

## WHAT DETERMINES ISLAMIC PERFORMANCE RATIO OF ISLAMIC BANKING IN INDONESIA: AN ANALYSIS USING FINANCING DEPOSIT TO RATIO AS MODERATOR

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**ABSTRACT** – The measurement of Islamic banking performance should differ from the indicators used in their conventional counterparts. Therefore, this study analyzes the performance of Islamic banking in Indonesia using the Islamic Performance Ratio (IPR) variable. Specifically, this study aims to examine the influence of Asset Growth and Non-Performing Financing (NPF) on the IPR using Financing to Deposit Ratio (FDR) as moderator. Data for this study were gathered from seven Islamic Commercial Banks from 2012 to 2018 with 49 observations. They were analyzed using the quantitative approach by employing SPSS software. The findings show that the quality of financing has a negative but significant effect on the IPR. Meanwhile, asset growth does not have a significant direct effect on the IPR. When FDR was inserted as moderator, it showed a significant effect of asset growth on IPR. The theoretical implication of this research shows that Islamic banks' performance is shown from the growth of assets but must be supported by other variables such as the quality of financing (NPF) and must also be accompanied by good financing disbursement capability (FDR). In addition, the managerial implication of this research is that the measurement of indicators for Islamic banks should be equipped with performance indicators under the operational principles of Islamic banks, such as the Islamic Performance Ratio (IPR).

**Keywords:** Islamic Performance Ratio (IPR), Asset Growth, Non-Performing Financing (NPF), Islamic Banking

**ABSTRAK** – *Determinan Apa yang Mempengaruhi Islamic Performance Ratio Perbankan Syariah di Indonesia: Suatu Analisis Menggunakan Financing to Deposit Ratio sebagai Moderator.*

*Pengukuran kinerja perbankan syariah seharusnya menggunakan parameter yang berbeda dari perbankan konvensional. Oleh karena itu, artikel bertujuan untuk menganalisis kinerja perbankan syariah di Indonesia menggunakan variabel Islamic Performance Ratio (IPR). Secara khusus, artikel ini bermaksud untuk menguji pengaruh variabel pertumbuhan aset dan pembiayaan bermasalah (NPF) terhadap IPR dengan menggunakan Financing to Deposit Ratio (FDR) sebagai variabel moderator. Data-data untuk kajian dikumpulkan dari tujuh bank umum syariah dari 2012 sampai 2018 dengan 49 observasi yang kemudian dianalisis secara kuantitatif dengan software SPSS. Hasil kajian menunjukkan bahwa kualitas pembiayaan memiliki pengaruh negatif tapi signifikan terhadap IPR. Sedangkan pertumbuhan aset tidak berpengaruh signifikan secara langsung terhadap IPR. Ketika FDR dimasukkan sebagai moderasi, pertumbuhan berpengaruh secara signifikan terhadap IPR. Implikasi teoritikal dari penelitian ini menunjukkan bahwa kinerja bank syariah tidak hanya ditunjukkan dari pertumbuhan aset saja, akan tetapi harus didukung dengan variabel lainnya seperti kualitas pembiayaan (NPF) dan juga harus disertai dengan kemampuan penyaluran pembiayaan yang baik (FDR). Selain itu, implikasi manajerial dari penelitian ini adalah pengukuran indikator dari bank syariah sebaiknya dilengkapi dengan indikator kinerja yang sesuai dengan prinsip operasional dari bank syariah seperti Islamic Performance Ratio (IPR).*

**Kata Kunci:** Islamic Performance Ratio (IPR), Pertumbuhan Aset, Non-Performing Financing (NPF), Bank Syariah

## INTRODUCTION

The existence of Islamic banks operating since 1992 must contribute to improving the welfare of the people in Indonesia. The size of this contribution can be shown by the performance of Islamic banks, where the better the performance of these Islamic banks, the more brazen the role of Islamic banks will be in improving people's welfare. As banks that carry out their activities based on sharia principles, Islamic banks have performance indicators that should be different from their conventional counterparts. Islamic bank performance indicators cover not only financial aspects but also social aspects, justice aspects, and spiritual aspects. Therefore, a measurement based on the Islamic Performance Ratio (IPR) is needed to complement the performance measurement of existing Islamic banks.

The phenomenon of growth in third party funds (DPK), financing, and assets in the Islamic banking industry in the 2016-2018 period is as follows:

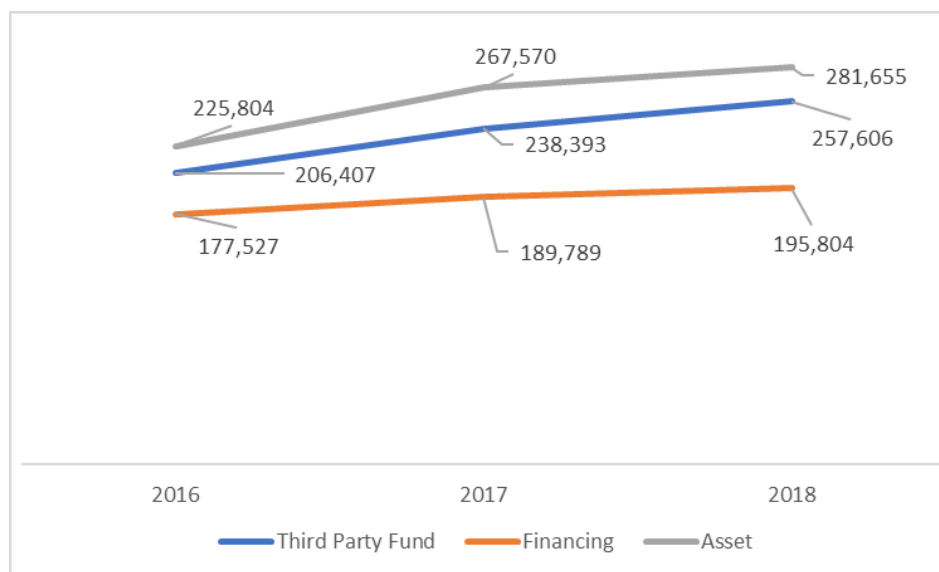


Figure 1. Growth Third Party Fund, Financing, and Assets (2016-2018)  
Source: OJK (2021)

Referring to Figure 1, the growth in deposits, financing, and assets from Islamic banks has increased. Where if analyzed using the compound annual growth rate (CAGR), it can be seen that DPK grew 7.67%, financing 3.32%, and assets grew 7.65%. Based on these data, it can be concluded that Islamic banks' asset growth is generated from deposit growth. The growth of Islamic bank assets shows that Islamic banks' management can manage the assets to increase



income and profits, which has implications for increased assets (Lepetit et al., 2008). According to Nugroho (2020) and Nugroho & Ghazali et al. (2020), the primary source of increasing the banking industry's assets is raising funds from the public. However, if these funds are not channeled by the bank in loans or become productive assets, these assets become idle assets and do not generate income and can even increase the burden of funds for the bank. Therefore, the research gap in this study is that the distribution of financing has not supported the growth of Islamic bank assets. The impact of asset growth has not been able to improve the performance of Islamic banks optimally.

Furthermore, as banks with different goals from conventional banks, Islamic banks should maintain trust in the public, shown by their excellent performance. There are several alternatives to measure Islamic banks' performance besides using profitability indicators and using various financial indicators with Islamic perspective aspects (Sudrajat, 2016). According to Yusnita (2019), it is essential to measure Islamic commercial banks' performance based on conventional Islamic principles. There are differences in conventional banks' and Islamic banks' principles in carrying out their business activities (Nugroho & Harnovinsah, 2020). Several performance ratios measured in Islamic financial performance include profit sharing ratio, zakat performing ratio, equitable distribution ratio, directors-employees welfare ratio, Islamic investment and non-Islamic investment ratio, Islamic income and non-Islamic income ratio (Mutia et al., 2018).

The increased performance is supported by Islamic banks' main activities, one of the asset growth indicators. In Islamic banks, the main activity is channeling financing. The appropriate distribution of Islamic bank financing to the public will generate optimum income when accompanied by good risk mitigation (Nugroho et al., 2018). Appropriate risk mitigation Islamic banks will improve financing quality to avoid future losses (Hafsa & Astrom, 2013). Thus, the increase in income received by Islamic banks will have implications for an increase in assets. Furthermore, the increase in Islamic banks' assets will have implications for all Islamic banks' welfare. Some of the ratios that differentiate Islamic banks' performance from conventional banks used in this study are profit-sharing ratios, zakat performing ratios, and equitable distribution ratios.

Based on this phenomenon, the problem formulations in this study are: (i) Does Non-Performing Financing (NPF) affect the Islamic Performance Ratio (IPR);



(ii) Does the growth of assets affect the Islamic Performance Ratio (IPR); (iii) Does FDR moderate the effect of asset growth on IPR.

The novel discussions in this research are to measure the performance of Islamic banks from the perspective of the various Islamic banking principles of conventional banks. The measurement of the performance of Islamic banks includes several aspects, including zakat, profit-sharing contracts (mudaraba and musharakah), and fairness in income distribution.

This study aims to analyze the factors that influence Islamic banking's performance based on the perspective of the distribution of financing, quality of financing, and size of assets. Therefore, the benefit of this research for Islamic banking practitioners is as a treasure trove of their knowledge in managing Islamic banks to have optimal performance under Islamic principles. The next researcher can also be used as a reference in conducting research related to Islamic banking performance.

## **LITERATURE REVIEW**

Organizations or companies that managed based on Islamic teachings have different values and principles than other organizations. Therefore, Islamic banks managed based on sharia principles must be managed differently compared to conventional banks. The Tawhid String Relationship Theory (TSR) and Sharia Enterprises Theory (SET) are the underlying theories. Furthermore, the two theories have a close relationship where TSR is the foundation of the SET theory. The TSR theory states that all human activities, including financial and business transactions, must be based on Islamic laws, namely the Al-Qur'an, the hadiths, and other sources of Islamic law such as Ijma and Qiyas (Nugroho, Meiwanto Doktoralina, Indriawati, Safira, & Yahaya, 2020). Referring to the TSR theory, in the SET theory, Allah is the mandate for the management of Islamic banks to manage these Islamic banks following sharia principles and provide benefits to humankind following Q.S. Al-Anbiya Verse 107 whose interpretation is (And we did not send you) O Muhammad! (But to become mercy) which is a blessing (for the universe) of humans and jinn through your apostolate. Thus, Islamic banks must have implications for the progress of financial aspects, social aspects, spiritual aspects, and environmental aspects (Ibrahim & Fitria, 2012).



Moreover, the purpose of the existence of Islamic banks is to provide benefits to all humanity. Therefore, Islamic banking operations' principles include the 4Ps: Prophet, Profit, People, Planet (Gusliana Mais et al., 2017; Elkamiliati & Ibrahim, 2014). Following the 4P principles, the basis for Islamic banks' business activities is the Al-Qur'an and hadiths. Therefore, the objectives of an Islamic bank or known as Maqasid Sharia, according to Arafah & Nugroho (2016), include: (i) Maintaining religion, (ii) Maintaining the soul, (iii) Maintaining mind, (iv) Maintaining descendants, (v) maintaining a property, (vi) Protecting the environment. Also, Islamic banks have differences from conventional banks. The priority of achieving performance is profit, but Islamic banks must also contribute to poverty alleviation, increase access to health, and increase the community's education level (Al-jarhi, 2017; Zulkhibri, 2016; Aulia, Ibrahim, & Tarigan, 2020). Islamic banks must also be concerned about environmental sustainability to maintain the next generation and natural disasters that threaten human life (Sairally, 2013). Therefore, the performance of Islamic banks cannot be measured by the achievement of company profits only. However, it must improve with some ratio performance that is following the principles of sharia. The ratios include profit-sharing ratios, zakat performing ratios, and equitable distribution ratios (Nugroho et al., 2020; Ibrahim & Kamri, 2016).

Assets are rights that can be used to run the company. Furthermore, assets' definition is the total asset consisting of current assets, long-term investments, fixed assets, intangible assets, deferred tax assets, and other assets (Gupta, 1969). Every company has assets used to carry out its business activities related to generating profits (Fairfield & Yohn, 2001). Asset growth can be used as a measurement basis for achieving its financial success performance (Maggina & Angelos Tsaklanganos, 2012). Therefore, one measure of a company's success is the growth of its assets, which can be expressed as a percentage. The greater the profit earned, the more efficient the management will be in managing the assets it owns. This result is supported by Nurlaela et al. (2019), which state that total asset turnover positively affects financial performance. Suppose the activity at the company shows the level of effectiveness that is in the company. Therefore, companies that can manage their assets effectively will get high profits as well.

Banks are intermediary financial institutions that are generally established to have the authority to collect funds in deposits and distribute them to the public in the form of credit or other forms to improve the people's economic welfare



(Muniarty et al., 2020). Whereas in Islamic banks, the collection and distribution of credit use a sharia contract, which in general uses a sale and purchase agreement (Murabaha) and cooperation (Mudarabah) (Ihwanudin et al., 2020). The term credit in Islamic banks is commonly referred to as financing. Furthermore, the financial condition is a factor that is the most crucial measure in determining whether a company can maintain the going concern of business activities (Nugroho et al., 2018; Suryo et al., 2019; Utami & Nugroho, 2019). According to Soekapdjo et al. (2018), the Financing to Deposit Ratio (FDR) is used to measure the composition of the amount of financing provided and compared with the number of third-party funds collected by Islamic banks. A high FDR will illustrate good fund disbursement capabilities, and if the FDR decreases, it is shown that financing channels will experience a decrease. This fact is supported by Fakhruddin & Purwanti's (2015) research, which states that FDR positively affects ROA, which means the higher the FDR, significantly increasing Islamic banks' performance.

According to Bank Indonesia, total credit or financing, namely the sum of credits or financing classified into several categories. In general, this category consists of performing financing and non-performing financing (NPF). Furthermore, non-performing financing consists of substandard, doubtful, and bad loans. The NPF ratio calculation, namely total credit or financing, is divided by the total NPF. A high NPF ratio will lead to high costs, which will potentially lead to bank losses. The higher NPF will lead to potential losses for Islamic banks in the future. Nugroho et al. (2018) revealed that NPF has a negative relationship between profitability and performance. When the NPF increases, the profitability will decrease. Therefore, Bank Indonesia, as a central bank, limits the NPF number. The max number of NPF of Islamic banking to a maximum of 5%. This regulation aims to mitigate risks so that the non-performing financing at the bank does not increase to lead to bank bankruptcy (Fadhila et al., 2015; Ibrahim & Rahmati, 2017; Muarif, Ibrahim, & Amri, 2021).

Based on a background study and literature review, the conceptual research framework in this study is as follows:



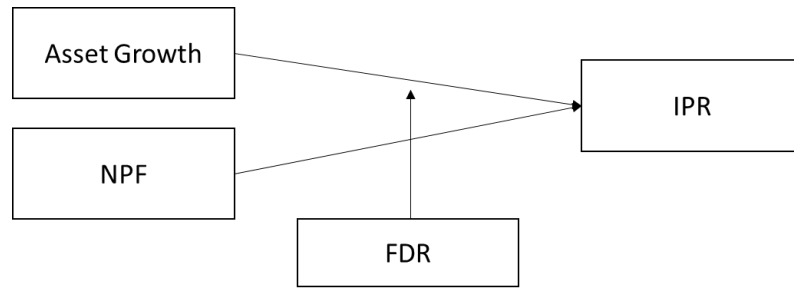


Figure 2. Research Conceptual Framework

Referring to figure 2, the development of the hypothesis in this study includes: The quality of financing (NPF) is also the focus of all stakeholders of Islamic banks as the NPF is one of the key financial indicators that can determine Islamic banks' sustainability. The higher the NPF, the higher the risk of credit or Islamic financing (Purbaningsih, 2014; Nisak & Ibrahim, 2014). If the financing risk cannot be adequately mitigated, then there is a possibility that the Islamic bank will go bankrupt (Sistiyarini & Supriyono, 2017; Nadia, Ibrahim, & Jalilah, 2019). Based on the facts above, the first hypothesis is proposed as the following:

*H1: NPF affects IPR*

The asset is the leading resource for Islamic banks to generate income. The better Islamic banks manage their assets, the more likely it is that Islamic banks will get optimal profits (Farook et al., 2012; MacMillan & Hambrick, 1986). Optimal profit can improve Islamic banks' social function, namely the payment of zakat from Islamic banks set aside from total income (Raquib, 2011). Based on the above studies, the second hypothesis is proposed:

*H2: Asset growth affects the IPR*

Optimal asset growth can improve Islamic banks' performance (Tarek Al-Kayed et al., 2014). However, the growth of assets from Islamic banks comes from the collection of third-party funds. Furthermore, the third-party funds cannot be idle and should be disbursed to the public so that Islamic banks can obtain optimal margin income and revenue sharing (Rachmadita, 2013). Therefore, asset growth must be accompanied by optimal FDR (Rengasamy, 2019). Thus, the third hypothesis in this study is proposed.

*H3: FDR is moderate, the effect of asset growth on IPR*



## RESEARCH METHOD

This research uses descriptive quantitative and causal explanatory methods of testing one variable that causes changes in other variables or not (Sekaran & Bougie, 2016). The design of this study begins with research issues in the form of a phenomenon. The issues are then formulated into research questions. The research object is the variable that is analyzed or measured in the study. Furthermore, the objects in this study are (i) Islamic Performance Ratio (IPR); (ii) Financing to Deposit Ratio (FDR); (iii) Asset Growth; (iv) Quality of financing or Non-Performing Financing (NPF). The operationalization of the variables in this study consisted of four (4) variables, as follows:

- According to Nugroho et al. (2020), Islamic Performance Ratio (IPR) is a ratio to measure Islamic banks' performance measurement different from conventional banks. The formula is as follows:

$$IPR = Profit\ sharing\ ratio + Zakat\ Performance\ Ratio + Equitable\ Ratio$$

- According to Soekapdjo et al. (2019), FDR is the ratio of banks, both Islamic banks and conventional banks, to channel the funds they have collected. The ratio representing a bank's ability to channel financing is the FDR at Islamic banks or LDR at conventional banks. The formula is as follows:

$$FDR\ or\ LDR = \frac{Financing\ Outstanding}{Total\ Third\ Party\ Funds}$$

- According to Nugroho et al. (2018), Non-Performing Financing (NPF) represents bad financing in this study, which is the ratio of non-performing financing compared to the total financing distribution. Furthermore, the formula for the NPF proxy used in this study is as follows:

$$NPF = \frac{Bad\ Debt\ Outstanding}{Total\ Financing\ Outstanding}$$

- According to Nugroho & Husnadi (2014), Asset growth in this study is the growth of assets compared to the previous year's asset position. The formula for proxies for asset growth is as follows:

$$\Delta\ Asset = \frac{Asset\ t}{Asset\ t - 1}$$





This study utilizes panel data and employing a regression model. Therefore the classic assumption tests that underlie the use of regression analysis are first carried out. Ghazali (2016) suggests that a classic assumption test is carried out to analyze whether the panel data regression results are bias or not. The number of samples in this study amounted to seven Islamic commercial banks with complete financial information following the research needs from 2012 to 2018. Therefore, the total research observations amounted to 49 samples.

## RESULT AND DISCUSSION

Before the panel data regression test is carried out, it is necessary to ensure that there are no problems with the classical test results, which include:

- Normality test

In this study, the level of significance was used  $\alpha=0,05$ . Decision-making considerations in the normality test are based on the probability figures from the Jarque-Bera test. It has the following conditions: (i) If the probability value  $p \geq 0,05$ , then the assumption of normality is fulfilled; (ii) If probability  $p < 0,05$ , then the assumption of normality is not fulfilled. Based on Figure 3 below, it is known that the probability value of the Jarque-Bera statistic is 0,057. Because the probability value  $p$  is 0,971 greater than the significance level, namely 0.05, the assumption of normality is fulfilled.

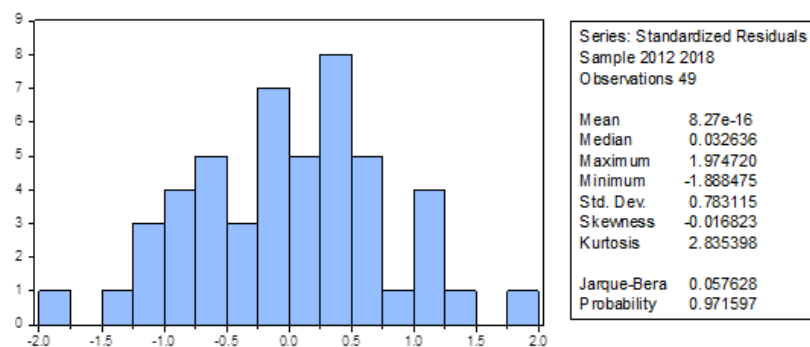


Figure 3. Normality Test with Jarque-Bera Test

Source: Eviews 9 software results

- Multicollinearity test

Symptoms of multicollinearity can be seen from the VIF value. Ghazali (2013) states that if the VIF value is  $> 10$ , this indicates multicollinearity. The multicollinearity test results are presented in the following table:



Table 4. Multicollinearity Test

Variance Inflation Factors  
 Date: 03/20/21 Time: 21:38  
 Sample: 49  
 Included observations: 49

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.349196	16.89921	N.A.
NPF	0.011687	4.136170	1.087229
ASSETGROWTH	0.006965	12.20316	1.184248
FDR	0.069561	3.610342	1.104004

Source: Eviews 9 software results

Based on Table 4, the multicollinearity test results show no multicollinearity symptoms between the independent variables. This conclusion is because the VIF value is not more than 10.

▪ Autocorrelation test

Assumptions regarding independence from residuals (non-autocorrelation) can be tested using the Durbin-Watson test. The statistical value of the Durbin-Watson test ranges between 0 and 4. A statistical value from the Durbin-Watson test that is smaller than one or greater than 3 indicates autocorrelation. According to Table 5 below, the value of the Durbin-Watson statistic is 1.689. Therefore, the Durbin-Watson statistic value lies between 1 and 3, namely  $1 < 1.689 < 3$ , so the non-autocorrelation assumption is fulfilled. In other words, there was no high autocorrelation symptom at the residuals.

Tabel 5. Autocorrelation Test with the Durbin-Watson Test

Log-likelihood	-67.74618	Hannan-Quinn criter.	2.987008
	13.01121	Durbin-Watson stat	1.689838
	0.000003		

Source: Eviews 9 software results

▪ Heteroscedasticity Test

Nevertheless, to test whether heteroscedasticity occurs or not, the Breusch-Pagan test can be used to prove it. Table 6 below shows the results of heteroscedasticity testing using the Breusch-Pagan test.



Table 6. Heteroscedasticity Test with the Breusch-Pagan Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.519673	Prob. F(3,45)	0.0075
Obs*R-squared	11.34568	Prob. Chi-Square(3)	0.0700
Scaled explained SS	10.41898	Prob. Chi-Square(3)	0.0853

Source: Eviews 9 software results

Based on the Breusch-Pagan test results in Table 4.4, it is known that the value of Prob on the Obs \* R-squared line  $0.070 > 0.05$ , which means there is no heteroscedasticity.

Furthermore, the Chow test is carried out to decide whether the model used is Common Effect or Fixed Effect, with the decision criteria, namely if the cross-section Prob score is  $F > 0.05$ , then the Common Effect model will be used. However, if the Cross-Section F Prob score is  $< 0.05$ , the Fixed Effect Model will be used. Table 7 presents the results of the chow test as follows:

Table 7. Chow Test

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.284083	(6,39)	0.2871
Cross-section Chi-square	8.833665	6	0.1832

Source: Eviews 9 software results

Based on the chow test results in Table 7, the Cross-Section F prob score is  $0.183 > 0.05$ , so the Common Effect model will be used.

Hypothesis testing is done through simultaneous influence testing (F-test), partial effect testing (t-test), and determination coefficient analysis. The statistical values of the coefficient of determination, F-test, and t-test are presented in Table 8.



Table 8. Statistical values of the coefficient of determination, F-test, and t-test

Dependent Variable: IPR  
 Method: Panel Least Squares  
 Date: 03/20/21 Time: 21:55  
 Sample: 2012 2018  
 Periods included: 7  
 Cross-sections included: 7  
 Total panel (balanced) observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.977655	0.388241	5.093891	0.0000
NPF	-0.250664	0.086476	-2.898647	0.0058
ASSETGROWTH	0.209006	0.076978	2.715128	0.0594
FDR_ASSETGROWTH	0.232434	0.040750	5.703858	0.0000
R-squared	0.654028	Mean dependent var		3.663878
Adjusted R-squared	0.630963	S.D. dependent var		1.331390
S.E. of regression	0.808798	Akaike info criterion		2.491573
Sum squared resid	29.43695	Schwarz criterion		2.646007
Log-likelihood	-57.04353	Hannan-Quinn criter.		2.550165
F-statistic	28.35610	Durbin-Watson stat		2.133997
Prob(F-statistic)	0.000000			

Source: Eviews 9 software results

The F-test aims to test the effect of the independent variables together or simultaneously on the dependent variable. Based on Table 8, it is known that the Prob value. (F-statistics), which is  $0.000000 < 0.05$ , it can be concluded that all independent variables, namely the quality of financing (NPF), asset growth, which is moderated by the simultaneous variable distribution of financing (FDR), have a significant effect on the Islamic Performance Ratio variable. Based on Table 8, the multiple linear regression equation is obtained as follows:

$$Y = 1.977 - 0.250X_1 + 0.209X_2 + 0.232 X_3 + e$$

Furthermore, when analyzed from each variable, the quality of financing (NPF) has a negative and significant effect on the Islamic Performance Ratio (IPR) because the Prob value is  $< 0.05$ . The asset growth variable has an insignificant effect on IPR with a Prob value  $> 0.05$ . However, the asset growth variable, moderated by the distribution of financing (FDR), positive and significant affects the IPR due to the Prob  $< 0.05$ .

Following these statistical results, it is known that the quality of financing has an essential role in maintaining the income of Islamic banks. Therefore, every



increase in non-performing financing will impact the decline in Islamic banks' performance (IPR). This study's results can be likened to the effect of financing quality (NPL) on profitability in conventional banks, represented by the indicator return on assets (ROA). Some of the previous studies stated that the quality of financing had a significant impact on the performance decline in conventional banks and Islamic banks, including Dewi et al. (2015), Indah & Arief (2016), Pravasanti (2018). Low quality of non-performing financing will increase the risk and high costs incurred for write-offs. Besides, there is a fee to collect the bad debt. The increase in these costs will have an impact on reducing the income of Islamic banks. The decline in income will have implications for the decline in Islamic banks' performance (Nugroho et al., 2017).

Asset growth does not have a significant effect on the performance of Islamic banks (IPR). The reason is that there is a potential for asset growth that has not been supported by the main business activity in the form of distribution of financing that can generate income but comes from increased liabilities in the form of third-party funds (Greenbaum & Thakor, 1987; Khan et al., 2017). If the source of these assets' growth comes from funds and Islamic banks cannot channel these funds optimally to the public. Therefore, assets' growth cannot generate income optimally and must bear the cost of funds from customer savings. These conditions' impact on Islamic banks' performance can decline (DeYoung & Rice, 2004).

Furthermore, if asset growth is supported by the distribution of financing (FDR), then the impact of IPR will be significant. Therefore, based on this study's statistical processing results, the FDR variable strengthens the relationship between the asset growth variable and the IPR. Distribution of financing is the main business activity for Islamic banks because it provides margin income and profit-sharing income following the financing contracts with Islamic bank customers (Izhar & Asutay, 2007). Apart from financing, there is another income source for Islamic banks, namely fee-based income (Hardianto & Wulandari, 2016). However, the portion of fee-based income in banks is still smaller than that of lending. The portion of the fee-based income from total banking income does not, on average, exceed 40%. Sources of fee-based income in Islamic banks can be divided into two categories: disbursement of financing in administrative fees and, second, non-disbursement of financing. Fee income base that comes from non-disbursement financing activities



includes (i) Remittance Fee; (ii) ATM Fee; (iii) Treasury Fee; (iv) Trade Product Fee; (v) Cash Management Fee.

Additionally, referring to the results of this study, Islamic banks must maintain their financing quality. If the Islamic bank cannot carry out a proper financial feasibility analysis to approve the financing, then there is a potential for financing to customers that can be problematic later (Muniarty et al., 2020; Zhu et al., 2019). As banks that carry out their business activities based on sharia principles, Islamic banks must educate their customers regarding the Islamic religion's teachings. Thus, customers are aware that being a customer of a sharia bank must understand the teachings of the Islamic religion to not act for personal gain that can harm other sharia bank customers (Kashif et al., 2016; Mahliza et al., 2020). Based on this study's results, Islamic banks' income still depends on loans extended to the community. Therefore, the loan quality should be the concern of Islamic bank management to manage it properly.

Also, Islamic banks must be able to optimize fee-based income through technology-based products and services. Quality technology-based products and services can increase fee-based income. The advantage of fee-based income opinion is that the income is obtained from a risk-free activity (Stiroh, 2004). Thus, Islamic banks must implement digital banking to anticipate the challenges and needs of facing the VUCA era (Vulnerability, Uncertainty, Complexity, and Ambiguity) and the Industrial Revolution's challenges 4.0.

## CONCLUSION

Islamic banks are a financial solution for society's welfare through their function as a financial institution that mobilizes public funds in a country. Therefore, Islamic banks' performance indicators are essential to provide confidence and trust to the public as Islamic banks' business partners. Islamic Performance Ratio (IPR) is an indicator that can represent the performance of Islamic banks. The higher the IPR, the better the performance of Islamic banks. Based on this study's results, the quality of financing (NPF) has a negative and significant effect on IPR.

Meanwhile, asset growth has an insignificant effect on the IPR. However, the distribution of financing (FDR) is a moderating variable that strengthens asset growth on IPR to be positive and significant. Therefore, Islamic banks must focus on running the core business by distributing funds (financing) to the



customer and maintaining its quality to generate optimal profits. Optimal profit from Islamic banks will have an impact on increasing the IPR of these Islamic banks. However, Islamic banks must increase their fee base income through innovative digital-based products and services to face market needs and desires in the era of industrial revolution 4.0. The theoretical implication of this research shows that Islamic banks' performance is shown from the growth of assets but must be supported by other variables such as the quality of financing (NPF) and must also be accompanied by good financing disbursement capability (FDR). In addition, the managerial implication of this research is that the measurement of indicators for Islamic banks should be equipped with performance indicators that follow the operating principles of Islamic banks, such as the Islamic Performance Ratio (IPR).

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