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ASSESSING FINANCIAL PERFORMANCE'S INFLUENCE ON FINANCING RISK IN INDONESIA'S ISLAMIC COMMERCIAL BANKS

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Abstract:

This research aims to determine the long- and short-term relationships between the Return on Asset (ROA), Financing to Deposit Ratio (FDR), Operational Costs to Operational Income (BOPO), Industrial Production Index (IPI), and inflation on financing risk or Non-Performing Financing (NPF) at Sharia Commercial Banks in Indonesia. This study uses secondary data from the Financial Services Authority and Central Statistics Agency publications from January 2015 to June 2023. The Auto-Regressive Distributed Lag (ARDL) method was used with the help of EViews 12.0. The results show that the ROA variable has a negative and significant effect on NPF in the long term. The FDR and BOPO variables have a positive and significant effect on NPF. However, Inflation and IPI variables have no long-term effect on NPF. In the short term, ROA and BOPO influence NPF. Meanwhile, the FDR, Inflation, and IPI variables did not influence NPF in the short term.

A. INTRODUCTION

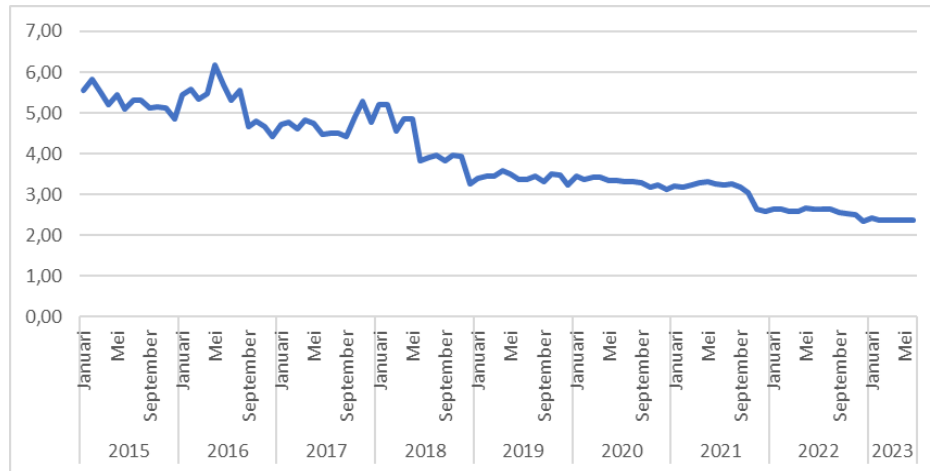
In the financing process of Islamic banks, there are no risks, namely, the risk of problematic financing. Problematic financing in conventional banks is called Non-Performing Loan, while in Sharia banks, it is called Non-Performing Financing. Non-Performing Financing (NPF) is an important parameter determining banking stability (Accornero et al., 2018; Sudarsono et al., 2024). Instability in a financial system can be reflected in three aspects: the failure of banking institutions when banks experience large losses due to increasing NPF levels (Ascarya & Yumanita, 2008). Losses in Sharia bank financing can arise due to the customer's inability to fulfill payment obligations, which causes increased risks and losses that the bank must bear to become greater.

Based on the Financial Services Authority Circular Letter No.10/SEOJK.03/2014, credit risk results from the failure of customers or other parties to fulfill their obligations to the bank under agreed agreements. The quality of banking financing must be considered because if you do not pay attention to quality in financing, the bank could suffer losses. Non-Performing Financing (NPF) is one of the benchmarks for bank assessments of debtors' ability to fulfill their obligation installments. The NPF compares problematic financing to the total amount of the Sharia bank financing distribution (Sudarsono, 2018). Delays in paying principal installments or financing profit sharing by customers can decrease financing collectability. If the NPF at the bank increases, the bank must prepare larger reserves to decrease the bank's capital.

As intermediary institutions, Islamic banks will continue to face risks of Non-Performing Financing. Financing risk in Islamic banks cannot be separated from the influence of financial performance in the economy (Chamberlain et al., 2020); thus, the topic of NPF is interesting to test for the author because the role of NPF is an important indicator in assessing the health of a bank (Siddique et al., 2022). High levels of problematic financing can disrupt the profitability of Sharia Commercial Banks (Sudarsono, 2018). Therefore, it is very important to know the factors that influence the occurrence of NPF so that it can then be used as a step in financing risk management, as well as to anticipate and minimize the risk of losses that Islamic

banks may experience. Therefore, this study focuses on the determinants of financial performance that influence NPF.

Figure 1. NPF of Sharia Commercial Banks 2015-2022



Source: Financial Services Authority (2015-2023).

Figure 1 displays the evolution of Non-Performing Financing (NPF) in Sharia Commercial Banks from 2015 to June 2023. In May 2016, a significant increase in the NPF ratio reached 6.17%. These data indicate that the NPF level exceeded the maximum limit set by Bank Indonesia (5%). However, there was a fluctuating decline in NPF in the following period. This shows improvements in the financial performance of Sharia Commercial Banks in dealing with the challenges of distributing funds to customers.

Previous studies have revealed several factors that influence NPF (Rofi'ah & A'yun, 2020; Asnaini, 2014; Effendi et al., 2017; Hellen et al., 2019; Iqbal & Anwar, 2022; Fatmafuli & Moin, 2022; Lisa & Yusvita Nena Arinta, 2023; Marella et al., 2017; Kuswahariani et al., 2020; Sudarsono, 2027, 2018; Syachreza & Mais, 2020; Umami & Rani, 2021; Ikramina & Sukmaningrum, 2021; Wijoyo, 2016). This research re-examines the factors that influence the NPF of Islamic commercial banks in Indonesia. The difference between this research and previous research during the research period was determined. This research was conducted from January 2015 to April 2023; this period was chosen because the variable data used was relatively complete and met the updated data elements.

B. LITERATUR REVIEW

Islamic Bank

Based on the Republic of Indonesia Law No. 21 of 2008, Sharia banks carry out their business activities based on Sharia principles. Sharia banks, as intermediary institutions, collect funds from the community through savings and redistribute them to the community through credit or other financial services to improve community welfare (UU Number 10 of 1998, 1998). The Islamic banking system is based on profit sharing and losses. In distributing funds to the community, Islamic banks must also be willing to bear risks (Kuswahariani et al., 2020). The risks Islamic banks bear could be due to problematic or bad financing. Therefore, managing the liquidity of Islamic banks is important to prevent and overcome the risks of problematic financing; therefore, an active and smooth financing management system is needed to improve the health of Islamic banks (Sudarsono, 2018). To overcome the risk of problematic financing, indicators can help see the smooth running of customer financing, namely ratios Non-Performing Financing.

ROA and NPF

In general, an increase in the ROA of Islamic banks causes a decrease in the risk of problematic financing. This is because a high ROA reflects a bank's level of efficiency. The higher the ROA level, the greater the profit Islamic banks achieve. Thus, the possibility of increasing the NPF will be smaller. The bank's high profitability reflects the accumulation of substantial reserves, indicating that the bank can handle risks related to problematic financing. The size of the problematic financing influenced the ROA level in each period. The lower the problematic financing, the more the bank can maximize profits from the funding issued. Based on the research by Hellen et al. (2019), Iqbal and Anwar (2022), Kuswahariani et al. (2020), and Umami and Rani (2021). found that it hurt NPF. This is because the higher the ROA ratio, the lower the level of problematic financing. In contrast, Sudarsono (2018) shows that ROA in the long term has no significant effect on NPF. The influence of ROA on financing risk can be formulated in the following hypothesis:

H1: ROA has a positive influence on financing risk.

FDR and NPF

In the banking sector, it is important to have indicators that can measure bank liquidity to show a bank's ability to meet credit demand using the total assets it owns. One indicator that is often used to assess bank liquidity is FDR. FDR reflects how much deposit banks use to provide financing and can be a benchmark for Sharia banking liquidity by comparing the amount of credit disbursed with the amount of deposits held. The high level of FDR indicates that banks are becoming more aggressive in distributing credit. Banks almost completely allocate their reserve funds to the public through financing. This may result in increased levels of Non-Performing Financing (NPF) due to the inability of bank management to manage and supervise funding properly. Therefore, strict supervision is required for bank management and good risk management in bank lending activities. According to research by Rofi'ah and A'yun (2020), Fatmafuli and Moin (2022), Syachreza (2020), and Sudarsono (2018), FDR has a positive and significant effect on NPF. This is because financing channeled by Sharia Commercial Banks through third-party funding sources can increase the risk of financing problems. The higher the funds disbursed, the higher the possibility of problematic financing (NPF). From the explanation above, hypotheses can be formulated as follows:

H2: FDR has a positive influence on financing risk.

BOPO and NPF

Bank Indonesia defines operational efficiency as comparing total costs and operating income, generally known as BOPO (Syachreza & Mais, 2020). BOPO is an important indicator for assessing how much a bank can manage its operational costs relative to the income generated. If the BOPO level at a Sharia bank is high, it indicates that the bank has limitations in managing its operations well. As a result, banks will experience losses, and the performance of Islamic banks will be considered low (Fatmafuli & Moin, 2022). When a bank experiences a loss, this results in the bank losing reserve funds that can be used as protection (Hellen et al., 2019). Consequently, banks find it difficult to overcome the risks associated with problematic financing conditions, thereby increasing NPF. Banks become less able to

handle problematic financing in this situation, affecting their overall financial stability and performance. Thus, hypotheses can be formulated as follows:

H3: BOPO has a positive influence on financing risk.

INFL and NPF

According to Bank Indonesia, inflation is a continuous increase in the price of a good that occurs widely and causes an increase in the price of other goods, not just in one or two things. The price of raw materials has increased in line with the increase in people's needs; however, income does not support this (Asnaini, 2014). This can be detrimental for producers because obtaining raw materials for producing goods will be difficult, which will temporarily stop the production process. Some people will have difficulty meeting their daily needs, so many will apply for credit or bank financing. Production costs also increase due to the price of input goods. This affects the marketing that will be carried out so that the producer's income will decrease. A decline in producer income will cause difficulties in paying loan installments, increasing the NPF ratio in Islamic banks (Sudarsono, 2018). When inflation increases, the NPF ratio also increases, and vice versa. From the explanation above, hypotheses can be formulated as follows:

H4: INFL has a positive influence on financing risk.

IPI to NPF

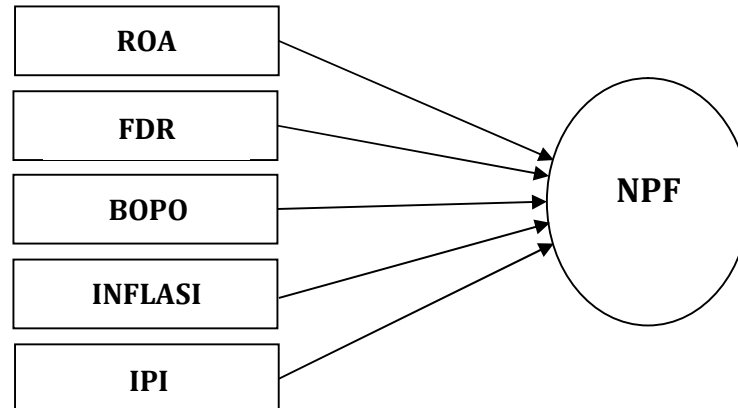
The Industrial Production Index (IPI) determines the economic growth rate because it represents the Gross Domestic Product (GDP). GDP is an economic indicator that assesses the financial performance of economic actors, including the banking sector (Angraini et al., 2020). The manufacturing sector has a larger contribution to GDP than other sectors. The IPI is the main instrument for monitoring the production development in the processing industry on a large and medium scale (Umami & Rani, 2021). The higher the IPI level, the higher the GDP of a country will also increase, which reflects an increase in economic growth. With increased economic growth, access to credit should be easier, and the risk of problematic financing in financial institutions, such as Sharia banking, can be minimized. However, an increase in GDP is not always followed by a decrease in the NPF. When the

community's income increases, needs tend to increase and give rise to a consumptive attitude toward the community, thus setting aside its obligations towards debtors. Improving the economy does not guarantee that the community fulfils its obligations to the bank (Ikramina & Sukmaningrum, 2021). Therefore, monitoring IPI is important for economic stakeholders to understand the dynamics and prospects of a country's economic growth. Thus, hypotheses can be formulated as follows:

H5: IPI has a negative influence on financing risk.

Figure 1. Model Illustrating the influence of ROA, FDR, BOPO, Inflation, and IPI on NPF.

Figure 2. Research Model



C. METHODOLOGY

Secondary data were used in this study. Secondary data are obtained by researchers from other sources or other parties that have been processed, so it does not require additional methods such as sampling or using questionnaires. These secondary data can come from various sources, such as publications, reports, or previous research, and are used to support the research. The data source in this research uses data obtained through the official website of the agency concerned, namely, the Financial Services Authority and Central Statistics Agency. The data used were monthly time-series data from January 2015 to June 2023. Data on NPF, ROA, FDR, and BOPO ratios are obtained from monthly financial reports published periodically by the Financial Services Authority. In addition, the author from the Central Statistics Agency obtained data on the inflation ratio and IPI.

In this research, the data analysis technique involves the time-series regression method with autoregressive distributed lag (ARDL). This model is used because it can analyze economic phenomena in both the short and long terms. In addition, the ARDL method does not require the assumption that the data must be stationary, so it is suitable for use when the data do not show a clear stationary level. It is flexible in dealing with large numbers—limited samples or observations. The estimation of data processing in this research was assisted using EViews 12.

The object of this study involves two types of data variables: dependent and independent. The dependent variable in this study is Non-Performing Financing, whereas the independent variables involve microeconomic and macroeconomic aspects. Microeconomic aspects include Return on Asset (LONG), Financing to Deposit Ratio (FDR), Operating Costs, and Operating Income (BOPO). From a macroeconomic perspective, there is an Industrial Production Index (IPI) and inflation. The ARDL method was used in this study. This study examines the influence of financial performance on non-performing financing at the Sharia Commercial Bank.

Before testing with the ARDL method, it is important to carry out the data identification process using statistical analysis to understand the characteristics of each variable well. The data identification process was carried out to thoroughly and in detail describe the properties of the data being managed before further analysis. The following are the statistical data results for each variable that contains the average value (mean), middle value (median), maximum value, and minimum value.

Table 1. Descriptive Statistical Analysis

	NPF	LONG	FDR	BOPO	INFL	IPI
Mean	3.90	1.33	80.40	87.42	0.25	138.91
Median	3.47	1.37	79.41	87.92	0.20	139.97
Std. Deviation	1.06	0.57	5.47	5.94	0.30	10.01
Max	6.17	2.18	92.56	99.04	1.17	158
Min	2.35	0.0063	68.98	75.78	-0.45	104.02
Obs	98	98	98	98	98	98

Source: Processed data, 2024.

D. RESULT AND ANALYSIS

The requirement for analyzing time-series data is to perform a stationarity test. The data stationarity test was performed on all dependent and independent variables

to determine whether the data used were stationary. This is important for determining whether the data used in the research have consistent trends or fluctuations over time. If time-series data are not stationary, this can lead to inaccurate regression. In this research, a data stationarity test was conducted to determine the model used in the research data analysis. Suppose all variables are stationary at the original level or level $I(0)$. In that case, they can be used directly in further regression analysis, and it can be said that the econometric model is in the long term. Conversely, cointegration testing of all these variables is required if all variables show stationarity after the level is first differenced $I(1)$. If some variables are stationary at level $I(0)$, while others are stationary at level first *differenced* $I(0)$, then the ARDL mode is the right choice to apply. The probability can be obtained from the ADF test to determine whether the results of this hypothesis are stationary.

Table 2 shows that ROA, FDR, and BOPO are not stationary at the NPF level, with a probability of $>5\%$. In contrast, other variables, such as inflation and IPI, are stationary at this level. At the 1st differenced level, the test shows that the variables NPF, ROA, FDR, BOPO, inflation, and IPI are stationary at the 1st differenced level, with a probability value $< \alpha 5\%^*$. The stationarity test results show that the inflation and IPI variables are stationary at the level $I(0)$, and all variables are stationary at the first-differenced level $I(1)$. Thus, the ARDL model is appropriate for use in estimation analysis. This is because the ARDL model does not require all the variables to be stationary at the same level.

Table 2. Stationarity Test Results using Augmented Dickey-Fuller

Variable	level	information	1 st differenced	information
NPF	0.7816	not stationary	0.0000	stationary
ROA	0.5586	not stationary	0.0000	stationary
FDR	0.4483	not stationary	0.0000	stationary
BOPO	0.7077	not stationary	0.0000	stationary
INFL	0.0000	stationary	0.0000	stationary
IPI	0.0001	stationary	0.0001	stationary

Source: Processed data, 2024

The optimal lag in the ARDL model is selected based on the Akaike Information Criterion (AIC) contained in EViews. Based on the output analysis results, the model (4,3,0,3,0,0) gave optimal results based on the Akaike Information Criterion (AIC). According to Widarjono (2020), one of the important aspects of the ARDL model estimation process is the use of criteria Akaike Information Criteria.

Table 3. ARDL Estimation Results

	ARDL estimates			
NPF(-1)	0.696204	0.091857	7.579244	0.0000
NPF(-2)	0.119407	0.103353	1.155338	0.2513
NPF(-3)	0.294693	0.104355	2.823946	0.0060
NPF(-4)	-0.447147	0.082593	-5.413853	0.0000
ROA	-0.269729	0.118384	-2.278415	0.0253
ROA(-1)	0.284456	0.149399	1.904008	0.0604
ROA(-2)	0.029506	0.145522	0.202757	0.8398
ROA(-3)	-0.305121	0.124552	-2.449747	0.0164
FDR	0.019570	0.007229	2.707150	0.0083
BOPO	0.046143	0.012037	3.833577	0.0002
BOPO(-1)	-0.014553	0.015075	-0.965373	0.3372
BOPO(-2)	-0.037439	0.015050	-2.487679	0.0149
BOPO(-3)	0.027144	0.011458	2.368989	0.0202
INFL	-0.056050	0.069935	-0.801451	0.4252
IPI	0.002026	0.002279	0.889077	0.3766
C	-2.055577	1.248087	-1.646982	0.1034

Source: Processed data, 2024

A cointegration test was carried out to determine whether the data were cointegrated. The tests carried out by the author in this study used the bounds test. The F-statistic value can be used to determine whether the data are cointegrated. If the F-statistic value is greater than the critical value at the 5% level, it can be concluded that the data are co-integrated. Based on the data processing results in Table 4, the F-statistic value is greater than the critical value at the 5% level. Thus, it can be concluded that the data have a cointegration or long-term relationship between the independent and dependent variables.

Table 4. Cointegration Test Results

Mark F-statistics	Critical Value Bound			Information	
	Bound	1%	5%		10%
4.041058	10 Bound	3.41	2.62	2.26	cointegration
	11 Bound	4.68	3.79	3.35	

Source: processed data, 2024

Based on the data processing results in Table 4, the F-statistic value is greater than the critical value at the 5% level. Thus, it can be concluded that the data have a cointegration or long-term relationship between the independent and dependent variables.

Short-Term ARDL Estimates

Table 5 shows short-term ARDL. Below are the ARDL estimation results in the short term. The short-term estimation results in the table below show that there is an influence lag on certain variables on the NPF variable, namely NPF(-1)*, NPF(-3), ROA, ROA(-1), ROA(-2), FDR, BOPO, BOPO(-2).

Table 5. Short-Term ARDL Estimation Results

Conditional Error Correction Regression				
Variable	coefficient	Std. Error	t-Statistic	Prob
C	-2.055577	1.248087	-1.646982	0.1034
NPF(-1)*	-0.336843	0.070457	-4.780852	0.0000
ROA(-1)	-0.260887	0.122567	-2.128525	0.0363
FDR**	0.019570	0.007229	2.707150	0.0083
BOPO(-1)	0.021295	0.009259	2.299954	0.0240
INFL**	-0.056050	0.069935	-0.801451	0.4252
IPI**	0.002026	0.002279	0.889077	0.3766
D(NPF(-1))	0.033047	0.099953	0.330625	0.7418
D(NPF(-2))	0.152454	0.098012	1.555461	0.1237
D(NPF(-3))	0.447147	0.082593	5.413853	0.0000
D(ROA)	-0.269729	0.118384	-2.278415	0.0253
D(ROA(-1))	0.275615	0.123162	2.237827	0.0279
D(ROA(-2))	0.305121	0.124552	2.449747	0.0164
D(BOPO)	0.046143	0.012037	3.833577	0.0002
D(BOPO(-1))	0.010295	0.012200	0.843896	0.4012
D(BOPO(-2))	-0.027144	0.011458	-2.368989	0.0202

Source: Processed data, 2024

The estimation results show that, in the short term, the ROA variable has a significantly negative impact on NPF at Sharia Commercial Banks. However, in the first and second lags, ROA shows a coefficient that has a positive and significant impact on NPF. The FDR variable also positively and significantly affects NPF in Sharia Commercial Banks in the short-term. In addition, from the short-term estimation results, BOPO shows that the coefficient positively and significantly affects NPF in Sharia Commercial Banks in the contemporaneous period. However, in the first lag, BOPO does not significantly affect NPF. However, in the second BOPO lag, it can be seen that, in the short term, BOPO has a negative and significant effect on the NPF of Sharia commercial banks. The IPI and inflation variables have no short-term effect on the NPF of Islamic commercial banks in Indonesia.

Long-Term ARDL Estimates

In the long term, the ROA variable shows a probability of 0.0180, which is smaller than 5%, with a coefficient that has a negative and significant effect on NPF in Sharia Commercial Banks. ROA also has a constant value of -0.787003, which means that if there is a one-unit increase in ROA, the NPF value will decrease by 78%. The FDR variable has a positive and significant influence on NPF, as shown in Table 6, with an FDR probability value of 0.0024, which is also smaller than 5%. FDR has a constant value of 0.062676, which means that if there is a one-unit increase in FDR, the NPF value will increase by 6%. The BOPO variable also has a probability value of 0.0121, which is less than 5%, indicating that BOPO has a positive and significant effect on NPF. BOPO has a constant value of 0.061700, which means that if there is a one-unit increase in BOPO, the NPF value will increase by 6%. However, the inflation variable has a probability of 0.4285, greater than 5%, indicating that inflation has no long-term effect on NPF. The IPI variable also has no significant effect on NPF in the long term, as shown by the IPI probability value of 0.3851, which is greater than 5%.

Table 6. Long-Term ARDL Estimation Results

Level Equation				
Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob
LONG	-0.774508	0.320793	-2.414354	0.0180
FDR	0.058099	0.018584	3.126299	0.0024
BOPO	0.063219	0.024639	2.565771	0.0121
INFL	-0.166398	0.209119	-0.79571	0.4285
IPI	0.006015	0.006887	0.873257	0.3851

Source: Processed data, 2024

Economic Analysis

An analysis in the short term found that the ROA variable hurt NPF in Sharia Commercial Banks during the same period. This is because a high NPF level affects the profitability obtained by Sharia Commercial Banks. In other words, if NPF increases, the profits obtained by Islamic banks decrease. Thus, the smaller the NPF in a Sharia bank, the greater the profits obtained by Sharia commercial banks (Fatmafuli & Moin, 2022). This finding is strengthened by Syachreza and Mais (2020). Meanwhile, in the first and second lags, ROA positively and significantly influences NPF in the short-term. This shows that NPF can impact increasing profits obtained by Sharia Commercial Banks, possibly from relatively high profit sharing and fee-based income. However, in the long-term analysis, it was found that the ROA variable had a negative influence, by research by Iqbal and Anwar (2022). This indicates that the higher the ROA, the higher the level of profit obtained by Sharia Commercial Banks, and the smaller the possibility of increasing the NPF. When the ROA at a Sharia Commercial Bank is high, it shows that the bank has reserve funds that can be used to overcome risks in facing problematic financing, so it is possible that the NPF level can be reduced.

In the short- and long-term estimation results, it was found that the FDR variable had a positive influence on NPF. The interpretation of this finding is that the greater the amount of financing provided by a bank, the higher the risk of problematic financing borne by the bank. By increasing the financing distribution, reserve funds held by banks are allocated to the community as financing. The impact is an increase in the Non-Performing Financing (NPF) ratio because more financing tends to

increase risk. This finding is strengthened by the research of Haifa and Wibowo (2015) and Sudarsono (2018).

The results of the short and long-term analyses in the same period concluded that BOPO had a positive influence on NPF in Sharia Commercial Banks. This indicates that the higher the BOPO level, the higher the possibility of problematic financing in Islamic banks. Deviations in the BOPO ratio in Islamic banking show that banks incur more operational costs than their operational income, reflecting an imbalance between costs and income. This condition causes losses owing to less efficient and effective fund management. The low quality of management in managing resources is also reflected in the quality standards in providing financing, which increases the level of problematic financing. This finding was strengthened by Wijoyo's (2016) study. However, in the second short-term lag, BOPO has a negative and significant effect on NPF, a result supported by Hellen et al. (2019).

Based on the short- and long-term analysis results, it was found that inflation did not have a significant effect on NPF. Although inflation can increase income for debtors and enable them to meet loan obligations better, its impact may not be evenly distributed across all sectors. It may not be as large at the overall NPF level. In addition, Bank Indonesia has published inflation targets for the next few years so that the public and customers can anticipate inflation. This results in a condition in which inflation does not cause major changes in income distribution and customers can still pay their obligations to Islamic banks (Wijoyo, 2016). Other factors, such as overall economic conditions and banking policies, have a more dominant influence on determining NPF levels. In addition, the Sharia banking system, which uses profit-sharing contracts, is less vulnerable to inflation because Sharia banks do not depend on the interest system. These results are supported by studies by Rofi'ah and A'yun (2020), Wijoyo (2016), and Asnaini (2014).

The research analysis results in both the short and long term found that IPI has no influence on NPF in Sharia Commercial Banks. An increase in economic growth shows that demand for consumption and production activities increases, increasing overall income. However, an increase in income does not always imply a decrease in NPF levels. On the other hand, income growth can also trigger consumptive behaviour that can disrupt people's ability to repay loans, thus increasing NPF. Even with

increasing economic growth, some individuals tend to increase their consumption, neglecting their obligations as debtors and affecting their ability to repay loans, which can increase NPF levels (Ikramina & Sukmaningrum, 2021).

E. CONCLUSION

Based on the research results, it was found that the Return on Assets (ROA) variable had a negative and significant impact on Non-Performing Financing (NPF) in the same period, indicating that an increase in NPF has the potential to reduce the profitability of Sharia Commercial Banks. This aligns with previous research findings that state that high levels of non-performing loans can disrupt bank profitability. On the other hand, the FDR and BOPO variables show a positive and significant influence on NPF in both the short and long terms. This means that the greater the distribution of financing by the bank and the higher the ratio of operational costs to operational income, the higher the risk of problematic financing that the bank must bear. However, inflation and the Industrial Production Index (IPI) do not significantly affect NPF. These results indicate that other factors may be more dominant in determining the level of NPF and that Islamic banking policies focusing on profit-sharing agreements may reduce the impact of inflation on NPF.

The implication of these findings is the importance of effective risk management in managing non-performing loans, as well as strict supervision of the level of financing distribution by banks. Operational efficiency and careful fund management are also emphasized to reduce the risk of financing problems. However, the limitation of this research is that it focuses on Islamic banks in Indonesia; therefore, the results may not be directly applicable to conventional banking contexts or other countries. Future research should expand the scope of the research by involving more Islamic banks or comparing them with conventional banks. Further research could explore other factors influencing NPF, such as government regulations or customer characteristics. Thus, further research can provide deeper insights into managing the risk of non-performing loans in the banking sector.

F. REFERENCES

Angraini, D., Sudarsono, H., Anindita, S. (2020). Influence of financial performance and

- macroeconomic factors on financing risk in Islamic banks. *Asian Journal of Islamic Management*, 2(2), 138-152. doi: <https://doi.org/10.20885/ajim.vol2.iss2.art6>.
- Accornero, M., Cascarino, G., Felici, R., Parlapiano, F., Sorrentino, A.M. (2018). Credit risk in banks' exposures to non-financial firms: credit risk in banks' exposures to non-financial, *European Financial Management*, 24(5), 775-791. <https://doi.org/10.1111/eufm.12138>.
- Ascarya and Yumanita, D. (2008). Comparing the efficiency of Islamic banks. *Bulletin of Monetary Economics and Banking* 11(2): 96–196.
- Asnaini, S. W. (2014). Faktor-faktor yang mempengaruhi non performing financing (NPF) pada bank umum syariah di Indonesia. *Jurnal TEKUN*, 5(2), 264-280
- Budiman, R., Achsani, N. A., & Ismal, R. (2018). Risiko Pembiayaan dan Determinannya pada Perbankan Syariah di Indonesia. *Jurnal Aplikasi Bisnis dan Manajemen*, 151–159. <https://doi.org/10.17358/jabm.4.1.151>
- Chamberlain, T., Hidayat, S., Khokhar, A.R. (2020). Credit risk in Islamic banking: Evidence from the GCC. *Journal of Islamic Accounting and Business Research*, 11(5), 1055-1081. <https://doi.org/10.1108/JIABR-09-2017-0133>
- Dewantara, A., & Bawono, A. (2020). Influence Analisis of Mudharabah, Musharakah, and Murabahah Financing To Profitability of Sharia Commercial Bank in Indonesia 2016-2019 With Non Performing Financing As Intervening Variable. *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 11(2). <https://doi.org/10.32678/ije.v11i2.197>.
- Effendi, J., Thiarany, U., Nursyamsiah, T. (2017). Factors Influencing Non-Performing Financing (NPF) in Sharia Banking. *Walisongo: Jurnal Penelitian Sosial Keagamaan* 25(1): 109. <https://doi.org/10.21580/ws.25.1.1540>
- Fatmafuli, E., & Moin, A. (2022). Pengaruh return on asset, biaya operasional dan pendapatan operasional, dan financing to deposit ratio terhadap non performing financing pada bank Syariah dengan financial constraints sebagai variabel moderasi. *Selekta Manajemen: Jurnal Mahasiswa Bisnis & Manajemen*, 1(1), 248–269. <https://journal.uui.ac.id/selma/article/view/23864>
- Haifa, H., & Wibowo, D. (2015). Pengaruh faktor internal bank dan makro ekonomi terhadap non performing financing perbankan syariah di Indonesia: Periode

- 2010:01 – 2014:04. *Nisbah: Jurnal Perbankan Syariah*, 1(2), 74. <https://doi.org/10.30997/jn.v1i2.253>
- Hellen, H., Fadrul, F., & Asyik, N. F. (2019). Analysis of the influence of capital adequacy ratio (CAR), non performing financing (NPF), net operating margin (NOM), operational cost and revenue (BOPO), and finance to deposit ratio (FDR) on the financial performance of Syariah banking in indonesia year 2011-2017. *Kurs : Jurnal Akuntansi, Kewirausahaan dan Bisnis*, 4(2), 181-191. https://repository.stiesia.ac.id/id/eprint/5111/1/1.%20Artikel_Analisis%20of%20the%20Influence.PDF
- Ikramina, C., Sukmaningrum, P. S. (2021). Macroeconomic factors on non-performing financing in Indonesian Islamic banks: The Error Correction Model Approach. *Jurnal Ekonomi dan Bisnis Islam (Journal of Islamic Economics and Business)*, 7(1), p.34. <https://doi.org/10.20473/jebis.v7i1.23647>
- Iqbal, M. ., & Anwar, S. . (2022). Pengaruh capital adequacy ratio, non performing financing, financing to deposit ratio, operational efficiency ratio, dan profit-sharing ratio terhadap kinerja keuangan bank umum syariah. *Jurnal Revenue : Jurnal Ilmiah Akuntansi*, 2(2), 259-270. <https://doi.org/10.46306/rev.v2i2.69>
- Kuswahariani, W., Siregar, H., & Syarifuddin, F. (2020). Analisis NON PERFORMING FINANCING (NPF) secara umum dan segmen mikro pada tiga bank Syariah nasional di Indonesia: Non performing financing analysis with regard to a general and micro segment on three national Sharia banks in Indonesia. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 6(1), 26. <https://doi.org/10.17358/jabm.6.1.26>
- Lisa, L. F., & Yusvita Nena Arinta. (2023). Pengaruh Capital Adequacy Ratio (CAR), Kualitas Aktiva Produktif (KAP), dan Non Performing Financing (NPF) terhadap kinerja keuangan dengan likuiditas perusahaan sebagai variabel intervening pada bank umum Syariah di Indonesia Periode 2017 – 2021. *Jurnal Manajemen Perbankan Keuangan Nitro*, 6(1), 1–13. <https://doi.org/10.56858/jmpkn.v6i1.88>
- Munir, M. (2018). Analisis pengaruh CAR, NPF, FDR dan inflasi terhadap profitabilitas perbankan Syariah di Indonesia. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*, 1(1), 89. <https://doi.org/10.12928/ijiefb.v1i1.285>

- Nugroho, L., Suganda, A. D., Febrianty, F., Labetubun, M. A. H., Ihwanudin, N., Trimulato, T., ... & Anwar, A. (2020). Pengantar Perbankan Syariah.
- Rofi'ah, K. & A'yun, A.'A (2020). Faktor-faktor Non-Performing Financing (NPF) di bank umum Syariah Indonesia. *Jurnal Ekonomi*, 24(3), 452-467. <https://doi.org/10.24912/je.v24i3.609>
- Siddique, A., Khan, M.A. and Khan, Z. (2022), The effect of credit risk management and bank-specific factors on the financial performance of the South Asian commercial banks, *Asian Journal of Accounting Research*, 7(2), 182-194, <https://doi.org/10.1108/AJAR-08-2020-0071>
- Sudarsono, H., Sholihin, M. & Susanto, A.A. (2024), Bank ownership and credit risk: an empirical study of Indonesian Islamic local banks, *Journal of Islamic Accounting and Business Research*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IABR-02-2023-0069>
- Sudarsono, H. (2017). Analisis pengaruh kinerja keuangan terhadap profitabilitas bank Syariah di Indonesia. *Economica: Jurnal Ekonomi Islam*, 8(2), 175–203. <https://doi.org/10.21580/economica.2017.8.2.1702>
- Sudarsono, H. (2018). Analisis pengaruh variabel mikro dan makro terhadap NPF perbankan Syariah di Indonesia. *Equilibrium: Jurnal Ekonomi Syariah*, 6(1), 1. <https://doi.org/10.21043/equilibrium.v6i1.3040>.
- Suganda, A. D., Anita, A., & Wulandari, S. (2023). How to Overcome the Risk of Islamic Banks: Evidence from Indonesia. *El Barka: Journal of Islamic Economics and Business*, 6(1), 48-78. <https://doi.org/10.21154/elbarka.v6i1.6795>.
- Syachreza, D., & Mais, R. (2020). Analisis pengaruh CAR, NPF, FDR, Bank Size, BOPO terhadap kinerja keuangan bank umum Syariah di Indonesia. *Jurnal Akuntansi dan Manajemen*, 17(1), 25 - 37. <https://doi.org/10.36406/jam.v17i01.326>
- Umami, D. R., & Rani, L. N. (2021). Faktor-faktor yang mempengaruhi non performing financing bank pembiayaan rakyat Syariah periode 2015-2019. *Jurnal Ekonomi Syariah Teori dan Terapan*, 8(4), 483. <https://doi.org/10.20473/vol8iss20214pp483-495>
- Vanni, K. M., & Rokhman, W. (2017). Analisis faktor-faktor yang mempengaruhi non performing financing pada perbankan Syariah di Indonesia tahun 2011-2016. *EQUILIBRIUM: Jurnal Ekonomi Syariah*, 5(2), 306–319.

<https://smartlib.umri.ac.id/assets/uploads/files/2329b-2776-9677-1-pb.pdf>

Widarjono, A. (2020). Stability of Islamic banks in Indonesia: Autoregressive Distributed Lag Approach. *Jurnal Keuangan dan Perbankan*, 24(1), 40–52.

<https://doi.org/10.26905/jkdp.v24i1.3932>

Wijoyo, S. (2016). Analisis faktor makroekonomi dan kondisi spesifik bank Syariah terhadap Non-Performing Finance (Studi pada bank umum Syariah dan unit usaha Syariah yang ada di Indonesia Periode 2010:1- 2015:12). *Jurnal Pendidikan dan Ekonomi*, 5(6), 513–525.

<http://journal.student.uny.ac.id/ojs/index.php/ekonomi/article/view/4830>

Wulandari, S., & Suganda, A. D. (2021). Determining factors of earnings management based on accrual model. *Jurnal Akuntansi dan Auditing Indonesia*, 45-53.

<https://doi.org/10.20885/jaai.vol25.iss1.art5>.

