

Impact of the Maqasid Sharia Index Mediation on Financial and Governance Performance and Profitability Sharia Commercial Banks in Indonesia

Satrio Hadibowono^{1*}, Agus Munandar²

^{1,2}Esa Unggul University, Indonesia.

*Corresponding Author: satriohadibowono@gmail.com

Abstract

This study aims to explore the impact of the influence of Maqashid Syariah as a moderating variable on the variable's *capital adequacy ratio*, operational costs, *non-performance finance*, Sharia supervisory board, and independent board of commissioners in influencing the profitability of Islamic banks in Indonesia. using panel data regression analysis, which is a combination of *time series* and *cross-sectional data*. The sample consists of 11 Islamic commercial banks with a time series from 2015 to 2020. The factors in the study are based on previous empirical literature. The findings show that the variables that have been moderated by Maqashid Shariah, such as the *capital adequacy ratio* and the Sharia supervisory board, are more significant than the variables of operational costs, *non-performance finance*, and the independent board of commissioners in influencing the profitability of Indonesian Sharia banking. The results of the study show that profitability growth, as measured by the moderation of the Islamic Maqashid variable on the *capital adequacy ratio* and the Sharia supervisory board, is a significant determinant of profitability, which implies that most of the profitability of Islamic banking in Indonesia is motivated by the *capital adequacy ratio* and the Sharia supervisory board, which is statistically significant. The coefficients of the *capital adequacy ratio* and Sharia supervisory board measures imply that these variables have a positive effect on the profitability of Islamic banking in Indonesia. The increase in profitability of Islamic banking in Indonesia, as measured by the capital adequacy ratio and the Sharia supervisory board, has a positive effect on profitability; these findings indicate that the growth of factors such as operational costs, non-performance finance, and the independent board of commissioners in influencing profitability of Indonesian Sharia banking is not motivating.

Keywords: Profitability, maqashid sharia, sharia supervisory board, board of independent commissioners

JEL Classification: A2*, A2

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license



1. INTRODUCTION

The growth of Sharia banking has slowed down during the coronavirus (COVID-19) pandemic but still outperforms conventional banks. Compared to the entire financial industry, the increase in Islamic banking in May 2020 was better than conventional banks. Since May 2020, Islamic bank loans (PYD) have increased by 10.14 percent year-to-date (YTD). On the asset side, YTD returns rose 9.35% down during the coronavirus (COVID-19) pandemic but still outperforms conventional banks. Compared to the entire financial industry, the increase in Islamic banking in May 2020 was better than conventional banks. Since May 2020, Islamic bank loans (PYD) have increased by 10.14 percent year-to-date (YTD). On the asset side, YTD returns rose 9.35%, and third-party funds (DPK) also rose 9.24%. Meanwhile, conventional bank loans increased by only 3.04 percent in May 2020, while DPK increased by 8.87%. Moreover, the portion of Islamic funds in Islamic banks has reached 6.05 percent since May 2020. This number is far better than previous years without the Corona pandemic. (Teguh Supangkat *et al.*, 2020). Furthermore, the presence of Islamic banks in Indonesia today is nothing new. Because Islamic banking has been able to develop very strongly. The development of Islamic banking has continued since the enactment of Law Number 10 of 1998 concerning Amendments to Law Number 7 of 1992 concerning Banking, followed by Law Number 21 of 2008 concerning Islamic Banking, reflecting the spirit of Islam. A bank and a conventional banking system characterize it (Kara, 2013).

Islamic banking has the potential to grow significantly because it is considered more stable in dealing with existing economic problems. According to the Governor of Bank Indonesia, Islamic banking was the most stable sector during the 2008–2011 crisis and was still able to grow 17.1%. Furthermore, Islamic banks grew by 8.8% in 2015, lower than the growth rate of conventional banks; in 2016, conventional banks only grew by 9.2%, while Islamic banks were able to grow by 12%. This shows that the development of Islamic banking is more stable compared to conventional banking (Kartini, 2016). Banks are very concerned about the allocation of funds and must allocate funds according to their objectives so that they can smoothly return funds provided by customers who have obtained financing instruments. Public trust is needed so that Islamic banking can develop rapidly to overcome current economic problems. The type of metric that can be used to measure good Islamic bank performance is a focus on financial reporting, including profitability (Fadhillah, 2019).

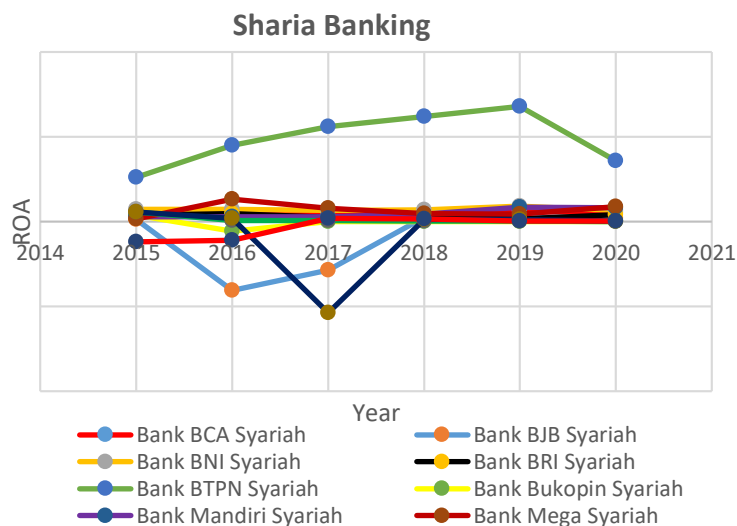


Figure 1. Development of Sharia Bank Profitability Growth in Indonesia Period 2015-20 20.

Source: Processed data (2022)

Profitability is a measure used in the business activities of companies and banks to generate profits (Mawadah, 2015). According to Fadilla's research, profitability is a measure of a company's efforts to generate profit, where profitability is profit if taxes are divided by the total assets used by the bank during a certain period of time, and the rate of return is a percentage of income. Comparison of company profits and "eth" in working capital (Fadhila, 2015) used on Bank Syariah Indonesia Profitability Realization Data released by Bank Syariah Indonesia, the progress of Indonesia's profitability realization, especially in the 2015–2020 period, fluctuated from year to year. In the 2020 period, the business environment in Indonesia was disrupted during this period, so that the realization of profitability in Indonesia declined from 2015 to 2020. Indonesia's banking environment is no longer conducive, and banking, especially at Islamic banks, tends to be unprofitable, impacting the banking environment. After the economic crisis of 2015–2017, the realized value of profitability increased sharply in 2018–2020. This indicates that the banking climate, especially Islamic banking in Indonesia, is still not conducive after the economic crisis. This study raises 6 independent variables, namely *the capital adequacy ratio operational costs non-performance finance Maqashid sharia* Sharia Supervisory Board, and independent Commissioner Board. For the dependent variable, the authors use the growth of banking profitability at Islamic banks in Indonesia.

The application of good corporate governance is a sign that a company manages its business neatly in order to provide financial reports that satisfy its users. Meanwhile, Gallizo and Saladrigues (2015), Carson et al. (2013), Rudkhani and Jabbari (2013), and Laitinen and Sourmumnen (2012) evaluate company performance through ratios to determine company acceptance of going concern audit opinions. Jabbari (2013), and Laitinen and Sourmumnen (2012) evaluate company performance through ratios to determine company acceptance of going concern audit opinions. Many say that companies with good performance and stable growth will survive for a long time because the company does not show signs of business failure within a certain period of time (Carson et al., 2013; Laitinen and Sourmunen, 2012; Kuruppu, Laswad, and Oyelere, 2012). This research was led by Rendyka (2014) with the topic of "Examining the Effects of Bad Credit." The quality of assets obtained from capital ratios, loan ratios, and operating expenses is relative to operating expenses at the profit level of Islamic commercial banks. The NPF and FDR variables do not have a significant impact on the profitability of Islamic banks, although they have a significant impact. While being able to explain our hypothesis, we have obtained results showing that the KAP, NPF, FDR, CAR, and BOPO variables affect Islamic bank profitability (ROA). Second, Alipah's (2014) research identified the determinants of *non-performance finance risk and capital adequacy level on the ON* profitability of PT. The results of this study indicate that some of the results of testing the NPF variable have a significant negative effect on the profitability of PT. Indonesian Muarat Bank. Defri's research (2012) on "*Effects of Capital Adequacy and Liquidity*" explains that the CAR and NPF variables have an impact on the profitability of Bank Muamalat Indonesia. Third, when testing hypotheses simultaneously, slightly positive for ROA, negative for BOPO, and significant for ROA. The analysis used is multiple regression analysis.

Fourth Dewi's (2010) research on the relationship between CAR and ROA shows that CAR does not have a significant effect on the profits of Islamic banks in Indonesia. This result explains why Islamic banks do not need to benefit from high CAR ratios when they have large amounts of capital but cannot use it effectively to generate profits. Banking capital also has no significant effect on the profitability of Islamic banks. Analysis of the five studies of Hutashut (2009) shows that the ratio of capital to funds (FDR) DPK has a

significant positive effect on the profitability (ROA) of Islamic banks. This increase was contributed by an increase in the *capital deposit ratio* (FDR). Funds are distributed according to the 5C principles of capacity, character, collateral, conditions, and equity. On the other hand, Mahadian's sixth study (2008) shows that the results of the BOPO (*operational costs and income*) analysis are synergistic. This has an important effect. The negative impact on profitability (ROA) allows banks to focus on the level of operational efficiency and increase the profitability of operating results. The correlation between the current research and previous research is the observation of return on investment (ROI) using Maqashid Syariah, a Syariah board, and independent directors

2. HYPOTHESES DEVELOPMENT

There are various studies on the profitability of Islamic banks in Indonesia that are closely related to the level of customer loyalty. Why is customer loyalty important to company profitability? Customers earn more revenue by using the company's products across all of its services. Financial statements are a very important tool to obtain information about the financial position of a company. By comparing and analyzing data from two or more time periods, data that supports decision-making becomes more meaningful for stakeholders (Lovelock, 2010). In this study, bank profitability refers to ROA (return on assets). In assessing the performance and reliability of banks, Bank Indonesia (BI) refers to ROA, not ROE (Return on Equity). ROA is considered to be a more representative measure of bank profitability because BI emphasizes bank profitability (Abrita and Pangestuti, 2016). According to Fadhila (2015), profitability is the level of a company's ability to earn profits; profitability is profit before tax on all bank investments over a certain period of time; and the rate of return is the return on company capital. According to Arifuddin (2012), ROA is used to measure the efficiency (profitability) of a company in using its assets to generate profits. In other words, this indicator is used to measure the profitability of bank management as a whole. The higher the bank's ROA, the better its profitability and position in terms of asset utilization. This study uses ROA as an indicator of bank performance.

Return on assets (ROA) is very important. This ratio is used to rank the value of bank profits derived from asset acquisitions financed by third-party funds (DPK). The better the return on assets (ROA) of a bank, the better its profits and its position in terms of capital utilization (Kasmir and Jakfar, 2003). Financial metrics are considered useful for decision-making. The usefulness of financial indicators in viewing income growth can be measured by the significant relationship between individuals and the level of development of financial indicators (assets, wealth, income, and liquidity) and income growth. Financial metrics are useful when their relationship to revenue growth has a material impact. Sharia banking requires a strong and clear legal basis so that its financial operations become prudent in the eyes of the wider community. Consistency with Indonesian laws and regulations regarding Islamic banking is included in the following laws and regulations: Law Number 10 of 1998 concerning Amendments to Law Number 7 of 1992 concerning Banking; Board Order No. 32/33/KEP/DIR dated May 12, 1999 concerning Bank Indonesia; and Board Order No. 32/34/KEP/DIR dated May 12, 1999 concerning Commercial Banks, concerning Sharia Principles; 1999 concerning commercial banking on foundations

CAIR (capital equity ratio) is the capital adequacy ratio that is used to calculate the risk of loss that may be reversed. The higher the CAIR, the better the return on the position to bear productive assets with credit risk that may be reversed. The higher the CAIR, the

better the return on the position to bear productive assets with credit risk. According to Dalmalwi (2011), one of the components of the capital factor is the capital adequacy ratio. The key tool used to check the adequacy of capital assets is the CAIR (Capital Adequacy Ratio). According to Kalsmir (2016), CaL is the ratio of capital to risk-weighted assets in accordance with government regulations. According to the expert's palral definition, CARB is a good performance ratio that measures the adequacy of good capital to support risk-bearing assets. B. Loan to the customer's head Furthermore, CAIR is a bare minimum of sufficient capital to protect the interests of third parties. CALR is a ratio that calculates the amount of good capital in terms of risk-weighted activity (RWA). Talsualn (2010:166). The higher this ratio, the higher the capitalization of the balance, and the higher the CALR, the more resources that can be used to counterbalance potential losses in financing sales. In summary, a high CAIR score increases reliability and is good for transmitting data. With a CaLR of 20% or higher, banks can support credit growth of up to 20-25% per year. A higher CAIR can help predict the loss of productive assets, including risk. B. Dalnal diversification

Malcet credit is a risk of loss that may be experienced in the channeling of capital. Non-performing loans (NPL) show good collectibility by returning the loans issued by them until repaid. The NPF is the percentage of non-performing loans (including the criteria for under-performing, decreasing, and defaulting) in the total credit issued by the bank. Malcet credit is a term that is used frequently. Loans that are of good quality have little or no risk of becoming delinquent and bankrupt. Loans that don't meet the requirements, on the other hand, are the ones that have a higher risk of becoming overstressed. Certain measures should be taken to determine the quality and non-quality of the loan. This level of NPF reflects the bank's track record in managing the capital being spent. An increase in the proportion of bad credit will eventually decrease the profit rate of good credit. In the end, this will affect the level of profitability in both directions. The lower the level of NPF, the less professional the data management. This also shows that the risk of capital investment is quite high, in line with the high NPF that is also expected. Therefore, the higher the NPF, the higher the investment, and the lower the liquidity, the better, compared to the lower ratio.

Dalpalt efficiency is measured by the ratio of operational costs to operational costs (BOPO). Based on Indonesian Regional Bank Letter No. 15/15/PBI/2013, dated December 24, 2013. The ideal ratio for BOPO is 50-75%; however, the Indonesian Bank has an ideal BOPO ratio of 85%. If a BOPO bank has more assets than the Indonesian Bank, then the bank is included in the unhealthy and inefficient category. Based on the Indonesian Bank Circular Letter Number 15/29/DKBU dated July 31, 2013, the BOPO receipts are as follows: The repayment of total operational costs in total investment is calculated per contribution (not per year).

Sharia banking performance assessment can be measured through profitability and the maqasid syariah index. Previous research found that the elements of maqashid sharia can have an impact on increasing profitability. The zakat performance ratio and director-employee welfare ratio variables also have a significant effect on profitability. To strengthen the hypothesis and research results, this research is guided by QS Ar-Rum verse 39, which means: "multiply (the reward)." Allah SWT will multiply goodness, including the sub-principle of maqashid sharia, which is solely to spread justice and prosperity.

Furthermore, in her research, Aisyah (2018) explains that one of the variables that has a significant effect on profitability as measured by net operating margin (NOM) is company size and capacity. Masrurroh & Mulazid (2017) Companies with large assets are able to generate greater profits when following the results of their operational activities. The greater the total assets owned by the company, the safer investors will feel about investing in it. Large companies are considered to be more stable and mature, resulting in greater sales due to greater production capacity, which will increase capital cost savings..

3. METHOD, DATA, AND ANALYSIS

Method

The method used in this study is to estimate the parameters of the panel regression function using the usual least squares method, which was used in Eviews 9.0 software. Time series data models are used to forecast the future using historical data from 2015 to 2020. In essence, regression analysis aims to assess the effect on the dependent variable and one or more independent variables to estimate and predict the mean. Population means the independent variable or the mean of the dependent variable based on a known value. The focus is on efforts to describe and assess the influence between the dependent variable and one or more independent variables (Gujarati, 2004). The analysis used in this research is panel data design. Panel data is a hybrid of cross-sectional and time series data, in which several variables are observed in different categories and collected over a given time period (Rosadi, 2012: 271). Some estimates in this panel data are based on the opinion of the determinant. The panel regression formula is as follows:

$$Y_{ROA\ it} = \alpha + \beta_1 CAR_{it} * MSI_{it} + \beta_2 BOPO_{it} * MSI_{it} + \beta_3 NPF_{it} * MSI_{it} + \beta_4 DPS_{it} * MSI_{it} + \beta_5 DKI_{it} * MSI_{it} + \epsilon_{it}$$

The dependent variable in this study is the ROA profitability growth of Islamic banking in Indonesia in percent ratio, and the independent variables expected to determine ROA profitability growth are carefully selected, based on previous literature and the availability of data sets for the selected period. The independent variables in our estimation include CAR, BOPO, NPF, the Sharia Supervisory Board, the Independent Commissioner Board and Maqashid Syariah as moderating variables.

Where does ROA equal profit growth? ROA banking in Indonesia i & t time period; CAR_{it} = Capital Adequacy Ratio ; $BOPO_{it}$ = Operational Costs ; NPF_{it} variable = Non Performance Finance ; Variable $Maqashid_{it}$ = Maqashid Shariah Banking . And next is the error term of the model.

Population and Sample

Based on the discussed literature review, our study estimates a set of potential determinant variables affecting the ROA profitability of Islamic banking in Indonesia, and we classify the variables into the following broad categories:

Table 3. Sample Descriptive

	Variables	Source
1	ROA	Indonesian Sharia Commercial Bank Report
2	CAR	Indonesian Sharia Commercial Bank Report
3	BOPO	Indonesian Sharia Commercial Bank Report
4	NPF	Indonesian Sharia Commercial Bank Report
5	DPS	Indonesian Sharia Commercial Bank Report
6	DKI	Indonesian Sharia Commercial Bank Report
7	MSI	Indonesian Sharia Commercial Bank Report

Source: Author (2023)

Annual datasets for the years 2015-2020 in Indonesia. The required data set for the selected Islamic banks was obtained from the Indonesian Islamic Commercial Bank Report data set. Variable operational definitions are used to explain the variables used in the research model. The operational definitions of the variables in this study are as follows:

Return on Assets (Y)

This variable can be interpreted as banking profitability, which refers to ROA (*Return on Assets*). In determining banking performance or health, Bank Indonesia (BI) refers more to ROA than ROE (*return on equity*). BI prioritizes the profitability of a bank as measured by assets whose funds mostly come from public savings funds so that ROA is considered more representative in measuring banking profitability (Avrita & Pangestuti, 2016).

To calculate the ROA ratio, use the following formula:

$$\text{Return on Assets} = \frac{\text{Profit Before Tax}}{\text{total Assets}} \times 100\%$$

1. CAR (X1)

Capital Adequacy Ratio (CAR) is the ratio of capital adequacy that is useful for accommodating the risk of loss that a bank may face. The capital adequacy ratio indicates the extent to which a bank has risks that are also financed by public funds (credit, statements, securities, and bills).

$$\text{Capital Adequacy Ratio} = \frac{\text{Capital}}{\text{ATMR}} \times 100\%$$

2. BOPO (X2)

The efficiency ratio is represented by Operating Costs per Operating Income (BOPO), which is the ratio used to measure the ratio of operating costs or intermediation costs to the operating income earned by the bank. The smaller the ratio, the better the condition of the bank (Anggrainy, 2010).

$$\text{BOPO} = \frac{\text{Operational Cost}}{\text{Operating Income}} \times 100\%$$

3. NPF (X3)

Non-performance finance (NPF) is used to calculate the present value of a stream of future payments from a company, project, or investment. To calculate NPF, you need to estimate the timing and amount of future cash flows and choose a discount rate that is equal to the minimum acceptable rate of return. (Arifa, 2008). If non-performance finance (NPF) is high, then profitability decreases and the profit sharing rate decreases; if non-performance finance (NPF) decreases, then profitability increases and the profit sharing rate increases. The best standard for non-performance finance (NPF) is less than 5%.

$$NPF = \frac{\text{Number of Non-Performing Loans}}{\text{total credit}} \times 100\%$$

4. DPS (X4)

The Sharia Supervisory Board (DPS) is a body that has the duty to supervise all activities within Islamic financial institutions so that they comply with sharia provisions. The Sharia Supervisory Board also has other duties, namely researching and making new product proposals for the financial institutions it oversees. Thus, the Sharia Supervisory Board is the earliest person to screen a product before it is applied and fatwaed at the National Sharia Council (Muhammad, 2001). Furthermore, Abdullah (2003:5) in Nurhisam (2016) explains that the Islamic financial system is substantially different from the financial industry, which still uses conventional systems. There is a very close link between the conceptual and practical aspects of financial business activities and Islamic or sharia principles. In other words, one of the fundamental aspects that differentiates between the Islamic and conventional financial industries is compliance with sharia principles (*sharia compliance*). Governance as the basis for the operation of an agency is an important part of the Islamic finance industry in terms of management and operations. This is supported by requiring the existence of a Sharia Supervisory Board (DPS) for every sharia-based financial institution. DPS is tasked with supervising the implementation of contracts or agreements to determine whether the implementation is in accordance with Sharia principles. Σ *Dewan Pengawas Syariah (Sharia Board Committee)*

5. DKI (X5)

The Independent Board of Commissioners is a member of the Board of Commissioners who comes from outside the Issuer or Public Company and fulfills the requirements as an Independent Commissioner (OJK, 2014)

6. MSI(Z)

Maqashid Sharia Index (MSI) is a method of measuring the performance of Islamic banking developed by Mohammed, Dzuljastri, and Taif (2008). In this study, a performance evaluation for Islamic banking was formulated, which refers to the concept of maqashid sharia. Furthermore, based on Mohammed & Dzuljastri (2008: 3), the performance of maqasid sharia is a level achieved by sharia banks in achieving the objectives of Islamic sharia (maqasid sharia). The following is a measurement of the maqasid shariah index:

Table 4. Maqasid Shariah Index Measurement (Mohammed: 2008)

Purpose	Weighted Average (100% scale)	Elements	Weighted Average (100% scale)
Education _ _	30	Educational Assistance	24
		Study	27
		Training	26
		Publication	23
Justice (<i>Justice</i>)	41	Profit justice	30
		Price fairness	32
		<i>interest-free product</i>	38
Public Interest (<i>Public Interests</i>)	29	<i>Profit Ratio</i>	33
		<i>Revenue transfers</i>	30
		Real sector Investment Ratio	37

The panel regression equation from this study contains the *maqasid shariah index variable*, which acts as a mediator so that it has two functions (Baron & Kenny, 1986), namely as the dependent variable ON the variables CAR, BOPO, NPF, DPS, and DKI. as well as acting as an *independent variable* on the variable "profitability return on assets." According to Taylor (2007), in a regression equation with two variables A and B, the interaction term will be A*B, and then the statistical formulation tests the effect of CAR, BOPO, NPF, DPS, and DKI ON profitability return on assets partially through the maqasid shariah index variable as mediation are as follows:

$$Y = \alpha + \beta 1 (CAR \times MSI) + e_1$$

$$Y = \alpha + \beta 2 (BOPO \times MSI) + e_2$$

$$Y = \alpha + \beta 3 (NPF \times MSI) + e_3$$

$$Y = \alpha + \beta 4 (DPS \times MSI) + e_4$$

Information:

CAR	= Capital Adequacy Ratio
BOPO	= Operational Cost
NPF	= Non Performance Finance
DKI	= Independent Commissioner
DPS	= Sharia Supervisory Board
MSI	= Maqasid Shariah Index
Y	= Return on Assets
α	= Constant
$\beta 1 - \beta 13$	= Regression Coefficient
$e 1 - e 13$	= Residual Error

4. RESULTS

Panel Model Regression Analysis Results without MSI moderation

Statistical Test Results

Descriptive statistics

Table 5. Descriptive Statistics

	ROA	CAR	BOPO	NPF	DPS	DKI
Means	1,041	20,350	95,071	3,984	2.257576	2.3787
Median	0.595	19,245	93,885	3,090	2,000000	2.0000
Maximum	13,580	49,440	217,400	22040	3,000000	3.0000
Minimum	-10,770	2,530	58,070	0.320	2,000000	1.0000
std. Dev.	3,563	9,689	19,858	3,708	0.440650	0.5193
Skewness	0.844	0.848	3,642	2,774	1.108734	0.1651
kurtosis	8,355	4.154	23,425	12,608	2.229292	1.7801
Jarque-Bera	86,720	11,578	1293,201	338,560	15.15568	4.3920
probability	0.0000	0.003	0.000	0.0000	0.000512	0.1112
sum	68,740	1343.130	6274,690	263.00	149,000	157,000
Sum Sq. Dev.	825,329	6102506	25634.35	893.7614	12.62121	17,530
Observations	66	66	66	66	66	66

The explanation above uses the ratio percent as the base unit and then the data is processed. Moreover, because BOPO has mixed ownership, it generally has different indicator values for all variables so that it contributes a large maximum value. Likewise,

BOPO contributes greatly to the minimum value, so that the disparity between BOPO increasingly contributes to the deviation level.

Normality Test (Jarque-Bera)

The normality test used in this study is *the Jarque-Bera test*, which looks at the probability value. If the probability value is greater than the degree of error value = 5% (0.05), then this study has no normality problem, or in other words, the data is normally distributed. If the probability value is less than the degree of error value = 5% (0.05), then there is a problem with normality in this study or the data is not normally distributed. The *Jarque-Bera value* (JB statistic) follows the *Chi-square distribution* with 2 df (degrees of freedom). According to the findings

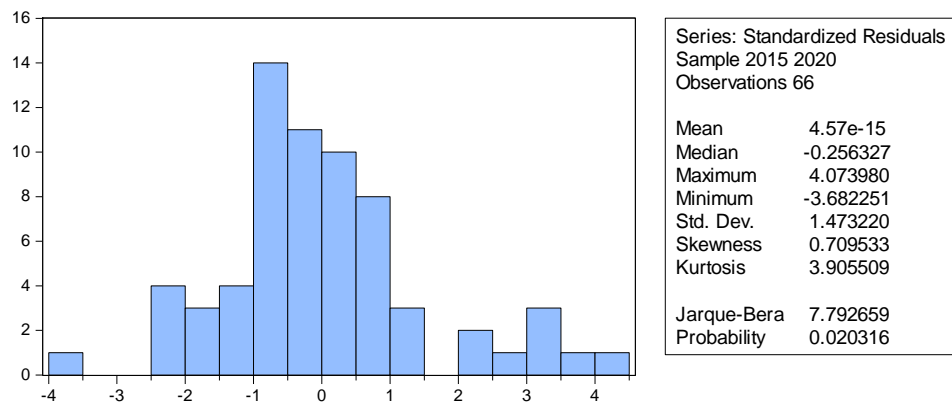


Figure 3. The results of the Jarque-Bera test using trends and intercepts

Table 6. Heteroskedacity test results

test	Statistics	df	Prob.
Breusch-Pagan LM	67.31820	55	0.1232

Source: Processed data (eviews 9.0)

In the table above, where the p-value is indicated by the *Prob value. chi square* (4) on *Obs*R-Squared* is 0.0549. Because the p value is 0.1232 > 0.05, accept H0 or which means that the regression model is homoscedasticity or in other words there is no problem with the assumption of non-heteroscedasticity.

Results of Panel Model Regression Analysis with MSI moderation

Table 7. Regression analysis results for predictor power

Common Effect Panel Model Regression				
Variables	coefficient	std. Error	t-Statistics	Prob.
CAR	0.080164	0.027765	2.887216	0.0054
BOPO	-0.119827	0.016748	-7.154542	0.0000
NPF	-0.105346	0.093175	-1.130621	0.2627
DPS	-0.711104	0.629738	-1.129206	0.2633
DKI	0.150729	0.521433	0.289067	0.7735
C	12.46881	2.600208	4.795313	0.0000
R-squared	0.730561	Mean dependent var		1.041515
Adjusted R-squared	0.708107	SD dependent var		3.563339
SE of regression	1.925168	Akaike info criterion		4.234412
Sum squared residue	222.3764	Schwarz criterion		4.433471
Likelihood logs	-133.7356	Hannan-Quinn criter.		4.313070
F-statistics	32.53692	Durbin-Watson stat		0.798850
Prob(F-statistic)	0.000000			

Fixed Effect Panel Model Regression

Variables	coefficient	std. Error	t-Statistics	Prob.
CAR	0.009508	0.023355	0.407123	0.6857
BOPO	-0.078392	0.010793	-7.263383	0.0000
NPF	-0.212606	0.062465	-3.403594	0.0013
DPS	0.001560	0.527403	0.002958	0.9977
DKI	-0.692729	0.397918	-1.740883	0.0879
C	10.79236	2.006638	5.378329	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.942443	Mean dependent var		1.041515
Adjusted R-squared	0.925176	SD dependent var		3.563339
SE of regression	0.974716	Akaike info criterion		2.993877
Sum squared residue	47.50361	Schwarz criterion		3.524702
Likelihood logs	-82.79793	Hannan-Quinn criter.		3.203631
F-statistics	54.58015	Durbin-Watson stat		2.026183
Prob(F-statistic)	0.000000			

Random Effect Panel Model Regression

Variables	coefficient	std. Error	t-Statistics	Prob.
CAR	0.021519	0.022140	0.971948	0.3350
BOPO	-0.080878	0.010571	-7.651260	0.0000
NPF	-0.211814	0.060652	-3.492273	0.0009
DPS	-0.098832	0.493699	-0.200186	0.8420
DKI	-0.571429	0.377878	-1.512204	0.1357
C	10.71920	1.972795	5.433508	0.0000
Effects Specification				
			SD	Rho
Random cross-sections			1.615159	0.7330
Idiosyncratic random			0.974716	0.2670
Weighted Statistics				
R-squared	0.780576	Mean dependent var		0.249148
Adjusted R-squared	0.762291	SD dependent var		2.076982
SE of regression	1.012642	Sum squared residue		61.52657
F-statistics	42.68869	Durbin-Watson stat		1.587803
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.656287	Mean dependent var		1.041515
Sum squared residue	283.6765	Durbin-Watson stat		0.344378

Analysis of the Best Regression Models of Profitability Determinants of Islamic Bank in Indonesia Period 2015-2020

Panel Data Regression Model Selection without Moderation

1. Chow test results

the Chi-square cross-section probability is 0.000 . it can be seen that the pvalue < (0.00).

2. Hausman test results

the Chi-square cross-section probability is 0.0823. it can be seen that p value > (0.0823> 0.05), so it is accepted. At a significance level of 5% it can be concluded that the model selected in this test is the *random effect model* .

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-sections	9.759885	5	0.0823

Based on the tests that have been carried out, the final regression model for panel data for the Profitability Determinants of Bank Syariah Indonesia is obtained, namely the *random effect model* as follows:

$$Y_{ROA\ it} = 10.71920 + 0.021519\ CAR_{it} - 0.080878\ BOPO_{it} - 0.211814\ NPF_{it} - 0.098832\ DPS_{it} - 0.571429\ DKI_{it} + \epsilon_{it}$$

Second Statistical Test Results

MSI Moderation Panel Model Regression Analysis Results

Descriptive statistics

Table 8. Descriptive Statistics

	ROA	CARMSI	BOPOMSI	NPFMSI	DPSMSI	DKIMSI
Means	1.041515	4.272121	17.93939	0.630455	0.445000	0.475000
Median	0.595000	3.870000	19.31500	0.565000	0.450000	0.470000
Maximum	13.58000	13.03000	24.37000	1.680000	0.700000	0.840000
Minimum	-10.77000	-1.500000	-28.35000	-1.630000	-0.260000	-0.260000
std. Dev.	3.563339	2.855001	6.809274	0.471258	0.147035	0.168708
Skewness	0.844886	1.180082	-5.053579	-1.193511	-1.868360	-1.351425
kurtosis	8.355329	4.863008	33.92239	9.668814	9.941491	7.828265
Jarque-Bera probability	86.72093	24.86322	2910459	137.9701	170.9053	84.19824
sum	0.000000	0.000004	0.000000	0.000000	0.000000	0.000000
Sum Sq. Dev.	68.74000	281.9600	1184,000	41.61000	29.37000	31.35000
Observations	825.3298	529.8171	3013,804	14.43549	1.405250	1.850050
	66	66	66	66	66	66

Source: Processed data (eviews 9.0)

The explanation above uses the ratio of percent as the base unit, and then the data is processed. Moreover, because BOPO has mixed ownership, it generally has different indicator values for all variables, so it contributes a large maximum value. Similarly, BOPO makes a significant contribution to the minimum value, so the disparity between BOPO contributes to the deviation level.

Normality Test (Jarque-Bera)

The normality test used in this study is using the *Jarque-Bera test* by looking at the probability value. If the probability value is greater than the degree of error value $\alpha = 5\%$ (0.05), then this study has no normality problem or in other words the data is normally distributed. If the probability value is less than the degree of error value = 5% (0.05), then there is a problem with normality in this study or the data is not normally distributed. The *Jarque-Bera value* (JB statistic) follows the *Chi-square distribution* with 2 df (*degree of freedom*). According to the findings,

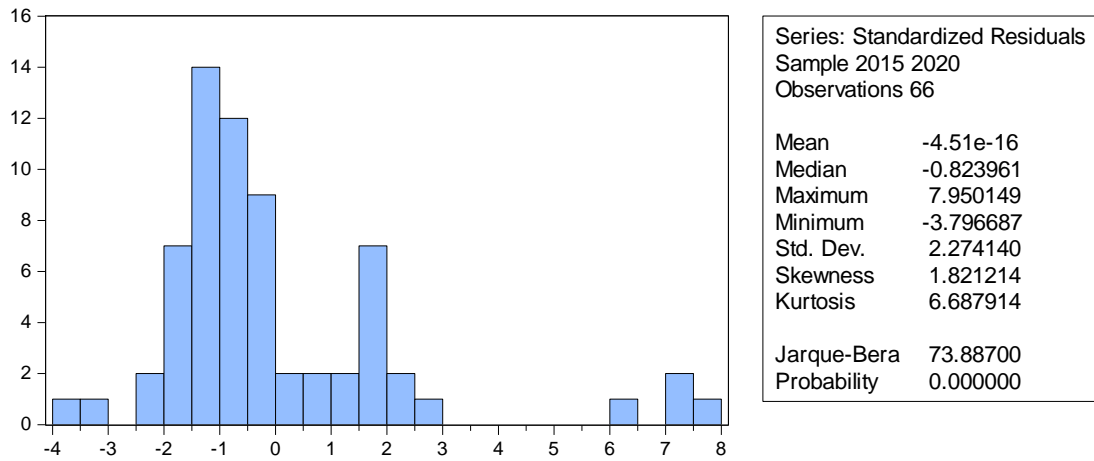


Figure 4. The results of the Jarque-Bera test using trends and intercepts

Heteroskedacity Test

Table 9. Heteroskedacity test results

test	Statistics	df	Prob.
Breusch-Pagan LM	72.73399	55	0.0549

Source: Processed data (eviews 9.0)

In the table above, where the p-value is indicated by the *Prob value. chi square* (4) on *Obs*R-Squared* is 0.0549. Because the p value is $0.0549 > 0.05$, accept H_0 or which means that the regression model is homoscedasticity or in other words there is no problem with the assumption of non-heteroscedasticity.

Results of Panel Model Regression Analysis with MSI moderation

Common Effect Model Regression

Variables	coefficient	std. Error	t-Statistics	Prob.
CARMSI	0.666861	0.104216	6.398854	0.0000
BOPMSI	-0.077759	0.071699	-1.084514	0.2825
NPFMSI	0.164685	0.714505	0.230488	0.8185
DPSMSI	5.991611	3.214477	1.863946	0.0672
DKIMSI	7.625163	2.676913	2.848491	0.0060
C	-6.804493	0.843926	-8.062899	0.0000
R-squared	0.696393	Mean dependent var		1.041515
Adjusted R-squared	0.671093	SD dependent var		3.563339
SE of regression	2.043590	Akaike info criterion		4.353802
Sum squared residue	250.5757	Schwarz criterion		4.552861
Likelihood logs	-137.6755	Hannan-Quinn criter.		4.432459
F-statistics	27.52482	Durbin-Watson stat		0.628111
Prob(F-statistic)	0.000000			

Fixed Effect Model Regression

Variables	coefficient	std. Error	t-Statistics	Prob.
CARMSI	0.323954	0.108078	2.997396	0.0042
BOPOMSI	0.085525	0.063626	1.344185	0.1850
NPFMSI	0.213638	0.710896	0.300520	0.7650
DPSMSI	8.630225	2.611942	3.304141	0.0018
DKIMSI	-2.448354	2.079851	-1.177177	0.2447
C	-4.688896	0.656181	-7.145736	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.919286	Mean dependent var		1.041515
Adjusted R-squared	0.895072	SD dependent var		3.563339
SE of regression	1.154258	Akaike info criterion		3.332009
Sum squared residue	66.61554	Schwarz criterion		3.862834
Likelihood logs	-93.95629	Hannan-Quinn criter.		3.541763
F-statistics	37.96483	Durbin-Watson stat		1.628382
Prob(F-statistic)	0.000000			

Regression Model Random Effects

Table 10. Regression analysis results for predictor power

Variables	coefficient	std. Error	t-Statistics	Prob.
CARMSI	0.413449	0.098002	4.218781	0.0001
BOPOMSI	0.065952	0.059697	1.104773	0.2737
NPFMSI	- 0.061695	0.649213	-0.095031	0.9246
DPSMSI	8.136050	2.466279	3.298917	0.0016
DKIMSI	- 0.630576	1.987339	-0.317297	0.7521
C	-5.190048	0.809652	-6.410224	0.0000
Effects Specification				
			SD	Rho
Random cross-sections			1.705648	0.6859
Idiosyncratic random			1.154258	0.3141
Weighted Statistics				
R-squared	0.695967	Mean dependent var		0.277352
Adjusted R-squared	0.670631	SD dependent var		2.106083
SE of regression	1.208695	Sum squared residue		87.65668
F-statistics	27.46941	Durbin-Watson stat		1.246226
Prob(F-statistic)	0.000000			

Source: Processed data (eviews 9.0).

Analysis of the Best Regression Models of Profitability Determinants of Islamic Bank in Indonesia Period 2015-2020

Panel Data Regression Model Selection

Chow test results

the Chi-square cross-section probability is 0.000 . it can be seen that the pvalue < (0.000).

Hausman test results

the Chi-square cross-section probability is 0.0556. it can be seen that pvalue > (0.0556 > 0.05), so it is accepted. At a significance level of 5% it can be concluded that the model selected in this test is the *random effect model* .

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-sections	10.792960	5	0.0556

Based on the tests that have been carried out, the final regression model for panel data for the Profitability Determinants of Bank Syariah Indonesia is obtained, namely the *random effect model* as follows:

$$Y_{ROA\ it} = -5.190048 + 0.413449\ CAR\ it *MSI\ it + 0.065952\ BOPO\ it *MSI\ it - 0.061695\ NPF\ it *MSI\ it + 8.136050\ DPS\ it *MSI\ it - 0.630576\ DKI\ it *MSI\ it + \epsilon\ it$$

Discussion

The relationship between each predictor variable and the response variable can be seen from the coefficients. The results are as follows:

CAR Variable (X1)

The coefficient of the *capital adequacy ratio variable* is 0.413449, meaning that when CAR increases by one unit, profitability will also increase by 0.413449% per year, with the coefficients of other variables considered constant. And the probability t-statistic is 0.0001, so that at a significance level of 5%, it can be concluded that CAR has a positive and significant effect on the profitability of Islamic banks in Indonesia. This supports the statement that the implementation of good corporate governance is a sign that a company manages its business neatly in order to provide financial reports that satisfy its users. Meanwhile, Gallizo and Saladrigues (2015), Rudkhani and Jabbari (2013), and Laitinen and Sourmumnen (2012) evaluate company performance through ratios to determine company acceptance of banking profitability.

Furthermore, the results of the study are also in line with the research of Susanto and Kholis (2016), who explain that CAR has a significant effect on financial performance (ROA). An increase in profits using ROA analysis must also be accompanied by an increase in capital adequacy (CAR). According to Sinungan and Muchdarsyah (2000), "the element of trust is an important issue and is a factor in the success of managing a bank." In this study, from the capital side, the CAR ratio is used. *Capital adequacy ratio* (CAR) is used as an independent variable that affects ROA based on its relationship with the level of bank risk, which leads to bank profitability (ROA). The *capital adequacy ratio* (CAR) measures capital adequacy, which shows the bank's ability to maintain sufficient capital and its management ability to identify, measure, supervise, and control the risks that arise that can affect the amount of capital.

BOPO variable (X2)

BOPO's variable coefficient is 0.065952, meaning that when BOPO increases by one unit, profitability will decrease by 0.065952 percent annually with the coefficients of other variables held constant. And the probability t-statistic is 0.2737, so that at a significance level of 5%, it can be concluded that BOPO has a positive relationship but does not have a significant effect on the profitability of Islamic banks in Indonesia. In line with research from Aisyah (2018), one of the variables that has a significant effect on profitability as

proxied by operational costs (*BOPO*) is company size and capacity. Masrurroh & Mulazid (2017): Companies with large assets are able to generate greater profits when followed by the results of their operational activities. The greater the total assets owned by the company, the safer investors will feel about investing in it. Large companies are considered to be more stable and mature, resulting in greater sales due to greater production capacity, which will increase capital cost savings.

Furthermore, the findings of this study are consistent with Nanda's (2019) research, which states that positive *BOPO* is not significant for the profitability of Islamic banks on their performance. Furthermore, according to Wahyuningsih et al. (2017) research on the effect of *BOPO* on company profitability (*ROA*) in Sharia-law banks in Indonesia from 2010 to 2015, positive *BOPO* was not significant. This is because the efficiency level of the bank in carrying out its operations affects the level of income generated by the bank.

Furthermore, the standard *BOPO* variable used by Bank Indonesia for the *BOPO* ratio is 83–90%. According to the standard ratio, the average *BOPO* ratio for the 2015–2020 period is 83.409 percent at 83–90 percent, with banks in Indonesia reaching a maximum of 96%. Because the level of the *BOPO* ratio is quite low, it means that the performance of the bank's management is quite efficient in using existing resources at the bank, which will result in an increase in pre-tax profit, which will ultimately increase *ROA*. The *BOPO* variable has a positive effect on the performance of Islamic banks. This can be caused because the level of the *BOPO* ratio, which is quite low, means that the performance of the bank's management is quite efficient in using existing resources at the bank, which will result in increased profit before tax, which will ultimately increase *ROA*.

NPF Variable (X3)

The coefficient of the *non-performance finance* variable is -0.061695, meaning that when *non-performance finance* increases by 1 percent, profitability will decrease by 0.061695% per year, with the coefficients of other variables considered constant. And the probability t-statistic is 0.9246, so that at a significance level of 5%, it can be concluded that NPF has a negative relationship but does not have a significant effect on the profitability of Islamic banks in Indonesia. In Muh's research Sabir et al. (2012) explained that NPF has no effect on *ROA* because the financing provided to Islamic Commercial Banks is still not optimal and is constrained in channeling financing to customers, so the risk of bad financing is very low and has no effect on *ROA*. In line with that, research from Masrurroh & Mulazid (2017) entitled "Analysis of the Effect of Company Size, *Capital Adequacy Ratio (CAR)*, *Non-Performing Financing (NPF)*, *Return on Assets (ROA)*, and *Financing Deposit Ratio (FDR)* for Companies with Assets" shows that large companies are able to generate greater profits when followed by the results of their operational activities. The greater the total assets owned by the company, the safer investors will feel about investing in it. Large companies are considered to be more stable and mature, resulting in greater sales due to greater production capacity, which will increase capital cost savings. NPF is an indicator in assessing the performance of bank functions, where the bank's function is as an intermediary institution. A high NPF level indicates low bank health because this indicates that there are many problems with financing in the bank's operational activities.

Variable DPS (X 4).

Sharia Supervisory Board variable coefficient of 8.136050 means that when the Sharia Supervisory Board increases by 1 percent, profitability will decrease by 8.136050 percent per year, with the coefficients of other variables considered constant. And the probability

of the t-statistic is 0.0016, so that at a significance level of 5%, it can be concluded that DPS has a positive but influential relationship with significant implications for the profitability of Islamic banks in Indonesia. So it can be said that the Sharia Supervisory Board has a significant effect on company profitability. That is, the size of the sharia supervisory board contained in each Islamic commercial bank affects the quality of Islamic bank profitability. This is because all Sharia supervisory boards play a role in the quality of Sharia bank profitability. The Sharia Supervisory Board's working mechanism is in line with the conformity of Sharia-based products or contracts and is directly involved with management decisions in disclosing the quality of Sharia Bank Profitability.

(X 5) DKI variable

Independent Commissioner's variable coefficient of -0.630576, meaning that when the board of independent commissioners increases by 1 percent, profitability will decrease by 0.630576 percent per year, with the coefficients of other variables considered constant. And the probability of the t-statistic is 0.7521, so that at a significance level of 5%, it can be concluded that DKI has a negative but insignificant effect on the profitability of Islamic banks in Indonesia. So it can be said that the independent board of commissioners has no significant effect on company profitability. That is, the size of the independent board of commissioners found in each Islamic commercial bank does not affect the quality of the bank's profitability. This is because all independent commissioners do not play a role in the quality of Sharia bank profitability. The working mechanism of the Independent Board of Commissioners is not in line with the conformity of products or contracts based on Sharia principles and is not directly involved in management decisions in disclosing the quality of Sharia bank profitability.

5. CONCLUSION, LIMITATIONS, AND SUGGESTIONS

Conclusion

The conclusion from the results of this study is that the panel data regression model is the best and most suitable for modeling the determinants of the role of macroeconomic factors, sharia supervisory boards, independent commissioners, and maqashid as mediation on the profitability of Islamic banks in Indonesia for the 2015-2020 period, with a *random effect model* and an equation model of estimation results as using the Maqashid Syariah mediation index. $YROA_{it} = -5.190048 + 0.413449 CAR_{it} * MSI_{it} + 0.065952 BOPO_{it} * MSI_{it} - 0.061695 DPS_{it} * MSI_{it} - 0.630576 DKI_{it} * MSI_{it} + it = \%$ Determinant variable 7 Macroeconomic factors, the Sharia Supervisory Board, the Independent Board of Commissioners, and Maqashid as mediation on the profitability of Islamic Banks in Indonesia for the 2015-2020 period are unable to explain the profitability variable of Islamic Banks, while the remaining 31.9% is explained by other variables outside the model. And at a significance level of 5%, only the CAR and DPS variables have a significant effect on the profitability of Islamic banks in Indonesia. As a result, Indonesian Islamic banking is expected to be able to control and grow its profitability return on assets (ROA) in the future, ensuring that it is stable and sustainable. The government needs to work together to increase prudence on the *return on assets* (ROA) of Islamic banking in Indonesia.

REFERENCES

- Aisha, Must. (2018) *Analysis of Affecting Net Operating Margin (NOM) of Islamic Commercial Banks in Indonesia in 2011-2016* . ESSAY.
- Asy'ari, AH (2016). Analysis of the effect of Capital Adequacy Ratio, Financing to Deposit Ratio, Non-Performance Financing and Operating Expenses ON Operating Income ON Return On Assets of Foreign Exchange Sharia Commercial Banks in Indonesia. *Scientific Journal of Business Economics 2*. Pages 420-426
- Azizah, Aziz Nur .(2019). *The effect of CAR, BOPO and FDR ON profitability with NOM as a moderating variable in Islamic commercial banks for the 2015-2018 period*
- Ali, M., & tY, RL 2017. Effect of Net Interest Margin (NIM), Operating Costs ON Operating Income (BOPO), Loan to Deposit Ratio (LDR) and Non-Performing Loans (NPL) ON Return on Assets (ROA) . *Journal of Accounting and Finance Research, Volume 5, No. 2, 1377- 1392*
- Almunawwaroh, M., & Marliana, R. (2018). The Influence of CAR, NPF, and FDR ON Profitability of Islamic Banks in Indonesia. *Amwaluna : Journal of Islamic Economics and Finance, Volume 2, No. 1, 1-18*.
- Amaroh, S., & Masturin, M. (2018). The Determinants of Maqasid Shariah Based Performance of Islamic Banks in Indonesia. *Iqtishadia: Journal of Islamic Economics and Business Studies STAIN Kudus , 11 (2), 354-370*.
- Arifuddin. (2012). *Analysis of the Influence of CAR, LDR, BOPO, AND NPL ON BPR ROA and Comparison of ROA between BPRs in the South Sulawesi Region and BPRs in the Iramasuka Region (2008-2010 PERIOD)* . Faculty of Economics and Business, University of Hasanuddin Makassar.
- Avrita. R.D and Pangestuti. IRD (2016). Analysis of the Influence of CAR, NPL, LDR, NIM, and BOPO ON Bank Profitability (Comparison of Go Public Commercial Banks and Non-Go Public Commercial Banks in Indonesia Period 2011-2014). *Diponegoro Journal of Management, Vol. 5, No. 2, 2016*
- Ascarya, (2007). *Sharia Bank Contracts and Products* , Jakarta: Grafindo.
- Bank Indonesia. (2004). *Circular Letter Concerning the Rating System for the Soundness of Commercial Banks*. Jakarta: SE No. 6/23/DPNP dated 31 May 2004 .
- Bank Indonesia. (2011). *Circular Letter Concerning the Soundness Rating of Commercial Banks*. Jakarta: SE No. 13/24/DPNP dated 25 October 2011 .
- Bank Indonesia. (2013). *Circular Letter Concerning the Opening of Commercial Bank Office Networks based on Core Capital*. Jakarta: SE No. 15/7/DPNP dated 8 March 2013 .
- Bank Indonesia. (2013). *Circular Letter Concerning Calculation of Secondary Statutory Reserves and Statutory Reserves based on the Loan to Deposit Ratio (LDR) in rupiah*. Jakarta: SE No. 15/41/DKMP dated 1 October 2013.
- Bank Indonesia. (2018). Banking Regulations. from BI: www.bi.go.id Baron, RM, & Kenny, DA (1986). the moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology , 51 (6), 1173*.

- Bps.go.id (accessed September 29, 2021) List of Sharia Commercial Banks (BUS) at the Financial Services Authority (accessed September 14, 2021). *List of an Islamic Bank listed on Bank Negara Malaysia* (accessed September 14, 2021) *Financial Accounting Standard Board* (accessed October 1, 2021)
- Carcello, J.V, & Neal, t. L. (2000). *Audit committee composition and auditor reporting* . the *Accounting Review*, 75(4), 565–630.
- Dendawijaya. 2009. *Banking management*. Jakarta : Ghalia Indonesia
- Dahlan Ahmad. 2012. *Islamic Bank, Yogyakarta : terrace*
- Fauzia, IY, & Riyadi, AK (2014). *Basic Principles of Islamic Economics Perspective of Maqashid Al-Syariah* . Prenada Kencana. Media Group, Jakarta .
- Gallizo, Jose and Saladrigues. (2015). *An analysis of determinants of going concern audit opinion: Evidence from Spain stock exchange*. *Intangible Capital* . 12(1).
- Gujarati, DN (2007). *Fundamentals of Econometrics* . Jakarta: Erlangga.
- Husnan, Suad, and Eny Pudjiastuti. 2002. *Fundamentals of Financial Management, printing 1, edition 3* . Yogyakarta: UMP AMP YKPN.
- Jensen, MC and Meckling, WH (1976), *Theory of the firm: managerial behavior, agency costs and ownership structure*, *Journal of Financial Economics* , Vol. 3 No. 4, pp. 305-360.
- Julaeha. L. (2015). "The Influence of Non-Performing Loans , Net Interest Margin , Operating Costs/Operating Income and Loan to Deposit Ratio ON Bank Profitability (Case Study of Bank Rakyat Indonesia, tbk. period 2003-2014)". *Journal of Business Accounting*, Vol. 20, no. 2, December: 202-20 6.
- Jumingan. (2006). *Analysis of Financial Statements, print 1*. Jakarta: Bumi Aksara.
- Cashmere. (2013). *Banks and Other Financial Institutions, revised edition, printing 12* . Jakarta: Rajawali Press.
- Cashmere. (2016). *Financial Statement Analysis* . Jakarta: PT. King of Grafindo Persada.
- Kara. M. (2013). *The Contribution of Islamic Banking Financing TO the Development of Micro, Small and Medium Enterprises*. *Ahkam*. Vol XIII (2). July
- Kartini, t., Martaseli, E., & Ismatullah, I. (2016). *The Effect of Capital Adequacy Ratio (CAR) ON Earnings (ROE) at PT. Bank Syariah Mandiri Period 2004-2014*. *Scientific Journal of Economics (Journal of Accounting, Tax and Management)* , 4 (8), 129-143.
- Kim, O., & Verrecchia, RE (1997). *Pre-announcement and event-period private information*. *Journal of accounting and economics* , 24 (3), 395-419.
- Krisnawati, ND *The Influence of Corporate Governance Mechanisms, Liquidity, and Financing Risk ON the performance of sharia maqashid at Islamic commercial banks in Indonesia (Empirical Study on Islamic Commercial Banks in Indonesia Period 2014-2018)* .
- Lovelock, Christopher., Jochen, Wirtz., & Jacky, Mussry. 2010. *Service Marketing - Indonesian Perspective Volume 1* . Jakarta: Erlangga Publisher.
- Laitinen, EK, & Laitinen, t. (1998). *Qualified audit reports in Finland: evidence from large companies* . *European Accounting Review*, 7(4), 639–653

- Masrurroh & Mulazid. Analysis of the Influence of Company Size, Capital Adequacy Ratio (CAR), Non Performing Financing (NPF), Return on Assets (ROA), Financing Deposit Ratio (FDR) ON Disclosure of Corporate Social Responsibility (CSR) of Islamic Commercial Banks in Indonesia in the 2012-2015 period. " *HUMAN FALAH: Volume 4. No. January 1 – June. 2017* .
- Milgram, S. 1963. Behavioral Study of Compliance . *Journal of Abnormal and Social Psychology. Yale University* .
- Mohammed, MO, & Razak, DA (2008). t the Performance Measures of Islamic Banking Based on the Maqasid Framework . Malaysia.
- Mohammed, MO, & Taib, F. (2009). Testing the Performance Measures Based on Maqashid al-Shari'ah (PMMS) 24 Model Selected Islamic and Conventional Banks. In *2nd Langkawi INSANIAH-IRTI International Conference (LIFE)* (pp. 1-15).
- Muflih, M. (2006). *Consumer behavior in the perspective of Islamic economics* . RajaGrafindo Persada.
- Mohammed. 2005. Management of Islamic Banks. Yogyakarta: UPP AMP YKPN.
- Munir, M. (2018). Analysis of the Influence of CAR, NPF, FDR and Inflation ON Profitability of Islamic Banking in Indonesia. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking, Volume 1, No 1&2, 89-98.*
- Mulyono, S. (2006). Statistics for Economics and Business. Jakarta: Publishing Institute, Faculty of Economics, University of Indonesia.
- Muhammad Yusuf. 2005. Fundraising and Distribution of Sharia Bank Business Results. Jakarta: PT. Grasindo.
- Mohammed. 2005. Sharia Financing Management. Yogyakarta: UPP AMP. YKPN.
- Nissa, Khumaerotun. (2017) The Effect of *Maqasid Shariah Index* , Investment Account Holder, Company Size, and Company Age ON Disclosure of Islamic Social Reporting. *Thesis* . - Semarang: State University of Semarang.
- Nikensari, Sri Indah. (2012). Islamic Banking Principles History & Its Application. Semarang: PT Pustaka Rizki Putra
- Noman, Abdullah M., Imperatives of Financial Innovations for Islamic Banks , *International Journal of Islamic Financial Services* , Vol. 3, 2003
- Nugraheni, P., & Alam, WFI (2014). The Effect of Liquidity Risk ON Profitability in Islamic and Conventional Banking in Indonesia. *Journal of Accounting and Investment* , 15 (1), 1-16.
- Nurhisam, Luqman. (2016). *Maqasid Shariah Index* (Sharia Compliance) in the Islamic Financial Industry. *Journal of Law Ius Quia Iustum* 23.1: 77-96.
- Nurmahadi & Christina tri Setyorini. "Maqasid Syari'ah in Measuring the Performance of Islamic Financial Institutions in Indonesia." *Journal of Sharia Accounting STIE Syariah Bengkalis* VOL. 2 NO. 1 Jun.2018.
- Oktaviani, S., Suyono, & Mujiono. (2019). Analysis of the Influence of CAR, BOPO, LDR, NIM and Company Size on the Profitability of Banks listed on the Indonesia Stock Exchange in 2012-2017. *Bilancia: Scientific Journal of Accounting, Volume 3, No. 2, 218-231.*

Financial Services Authority. (2013). Indonesia Sharia Finance Development Report 2013. Jakarta: Directorate of Sharia Banking Regulation and Licensing of the Financial Services Authority.

Financial Services Authority. (2013). Sharia Banking Statistics. Jakarta: Department of Banking Licensing and Information.

Financial Services Authority. (2014). Indonesia Sharia Finance Development Report 2014. Jakarta: Directorate of Sharia Banking Regulation and Licensing of the Financial Services Authority.

Financial Services Authority. (2014). Sharia Banking Statistics. Jakarta: Department of Banking Licensing and Information