Determinants of Islamic Performance Ratio in Islamic Banks with Return on Assets as Moderating Factor

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Abstract

The plan of the Indonesian government that wants to make Indonesia the center of the world's Islamic economy and finance must be supported by all stakeholders. Therefore, as one of the vital elements in the Islamic financial ecosystem, Islamic banks need to have an excellent performance to increase the trust of the national and international community. In addition, Islamic banks with different operational principles from conventional banks should have different performance measurements compared to performance measurements from conventional banks.

The purpose of this study is to analyze the factors that can potentially affect the Islamic Performance Ratio (IPR). These factors include independent variables consisting of financing, the distribution ratio (Financing to Deposit Ratio-FDR), labor cost ratio (LCR), promotion cost ratio (PCR), financing quality ratio (Non-Performing Financing-NPF), ratio distribution of financing to micro, small and medium enterprises (MSMEs) and Return on Assets (ROA). Furthermore, to determine the relationship between financial performance indicators in

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conventional banks (ROA) with financial performance indicators and social performance in Islamic banks (IPR), ROA becomes a moderating variable.

The results of this study show that FDR has a positive and significant effect on IPR, LCR has a negative and insignificant effect on IPR, PCR has a positive and significant effect on IPR, NPF has a negative and significant effect on IPR, MSMEs have a positive and significant effect on IPR, ROA has a positive and significant effect on IPR, and ROA has a positive and significant effect on IPR. Significant to the IPR. Whereas the ROA variable as a variable that moderates the relationship of these independent variables to IPR results in that ROA moderates the effect of ROA positively and significantly on IPR, ROA moderates the effect of LCR negatively and significantly on IPR, ROA moderates the effect of PCR positively and significantly on IPR. Also, ROA positively and significantly moderates the effect of MSMEs on IPR.

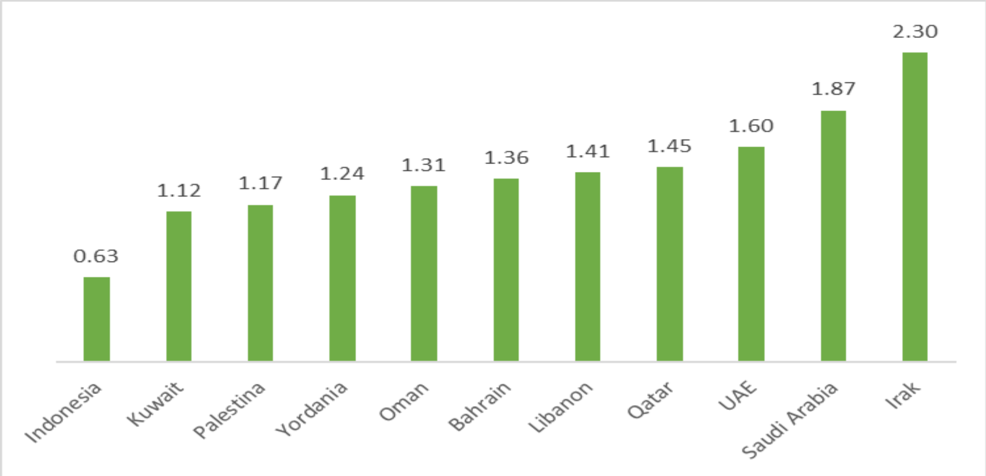
Key Words*:* Islamic Bank, Islamic Performance Ratio (IPR), Financing to Deposit Ratio (FDR), Labor Cost Ratio (LCR), Promotion Cost Ratio (PCR), Non-Performing Financing (NPF), Micro Small & Medium Enterprises (MSMEs), Return on Assets (ROA)

JEL Classification: G20, G21, G23, G32

1. Introduction

The Indonesian government plans to make Indonesia the center of the world's Islamic finance and economy (KNEKS, 2019). Therefore, one of the essential elements to make this happen is Islamic finance in Indonesia should have good resilience and stability (Nugroho & Anisa, 2018a; Nugroho, Ghazali, et al., 2020). Indonesia, which has the largest Muslim population globally, which in 2019 has reached 262 million, needs to have a good performing Islamic bank (Nugroho, Utami, Sukmadilaga, & Fitrijanti, 2017). This is because the excellent performance of Islamic banks will have implications for the good welfare of the community. Furthermore, Islamic banking is an intermediary institution that mobilizes funds in the community to have implications for the movement of the real sector and economic growth (Ductor & Grechyna, 2015).

Furthermore, the development of Return on Assets (ROA) of Islamic banks from 2009 to 2017 has fluctuated. However, compared to the ROA of conventional banks, the ROA of Islamic banks is still relatively low. The ROA of Islamic banks from 2009 to 2017 tended to decline by 0.85%, from 1.48% in 2009 to 0.63% in 2017. While the ROA of conventional banks decreased by 0.38% from 2.83% in 2009 became 2.45% in 2017. The decreasing ROA occurred in all banking industries (Islamic banks and conventional banks) in the 2009-2017 period. However, the decline in ROA of Islamic banks was relatively more significant, namely 0.63%, while conventional banks experienced a decrease of 0.38%. In addition, compared to Islamic banks in Middle Eastern countries such as Palestine, Qatar, United Arab Emirates, Lebanon, Saudi Arabia, Kuwait, Bahrain, Jordan, Oman, and Iraq, the ROA of Islamic banks in Indonesia is among the lowest. The low ROA of Islamic banks in Indonesia, when compared to the ROA of Islamic banks in Middle Eastern countries, is shown in Graph 1 below:



Source: CPIFinancial (2017)

Figure 1.1 Return On Assets of Indonesian Islamic Banks VS Islamic Banks in Middle Eastern Countries

Referring to Graph 1.1 above, Islamic banks in Indonesia have the lowest ROA level compared to 10 other countries in the Middle East. According to this phenomenon, the profitability of Islamic banks in Indonesia still needs to be improved. Based on the phenomenon of low ROA from the Indonesian Islamic banking industry, it shows that the contribution of Islamic banks to improving the welfare of the people in Indonesia is still not optimal (Nugroho, Mastur, Harnovinsah, & Aryanti, 2020). Another phenomenon is that Indonesian Islamic financial literacy is still low compared to financial literacy in general. The low level of Islamic financial literacy is shown in table 1 below:

Table 1.1 Financial Literacy VS Islamic Financial Literacy in 2016 and 2019

Literacy	2016	2019	Growth 2016-2019
Financial Literacy	29,70%	38%	27,9%
Islamic Financial Literacy	8,10%	11,10%	37%

Source: Nugroho (2020)

Table 1.1 above shows that financial literacy is the public's understanding of financial products and services by 38%. While the population understood sharia financial products in 2019, only 11.1% understand sharia financial products. The size of the gap can cause low levels of society to use the services of Islamic banks. In connection with the low literacy of Islamic finance, it is necessary to provide adequate information to the public that using financial service products from Islamic banks can provide a sense of security and comfort for customers and the public but can also fulfill the need to carry out their religious teachings in totality (A. Rachmawati & Widana, 2019). In addition, as a bank that aims to serve the public based on sharia principles, Islamic banks must have good performance and have good productivity (Nugroho, Badawi, & Hidayah, 2019b; Nugroho, Ghazali, et al., 2020). Furthermore, referring to a hadith narrated by Al-Hakim, Rasulullah SAW delivered a message that has relevance to productivity and performance. Rasulullah SAW said: *"Whoever today (performance) is better than yesterday means he is lucky, whoever today his condition (performance) is the same as yesterday means he is losing, and whoever today his condition (performance) is worse than yesterday then really he is a person who is lost or despicable."*

Performance measurement or success in managing a company can be done by comparing output with input, so the better the income generated is compared to expenses, the better the company's performance (Lee & Roh, 2020). Meanwhile, the output of Islamic banks or the performance of Islamic banks, which is called the Islamic Performance Ratio (IPR), can be measured through ratios: Profit-sharing ratio (PSR), Zakat performing ratio (ZPR), Equitable distribution ratio (EDR). The greater this ratio, the better the Islamic bank has implemented sharia principles. Based on the IPR indicator above, the success of Islamic banks can be measured by achieving the ratio elements of the IPR (Nugroho, Nugraha, & Badawi, 2020b). Therefore, the measurement of the performance of Islamic banks cannot be assessed only from return on assets (ROA) but needs to be complemented by using a more comprehensive and unique measurement because Islamic banks have different objectives from conventional banks (Nugraha, Nugroho, Lindra, & Sukiati, 2020; Usman & Khan, 2012; Vania, Nugraha, & Nugroho, 2018). Islamic banks have more comprehensive objectives when compared to conventional banks because

Islamic banks carry out their activities to optimize profit and focus on social and sharia (spiritual) aspects (Nugroho, Badawi, & Hidayah, 2019a; Nugroho, Meiwanto Doktoralina, Indriawati, Safira, & Yahaya, 2020; Nugroho, Nugraha, & Badawi, 2020a).

The performance indicator of the banking function in channeling funds collected to the public in the form of loans is the financing to deposit ratio (FDR). This ratio shows the bank's ability to channel loans from third-party funds or funds from the public that the bank has collected (Hakiim & Rafsanjani, 2016; Lutfiandari & Septiarini, 2016).

Furthermore, Islamic banks require expenses, including labor costs, promotion costs, and general administrative costs. However, labor is the central resource in an organization or company, so that its role is significant for the progress and improvement of the company's performance. Therefore, according to Putra & Sudirman, 2015 and Waterman (2006), labor is a capital with essential values and is beneficial to the company.

In addition, to increase the market share of Islamic banks, the information conveyed to market Islamic bank products and services in the form of promotion needs to be empowered. This promotion is expected to increase public interest in using Islamic banking services, either saving funds or borrowing funds for business interests and using Islamic banking services to pay zakat, infaq, sadaqah. The effectiveness of promotions will increase the use of products and services from Islamic banks by the wider community to increase the market share of Islamic banks in Indonesia (Lestari, 2009; Patriana & Nurismalatri, 2018; Rust & Zahorik, 1993). In addition, the promotion is also needed to increase literacy, where currently, the Indonesian public's literacy for Islamic bank financial products and services is still low (Muzdalifa, Rahma, & Novalia, 2018; Tan & Bogomolova, 2016).

In addition, to increase public trust, the quality of credit or financing is an essential financial indicator (Bernstein, 1996a; Nugroho, Hidayah, & Badawi, 2018). Thus, to maintain this reputation and profitability, the bank tries to maintain the quality of financing so that the assets owned by the bank can generate optimal profits (Rahman & Rochmanika, 2012; Setiawati et al., (2017).

Moreover, Islamic banking is a bank that cares about social problems so that it can be used as a solution for micro and small entrepreneurs seeking capital to increase their financial capacity and income. Therefore, Islamic banks should be pro banks for micro, small and medium enterprises (MSMEs) so that every Islamic bank must have financial products that are pro to MSMEs (Nugroho, 2014; Wajdi Dusuki, 2008b). Following the phenomena above, research is needed to analyze the variables that can affect the IPR, which includes the ability of sharia bank financial (Financing to Deposit Ratio/FDR), sharia bank productivity (labor cost ratio/LCR), sharia bank promotion ability (promotion cost ratio/PCR), quality of financing (Non-Performing Financing/NPF), and distribution of financing to MSMEs. Furthermore, because currently, one of the indicators used by regulators in determining good performance is Return on Assets (ROA), the ROA in this study is a moderating variable. The research aims are to determine the factors that influence the performance of Islamic banking from a sharia perspective, namely the IPR, which is moderated by the performance measurement currently used, namely ROA. Furthermore, based on this phenomenon, the research questions in this study include:

- Does the financing to deposit ratio (FDR) affect the Islamic Performance ratio (IPR)?;
- Does the labor costs ratio (LCR) affect the IPR?;
- Does the promotion costs ratio (PCR) affect the IPR?;
- Does the ratio of financing quality (NPF) to total financing affect the IPR?;
- Does the financing disbursement to micro, small and medium enterprises (MSMEs) affect the IPR?;
- Does the return on assets (ROA) affect the IPR?;
- Does ROA moderating FDR; LCR, PCR, NPF, and MSMEs affect the IPR

This study aims to analyze the factors that influence the performance of Islamic banking, namely the Islamic Performance Ratio. Theoretically, the benefit of this research is to add to the treasury of science, especially in measuring the performance of Islamic banks and the factors that influence them. This is done because, in general, in the study of the performance of Islamic banking, conventional banking performance indicators still use. At the same time, there are differences in objectives between conventional banks and Islamic banks. Therefore, the results of this study can be used by further researchers that the phenomenon of using Islamic bank performance indicators requires further analysis to measure Islamic bank's achievement. It not only uses the ROA currently used but also must also consider the impact of the ROA on the IPR indicator. This study aims to analyze the effect of distribution of financing, labor costs, promotion costs, quality of financing, MSME financing, and ROA on the Islamic Performance Ratio.

2. Literature Review and Research Framework

The existence of Islamic banks can be used as a solution because Islamic banking aims to improve the welfare of the community. In other words, Islamic banking aims not only to seek profit but also to care for social problems (Arafah & Nugroho, 2016; Cebeci, 2012). Furthermore, Islamic banks have Islamic values that conventional banks do not own. The foundation of Islamic banking is sharia maqasid which consists of six elements, according to Fitrotulloh (2013) and Masruri & Rossidy (2007), namely: (1) Maintaining Religion; (2) Guarding the Soul; (3) Maintain Intellect; (4) Safeguarding Assets; (5) Maintaining Descendant and (6) Maintaining Environment. Maqhasid sharia is implemented in everyday human life, namely, meeting basic needs, secondary needs, and tertiary needs. Islamic banking services supporting human life in business and financial transactions need to have the same vision and mission.

The vision and mission must be based on maqasid sharia, which aims to achieve Maslahah (beneficiaries to each other) and Falah (hereafter focus). In addition, Islamic banking, with its pillars (prophet, profit, people, and planet), is to maintain a balance between the benefits of a business that has moral and spiritual responsibilities and has an impact on reducing social problems such as poverty, unemployment, social inequality, etc. Furthermore, Islamic banks must also contribute to preserving the environment for the next generation's survival (Nugroho, Utami, Harnovinsah, & Doktorlina, 2020). Therefore, the entire Islamic banking ecosystem, both internal and external, is significant in realizing the Sustainable Finance of Islamic Banking, such as the application of sharia principles; focus on the needs of society and the ummah; there is a business strategy that is just and following the needs of the industry; operational implementation based on Islamic values; risk management implementation; appreciation of human resources that are objective and by Islamic values; application of the principle of benefit to community welfare and environmental sustainability. Therefore, Islamic banks must be able to provide benefits for all the ummah in accordance with the Qur'an Al-Anbya Verses 107: *"We have sent you ˹O Prophet˺ only as a mercy for the whole world."*

Nevertheless, according to the phenomenon and the literature review, the conceptual research framework can be established as follows:

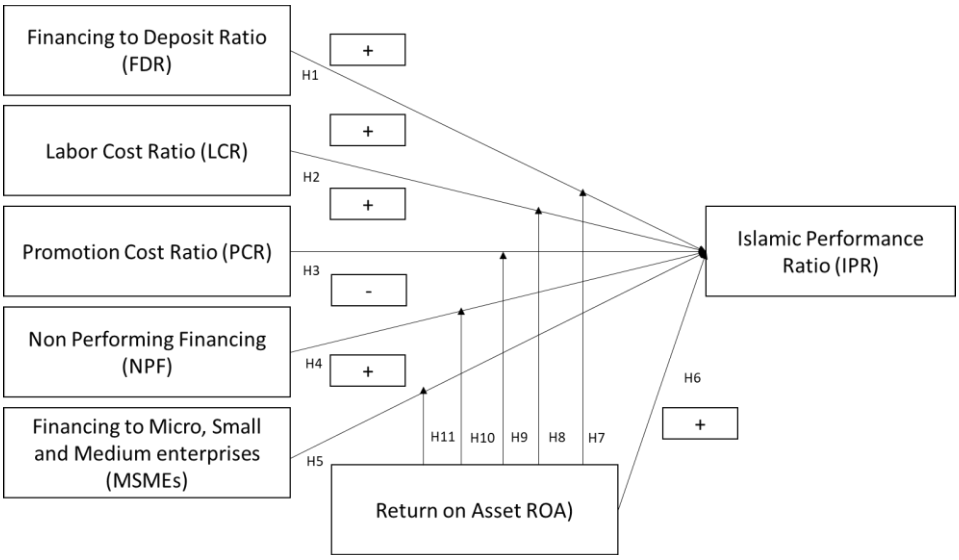


Figure 2.1 Research Framework

According to figure 2.1, the hypothesis in this research as follows:

- FDR has affected the IPR positively;
- LCR has to affect negatively to the IPR;
- PCR has affected the IPR positively;
- NPF has to affect negatively to the IPR;
- MSMEs has positive to the IPR;
- ROA has positive to the IPR;
- ROA as the moderating variable affected FDR, to the IPR has strengthened impact;
- ROA as the moderating variable affected LCR, to the IPR has strengthened impact;
- ROA as the moderating variable affected PCR, to the IPR has strengthened impact;
- ROA as the moderating variable affected NPF, to the IPR has strengthened impact;
- ROA as the moderating variable affected MSMEs, to the IPR has strengthened impact;

2.1. The Effect of Financing to Deposit Ratio (FDR) to Islamic Performance Ratio (IPR)

The performance indicator of the banking function in channeling funds collected to the public in the form of loans is the financing to deposit ratio (FDR). This ratio shows the bank's ability to channel loans from third-party funds or funds from the public that the bank has collected (Hakiim & Rafsanjani, 2016; Ihwanudin, Wicaksono et al., 2020; Widyaningrum & Septiarini, 2015). So, the higher the ratio of the FDR reflect the better the intermediary function of the Islamic bank. Moreover, the excellent function of Islamic banks in channeling their funds in the community will impact the excellent distribution of profit sharing from these Islamic banks to all stakeholders of Islamic banks (Bashir, Darrat, & Suliman, 1993; Sukmadilaga & Nugroho, 2017). Nevertheless, the optimum allocation profit sharing of Islamic banks to the customer will also contribute to the increase in the Islamic Performance Ratio of these Islamic banks.

2.2. The Effect of the Ratio of Labor Costs Ratio (LCR) to the Islamic Performance Ratio (IPR)

The globalization condition pushes Muslims to have a diligent work ethic, disciplined, and toughness but always balances Islamic values such as honesty and justice following sharia values. The excellent work ethic of a Muslim, where they are also employees of a sharia bank, can directly increase income and contributing to improving the performance of Islamic banks (IPR). The issue of productivity is crucial for Islamic banking to compete with competitors and meet the needs of customers (Fujii, Managi, & Matousek, 2014).

2.3. The Effect of Promotion Cost Ratio (PCR) to Islamic Performance Ratio (IPR)

The effectiveness of promotion will increase the use of products and services from Islamic banks by the wider community. The impact of effective promotion of Islamic banks will increase the market share of Islamic banks in Indonesia (Lestari, 2009; Patriana & Nurismalatri, 2018). The promotion has a vital role for a company or organization that aims to introduce a new product or service. In addition, promotion can also be defined as costs or incentives given to customers by companies in conducting trials or introducing a product or service it has (Blattberg & Neslin, 1989; Sudirman et al., 2020). Furthermore, the effectiveness of the promotion of Islamic banks will impact increasing the performance of Islamic banks (IPR).

2.4. The Effect of Non-Performing Financing (NPF) to Islamic Performance Ratio (IPR)

The quality of credit or financing (NPF) is an essential financial indicator in maintaining a bank's reputation (Bernstein, 1996b; Budiman, 2016; Nugroho, Villaroel, & Utami, 2018). Thus, to maintain reputation and profitability (ROA), the bank tries to maintain the quality of financing so that the assets owned by the bank can generate optimal profits (Rahman & Rochmanika, 2012; Setiawati, Rois, & Nur'Aini, 2017).

2.5. The Effect of Financing to Micro, Small and Medium Enterprises Segment (MSMEs) to Islamic Performance Ratio (IPR)

Another internal capability of Islamic banks that can contribute to improving company performance is the distribution of financing of micro, small and medium enterprises (MSMEs). The existence of MSMEs in Indonesia is the backbone of the economy, so that the sustainability of MSMEs is essential. In addition, Islamic banks that develop duties as banks based on sharia principles should prioritize channeling financing to the MSME sector. Previous researchers argued that Islamic bank financial products and services should prioritize MSMEs (Arafah & Nugroho, 2016b; Dhumale & Sapcanin, 1998; Khan, 2010a; Shahinpoor, 2009)

2.6. The Effect of Return on Assets (ROA) to Islamic Performance Ratio (IPR)

Efforts to increase the growth of Islamic banks must be accompanied by the principle of prudence so that the Islamic banking industry becomes a fast-growing industry with good quality and is sustainable (Beck et al., 2010). One of the critical financial ratios (key financial indicators) that investors and stakeholders consider in making investment decisions and financial actions is the ratio of profitability or return on assets (ROA) (Elton, 1999; Hillman & Keim, 2001; Nugroho, Aryani, & Mastur, Akhmad Amien, 2019). ROA shows the ability of a company's business activities through its resources to generate revenue or profit. The higher the ROA of an Islamic bank, the better the company's performance. Moreover, the lower ROA of Islamic banks can be assumed that the company is experiencing financial problems (Crutchley, Jensen, Jahera, & Raymond, 2002; Jusmansyah & Sriyanto, 2010). In addition, the high level of ROA in a bank will increase the Bank's reputation to its stakeholders.

2.7. The Effect of Return on Assets (ROA) as Moderating Variable to the impact of FDR, LCR, PCR, NPF, and MSMEs to IPR

One of the indicators used to measure the performance of Islamic banks in managing assets to generate profits is a return on assets (ROA) (Satibi, Utami, & Nugroho, 2018; Wahab, Hosen, & Muhari, 2015). Therefore, the indicators used to measure the performance of Islamic banks are the same as conventional banks. ROA indicator is an indicator based on a financial performance perspective, while IPR is an indicator based on financial and social aspects. Therefore, the variables that can influence IPR (FDR, LCR, PCR, NPF, and MSMEs) can be strengthened by the ROA variable.

3. Methodology

The methodology used in this study is a quantitative method using a panel data regression model. The mechanism for taking the number of samples of Islamic banks in this study is as follows:

Table 2. Research Sample Method

No	Criteria	Number
1	The number of Islamic Commercial Banks in Indonesia, which operated during 2012 - 2017	13
2	Islamic commercial banks that do not have the data needed for research during 2012-2017	(6)
The number of Islamic Commercial Banks used as a research sample		7
The total sample used in the 2012-2018 study (7x6 years)		42

Furthermore, based on the research framework, there are two models equation in this study as follows:

$$IPR = \alpha + \beta_1 FDR - \beta_2 LCR + \beta_3 PCR - \beta_4 NPF + \beta_5 MSMEs + \beta_6 ROA + e \quad (1)$$

$$IPR = \alpha + \beta 1 FDR*ROA - \beta 2 LCR*ROA + \beta 3 PCR*ROA - \beta 4 NPF*ROA + \beta 6 MSMEs*ROA + e \quad (2)$$

Remarks:

FDR: Financing to Deposit Ratio;

LCR: Labor Cost Ratio;

PCR: Promotion Cost Ratio;

NPF: Non-Performing Financing;

MSMEs: Micro, Small, Medium Enterprises Financing Ratio;

IPR: Islamic Performance Ratio.

The use of the Islamic Performance Ratio for performance measurement is carried out to test whether Islamic banks are good at disclosing helpful information for stakeholders. Islamic Performance Ratio is a method that evaluates the performance of Islamic banks from a financial aspect and is also used to evaluate the principles of justice, halals and purification practiced by Islamic commercial banks. Furthermore, the operational variables in this study are as follows:

Table 3. Operational Variables

Variable	Measurement	Scale	References
Return On Assets (ROA)	$\frac{\text{Net Profit}}{\text{Total Assets}}$	Ratio	(Margaretha & Letty, 2017; Nugroho & Bararah, 2018)
Islamic Performance Ratio (IPR)	Average (PSR + ZPR + EDR)	Ratio	(Makruflis, 2019; Nugroho, Nugraha, et al., 2020b)
Profit-Sharing Ratio (PSR)	$\frac{\text{Mudharabah} + \text{Musyarakah}}{\text{Total Financing}}$	Ratio	(Makruflis, 2019; Nugroho, Nugraha, et al., 2020b)
Zakat Performing Ratio (ZPR)	$\frac{\text{Zakat}}{\text{Net Assets}}$	Ratio	(Makruflis, 2019; Nugroho, Nugraha, et al., 2020b)
Equitable Distribution Ratio (EDR)	$\frac{(\text{Qard \& Donation}) + (\text{Wages}) + (\text{divide}}{\text{Total Revenue} - (\text{Zakat } +}$	Rati o	(Makruflis, 2019; Nugroho, Nugraha, et al., 2020b)
Financing Deposit Ratio (FDR)	$\frac{\text{Total Financing}}{\text{Total Deposits}}$	Rati o	(Nugroho, Utami, Doktorlina, Soeharjoto, & Husnadi,

Variable	Measurement	Scale	References
			2017; Soekapdjo, Tribudhi, & Nugroho, 2019)
Labor Cost Ratio (LCR)	$\frac{\text{Labor Cost}}{\text{Total Income}}$	Ratio	(Adab & Rokhman, 2015; Farida, 2016)
Promotion Cost Ratio (PCR)	$\frac{\text{Promotion Cost}}{\text{Total Income}}$	Ratio	(Acar & Temiz, 2017; Capon et al., 1990; Hakim et al, 2011; Peterson & Jeong, 2010)
Financing to Micro, Small and Medium Enterprises (MSMEs)	$\frac{\text{MSMEs Financing Outstanding}}{\text{Total Financing Oustanding}}$	Ratio	(Dhumale & Sapcanin, 1998; Dusuki, 2008; Khan, 2010b; Shahinpoor, 2009)
Non-Performing Financing (NPF)	$\frac{\text{Non Performing Financing}}{\text{Total Oustanding}}$	Ratio	(Firmansyah, 2014; Mawaddah, 2015; Soekapdjo, Nugroho, Badawi, & Utami, 2018)

4. Results and Discussion

4.1 Model Equation I

4.1.1 Normality Test

The results of the normality test for the equation model I are as follows:

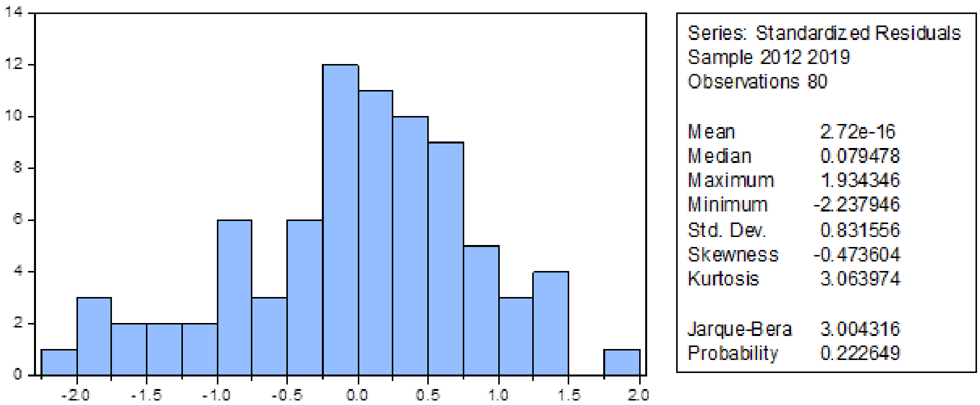


Figure 3.1. Normality Test

Based on Figure 3.1, it is known that the probability value of the J-B statistic is 0.778043. Because the probability p-value, which is 0.222649, is greater than the significance level, which is 0.05. This means that the assumption of normality is fulfilled.

4.1.2 Multicollinearity Test

The results of the multicollinearity test for equation model I are as follows:

Table 3.1 Multicollinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.211110	22.56891	NA
FDR	0.005552	23.15136	1.511376
LCR	2.14E-05	3.372640	1.185175
PCR	0.000324	4.104791	1.296889
NPF	0.004614	3.459536	1.090146
MSMEs	0.008018	2.383460	1.228325
ROA	0.001750	6.873313	1.775888

Based on Table 3.1, the multicollinearity test results show that there are no multicollinearity symptoms between the independent variables. This is because the VIF value is not more than 10.

4.1.3 Autocorrelation Test

The results of the autocorrelation test for the equation model I are as follows:

Table 3.2 Autocorrelation Test

Log-likelihood	-98.25539	Hannan-Quinn criteria.	2.714949
		Durbin-Watson stat	**2.066793**

Based on Table 3.2, the value of the Durbin-Watson statistic is 2.240788 because the Durbin-Watson statistical value lies between 1 and 3, namely 1 < 2.066793 < 3, then the non-autocorrelation assumption is fulfilled. In other words, there was no high autocorrelation symptom at the residuals.

4.1.4 Regression Test

In testing the equation model I hypothesis, the coefficient of determination analysis will be carried out, simultaneous effect testing (F test), and partial effect testing (t-test). Statistical values of the coefficient of determination, F test, and t-test are presented in Table 3.4

Table 3.4 Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.108117	0.459467	4.588185	0.0000
FDR	0.149749	0.074513	2.009692	0.0482
LCR	-0.007742	0.004622	-1.675084	0.0982
PCR	0.069339	0.017991	3.854015	0.0002
NPF	-0.170744	0.067928	-2.513593	0.0142
MSMEs	0.315256	0.089543	3.520740	0.0007
ROA	0.086897	0.041835	2.077149	0.0413
R-squared	0.560218	Mean dependent var	3.842625	
Adjusted R-squared	0.524071	S.D. dependent var	1.253928	

S.E. of regression	0.865055	Akaike info criterion	2.631385
Sum squared resid	54.62733	Schwarz criterion	2.839812
Log-likelihood	-98.25539	Hannan-Quinn criteria.	2.714949
F-statistic	15.49855	Durbin-Watson stat	2.132282
Prob(F-statistic)	0.000000		

Based on Table 3.4, it is known that the Prob. Value (F-statistics), which is 0.000000 < 0.05, it can be concluded that all independent variables, namely FDR, LCR, PCR, NPF, MSMEs, and ROA simultaneously, have a significant effect on the IPR variable. Based on Table 3.4, the multiple linear regression equation is obtained as follows:

$$IPR=2.108+0.149FDR-0.007LCR+0.069PCR-0.170NPF+0.315MSMEs+0.086ROA+ e \quad (3)$$

Based on table 3.4 and equation three above, it is known that the relationship between variables is as follows:

- It is known that the value of the regression coefficient of FDR is 0.149 with a Prob. Value of 0.048, which is < a significance level of 0.05, so Ho is rejected, which means that FDR has a positive and significant effect on IPR;
- It is known that the regression coefficient value of the LCR is -0.007 with a Prob. Value of 0.098, which is > a significance level of 0.05, so Ho is accepted, which means that LCR has no significant effect on the IPR;
- It is known that the regression coefficient value of the PCR is 0.069, with a Prob. Value of 0.000, which is < a significance level of 0.05, so Ho is rejected, which means that PCR has a positive and significant effect on IPR;
- It is known that the regression coefficient value of the NPF is -0.170 with a Prob value of 0.014, which is < a significance level of 0.05, so Ho is rejected, which means that NPF has a negative and significant effect on the IPR;
- It is known that the regression coefficient value of MSMEs is 0.315 with a Prob value of 0.000, which is < 0.05 significance level, so Ho is rejected, which means that MSMEs have a positive and significant effect on IPR;
- It is known that the regression coefficient value of ROA is 0.086 with a Prob value of 0.041, which is < a significance level of 0.05, so Ho is rejected, which means that ROA has a positive and significant effect on the IPR.

4.2 Hypothesis Testing Equations Model II

4.2.1 Normality test

5.2.1 The results of the normality test for equation model II of this study are as follows:

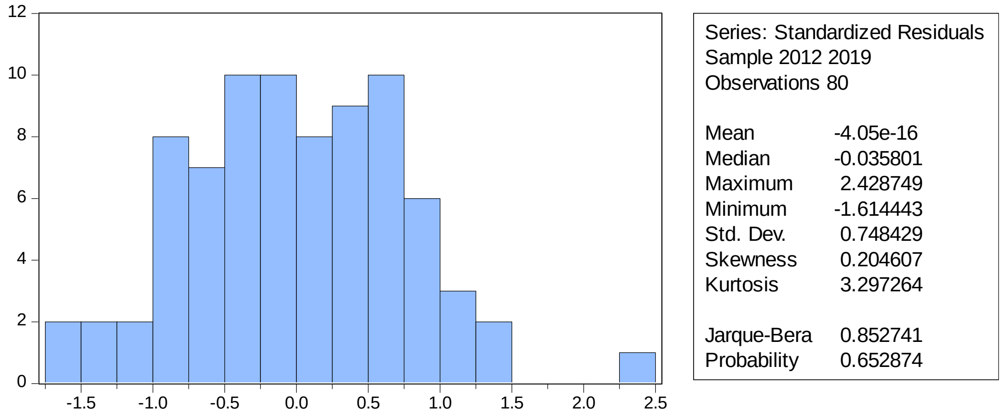


Figure 3.2 Normality Test

B Based on Figure 4.2, it is known that the probability value of the J-B statistic is 0.823854. Therefore the probability p-value, namely 0.652874, is greater than the significance level, namely 0.05. This means that the assumption of normality is fulfilled.

4.2.2 Autocorrelation Test

The results of the autocorrelation test for equation model II of this study are as follows:

Table 3.5 Autocorrelation Test

Log-likelihood	-89.82957	Hannan-Quinn criteria.	2.467366
F-statistic	26.74382	Durbin-Watson stat	**2.495213**
Prob(F-statistic)	0.000000		

Based on Table 3.5, the value of the Durbin-Watson statistic is 2.215413 because the Durbin-Watson statistic value lies between 1 and 3, namely 1 < 2.495213 < 3, then the non-autocorrelation assumption is fulfilled. In other words, there was no high autocorrelation symptom at the residuals.

4.2.3 Regression Test

The results of the autocorrelation test for equation model II of this study are as follows:

Table 3.6 Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	4.005472	0.488178	8.204942	0.0000
FDR_ROA	0.039497	0.014362	2.750102	0.0075
LCR_ROA	-0.349883	0.126735	-2.760745	0.0073
PCR_ROA	0.025011	0.009685	2.582381	0.0118
NPF_ROA	-0.593443	0.204243	-2.905568	0.0048
MSMEs_ROA	0.153998	0.033476	4.600262	0.0000

R-squared	0.643750	Mean dependent var	3.842625
Adjusted R-squared	0.619679	S.D. dependent var	1.253928
S.E. of regression	0.773300	Akaike info criterion	2.395739
Sum squared resid	44.25148	Schwarz criterion	2.574391
Log likelihood	-89.82957	Hannan-Quinn criter.	2.467366
F-statistic	26.74382	Durbin-Watson stat	2.495213
Prob(F-statistic)	0.000000		

The F test aims to test the independent variables together or simultaneously on the dependent variable. Based on Table 3.6, it is known that the Prob value. (F-statistics), which is 0.000000 < 0.05, it can be concluded that all independent variables with ROA moderation, namely FDR*ROA, LCR*ROA, PCR*ROA, NPF*ROA, UMKM*ROA simultaneously, have a significant effect on variables IPR. Furthermore, according to Table 3.6, the multiple linear regression equation is obtained as follows:

$$IPR=4.005+0.039FDR*ROA-0.349LCR*ROA+0.025PCR*ROA-0.593NPF*ROA+0.153MSMEs*ROA+ e \tag{4}$$

Furthermore, based on table 3.6 and equation 4 above, it can be analyzed the variable relationship between ROA and IPR moderation with the following independent variables:

- It is known that the regression coefficient value of FDR*ROA is 0.039 with a Prob value of 0.007, which is < a significance level of 0.05, so Ho is rejected, which means that FDR*ROA strengthens the relationship between FDR and IPR, which is positive and significant;

- It is known that the regression coefficient value of LCR*ROA is -0.349 with a Prob value of 0.007, which is < 0.05 significance level, so Ho is rejected, which means LCR*ROA strengthens the relationship between LCR and IPR, which is negative and significant;
- It is known that the regression coefficient value of PCR*ROA is 0.083 with a Prob value of 0.011, which is < a significance level of 0.05, so Ho is rejected, which means that PRO*ROA strengthens the relationship between PCR and IPR, which is positive and significant;
- It is known that the value of the regression coefficient of NPF*ROA is -0.593 with a Prob value of 0.004, which is < a significance level of 0.05, so Ho is rejected, which means that NPF*ROA strengthens the relationship between NPF and IPR, which is negative and significant;
- It is known that the regression coefficient value of MSMEs*ROA is 0.153 with a Prob value of 0.000, which is < 0.05 significance level, so Ho is rejected, which means MSMEs*ROA strengthens the relationship between MSMEs and IPR, which is positive and significant.

4.3 Discussion

4.3.1 Effect of FDR on IPR

This study shows that the financing distribution ratio (FDR) has a positive and significant effect on the Islamic Performance Ratio (IPR). Therefore, the higher the FDR, the better the performance of Islamic banks represented by the IPR ratio. This is because the distribution of financing to the public is the core business of Islamic banks as an intermediary institution (Ihwanudin, Maulida, et al., 2020). Furthermore, the implication of the excellent function of the distribution of financing will increase the ability of Islamic banks to distribute zakat (2.5% of their profits) and the ability of banks to channel equitable financing using cooperation contracts (mudharabah and musyarakah). In addition, the good intermediary function of Islamic banks is shown in table 3.7 below, where the average financing distribution ratio (FDR) of Islamic banks is 88.78%. This ratio shows that Islamic banks can channel the funds they have collected because according to the provisions of SE BI No.15/41/DKMP regulations, regarding the Calculation of Secondary Statutory Reserves and Statutory Reserves based on the Loan to Deposit Ratio in Rupiah, the minimum ratio the distribution of financing to third party funds (FDR) is 78%. This is in line with research by Nugroho et al. (2020) and Nugroho & Anisa

(2018). The excellent ability of Islamic banks in carrying out their business activities impacts the good financial and social functions of Islamic banks, including the IPR.

Table 3.7 Descriptive Statistics

Variable	**Mean**	**Standard Deviation**	**Min**	**Max**
FDR	0.8877548	0.1048796	0.4126	1.0475
LCR	0.208069	0.0573609	0.1027	0.3441
PCR	0.0581071	0.2405964	0.0016	1.576
NPF	0.0223429	0.0147082	0	0.0494
MSMEs	0.3165	0.1390035	0.1238	0.7449
ROA	0.0062024	0.0186991	-0.0809	0.0381
IPR	0.3696595	0.2746017	0.0017	1.3466

4.3.2 Effect of Labor Cost Ratio (LCR) on IPR

The Ratio of Labor Costs (LCR) is the most significant portion of overhead costs so that to control costs, Islamic banks must be able to manage LCR optimally. This study shows that the LCR ratio has no significant effect on the performance of Islamic banks or IPR. Therefore, LCR does not directly influence the IPR where the number of employees in a company, including Islamic banks, has determined the number of employees following the established organizational structure (Dalton, Todor, Spendolini, Fielding, & Porter, 1980; Kasarda, 1973). Based on this, the cost of labor has been planned and can be estimated effectively. Financial companies such as Islamic banks, where most salary payments are based on fixed costs, labor costs cannot be directly related to the income received. However, the productivity of Islamic bank employees is measured by the ability to innovate and create in making and developing products and services from Islamic banks (Gupta & Singhal, 1993; Roffe, 1999).

4.3.3 Effect of Promotion Cost Ratio (PCR) on IPR

Information is vital for society and consumers in choosing to use products and services (Porter, 1980; Sudirman et al., 2020). Therefore the function of marketing communication is essential for Islamic banks to market their products and services to attract people to use Islamic banks in their financial and business transactions (Villarejo-Ramos & Sánchez-Franco, 2005). This study shows that the promotion cost ratio (PCR) positively and significantly affects the Islamic Performance Ratio (IPR). Therefore, the higher the cost of promotion, it will impact the increased sales of Islamic bank products and services. It has implications for the increased performance of Islamic banks (IPR). This is in line with research conducted by Patriana & Nurismalatri (2018), Blattberg & Neslin (1989), and Pauwels et al. (2003), which in their research states that promotion costs can improve the performance of Islamic banks.

Furthermore, the use of promotional costs, according to Rachmawati (2011), can be used for the following matters: (1) Developing and introducing a product and service; (2) Perform retention of existing customers; (3) Communicating the products and services of a company to the public (marketing communication/Marcom). In addition, based on table 3.7 above, the promotion cost ratio is still relatively small, namely 5.81%. Therefore, based on these conditions, Islamic banks must increase promotional costs again to improve their performance.

4.3.4 Effect of NPF on IPR

The results of the statistical data processing show that the NPF has a negative and significant effect on the IPR. The higher the NPF will have implications for the lower IPR and Islamic banks. This is in line with previous research conducted by Setiawan & Indrian (2016), Wibisono & Wahyuni (2017), and Suhadak et al. (2013), where NPF has a negative and significant effect on bank performance. The quality of financing (NPF) for Islamic banks is a significant financial indicator for Islamic banks in maintaining the bank's reputation. This is because if the NPF of a bank is very high, it indicates that the bank has a high potential risk, so that it has an impact on the decline in the reputation of the Islamic bank in the community. (Nugroho et al., 2017). According to Nugroho & Malik (2020), there are several mitigations that Islamic banks can do in preventing low quality of financing, which include:

- Financing for prospective customers who are unable or unwilling to submit information/data required by the Bank following applicable regulations;
- Financing for speculative purposes, including in this type of financing, includes financing for the purchase of unproductive land or if the land being financed is productive, the source of repayment of obligations to the bank is doubtful;

- Financing, proposed without the support of adequate financial and other information. Customer/prospective customer data and information are adjusted to the financing segment as well as the applicable risk assessment standards in the Bank;
- Financing to customers, both individuals and business entities, including the management of the said business entity, is problematic or destructive at other banks or other creditors.

In addition, the results of this study are in line with previous research conducted by Setiawan & Indrian (2016) and Wibisono & Wahyuni (2017), where NPF has a negative and significant effect on bank performance. If further analyzed, the average NPF of Islamic banks in this study is 2.23% (table 3.7). This indicator shows the quality of Islamic bank financing is still relatively good because, according to the Financial Services Authority (OJK) through Regulation No. 15/POJK.03/2017 concerning Determination of Status and Follow-Up for Commercial Bank Supervision, the maximum NPF that the regulator can tolerate is a maximum of 5%.

4.3.5 Affet of MSMEs on IPR

Islamic banks have different goals from conventional banks where the purpose of Islamic banks is not only to achieve the profit aspect but also must meet the social aspects (people), environmental aspects (planet), and spiritual aspects (Prophet) where conventional banks do not have these things. Therefore, according to Wajdi Dusuki (2008b), Islamic banks must be concerned for MSMEs so that products and services to MSMEs are a priority. Based on the results of this study, the MSMEs financing disbursement ratio has a positive and significant impact on IPR. The high distribution of financing to the MSMEs segment will significantly impact the increase in performance or IPR. The results of this study are in line with previous research related to the effect of MSMEs on a positive impact on the bank performance (Afkar, 2017). However, the share of sharia banks' distribution to the MSMEs segment was still relatively low, namely 31.65% (table 3.7). Therefore, Islamic banks must focus more on channeling financing to the MSMEs segment so that Islamic banks can improve their performance even better.

4.3.6 Affect of ROA on IPR

Performance measurement for Islamic banks still uses the same ratio indicator as conventional banks, which is ROA. However, Islamic banks, according to different objectives, should have different performance indicators from conventional banks. Therefore, in this study, the indicator of Islamic financial performance uses the IPR ratio, where the components of the IPR are following Islamic values such as zakat payments from Islamic banks, fair contracts, and equitable income sharing (Nugroho, Mastur, & Wahyono, 2021). This study indicates that ROA has a positive and significant impact on IPR, so it can be said that performance achievement based on the ROA perspective is in line with the IPR where the higher the ROA will have implications for the increase in IPR.

4.3.7 Affect of FDR on IPR with ROA as Moderation Variable

According to the results of this study, it is known that ROA moderates the effect of FDR on IPR so that the direction of the effect is positive and significant. ROA as a moderating variable strengthens the effect of FDR on ROA so that the better the FDR and the better ROA will have implications for increasing the IPR. According to Nugroho et al. (2021), The distribution of financing as one of the main activities of Islamic banks will have implications for the profit of Islamic banks. Therefore, based on the results of this study, the financial performance of ROA strengthens the effect of FDR on the IPR.

4.3.8 Affect of LCR on IPR with ROA as a Moderation Variable

The ROA variable as a moderating variable, the effect of LCR on IPR, has a negative and significant effect. Therefore an increase in LCR will be accompanied by a decrease in ROA so that it will also impact the decrease in IPR. Therefore, to maintain financial performance and social performance, a bank must maintain employee productivity and have an adequate competition to adapt innovations under market needs and desires. (Khasanah, 2016). This is also in line with previous research conducted by Faslah & Savitri (2013) and C. W. Utami (2002), which states that employee productivity impacts improving the company's financial performance, so that in this study if labor costs increase and are not accompanied by innovation and service quality, it will contribute to the decline in the performance of the Islamic bank. This is in line with the cost leadership principle that Islamic banks must carry out their business activities by having products and services of equal quality to large conventional banks and even foreign banks, but labor costs must be lower.

Furthermore, by referring to the results of this study, the higher the LCR, the lower the financial performance and social performance (IPR ratio) of Islamic banks. This is in line with previous research conducted by Waterman (2006), Das et al. (2009), and Bhatti & Qureshi (2007) stated that the company must manage the productivity of its employees so that the output produced can compete with the company's competitors. Therefore, according to the results of this study, Islamic bank employees must have better productivity than conventional banks. This is because the phenomenon of the performance of Islamic banks is still not better than conventional banks. Referring to table 3.7 above, the average labor cost ratio (LCR) of Islamic banks is 20.81% of the total income received by Islamic banks. Therefore, the share of Islamic bank labor costs to total overhead costs of 20.81% is relatively competitive than conventional banks in the range of 22% (Adawiyah & Rahadian, 2020). Opportunities to improve the performance of Islamic banks can be through product innovation that is by the needs and desires of the community and products that are different from conventional banks, such as pawn financing products (Bahari et al., 2021).

4.3.9 Affect of PCR on IPR with ROA as Moderation Variable

The low level of Islamic financial literacy in Indonesia requires the socialization and dissemination of information related to Islamic financial products and services to increase Islamic financial literacy, which has implications for increasing market share. Therefore, this study shows that ROA as a moderating variable strengthens the effect of PCR on IPR where PCR has a positive and significant effect on IPR. Therefore, the higher the promotional costs, which ROA strengthens, will also impact IPR. Therefore, promotional activities for Islamic banks are vital because the implication is to increase profits and the social performance of Islamic banks. This is in line with previous research that the effectiveness of promotion can increase performance. (Ailawadi, Harlam, César, & Trounce, 2006; Ductor & Grechyna, 2015)

4.3.10 Affect of NPF on IPR with ROA as Moderation Variable

The effect of financing quality (NPF) on IPR, moderated by the ROA variable, has a negative and significant impact. Therefore, the higher the level of financing quality will impact the decline in the performance of Islamic banks (IPR), which is also caused by a decrease in ROA. The increase in the ratio of non-performing financing impacts the increased risk of loss in the future. The more risky the Islamic bank is, the savers will feel insecure about saving or investing in the Islamic bank. Therefore, low public trust can impact the decline in the financial performance of Islamic banks, which also has implications for the decline in the social performance of Islamic banks. The results of this study are in line with the research conducted by Nugroho et al. (2020). In contrast, the quality of Islamic bank financing is an essential factor in determining its performance.

4.3.11 Affect MSMEs on IPR with ROA as Moderation Variable

The distribution of financing to MSMEs should be the identity of a sharia bank and Sharia banks' superior products and services. Furthermore, this study shows that the ROA variable strengthens the relationship between the MSMEs financing ratio variable to the IPR. The effect of the ratio of MSME financing to IPR is positive and significant. Therefore, with the increase in the distribution of financing to the MSME segment, there is a positive impact on financial performance. The performance of Islamic banks both in financial and social aspects also increases. Based on this study's results, the financial aspects and social aspects as performance indicators (IPR) of Islamic banks are embedded from previous performance indicators (Return on Assets-ROA). This is in line with previous research that Islamic banks focus on four aspects: financial aspects, social aspects, environmental aspects, and spiritual aspects (Nugraha et al., 2020).

4.3.12 Affect of All Variables (FDR, LCR, PCR, NPF, MSMEs, and ROA) on IPR

According to the research results in table 3.4 where the variables FDR, LCR, PCR, NPF, MSMEs, and ROA simultaneously affect IPR. The effect is 52.40%, while other factors influence the remaining 42.60%. Furthermore, the study results are based on table 3.6, where ROA is a moderating variable. It is known that the simultaneous test results of the FDR, LCR, PCR, NPF and MSMEs variables simultaneously have a significant effect on IPR. In addition, it is known that the magnitude of this influence is 61.96%, other factors influence the remaining 38.04%. Based on the simultaneous test, it can be analyzed that the ROA variable as moderation strengthens the relationship between the FDR, LCR, PCR, NPF, and MSMEs variables. This is indicated by the magnitude of the influence of the FDR, LCR, PCR, NPF, MSMEs, and ROA variables on the IPR before the ROA variable is included as a moderating variable, which is 52.40%.

Furthermore, after the ROA was included in the equation as a moderating variable, the effect increased significantly to 61.96%. Therefore, the ROA variable as a moderating variable can increase the influence by 9.56%. Based on these results, it can be seen that the financial performance ratios based on ROA and IPR performance ratios in Islamic banks are closely related, where the increase in financial performance will also have an impact on the increased financial performance and social performance of Islamic banks.

5. Conclusion

This research was conducted to answer research questions about the factors that can affect the financial performance and social performance of Islamic banks. Following the results and discussion in this study, the Islamic performance ratio (IPR) can be used as a complement to measure the performance of Islamic banks in addition to return on assets (ROA). Based on the research results, FDR has a significant positive effect on IPR. PCR has a significant positive effect on IPR, NPF has a significant negative effect on IPR, ROA has a significant positive effect on IPR. Furthermore, the financing ratio for MSMEs has a significant positive effect on IPR.

Meanwhile, the LCR variable does not affect IPR. Furthermore, the moderating variable ROA strengthens the relationship of all direct and significant variables to IPR, namely ROA moderates the positive and significant effect of FDR on IPR, ROA moderates the negative and significant effect of the LCR ratio, ROA moderates the positive and significant effect of PCR on IPR, ROA moderates the negative and significant effect. NPF against IPR and ROA positively and significantly moderate MSMEs against IPR.

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