear regression analysis in this study produced the following equation model:



ROA = 11,699 + 0,254NPF + 0,022FDR - 0,041CAR - 0,134BOPO + e

The equation illustrates that the ROA constant of 11.699 indicates that if the variables NPF, FDR, CAR and BOPO are zero, then the ROA obtained is 11.699%. An NPF coefficient of 0.254 indicates that an upward trend in NPF of 1% will have an impact on an increase in ROA of 0.254%. Furthermore, an FDR coefficient of 0.022 indicates that any increase in FDR of 1% will increase the ROA by 0.022%. Meanwhile, the CAR coefficient of -0.041 reflects that an increase in CAR of 1% actually decreases ROA by 0.041%. The BOPO coefficient of -0.134 shows that an increase in BOPO of 1% will lead to a decrease in ROA of 0.134%. Variable e is an error term, which includes variables that cannot be explained by the regression model.

Referring to Table 4 aforementioned, it can be seen that the p-value (sig.) of the NPF variable of 0.042 is smaller than the significance level of 0.05, so that the NPF partially has a significant effect on ROA. In the FDR variable, the p-value (sig.) of 0.050 equals the significance limit of 0.05, which means that FDR also has a significant effect on ROA. Meanwhile, the CAR variable has a p-value (sig.) of 0.067 which is greater than 0.05, so that partially CAR does not have a significant effect on ROA. The BOPO variable shows a p-value of 0.000 which is smaller than 0.05, so it can be concluded that BOPO has a significant effect on ROA.

Pearson Correlation Test Result

Table 5. Pearson Correlation Test Result

Correlations						
NPF FDR CAR BOPO ROA						
ROA Pearson Correlation	-0,112	-0,237	-0,146	-,673**	1	
Sig. (2-tailed)	0,395	0,068	0,264	0,000		
N	60	60	60	60	60	

^{**}Correlation is significant at the 0.01 level (2-tailed).

Source: Data processed through SPSS version 26

Referring to Table 5 aforementioned, it's known that the NPF variable has a correlation value of 0.112 which indicates a negative (inverse) relationship between NPF and ROA, this value indicates a very low NPF relationship with ROA in BMS. The negative (inverse) correlation between NPF and ROA, means that if the NPF level in BMS increases, the ROA in BMS will decrease, which indicates that it is getting worse. Referring to historical data on BMS in certain periods, such as from the first quarter to the second quarter in 2010, 2011, 2012, 2016, 2018, 2021, the fluctuating NPF value was followed by fluctuations in the ROA value. Then, from quarter III to the quarter IV in 2015, 2017, 2019, 2022 and 2024, the decline in NPF values was followed by the growth of ROA.

The findings of this study align with Prihatin research, which indicates that NPF has a significant and negative effect (Prihatin, 2024), but contradicts the research conducted by Lestari et al. which states that NPF has no effect and is positive on ROA (Lestari et al., 2022) and Astuti's research which states that NPF has no effect and negative on ROA (Astuti, 2022).

This result is in line with the theory of liquidity which states that the NPF value is said to be good if it is less than five percent, because the high NPF number indicates that the level of bank fund allocation is getting worse, causing a decrease in liquidity (Wahyuningtyas et al., 2021; Sarmigi et al., 2022). In liquidity theory, NPF is the level of loss experienced by banks as a result of problematic financing, caused by the customer's inability to fulfill part or all of it's responsibilities (Wahyuningtyas et al., 2021).

Based on table 5 above, the FDR variable has a correlation value of -0.237 which indicates a negative (inverse) relationship between FDR and ROA, this value indicates a low FDR relationship with ROA in BMS. The negative (inverse) relationship between FDR and ROA, means that if the level of FDR in BMS increases, the ROA in BMS will decrease, which indicates that it is getting worse.

This aligns with liquidity theory, which states that the value of FDR is not in the optimal category

^{*}Correlation is significant at the 0.05 level (2-tailed).

(<80%) (Bank Indonesia, 2011; Otoritas Jasa Keuangan, 2017), and exceeding the maximum tolerance limit of 110% can pose liquidity risks, because the high proportion of financing compared to the funds raised can result in potential problems in financial problems (Sarmigi et al., 2022).

Referring to BMS historical data in the fourth quarter of 2010, the FDR value was recorded at 77.82% or below the optimal limit (80%), and the ROA was recorded at 1.90%. In the next quarter, the second quarter of 2011, FDR increased slightly to 79.14% but was still below the optimal limit, and ROA actually decreased to 1.77%. A similar phenomenon occurred in 2013 when FDR increased from 98.29% in the first quarter to 104.23% in the second quarter followed by a decrease in ROA from 3.57% to 2.94%.

The decline in ROA continued to occur even though FDR began to decline near the optimal limit, such as in the third quarter of 2013 when FDR became 102.33% and ROA fell to 2.57%. Similarly, in the period 2021 to 2024, FDR values were well below the optimal limit, such as 56.28% in the 2021 quarter II and 50.18% in the 2023 quarter I, followed by a gradual decline in ROA, such as from 3.39% in the 2021 quarter II to only 1.72% in the 2024 quarter I. These patterns reinforce the conclusion that the imbalance of the FDR ratio, either too high or too low from the optimal limit of 80% to 110% (Bank Indonesia, 2011; Otoritas Jasa Keuangan, 2017), can pose liquidity risks that negatively impact banks' ability to generate profits.

The results of this study are in line with the results of research conducted by Lufianda and Syafri which stated that FDR has a significant but negative effect on ROA (Lufianda & Syafri, 2023), but contradicts the research of Astuti and Lestari et al. which stated that FDR has no effect and is positive on ROA (Astuti, 2022; Lestari et al., 2022).

Referring to Table 5 above, the CAR variable has a correlation value of -0.146 which indicates a negative (inverse) relationship between CAR and ROA, this value indicates a very low relationship between CAR and ROA in BMS. The negative (inverse) relationship between CAR and ROA, means that if the level of CAR in BMS increases, the ROA in BMS will decrease, which shows that it is getting worse. However, the results of the t-test with a significance value of 0.067 showed that the CAR variable didn't have a significant effect on the ROA variable in BMS.

The findings of this study are consistent with the research carried out by Kirani and Hudaya which stated that the CAR ratio does not have a significant effect and shows a negative direction on ROA (Kirani & Hudaya, 2025), but it contradicts the research of Lufianda and Syafri and the research of Lestari et al. which reported that CAR has an effect and negative on ROA (Lufianda & Syafri, 2023; Lestari et al., 2022).

Theoretically, CAR is an indicator that shows the adequacy of a bank's capital in fulfilling the bank's obligations. Adequate capital can support business expansion and encourage increased profitability (Darmawan, 2020). BI and OJK stipulate that banks are considered to have sufficient capital if the value of the CAR is above 8% (Bank Indonesia, 2011; Otoritas Jasa Keuangan, 2017).

However, the results of this study show that in BMS, CAR has no effect and is negative on ROA. These differences between the theory and the findings are likely influenced by the limitations of the data analyzed, so they do not fully describe the relationship patterns that should be in theory. However, this result is still academically acceptable because the error value (e) in the regression model is only 5%, which means that 95% of the ROA variation can still be explained by the independent variables in the model.

The findings of this study are reinforced by data from the third quarter of 2024, where the CAR reached 31.41%, the highest throughout the period 2010 to 2024 and an increase from the previous period of 28.97%. Although theoretically these conditions reflect excellent capital health, this increase was not followed by an increase in ROA. On the contrary, ROA actually decreased from 2.00% to 1.46%.

Other BMS financial historical data that can also strengthen this finding is that in the third quarter of 2012 the CAR was 11.16%, the lowest throughout the period 2010 to 2024 and decreased from the



previous period of 13.77%. However, with this decrease condition, the ROA value actually increased from 1.65% to 4.11%. This data reinforces that statistically CAR is negative and indicates that the increase in CAR in BMS is not directly accompanied by an increase in profitability performance. Thus, the high capital ratio doesn't always indicate the efficiency of capital use in generating optimal profits.

Based on table 5 above, The BOPO variable has a correlation coefficient of -0.673, indicating a negative (inverse) relationship between BOPO and ROA, this value shows a strong relationship between BOPO and ROA in BMS. The negative (inverted) relationship between BOPO and ROA, means that if the BOPO level in BMS increases, the ROA in BMS will decrease, which indicates that it is getting worse.

The results of this study align with previous research of Astuti, Lestari et al. and Putri and Indrarini, which indicated that the BOPO ratio has a significant influence and shows a negative direction towards ROA (Astuti, 2022; Lestari et al., 2022; Putri & Indrarini, 2024), but contradicts Prihatin's research which explains that BOPO ain't effect and is positive on ROA (Prihatin, 2024) and Lufianda and Syafri's research which states that BOPO has no effect and is negative on ROA (Lufianda & Syafri, 2023).

The BOPO ratio in this study demonstrates a negative effect on ROA, indicating that as the BOPO value increases, the bank's profitability decreases. This result aligns with the operational efficiency theory, which asserts that high BOPO indicates low efficiency, because the costs incurred for bank operations are greater than the revenue generated (Wahyuningtyas et al., 2021).

Table 6. Simultaneous Test Results

Anova*					
Model	Sum of Squares	Df	Mean Square	\mathbf{F}	Sig.
1 Regression	58,726	4	14,682	24,161	,000**
Residual	33,421	55	0,608		
Total	92,147	59			

^{*}Dependent Variable: ROA

**Predictors: (Constant), NPF, FDR, CAR, BOPO Source: Data processed through SPSS version 26

Referring to Table 6, a p-value (sig.) of 0.000 was obtained, falling under the significance level of α = 0.05. This indicates that the variables NPF, FDR, CAR, and BOPO simultaneously affect ROA. Furthermore, referring to table 2, it is known that the four independent variables are able to explain the ROA of 0.611 or 61.1%, while the remaining 0.389 or 38.9% is influenced by factors beyond this research model, indicating the presence of other variables outside of NPF, FDR, CAR, and BOPO that also contribute to influencing ROA on BMS sustainability.

The findings of this study are consistent with Lestari et al. 2022 which found that CAR, FDR, BOPO, and NPF influence ROA, and align with theories on factors affecting profitability, indicating that both internal and external factors can impact a bank's profitability. Internal factors include the bank's financial resources as well as external factors including interest rates, inflation, exchange rates, and market share (Anggraini & Jamain, 2018).

3.2 DISCUSSION

Historical data on BMS's financial performance shows the contribution of NPF, FDR, CAR and BOPO variables to changes in ROA, although simultaneously only 61.1% affect ROA. In the first quarter of 2010, ROA was at 3.18% with healthy NPF, FDR, CAR and BOPO ratios. A similar thing happened in the first quarter of 2016 when the ROA increased to 4.86%, also supported by the good performance of the four variables. On the other hand, from 2014 to 2015, ROA decreased to record losses influenced by the high BOPO ratio.

The trend of decreasing ROA also occurred in 2023 and 2024, although it is still in the very good

category, this is due to the FDR ratio that is not optimal, the effectiveness of capital utilization is not better than the previous period which is characterized by a rise in the value of CAR and a decrease in the value of NPF which statistically also affects the decrease in ROA. This pattern indicates that all four variables simultaneously affect BMS's ROA.

In the context of BMS sustainability, the results of this study reinforce the principle of going concern as stipulated in PSA 30, which emphasizes that profitability stability and financial efficiency are the main prerequisites for long-term operational sustainability (IAPI, 2011). Empirical findings show that partially, NPF, and FDR have a positive effect on ROA, while BOPO has an effect and negative on ROA, and CAR has no effect but is negative on ROA. This relationship indicates that BMS's profitability performance is greatly influenced by the effectiveness of financing risk management, liquidity, capital and operational cost efficiency.

The four ratios are a direct reflection of the resilience and sustainability of the bank's financial performance. A controlled NPF indicates a maintained financing quality, an optimal FDR indicates healthy liquidity management, a low BOPO indicates cost efficiency and a productively managed CAR indicates the effectiveness of capital utilization, although in BMS it is not always positively correlated with profitability.

Overall, there is no indication of doubt about BMS's going concern, this is reinforced by independent opinions that consistently provide reasonable opinions without exception regarding business continuity during the period 2010 to 2024 in accordance with the provisions of PSA 30 paragraphs 13 and 14. This achievement cannot be separated from the strategic role of RAKB implemented by BMS. RAKB is an important instrument in directing the strengthening of internal capacity, both in liquidity management and cost efficiency, as well as in the regulation of organizational structure and risk management.

In addition, BMS also encourages the development of digital financial services efficiently and environmentally friendly, as well as allocating resources to support social responsibility and environmental conservation. Thus, the linkage between the four financial ratios to ROA not only illustrates statistical relationships, but also reflects the real integration between financial performance, operational resilience, governance principles, and sustainability values in the perspective of sharia maqashid. The four ratios are strategic instruments in achieving sustainable profitability, which encompasses both economic and social aspects and environmental objectives, as mandated in the RAKB BMS document and the principles of sharia maqashid.

Islamic banking risk management, both through NPF and FDR, is not only technical in nature to maintain asset stability and liquidity, but also reflects the implementation of the values of justice, empathy, and trust as taught in QS. Al-Baqarah verses 280 and 283. This practice shows that the sustainability of Islamic banks is supported by a balance between financial stability and a social-spiritual dimension that strengthens public trust (Elcavi et al., 2013; Indrayani & Mawardi, 2025). In the context of BMS, the liquidity management strategy through FDR supervised by ALCO and the implementation of RAKB confirm that the achievement of profitability is not only profit-oriented, but also includes sustainability based on sharia maqashid, which integrates financial, social, and environmental aspects (Bank Mega Syariah, 2023).

In addition, the ratio of CAR and BOPO also shows the relationship between profitability and sustainability. Although capital has not been fully optimally managed to support profitability in sustainability, BMS's efforts emphasize the importance of Islamic governance, socio-environmental risk management, and long-term responsibility (Bank Mega Syariah, 2023).

On the other hand, the operational efficiency reflected in BOPO not only increases profitability through cost control, but also reflects compliance with sharia principles in avoiding israf (QS. Al-Furqan: 67). The strategy of merging auxiliary branches, digitization of services, and socioenvironmental programs contained in the RAKB shows that the negative relationship of BOPO to ROA is empirically valid and at the same time is proof of BMS's success in harmonizing financial goals with the sustainability value of maqashid sharia.



4. CONCLUSION

According to the findings of the research, it shows that NPF had an significant effect on the profitability of Bank Mega Syariah with a very low and inverse relationship, FDR had an significant effect on the profitability of Bank Mega Syariah with a low and inverse relationship, CAR doesn't had an significant effect on the profitability of Bank Mega Syariah with a very low relationship and inversely proportional, BOPO had an effect on the profitability of Bank Mega Syariah significantly with a strong and inverse relationship, NPF, FDR, CAR, and BOPO simultaneously had an significant effect on the profitability of Bank Mega Syariah with a significant value of 0.000 and an adjusted R square value of 0.611 or 61.1% of Bank Mega Syariah's profitability influenced by NPF, FDR, CAR and BOPO.

5. REFERENCES

- Abdullah, T., & Wahjusaputri, S. (2018). Bank & Lembaga Keuangan. In *Mitra Wacana Media* (Cetakan II).
- Anggraini, D., & Jamain, T. H. (2018). Kajian Faktor-Faktor yang Mempengaruhi Laba Bank Perkreditan Rakyat Syariah Di DKI Jakarta. *Management & Accounting Expose*, 1(2), 12–21.
- Ariga, A., Wibowo, W., Choiri, Ah., Aminuddin, & Setyono, J. (2025). Pengelolaan Dana pada Bank Syariah: Kajian Literatur tentang Efisiensi, Risiko, dan Strategi Optimalisasi. *J-CEKI: Jurnal Cendekia Ilmiah*, 4(3), 348–356.
- Asnah, Sabri, Febrianti, E., & Al-amin. (2023). Konsep Pemeliharaan Harta Dalam Perspektif Konvensional Dan Syariah. *Journal Of Social Science Research*, 2(2), 11033–11046.
- Astuti, R. P. (2022). Pengaruh CAR, FDR, NPF, Dan BOPO Terhadap Profitabilitas Perbankan Syariah. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3213–3223. https://doi.org/10.29040/jiei.v8i3.6100
- Bank Indonesia. (2011). Surat Edaran Bank Indonesia No 13/24/DPNP 2011.
- Bank Mega Syariah. (2020). Profil Perusahaan: Kenali Bank Mega Syariah Lebih Dekat. Bank Mega Syariah.
- Bank Mega Syariah. (2023). Maju Tangguh Bersama Umat (Resilient Advancement with the Community). Bank Mega Syariah.
- Bank Mega Syariah. (2024). Laporan Keuangan PT. Bank Mega Syariah Per Desember 2024.
- Dahlan, R., Lestari, N. M., & Haryanto, A. (2022). *Manajemen Risiko Perspektif Maqashid Syariah* (F. N. Fuad (ed.); Cetapan I). Gramasurya.
- Darmawan. (2020). Dasar-Dasar Memahami Rasio dan Laporan Keuangan. In D. M. Lestari (Ed.), *Universitas Negeri Yogyakarta Press* (Cetakan I). UNY Press.
- Elcavi, S., Elbass, D., & Muam. (2013). *Al-Quranul Karim Tajwid dan Terjemahnya*. UD Halim Peblishing & Distributing.
- Fatihudin, D. (2015). *Metode Penelitian untuk Ilmu Ekonomi, Manajemen dan Akuntansi*. Zifatama Jawara Publisher.
- Gina, F. I., Nopiyanti, A., Cahyani, I. D., Fadila, A., Fajrin, I. A., Marlina, Arrosyid, M. R., Hidayati, Si., Ramadhani, R. B., Wahyudi, Fahrezi, Z., & Tristiarto, Y. (2025). *Dinamika Kinerja Keuangan Bank* (E. E. Nurdiana (ed.)). Deepublish Digital.
- Hakim, L. (2021). *Manajemen Perbankan Syariah* (S. Handayani & L. S. Imama (eds.)). Duta Media Publishing.

- Hasibuan, A. N., & Nofinawati. (2021). *Pemahaman Masyarakat Kota Padangsidimpuan tentang Produk Perbankan Syariah* (Cetakan I). Akademia Pustaka.
- Higar, A. S., & Djazuli, A. (2010). Analisis Respon Auditor terhadap Asumsi Going Concern Akibat Krisis Moneter dan Financial Distres Model (Studi Kasus pada Perusahaan di BEI yang Mengalami Kerugian). *Tazkia Islamic Finance and Business Review*, 5(1), 1–20.
- IAPI. (2011). PSA No 30 Pertimbangan Auditor Atas Kemampuan Entitas dalam Mempertahankan Kelangsungan Hidupnya. *Standar Profesional Akuntan Publik*, *341*, 1–23.
- Indrayani, S., & Mawardi. (2025). Konsep Keadilan dalam Ekonomi Syariah (QS. Al-Baqarah: 275-281). *Indonesian Research Journal on Education*, *5*(1), 73–79.
- Isman, A. F. (2024). *Merger Perbankan Syariah di Indonesia* (S. Chuzaemah (ed.); Cetakan I). Selat Media Patners.
- Junaidi, & Nurdiono. (2016). Kualitas Audit Perspektif Opini Going Concern (B. Hartadi (ed.)). CV. Andi Offset.
- Kimin, T. G. R., & Nasution, A. W. (2022). Analisis Komparasi Ketepatan Model Grover, Springate, Dan Zmijewski Dalam Memprediksi Financial Distress Bank Umum Syariah Di Indonesia. *Studia Economica: Jurnal Ekonomi Islam*, 256–280. https://doi.org/10.30821/se.v8i2.13654
- Kirani, S., & Hudaya, R. (2025). The Influence of Solvency and Liquidity Ratios on the Profitability of Commercial Banks in Indonesia. 4(2), 853–872.
- Lestari, D. T., Mahdi, F. M., & Aprilianto, F. (2022). Pengaruh CAR, Rasio BOPO, FDR Dan NPF Terhadap Profitabilitas ROA (Studi pada PT. Bank Muamalat Indonesia Periode 2009-2021). *Journal of Islamic Economics Development and Innovation (JIEDI)*, *2*(1), 1–15.
- Lufianda, P., & Syafri. (2023). Pengaruh Car, Npf, Fdr Dan Bopo Terhadap Profitabilitas (Roa) Pada Bank Umum Syariah (Studi Kasus: Bank Syariah Yang Terdaftar Di Ojk 2018-2022). *Jurnal Ekonomi Trisakti*, 3(2), 3243–3254.
- Maharani, D., & Hidayat, T. (2020). Bank dan Lembaga Keuangan Syariah Dalam Perspektif Al-Qur'an. *MALIA: Journal of Islamic Banking and Finance*, 4(1), 50–58. https://doi.org/10.21043/malia.v4i1.8448
- Melina, F., Zulfa, M., Zulkifli, Hamzah, & Muyasaroh, N. (2023). *Jurnal Pemberdayaan dan Pengabdian pada Masyarakat.* 1(1), 46–51.
- Muhammad. (2019). Manajemen Keuangan Syariah Analisis Fiqh & Keuangan (Edisi II). STIM YKPN.
- Muhazir. (2021). Ekonomi Dalam Kajian Al-Quran (Tela'ah Terhadap Ayat Hemat Dalam Distribusi Harta). *Al-Bayan: Jurnal Ilmu Al-Qur'an Dan Hadist*, 4(2), 159–173.
- Otoritas Jasa Keuangan. (2014). Peraturan Otoritas Jasa Keuangan No.8/PJOK.03/2014 Tentang Penilaian Tingkat Kesehatan Bank Umum Syariah dan Unit Usaha Syariah. In *Otoritas Jasa Keuangan*.
- Otoritas Jasa Keuangan. (2017). Surat Edaran Otoritas Jasa Keuangan Nomor 14/SEOJK.03/2017 tentang Penilaian Tingkat Kesehatan Bank Umum). In *Otoritas Jasa Keuangan*.
- Prasetiyo, L. (2022). *Ebook prasetyo 2022* (M. Nasrudin (ed.); Cetakan I). PT. Nasya Expanding Management.
- Prihatin, K. S. (2024). Pengaruh NPF dan BOPO Terhadap Profitabilitas pada Bank BJB Syariah Periode 2014-2021. *Progress: Jurnal Pendidikan, Akuntansi Dan Keuangan*, 7(1), 36–46. https://doi.org/10.47080/progress.v7i1.3026



- Putri, S. T., & Indrarini, R. (2024). Pengaruh Dana Pihak Ketiga, Non Performing Financing, Financing To Deposit Ratio dan Operational Efficiency Ratio Terhadap Profitabilitas Pada Bank Muamalat. *Jurnal Ekonomika Dan Bisnis Islam*, 7, 177–189.
- Raziqi, A., & Masruroh, N. (2025). *Teori Permintaan dalam Kajian Marshallian dan Ekonomi Islam* (M. Chotib (ed.); Cetakan I). CV. Jakad Media Publishing.
- Sarmigi, A., Putra, E., Busami, Y., & Parasmala, E. (2022). *Analisis Laporan Keuangan Perbankan Syariah* (Pertama). CV. Adanu Abimata.
- Simbolon, N., Nurlinda, Asmalidar, Marbun, M. F., & Purba, E. (2025). The Influence of BOPO (Operating Expenses and Operating Income) on Return on Assets (ROA) at PT. Bank Mega Tbk.
- Taufiq, M., Fatirawahidah, Gaffar, A., & Zuhrah, N. (2021). Karakter Berniaga Dalam Qs. Al-Nur/24:37 Kajian Tahlili. *El-Magro'*, 1(2), 102–120.
- Wahyuningtyas, E. T., Primasari, N. S., Ilmi, Z., Majidi, Ialu M. S., Susesti, D. A., Khusnah, H., Ghofirin, M., & Putra, R. S. (2021). Analisis Laporan Keuangan Syariah. In K. Marijan (Ed.), *Jurnal Riset Akuntansi* (Vol. 2, Issue 2). Kantor Perwakilan Bank Indonesia Provinsi Jawa Timur. https://doi.org/10.54066/jura-itb.v2i2.1805
- Yuniarti, D., & Wahab, A. (2023). Pemanfaatan Harta dalam Islam. *Jurnal Alwatzikhoebillah : Kajian Islam, Pendidikan, Ekonomi, Humaniora*, *9*(2), 541–549. https://doi.org/10.37567/alwatzikhoebillah.v9i2.2228