

Financial Performance of Islamic Commercial Banks in Indonesia

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Abstract

Assessment of the financial performance of banks is very important to be carried out by internal organizations and as a basis for corporate planning in the future. The financial performance in question is related to CAR, NPF, BOPO and FDR which theoretically and empirically affect bank profitability, namely ROA. The objectives of this study are: (1) to examine the effect of CAR on ROA; (2) examine the effect of NPF on ROA; (3) examine the effect of BOPO on ROA and (4) examine the effect of FDR on ROA. The Islamic Commercial Banks that are the locus of this research are BRI Syariah and BNI Syariah which represent Bank Syariah Indonesia before the merger in 2021. The research data is taken from the documentation of the two banks published by the Financial Services Authority of the Republic of Indonesia, from 2015 to 2020 in the form of data quarterly. The results of testing the research hypotheses can be stated: (1) CAR has a significant effect on ROA; (2) NPF has no significant effect on ROA; (3) BOPO has a significant effect on ROA and (4) FDR has a significant effect on ROA.

Keywords: Capital Adequacy Ratio, Non-Performing Financing, Financing to Deposit Ratio, Operational Costs on Operational Income, Return on Assets, Business Planning.

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INTRODUCTION

Financial performance is an important factor for banks to evaluate their business operations based on past data, in order to obtain an overview to plan future business development effectively and efficiently. according to Pavol (2021), evaluation of financial health is used to make plans and to predict the future of the company. Whereas Manalu (2019) explained that financial performance can represent the condition of a company, whether profitable or even heading for bankruptcy which must be watched out for so that business closures do not occur. Financial performance in question is an assessment of financial ratios.

Financial performance that can be assessed based on these financial ratios is empirically divided into four, namely: liquidity ratios, activity ratios, solvency ratios and profitability ratios (Abuzarqa, 2019; Adam, 2014; Barus, 2017; Kariyawasam, 2019; Putri, 2016; Tyas, 2020). In the context of banking, especially Islamic banking, which is the locus of this research, it is more focused on the study of the profitability ratio proxied by Return on Assets (ROA) which is influenced

by the variables of Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), Operational Costs on Operational Income (BOPO) and Financing to Deposit Ratio (FDR). The theoretical reference regarding the financial ratios above as stated by Abbas (2020).

In relation to the capitalization of a bank, CAR (also known as the minimum capital requirement) can be used to describe a bank's ability to reduce the risk of default in credit transactions so as to practically assist in improving financial stability. Thus, the CAR that tends to increase indicates that the bank is getting stronger and healthier in its business operations (Abbas, 2020; Asraf *et al.*, 2019; Sang, 2021). However Sang (2021) in his study in Vietnam found that a CAR that is too high in value has a negative impact on banks because banks are no longer efficient, especially in utilizing their capital and have a negative impact on financial stability and profitability.

The importance of CAR for banks cannot be separated from practical and empirical considerations

that there is a linear relationship between CAR and ROA and ROE. Where the higher the CAR value, the higher the bank's profitability as measured by ROA and ROE in a certain period of time. So that banks make every effort to increase their capital, both core and other capital (AGBEJA *et al.*, 2019; Bateni *et al.*, 2014; Białas & Solek, 2010). In the context of Islamic banking, Ilyas (2018) argued that effective and efficient capital management is an important factor to obtain optimal results. While the source of bank capital comes from two sources, namely: (1) core capital obtained from bank owners, namely shareholders, retained earnings, reserves, mudharabah profit sharing funds and (2) deposit funds with *al-wadiah* contracts in the form of *wadi'ah yad al-amanah* and *wadiah yad adhdhamamah*.

H₁: CAR has a significant effect on ROA.

Meanwhile, to determine bank ratings, the criteria and at the same time measure the value of Islamic banks based on the CAR value are based on OJK (2014); PBI (2007); SEBI (2004) the following.

Table-1: CAR Rating, Criteria and Value Based on PBI No. 9/1/PBI/2007; SEBI No. 6/23/DPNP Year 2004 and SEOJK No. 10/SEOJK.03/2014

Rating	Criteria	Mark
1	CAR 12%	Very healthy
2	9% CAR < 12%	Healthy
3	8% CAR < 9%	Healthy enough
4	6% < CAR < 8%	Unwell
5	CAR 6%	Not healthy

Previous research on the effect of CAR on banking ROA as stated by Mainata & Ardiani (2018) who found that at 9 Islamic Commercial Banks (BUS) in Indonesia from 2012 to 2016 CAR had a significant positive effect on ROA. The higher the CAR value, the more beneficial it is for the bank to contribute in generating profits. The same study as Simanjuntak (2016) who found a significant positive effect of the CAR variable on ROA in 23 banking companies in Indonesia in 2010-2014. However, there are different study results, that CAR has a negative effect like research Maulana *et al.*, (2021) on banks listed on the Indonesia Stock Exchange in 2017-2020 which explains the insignificant negative effect of the CAR variable on ROA caused by credit risk. Likewise with studies Latifah *et al.*, (2012) that CAR has a negative effect on ROA of foreign exchange banks that go public on the Indonesia Stock Exchange in 2009-2010.

Another important aspect for the world of Islamic banking is NPF, which conventional banks use the term Non-Performing Loan (NPL) according to Abbas (2020); Haryanto *et al.* (2020); Rahman & Safitrie (2018), NPF is related to the risk of bad credit caused by default by the debtor or other parties who are obligated to the bank. This NPF affects bank profitability which is proxied by ROA and ROE, so that

according to Kuswahariani *et al.*, (2020); Sugiharto *et al.*, (2019). The higher the value of the NPF or NPL ratio in conventional banks, the higher the risk of non-performing financing faced by the bank so that it can reduce profitability. It was further explained that this NPF ratio could be influenced by internal and external factors of the bank, such as the exchange rate, inflation and national income (GDP).

Meanwhile, the strategy to prevent the higher NPF that poses a risk to bank profitability as recommended by Riyadi *et al.*, (2014) namely by improving the CAR aspect, Earning Asset Quality (KAP) and Operating Costs and Operating Income (BOPO). Other recommendations are Rahayuni & Dalimunte (2021) that financing restructuring is a step and strategy to save financing as a bank's effort to improve the financing position and financial condition of the customer company by reinstating the financing, which is carried out among others through rescheduling, reconditioning and restructuring. This strategy is also relevant to Sitanggang (2019) that in order to deal with the problem of default through the application of 3R programs, namely rescheduling, reconditioning and restructuring. Likewise with Sa'diyah (2019) that with family approach strategies, revitalization, management assistance, collection agents and settlements through guarantees are expected to minimize problem financing.

H₂: NPF has a significant effect on ROA.

Meanwhile, to determine bank ratings, the criteria and at the same time measure the value of Islamic banks based on the NPF value are based on OJK (2014); PBI (2007); SEBI (2004) the following.

Table-2: Rating, Criteria and Value of NPF Based on PBI No. 9/1/PBI/2007; SEBI No. 6/23/DPNP Year 2004 and SEOJK No. 10/SEOJK.03/2014

Rating	Criteria	Mark
1	NPF < 2%	Very healthy
2	2% NPF < 5%	Healthy
3	5% NPF < 8%	Healthy enough
4	8% NPF < 12%	Unwell
5	NPF 12%	Not healthy

Previous research that analyzed the effect of NPF on the profitability (ROA) of Islamic banks that the NPF path analysis had a positive effect on the ROA of nine BUS in Indonesia in 2012 to 2015 (Wibisono & Wahyuni, 2017). Likewise, the ROA of Islamic Banks in Indonesia during the 2009-2019 period, which in its development was more influenced by the NPF of 0.78% (Hasibuan *et al.*, 2021). However, the results of different studies explain that NPF (seven Islamic banks in the period of observation, namely 2014–2018) has a negative and significant effect on ROA (Rohansyah *et al.*, 2021). Likewise according to Almunawwaroh & Marlina (2018) that NPF has a significant negative effect on the profitability of BUS and Islamic Unit Banks in Indonesia for the period January 2009 to

December 2016. Pravasanti (2018) argued that any increase in NPF will reduce ROA.

Aspects of bank profitability as measured by BOPO is used to measure the level of bank efficiency (Abbas, 2020; Haryanto *et al.*, 2020). Efficiency is also a measure of the success of an entity, including Islamic banking in Indonesia, so a balance between costs and operating income is needed. Suryadi *et al.* (2020) explained that the lower the BOPO ratio, it can be explained that the managerial performance of the bank is more efficient, especially in the utilization of the bank's production factors. And vice versa, namely when the BOPO is higher, the bank is increasingly inefficient as revealed by Puteh *et al.* (2018) that studies on Islamic banking in Indonesia show that in the five years 2012-2016 the average Islamic commercial bank in Indonesia has not been at an efficient level, which is in the range of 89.73% to 94.16%.

Studies on BUS in Indonesia for the period 2009-2019 suggest that profitability is affected by BOPO, and this is very likely to happen because banks are able to manage their financial resources efficiently (Hasibuan *et al.*, 2021). Same study as research Suryadi *et al.*, (2020) on 9 BUS in Indonesia in 2012-2018 that BOPO has a significant effect on ROA with a positive direction of influence. This positive effect reflects an increase in operating income which is higher when compared to an increase in operating costs, or banks are able to create conditions that are efficient in using their source of funds. However, different research results were found by Maulana *et al.*, (2021); Wibisono & Wahyuni (2017) that there is a negative effect of BOPO on the profitability of BUS.

H3: BOPO has a significant effect on ROA.

Meanwhile, to determine bank ratings, the criteria and at the same time measure the value of Islamic banks based on the BOPO value are based on OJK (2014); PBI (2007); SEBI (2004) the following.

Table-3: BOPO Rating, Criteria and Value Based on PBI No. 9/1/PBI/2007; SEBI No. 6/23/DPNP Year 2004 and SEOJK No. 10/SEOJK.03/2014

Rating	Criteria	Mark
1	BOPO 94%	Very healthy
2	94% < BOPO 95%	Healthy
3	95% < BOPO 96%	Healthy enough
4	96% < BOPO 97%	Unwell
5	BOPO > 97%	Not healthy

The fourth financial ratio which is also the independent variable of this study is the FDR ratio. Abbas (2020) explained that FDR is the ratio of BUS financing obtained from the amount of financing to non-bank third parties to third party funds. Meanwhile BI (2021) explained that FDR is a comparison of financing disbursed with funds from third parties in total. Total Funding Disbursed consists of total

Mudharabah Financing; Musyarakah Financing; Murabahah Receivables; Receivables Receivable; Ishtisna's Receivables; Qardh Receivables; Ijarah Receivables; Other Financing and Multi-service Receivables (especially for Sharia Rural Banks) Third Party Funds consist of total Wadiah Savings Funds and Unrestricted Investment Data.

Previous research on FDR in relation to bank profitability as the study Hasibuan *et al.*, (2021) that ROA is affected by FDR. Meanwhile, according to research Almunawwaroh & Marlina (2018); Pravasanti (2018) and Wibisono & Wahyuni (2017) found that FDR had a significant positive effect on banking ROA. However, there can be a negative effect of the FDR variable on ROA as research Rohansyah *et al.*, (2021) that in the period 2014-2018 7 Islamic banks in Indonesia showed that FDR had an insignificant negative effect on ROA.

H4: FDR has a significant effect on ROA.

As with previous research variables, namely CAR, NPF and BOPO, to determine bank ratings, the criteria and at the same time measure the BUS value based on the FDR value based on OJK (2014); PBI (2007); SEBI (2004) the following.

Table-4: Rating, Criteria and Value of FDR Based on PBI No. 9/1/PBI/2007; SEBI No. 6/23/DPNP Year 2004 and SEOJK No. 10/SEOJK.03/2014

Rating	Criteria	Mark
1	FDR 75%	Very healthy
2	75% < FDR 85%	Healthy
3	85% < FDR 100%	Healthy enough
4	100% < FDR 120%	Unwell
5	FDR > 120%	Not healthy

Table-5: Rating, Criteria and Value of ROA Based on PBI No. 9/1/PBI/2007; SEBI No. 6/23/DPNP Year 2004 and SEOJK No. 10/SEOJK.03/2014

Rating	Criteria	Mark
1	ROA > 1.5%	Very healthy
2	1.25% < ROA 1.5%	Healthy
3	0.5% < ROA 1.25%	Healthy enough
4	0% < ROA 0.5%	Unwell
5	ROA 0%	Not healthy

METHODOLOGY

This research design uses a quantitative approach because the main research data is numerical and the data analysis uses econometrics. This type of research is associative because this research wants to test the strength of the influence of the independent variable on the dependent variable. The ROA variable was chosen as the dependent variable that explains the bank's profitability, which is theoretically and empirically influenced by the independent variables, namely: CAR, NPF, BOPO and FDR. Each variable is measured by a ratio scale and using percent (%). The

data collection technique uses the documentation of the quarterly financial statements of Islamic banks which can be accessed on the website of the Financial Services Authority.

The sample of this research is BRI Syariah and BNI Syariah, with an observation period of six years starting from 2015 to 2020, or before the merger into Bank Syariah Indonesia (BSI). The amount of data observed in each BUS is 24 quarters. Because Bank

Mandiri Syariah data was not available, this bank was excluded from observation. The research hypotheses were tested with multiple regression which first tested for normality and the classical assumption test.

RESULTS AND DISCUSSION

The comparison of the average performance of BRI Syariah and BNI Syariah over a period of six years from 2015 to 2020 is presented in the following table.

Table-6: Comparison of the Average Performance of BRI Syariah and BNI Syariah, 2015-2020

Bank	ROA		CAR		NPF		BOPO		FDR	
	%	Mark	%	Mark	%	Mark	%	Mark	%	Mark
BRI Syariah	4.08	Very healthy	20.90	Very healthy	4.27	Healthy	92.92	Very healthy	94.12	Healthy enough
BNI Syariah	16.79	Very healthy	17.53	Very healthy	2.17	Healthy	119.70	Not healthy	16.33	Very healthy

Table 6 explains that based on the profitability ratio, BNI Syariah is better than BRI Syariah because of the higher ROA value and is ranked 1 which reflects the condition of the bank which is generally very healthy. according to OJK (2014) regarding the performance of banks in generating profits is calculated based on the ratio of the value of profit before tax divided by the average total assets. In terms of the capital adequacy ratio as measured by CAR, BRI Syariah is higher in value so it can be stated that BRI Syariah is better. according to Harahap (2013) CAR ratio is used to assess the safety and health of companies including banks from the side of the owner's capital. This means that most of the CAR value can indicate that a work is safe and healthy.

A high NPF value reflects the higher risk of non-performing financing faced by banks so that it can reduce profitability (Kuswahariani *et al.*, 2020; Sugiharto *et al.*, 2019). The instruments of this ratio are total loans disbursed and total third party funds or total savings. The more credit the more risky, while too low

then the bank is not effective in channeling funds. Based on table 6, BNI Syariah tends to be safer against the risk of non-performing financing. BOPO is the ratio of total operating expenses to total operating income. The lower the BOPO value, the lower the burden, so the better or profitable. If the BOPO is above 100% like BNI Syariah, it is called an operating loss because operating income is smaller than operating expenses. So based on the BOPO, BRI Syariah is more efficient than BNI Syariah (see table 6).

The FDR ratio is also known as the liquidity ratio, which is the ratio of the bank's inability to meet its maturing obligations from its funding source. So this ratio instrument is the amount of financing disbursed and the amount of third party funds. Based on table 6 it can be stated that BRI Syariah is more effective than BNI Syariah. It is based on opinion Muqoddam (2014) that the ratio of financing to funding or FDR of Islamic banking is considered to be effective in supporting high yields if it is in the 95%-98% range.

Table-7: ResultsStatistic test

Model	Unstandardized Coefficients B	t	Sig. (Dependent Variable: ROA)	Collinearity Statistics		Sig. (Dependent Variable: ABS)
				Tolerance	VIF	
(Constant)	8,625	26,177	.000			.592
CAR	-.013	-4.368	.000	.692	.000	.244
NPF	-.023	-1,328	.192	.321	.000	.163
BOPO	-.087	-19641	.000	.308	.192	.208
FDR	.007	3.381	.002	.653	.000	.776
R Square	.694					
Durbin-Watson	1,264					
Kolmogorov-Smirnov Sig.	.200					
Shapiro-Wilk Sig.	.067					

Based on table 7 it can be stated that

1. The research data is normally distributed because the Kolmogorov-Smirnov Sig. and Shapiro-Wilk Sig. greater than 0.05;
2. The research data does not occur heteroscedasticity because the value of Sig. (Dependent Variable: ABS) for all independent variables greater than 0.05;
3. The research data does not autocorrelate because the value of Durbin-Watson (DW) = 1.264, which according to Field (2009) if the DW value is 1 to 3 intervals, then there is no autocorrelation;
4. The research data does not occur multicollinearity because the value of Tolerance of the independent variable is > 0.10 and the value of VIF of the independent variable is < 10;
5. The value of the coefficient of determination (R²) = 0.694, which means the contribution of the independent variable to the dependent variable is 69.4%, while the remaining 0.306 or 30.6% is influenced by variables other than CAR, NPF, BOPO and FDR.
6. The econometric equations that can be built are:

$$Y = 8.625 - 0.013 X_1 - 0.023 X_2 - 0.087 X_3 + 0.007 X_4$$

Where:

Y is ROA; X₁ is CAR; X₂ is NPF; X₃ is BOPO and X₄ is FDR

The results of hypothesis testing, namely

Hypothesis 1: CAR has a significant effect on ROA. The results of this hypothesis test are based on the t test value of Sig. that is equal to 0.000 < from = 0.05 so that hypothesis 1 is tested. Empirically this research supports theory and research Abbas (2020); AGBEJA *et al.*, (2019); Asraf *et al.*, (2019); Bateni *et al.*, (2014); Sang (2021). However, the results of this study are different from previous studies, especially regarding the pattern of the relationship between the two variables which shows negative notation. Which means an increase in CAR results in a decrease in ROA. This result is due to the observation period in which this study also analyzes data for 2020, where this year there was a health crisis that resulted in banking conditions and the national economy.

Hypothesis 2: NPF has a significant effect on ROA. The results of this hypothesis test are based on the t test value of Sig. that is equal to 0.192 > from = 0.05 so that hypothesis 2 is not tested. The results of this study are not relevant to the theory Abbas (2020) and previous research Haryanto *et al.*, (2020); Kuswaharani *et al.*, (2020); Rahman & Safitrie (2018); Sugiharto *et al.*, (2019). The negative effect of NPF on ROA is also not relevant to previous research due to the observation period. Where this study includes NPF and ROA data until 2020 which is full of economic and

banking failures due to the Covid-19 crisis. At the beginning of 2020 the OJK Board of Commissioners Meeting decided to extend the relaxation period for bank credit restructuring for one year from March 31, 2022 to March 31, 2023. This extension of relaxation of credit restructuring also applies to BPR and BPRS. The credit restructuring issued since early 2020 has greatly helped banks and debtors, including MSME players. In fact, to maintain momentum and mitigate the impact of the still high spread of Covid-19, the validity period of the restructuring relaxation was extended until 2023.

Hypothesis 3: BOPO has a significant effect on ROA. The results of this hypothesis test are based on the t test value of Sig. that is equal to 0.000 < from = 0.05 so that hypothesis 3 is tested. The results of the study that BOPO has a significant effect on ROA are relevant to the study Abbas (2020); Hasibuan *et al.*, (2021); Puteh *et al.*, (2018); Suryadi *et al.*, (2020). The negative effect of BOPO on ROA is relevant to the results of the study Maulana *et al.*, (2021); Wibisono & Wahyuni (2017) that there is a negative effect of BOPO on the profitability of BUS.

Hypothesis 4: FDR has a significant effect on ROA. The results of this hypothesis test are based on the t test value of Sig. that is equal to 0.002 < from = 0.05 so that hypothesis 4 is tested. Previous research that supports this finding that FDR has a positive and significant effect on ROA as carried out by Almunawwaroh & Marlina (2018); Hasibuan *et al.*, (2021); Pravasanti (2018); Wibisono & Wahyuni (2017).

CONCLUSION

As a banking based on sharia principles, the performance of BUS, namely BRI Syariah and BNI Syariah, which is measured by the profitability ratio, namely ROA is influenced by other financial ratios, namely CAR, NPF, BOPO and FDR. In detail the results of this study can be concluded:

1. CAR Ratio. Although both are in the very healthy category, BRI Syariah is better at taking the risk of any risky financing/productive assets.
2. NPF ratio. Even though they are both in the healthy category, BNI Syariah has a lower risk of financing failure both in the bad, doubtful and substandard categories.
3. BOPO ratio. BRI Syariah is more efficient than BNI Syariah, because much of it is supported by growth in operating income compared to growth in operating costs.
4. FDR ratio. In terms of FDR, BNI Syariah is healthier because the bank is able to maintain its financial liquidity for funds distributed to third parties.

REFERENCES

- Abbas, A. (2020). Analysis of Islamic Banking Financial Statements. Parepare: DIRAH.
- Abuzarqa, R. (2019). Evaluating banks financial performance using financial ratios : a case study of kuwait local commercial banks. *Oradea Journal of Business and Economics*, 4(2), 101–114. <https://doi.org/10.47535/1991ojbe078>
- Adam, M.H.M. (2014). Evaluating the Financial Performance of Banks Using Financial Ratios- A Case Study of Erbil Bank for Investment and Finance. *European Journal of Accounting Auditing and Finance Research*, 2(6), 162–177. https://www.researchgate.net/publication/323987058_Evaluating_the_Financial_Performance_of_Banks_Using_Financial_Ratios-A_Case_Study_of_Erbil_Bank_for_Investment_and_Finance
- Agbeja, O., Adedokun, O. J., & Olufemi, F. I. (2015). Capital adequacy ratio and bank profitability in Nigeria: A linear approach. *International Journal of Novel Research in Marketing Management and Economics*, 2(3), 91-99.
- Almunawwaroh, M., & Marlina, R. (2018). The Influence of CAR, NPF and FDR on Profitability of Islamic Banks in Indonesia. *Amwaluna: Journal of Islamic Economics and Finance*, 2(1), 1–18. <https://doi.org/10.29313/amwaluna.v2i1.3156>
- Asraf, S., & Suwarni. (2019). Comparative Analysis of the Financial Performance of Bank Mandiri Syariah With Conventional Bank Mandiri. *MBIA*, 18(3), 121–136.
- Barus, MA (2017). Using financial ratio to measure financial performance of companies (Study on PT. Astra Otoparts, Tbk and PT. Goodyer Indonesia, Tbk which are Go Public on the Indonesia Stock Exchange). *Journal of Business Administration (JAB)*, 44(1), 154–163. <https://media.neliti.com/media/publications/87787-ID-usage-ratio-keuangan-untuk-meukur.pdf>
- Bateni, L., Vakilifard, H., & Asghari, F. (2014). The Influential Factors on Capital Adequacy Ratio in Iranian Banks. *International Journal of Economics and Finance*, 6(11), 108–114. <https://doi.org/10.5539/ijef.v6n11p108>
- BI. (2021). FDR (Financing to Deposit Ratio). Islamic Banking Department. <https://www.bi.go.id/id/statistik/metadata/sp-syariah/Documents/49FDRFinancingtoDepositRatio.pdf>
- Białas, M., & Solek, A. (2010). Evolution of Capital Adequacy Ratio. Recent Issues in Economic Development, 3(2), 48–57. <https://www.economics-sociology.eu/files/06%5B7%5D.pdf>
- Field, A. (2009). Discovering statistics using Spss THIRD EDITION (and sex and drugs and rock 'n' roll). In Sage (Vol. 2nd, Issue Third Edition).
- Harahap, S.S. (2013). Critical Analysis of Financial Statements. In Accounting Theory.
- Haryanto, S., Bachtiar, Y., & Khotami, W. (2020). Efficiency and Rentability of Islamic Banks in Indonesia. *innovator*. <https://doi.org/10.32832/innovator.v9i1.2972>
- Hasibuan, A.F.H., Falahuddin., & Ulva, H. (2021). The Effect of BOPO, FDR and NPF on Profitability (ROA) in Islamic Banks for the 2009-2019 Period. *El-Amwal*, 4(1), 1. <https://doi.org/10.29103/el-amwal.v4i1.3920>
- Ilyas, R. (2018). Islamic Bank Capital Management. *BUSINESS: Journal of Islamic Business and Management*, 5(2), 323–338. <https://doi.org/10.21043/bisnis.v5i2.3017>
- Kariyawasam, A.H.N. (2019). Analyzing the Impact of Financial Ratios on a Company's Financial Performance. *International Journal of Management Excellence*, 13(1), 1898–1903. <https://doi.org/10.17722/ijme.v13i1.1093>
- Kuswahariani, W., Siregar, H., & Syarifuddin, F. (2020). Analysis With Regard to A General and Micro Segment on Three National Sharia Banks in Indonesia. *Journal of Business and Management Applications (JABM)*, 6(1), 26–36. <https://core.ac.uk/download/pdf/288224277.pdf>
- Latifah, N.M., Rodhiyah, R., & Saryadi, S. (2012). Effect of Capital Adequacy Ratio (CAR), Non Performing Loan (NPL) and Loan to Deposit Ratio (LDR) on Return on Assets (ROA) (Case Study on Public Private National Foreign Exchange Bank Go Public on the Indonesia Stock Exchange 2009-2010 Period). *Journal of Business Administration*, 1(2), 57–66. <https://ejournal3.undip.ac.id/index.php/jiab/article/view/834>
- Mainata, D., & Ardiani, A.F. (2018). The Effect of Capital Adequacy Ratio (CAR) on Return On Assets (ROA) in Islamic Banks. *Al-Tijary*, 3(1), 19. <https://doi.org/10.21093/at.v3i1.960>
- Manalu, H.M. (2019). Strategic Planning, Budget and Financial Performance. *JTIMB: Journal of Applied Management and Business Science*, 2(1), 23–32. <https://jurnal.unai.edu/index.php/jtib/article/view/2026/1379>
- Maulana, P., Dwita, S., & Helmayunita, N. (2021). Effect of CAR, NPL, LDR and BOPO on Return on Assets (ROA) in Banks Listed on the Indonesia Stock Exchange in 2017-2019. *Exploratory Journal of Accounting*, 3(2), 316–328. <https://doi.org/10.24036/jea.v3i2.355>
- Muqoddam, F. (2014). The Ideal Islamic Bank Financing Ratio (FDR) 98%. *Finansial.Bisnis.Com*. <https://finansial.bisnis.com/read/20140314/232/210856/rasio-pemfundan-fdr-bank-syariah-yang-ideal-98>
- OJK. (2014). Circular Letter of the Financial Services Authority Number 10/SEOJK.03/2014

- concerning Assessment of the Soundness of Sharia Commercial Banks and Sharia Business Units. Jakarta: Financial Services Authority.
- Pavol, S. (2021). Financial Analysis as a Basis for Creation of the Financial Plan of the Selected Business Entity – Case Study. SHS Web of Conferences Globalization and Its Socio-Economic Consequences 2020, 92, 1–10. <https://doi.org/10.1051/shsconf/20219203027>
 - PBI. (2007). Bank Indonesia Regulation Number: 9/1/PBI/2007 concerning the Rating System for Commercial Bank Soundness Based on Sharia Principles. Bank Indonesia (BI). <https://peraturan.bpk.go.id/Home/Details/137618/peraturan-bi-no-91pbi2007>
 - Pravasanti, Y.A. (2018). The Effect of NPF and FDR on CAR and Their Impact on ROA in Islamic Banking in Indonesia. Scientific Journal of Islamic Economics, 4(03), 148. <https://doi.org/10.29040/jiei.v4i03.302>
 - Puteh, A., Rasyidin, M., & Mawaddah, N. (2018). Islamic Banks in Indonesia: Analysis of Efficiency. Proceedings of MICoMS 2017 (Emerald Reach Proceedings Series), 1, 331–336. <https://doi.org/https://doi.org/10.1108/978-1-78756-793-1-00062>
 - Putri, K.O. (2016). Financial Ratio Analysis to Assess The Performance of Mining Sector Company in United Tractor Semen Gresik Ltd., Period 2011-2015. Student Scientific Journal of the Faculty of Economics and Business Universitas Brawijaya, 5(1). <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/3372/3022>
 - Rahayuni, S., & Dalimunte, A.A. (2021). The Bank's Strategy in Overcoming Non-Performing Financing (NPF) During the Covid 19 Pandemic (Case Study of Bank Sumut Capem Karya). Al-Kharaj: Journal of Islamic Economics and Business, 2(1), 14–22. <https://doi.org/10.24256>
 - Rahman, T., & Safitrie, D. (2018). The Role of Non-Performing Financing (NPF) in the Relationship between the Independent Board of Commissioners and the Profitability of Islamic Banks. BUSINESS : Journal of Islamic Business and Management, 6(1), 145–171. <https://doi.org/DOI:10.21043/bisnis.v6i1.3701>
 - Riyadi, S., Iqbal, M., & Lauren, N. (2014). Non-Performing Loan Management Strategy for Go Public Commercial Banks. JDM: Journal of Management Dynamics, 6(1), 84–96. <https://doi.org/10.15294/jdm.v6i1.4299>
 - Rohansyah, M., Rachmawati., & Hasnita, N. (2021). The Influence of NPF and FDR on ROA of Islamic Banks in Indonesia. Robust: Research of Business and Economics Studies, 1(1), 123. <https://doi.org/10.31332/robust.v1i1.2620>
 - Sa'diyah, M. (2019). Strategy for handling Non Performing Finance (NPF) on murabahah financing at BMT. Conference on Islamic Management, Accounting, and Economics (CIMAE), 179–189.
 - Sang, N.M. (2021). Capital Adequacy Ratio and a Bank's Financial Stability in Vietnam. Banks and Bank Systems, 16(4), 61–71. [https://doi.org/10.21511/bbs.16\(4\).2021.06](https://doi.org/10.21511/bbs.16(4).2021.06)
 - SEBI. (2004). Bank Indonesia Circular Letter No.6/23/DPNP Dated May 31, 2004. Bank Indonesia. [https://www.bi.go.id/id/archive/arsip-peraturan/Pages/elektron banking.aspx](https://www.bi.go.id/id/archive/arsip-peraturan/Pages/elektron%20banking.aspx)
 - Simanjuntak, J. (2016). Effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), and Non Performing Loan (NPL) on Return on Assets (ROA) in the Banking Sector on the Indonesia Stock Exchange. BISMAN Journal of Business & Management, 2(2), 102–111. <https://core.ac.uk/download/pdf/268045177.pdf>
 - Sitanggang, L.M.S. (2019). NPF is still high, Islamic banking has prepared a strategy. Kontan.Co.Id, September, 1. <https://keuangan.kontan.co.id/news/npf-masih-tinggi-perbankan-syariah-prepare-strategi>
 - Sugiharto, R.B., Nuryartoro, N., & Effendi, J. (2019). Determinants of Non Performing Financing (NPF) in the Business Banking Segment (Case Study at PT Bank Syariah X). Journal of Management Review, 3(1), 291–296. <https://doi.org/http://dx.doi.org/10.25157/jmr.v3i1.1807>
 - Suryadi, N., Mayliza, R., & Ritonga, I. (2020). The Effect of Inflation, Operational Costs on Operating Income (BOPO), and Market Share on the Profitability of Islamic Commercial Banks in Indonesia for the 2012-2018 Period. Journal of Tabarru': Islamic Banking and Finance, 3(1), 1–10.
 - Tyas, Y.I.W. (2020). Financial Ratio Analysis To Assess Financial Performance At Elzatta Probolinggo. ECOBUSS: Scientific Journal of Economics and Business, 8(1), 28–39. [http://repository.upm.ac.id/1182/1/Financial Ratio Analysis to Assess Financial Performance at Elzatta Probolinggo.pdf](http://repository.upm.ac.id/1182/1/Financial%20Ratio%20Analysis%20to%20Assess%20Financial%20Performance%20at%20Elzatta%20Probolinggo.pdf)
 - Wibisono, M.Y., & Wahyuni, S. (2017). Effect of CAR, NPF, BOPO, FDR, on NOM-mediated ROA. Journal of Business & Management, 17(1), 41–62.