

Non-Performing Financing in Indonesian Islamic Commercial Banks During the Pandemic: A Macro and Microeconomics Perspective

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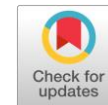
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ABSTRACT

Non-performing financing (NPF) as a measure of the soundness of Islamic banks might face adverse reactions during the Covid-19 pandemic. This study aimed to determine the effect of macroeconomic variables, including inflation, BI rate, exchange rate, and microeconomic variables such as CAR, FDR, and BOPO on the NPF of Islamic Commercial Banks registered by the Indonesian Financial Services Authority for the period 2013:5 to 2021:6. It also aimed to investigate the effect of the covid-19 pandemic on the NPF. This study utilized the autoregressive distributed lag (ARDL) analysis method. The ARDL was used to analyze the relationship between NPF and the macro and microeconomics variables in the short and long term. The analysis results showed that the covid-19 pandemic, inflation, and BI rate significantly affected the NPF of the Indonesian Islamic commercial banks in the short and long term. Additionally, it was evidenced that BOPO was only significant in affecting the NPF in the short time, and FDR was only significant in determining the NPF in the long term.



KEYWORDS

Autoregressive Distributed
Macroeconomic
Microeconomic
Covid-19



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Introduction

Financing distribution is one of the functions of Islamic banks as an intermediary institution, as stated in Law No. 21 of 2008 concerning Islamic Banking. One measurement of the risk profile of Islamic banking is financing risk using the Non-Performing Financing (NPF) ratio, which measures customer defaults at the bank (Najiatun *et al.*, 2020). The 2020 shariah financing growth reports issued by The Financial Services Authority (OJK) showed that the provision of Islamic bank financing in 2020 amounted to 8.08% (yoy), which decreased compared to 2019 of about 10.89% (yoy). Even with the decrease in growth due to Covid-19, sharia banks could still contribute positive financing growth, supported by more robust consumption growth than before, with 15.21% (yoy) from 12.46% (yoy). Besides that, there has also been a decrease in ratio showing Gross NPF and Net NPF from what was before 3.11% and 1.89% to 3.08% and 1.70% (OJK, 2020).

The Covid-19 pandemic was officially announced by the Indonesian government in March 2, 2020. This pandemic has impacted many different aspects of life, social and economy, which includes banking. The effects towards banking lay in the increase of non-performing financing due to people losing their source of income. Non-performing financing, as frequently mentioned as the NPL ratio in conventional, is an important fact within banking industry for the following reasons: Firstly, non-performing financing is one of the criteria used to measure a bank's financial performance. Therefore, a high NPL and NPF ratio within banks will negatively impact its income and sustainability. Secondly, a high NPL or NPF ratio will affect not only individual bank but also a nation's economic stability. (Priyadi *et al.*, 2021).

Research on the factors influencing NPF has been done widely. Sudarsono and Supriani (2018) unveiled that, using the ARDL method, variable CAR, FDR, and BOPO significantly affect NPF in the long run. In the short run, variables inflation, central bank rate, exchange rate, FDR, ROA, and BOPO have a significant effect. Saputri *et al.* (2020), using the ECM method, found that inflation, central bank rates, and CAR have a significant effect on NPF in the long run. Widarjo and Rudatin (2021), who

studied the effects of bank characteristics and macroeconomics variables on NPF BPRS with the NARDL model, showed several findings. Firstly, CAR affected NPF. Secondly, domestic output and inflation had an asymmetrical relationship on NPF. Thirdly, the economic downturn increased the NPF. Lastly, inflation affected the NPF.

Rahmah and Armina (2020) revealed that the NPF determinant in Indonesian sharia banking shows that bank profitability and financial ratio in savings and GDP positively affect NPF. Yusrizal *et al.* (2021), who analyzed how Non Performing Financing (NPF) performance in sharia banks during covid-19 using the qualitative and descriptive method, showed results during the pandemic NPF ratio sharia banking decreased and experienced improving conditions. Meanwhile, Tiwu (2020) stated that the covid-19 pandemic had had a positive and significant effect on NPL BPR in Indonesia.

Based on the background explained above, this research included macro variables of inflation, central bank rates, and exchange rate; micro variables which are CAR, FDR, and BPO as well as covid-19 pandemic. The pandemic was measured using dummy variable zero (0) for the period before the pandemic and one (1) throughout the pandemic.

Literature Review

Sharia Banking

Islamic banks or what is also called as sharia banks are banks that operates without applying interest or *riba* (usury). These interest-free banks are banking institutions whose operations and products are developed based on the basis of the Qur'an and the Hadith of the Prophet SAW. Law No. 21 of 2008 defines Islamic banks as banks that carry out business activities based on sharia principles or Islamic legal principles. Islamic financial institutions (non-insurance) have at least six risks in the risk management standards issued by the IFSB (Islamic Financial Service Board), namely credit risk, equity investment risk, market risk, liquidity risk, rate of return risk, and operational risk (Ramadiyah, 2014).

Non Performing Financing (NPF)

Non-Performing Financing (NPF) is the ratio between non-performing financing and the total financing disbursed by Islamic banks. The amount of the NPF ratio allowed by BI is a maximum of 5%, and if it is more than that number, it will affect the bank's soundness (Mutamimah & Chasanah, 2012).

Research Framework

There were seven variables used in this research, which were inflation, central bank rates, exchange rate, CAR, FDR, BOPO, and the covid-19 pandemic. The first three variables represented the macroeconomic variables, the following three variables represented the microeconomic variables, and the last variable represented a dummy variable. Seven research hypotheses were formulated based on the theoretical framework as shown in Figure 1.

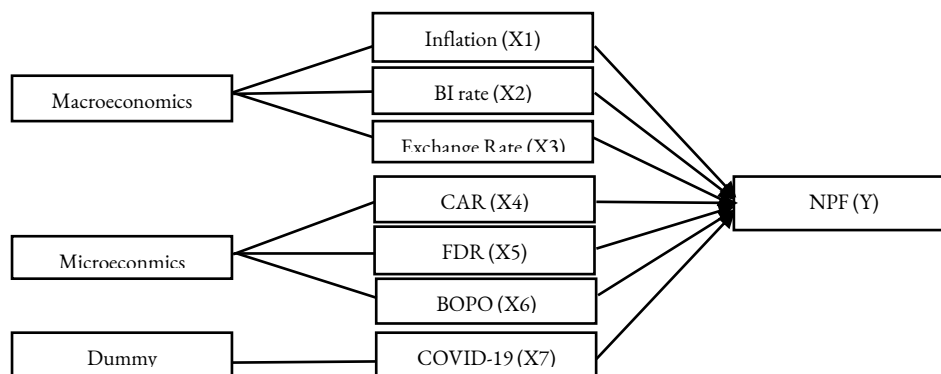


Fig. 1. Research Framework

Based on the framework illustrated in Figure 1, the hypothesis in this study were formulated as follows.

H1: There is a positive effect in the short term and long term of the Inflation variable on NPF of Islamic commercial banks.

- H2: There is a positive effect in the short term and long term of the BI rate variable on NPF of Islamic commercial banks.
- H3: There is a positive effect in the short term and long term of the exchange rate variable on NPF of Islamic commercial banks.
- H4: There is a positive effect in the short term and long term of the CAR variable on NPF of Islamic commercial banks.
- H5: There is a positive influence in the short term and long term of the FDR variable on NPF of Islamic commercial banks.
- H6: There is a positive effect in the short term and long term BOPO variable on NPF of Islamic commercial banks.
- H7: There is a positive effect in the short and long term of the Covid-19 pandemic variable on NPF of Islamic commercial banks.

Research Method

The population in this study were all Islamic banks in Indonesia, while the research sample was taken from all Islamic banks registered with the OJK. Monthly time series data related to research variables from May 2013 to June 2021 were taken as a sample of observation data. The data obtained from the Islamic Banking Statistics issued by the OJK using the documentation technique were analyzed using autoregressive distributed lag. The operational definitions and measurement of research variables are presented in the following discussion.

Non Performing Financing (NPF)

Non-Performing Financing (NPF) is an indicator that shows losses due to credit risk or non-performing financing. Non-performing financing is financing where the quality or during the course of financing, problems occur such as substandard, doubtful, and non-performing financing. The NPF variable in this study was measured using NPF monthly data reported by the OJK from May 2013 to June 2021 in percentage.

Inflation

Inflation is a problem that is always experienced by the economy of a country (Dahlan, 2014). Consumer Price Index (CPI) could be used as a benchmark for the inflation rate because it shows the prices level of commodities or services. In short, the index makes it easy to see the increase in commodities prices. The inflation variable in this study was measured using inflation data published by Bank Indonesia (BI) in monthly reports from 2013 to 2021 in percentage (%).

Central Bank (BI) Rate

An increase in the BI rate will make third-party funds of Islamic banks decrease because it affects the increase in the interest rates of conventional banks. The rising BI rate will impact increasing financing for Islamic banks due to increasing the risk of NPF (Sudarsono & Supriani, 2018). This study used BI rate data taken from the Central Statistics Agency (BPS) report in monthly data from 2013 to 2021 with the symbol percent (%).

Exchange rate

Changes in the exchange rate will affect the fluidity of consumer businesses, mainly business actors who run their business on imported raw materials. It will affect customers in paying back their obligations and thus will result in an increase in the ratio of non-performing loans. Meanwhile, a strong exchange rate will indicate that economic conditions are improving (Soekapdjo et al., 2019). This study uses the USD-IDR JISDOR Exchange rate data or the Jakarta Interbank Spot Dollar Rate taken from Bank Indonesia (BI) reports in the form of monthly data from 2013 to 2021.

Capital Adequacy Ratio (CAR)

CAR is an indicator of how banks deal with the decline in their assets due to bank losses that occur due to risky assets (Widyaningrum & Septiarini, 2015). The CAR variable in this study was measured using monthly CAR data reported in the Islamic Banking Statistics by OJK from 2013 to 2021 in percentage (%).

Financing to Deposit Ratio (FDR)

Financing to Deposit Ratio (FDR) is a ratio that provides a comparison of banks and third-party funds (DPK) on their success in channeling their funds. FDR explains how the ability of a bank to repay the withdrawal of funds made by depositors by relying on the credit provided as a source of liquidity. The FDR variable in this study was measured using monthly FDR data reported in the Islamic Banking Statistics by OJK from 2013 to 2021 in percentage (%).

The Ratio of Operating Costs to Operating Income (BOPO)

Bank Indonesia in SE BI NO.6/73/Intern/2204 states that operating efficiency is measured by comparing total operating costs with total operating income, commonly known as BOPO. This ratio is used to measure the ability to operate income to cover operational costs. Based on Bank Indonesia regulations, a bank is considered to be efficient if its BOPO ratio is below 90% (Susanto & Kholis, 2016). The BOPO variable in this study was measured using monthly BOPO data reported in the Islamic Banking Statistics by OJK from 2013 to 2021 in percentage (%).

Covid-19 Pandemic

The Covid-19 pandemic variable was measured using a dummy variable of 1 for data obtained before the pandemic and 0 for data acquired since the Covid-19 pandemic broke out. The COVID-19 pandemic was first announced in Indonesia on March 2, 2020. Therefore, observation data obtained before March 2020 was assigned a value of zero (0) and data from March 2020 was assigned a value of one (1).

Results and Discussion

Stationary Test (Unit Root Test)

The stationarity test is intended to test whether the research conducted is proven to be static. This study uses ADF for stationarity testing. Time series data can be stationary if the probability value is less than 0.05. The following table 1 shows the results of the ADF test.

Table 1 shows that non-stationary data were found in the variables of NPF, Inflation, BI rate, CAR, FDR, and Covid 19. Stationary data were only found in the exchange rate and BOPO variable. As there were non-stationary variables in this study, it was necessary to step on the first difference level test. The test aimed to see the stationarity of the data of the variables studied.

Table 1. Unit Root Test (Level)

Variabel	ADF value	t-statistic value	Description
NPF	0.2857	-2.001865	non-stationary
Inflation	0.3860	-1.784708	non-stationary
BI rate	0.8801	-0.527202	non-stationary
Exchange rate	0.0170	-3.313108	stationary
CAR	0.9164	-0.323057	non-stationary
FDR	0.5072	-1.544081	non-stationary
BOPO	0.0464	-2.923416	stationary
Covid19	0.8994	-0.425872	non-stationary

Source: Data results processed by Eviews 10, 2022.

Table 2 shows that all variable data are stationary at the first difference level and will then be continued with the cointegration test.

Table 2. Unit Root Test (First Difference)

Variabel	ADF value	t-statistic value	Description
NPF	0.009	-4.247507	stationary
Inflation	0.0000	-8.917669	stationary
BI rate	0.0000	-6.462456	stationary
Exchange rate	0.0000	-9.049229	stationary
CAR	0.0000	-9.610193	stationary
FDR	0.0001	-11.42006	stationary
BOPO	0.0001	-15.40373	stationary
Covid19	0.0000	-9.797959	stationary

Source: Data results processed by Eviews 10, 2022.

Cointegration Test

The cointegration test shows a long-term relationship (equilibrium). This study uses the Bound Test Cointegration test. The F-Statistic value obtained was compared with the Bound Test I(0) and I(1) (Ekananda, 2016). Cointegration test results can be seen in Table 3 below.

Table 3. Bound Test Cointegration

F- statistic NPF	5,175804	
Sig.	Lower Bound (I(0))	Upper Bound (I(1))
1%	2.96	4.26
5%	2.32	3.5
10%	2.03	3.13

Source: Data results processed by Eviews 10, 2022.

The autocorrelation test was conducted to detect correlation between residuals in one period with the previous period. Table 3 shows that the F-statistical NPF value is 5.175804. Because this value is greater than the Lower Bound (I(0)) value of 2.03 and Upper Bound (I(1)), which is 3.13, it can be said that there is a cointegration relationship or long-term relationship between variables.

Short Term ARDL Results

This short-term equation model is also known as the ARDL ECM model which was introduced by Engle-Granger (EG). The test results with the short-term ARDL model are in Table 4 below.

Table 4. Heteroscedasticity Test

Variabel	Coef.	Std. Error	t-statistic	Probability	Description
D(NPF(-1))	-0.280153	0.090481	-3,096,284	0.0033	Significant
D(NPF(-2))	-0.085015	0.096141	-0.884276	0.381	Insignificant
D(NPF(-3))	0.105555	0.088441	1,193,512	0.2385	Insignificant
D(NPF(-4))	-0.224026	0.089474	-2,503,820	0.0157	Significant
D(NPF(-5))	-0.482152	0.094718	-5,090,405	0.0000	Significant
D(INFLASI)	0.030126	0.044374	0.678902	0.5005	Insignificant
D(INFLASI(-1))	-0.109002	0.050468	-2,159,851	0.0358	Significant
D(INFLASI(-2))	-0.055425	0.054881	-1,009,913	0.3176	Insignificant
D(INFLASI(-4))	-0.002007	0.040366	-0.049726	0.9605	Insignificant
D(INFLASI(-5))	-0.138915	0.036308	-3,825,993	0.0004	Significant
D(BI_RATE)	-0.049539	0.104601	-0.473604	0.6379	Insignificant
D(BI_RATE(-1))	0.028902	0.100578	0.287355	0.7751	Insignificant
D(BI_RATE(-2))	-0.118287	0.102142	-1,158,064	0.2526	Insignificant
D(BI_RATE(-3))	0.242259	0.099189	2,442,389	0.0183	Significant
D(BI_RATE(-4))	-0.066341	0.102906	-0.644676	0.5222	Insignificant
D(BI_RATE(-5))	-0.191238	0.100732	-1,898,485	0.0637	Significant
D(exchange rate)	-9,060,005	8,150,005	-1,112,235	0.2716	Insignificant
D(exchange rate(-1))	0.000218	8,420,005	2,588,155	0.0127	Significant
D(exchange rate(-2))	-6,680,005	8,040,005	-0.83093	0.4101	Insignificant

Variabel	Coef.	Std. Error	t-statistic	Probability	Description
D(exchange rate(-3))	-9,970,005	8,580,005	-1,161,766	0.2511	Insignificant
D(exchange rate(-4))	-0.000139	7,250,005	-1,914,633	0.0615	Significant
D(exchange rate(-5))	0.000106	6,880,005	1,534,773	0.1314	Insignificant
D(FDR)	-0.009411	0.012673	-0.742629	0.4613	Insignificant
D(BOPO)	0.009127	0.006739	1,354,277	0.182	Insignificant
D(BOPO(-1))	-0.020722	0.009281	-2,232,677	0.0303	Significant
D(BOPO(-2))	-0.029211	0.008746	-3,339,890	0.0016	Significant
D(BOPO(-3))	-0.021737	0.00883	-2,461,730	0.0175	Significant
D(BOPO(-4))	-0.021926	0.008177	-2,681,579	0.01	Significant
D(BOPO(-5))	-0.018216	0.006672	-2,730,173	0.0088	Significant
D(COVID19)	0.100088	0.19899	0.502979	0.6173	Insignificant
D(COVID19(-1))	-0.063623	0.198863	-0.319932	0.7504	Insignificant
D(COVID19(-2))	0.2323	0.222616	1,043,502	0.3019	Insignificant
D(COVID19(-3))	0.853738	0.23001	3,711,745	0.0005	Significant
D(COVID19(-4))	0.623331	0.216716	2,876,257	0.006	Significant
CointEq(-1)*	-0.206936	0.030043	-6,888,024	0.0000	Significant

Source: Data results processed by Eviews 10, 2022.

Table 4 shows that the ARDL estimation results in the short term are significant research variables at different lags.

Long-term ARDL Results

Furthermore, estimates are made on the long-term model with the ARDL approach. The estimation results can be seen in Table 5 below.

Table 5. Long-term ARDL Results

Variabel	Coef.	Std. Error	t-statistic	Probability	Description
INFLASI	0.322001	0.191843	1.678461	0.0998	Significant
BI_RATE	0.601100	0.249341	2.410755	0.0198	Significant
Exchange rate	-0.000523	0.000217	-2.413864	0.0196	Significant
CAR	0.013072	0.068430	0.191030	0.8493	Insignificant
FDR	-0.190859	0.088447	-2.157895	0.0360	Significant
BOPO	0.062291	0.067211	0.926790	0.3587	Insignificant
COVID19	0.406897	0.249406	1.631464	0.1093	Significant

Source: Data results processed by Eviews 10, 2022.

Table 5 shows that all the coefficients and probability values for each variable are different. In the long term, the variables that do not significantly affect NPF are only the CAR and BOPO variables, whereas other variables have a significant effect.

Autocorrelation Test

This test was carried out to determine whether or not autocorrelation appears in this research model, so the Lagrange Multiplier (LM) test is appropriate to use. The autocorrelation test can be seen in Table 6 below.

Table 6. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.510546	Prob. F(2,46)	0.2315
Obs*R-squared	5.669814	Prob. Chi-Square(2)	0.0587

Source: Data results processed by Eviews 10, 2022.

The Table 6 shows that the probability value of Chi-Square (2) is 0.0587. Because this value is greater than the value of 0.05 ($\alpha = 5\%$), it can be said that the research conducted does not have an autocorrelation problem.

Heteroscedasticity Test

Penelitian ini menggunakan metode dengan uji Breusch-Pagan untuk mendeteksi ada tidaknya heteroskedastisitas dalam model regresi.

Table 7. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan Godfrey			
F-statistic	1.059829	Prob. F(43,48)	0.4207
Obs*R-squared	44.80671	Prob. Chi-Square(43)	0.3959
Scaled explained SS	13.95587	Prob. Chi-Square(43)	1.0000

Source: Data results processed by Eviews 10, 2022.

Table 7 shows the probability value of Chi-Square NPF 0.3959 which is greater than the α 5% level, which means that there is no heteroscedasticity problem in the tests carried out.

Discussion

Effects of Inflation on NPF

Inflation rate is used to show the economic problems of a country. ARDL test results in the short run show that inflation has a significant and negative effect on NPF, this means that an increase in inflation will decrease NPF. So it can be concluded that H1 was not supported. High inflation rates will have a bad impact on conventional bank financing. Thus, conventional banks have no other path than increasing the Bank Loan Basic Interest (SBDK) rate. When SBDK experiences an increase while the murabahah margin in sharia banks is normal, costumers will migrate to sharia financing. It will then increase sharia bank finances. Furthermore, the increase of financing will affect the risk sharing aspect. When the risk-sharing increase, the NPF value will likely be smaller. This result supports the reserach by Sudarsono and Supriani (2018) and Priyadi et al. (2021). Meanwhile, inflation holds a positive and significant effect towards NPF in the long run. It means that an increase in inflation rates will affect NPF. With this, it can be concluded that H1 is supported. A high inflation rate affects business venture cost that also increases, resulting in smaller costumer income and their ability to return obligation will be problematic. This result is in line with Widarjono and Rudatin (2021) study.

Effects of BI Rate Towards NPF

BI rates are monetary policy interest that is set by the central bank (BI). ARDL testing results in the short run show that the BI rate has a negative and significant impact on NPF. It means that high interest will affect non-performing finances in sharia banks that are decreasing, so it can be concluded that H2 is not supported. Rising BI rates will push profit-sharing within sharia banks to compete with interest rates on loans by conventional banks. The income margin obtained by Islamic bank customers depends on the type of business they do so that when interest rates rise, Islamic bank financing also increases. Smooth and suitable financing can provide high profits to the bank, and the proceeds from these profits are used as reserve funds to overcome non-performing finances. These findings are in accordance with research by Hakim (2020).

Meanwhile, BI rate in the long term has a positive and significant effect on the NPF. The increase in BI rate also increases NPF, so it can be concluded that H2 is supported. The occurrence of fluctuations in conventional bank interest rates can influence customers whether to undertake financing or not. A high BI rate incentivize conventional banks to increase loan interest rates. When the interest rates are high, customers will switch to Islamic bank financing due to the lower profit sharing ratio. As a result of increasing and unreasonable customer demand for financing services, Islamic banks face an increasing NPF ratio (Sudarsono & Supriani, 2018).

Effects of Exchange Rate on NPF

The exchange rate is one of the variables that shows the level of stability of a country's economy. The ARDL test results in the short term show that the exchange rate has a positive and insignificant effect on the NPF, so it can be concluded that H3 is not supported. It means that changes in the exchange rate had no impact on customers. Customers who run their business by relying on ingredients from exports do not experience interference with their business, so these customers are still able to manage their financing properly. The findings are in accordance with Auliani and Syaichu (2016) and Ardana (2019) research. Meanwhile, the exchange rate has a negative and significant effect on NPF in the long term. The increasing value of the rupiah against the dollar indicates that there is an appreciation or strengthening of the value of the local currency, this makes the prices of foreign goods lower and makes the prices of local goods higher or more expensive. It put pressure on the increased use of imported goods and resulted in lower sales of domestic goods. Due to low sales, the producer company receives low profits, which ultimately makes it difficult for them to repay the funds that have been

borrowed from the bank. Therefore, the low value of the rupiah exchange rate affects banks that experience a high level of NPF. So it can be concluded that H3 was not supported.

Effects of CAR on NPF

CAR is an indicator to see how banks deal with risky assets. ARDL test results in the short term and long term show that CAR has an insignificant effect on NPF. It explains that the CAR value is relatively stable from 2013 to 2021, thus offering the management of Islamic banks in using capital as a tool to anticipate risks in bank capital. CAR does not affect NPF because OJK has set the CAR ratio. In regulating the CAR ratio, Islamic banks are more stable every year because they are directly related to the bank's internal policies and have nothing to do with financing. In this condition, the CAR ratio did not affect the NPF ratio. So, it can be concluded that H4 was not supported. The finding was in accordance with Haifa and Wibowo (2015) and Sudarsono and Supriani (2018).

Effects of FDR On NPF

FDR is a ratio that compares banks and third-party funds (DPK) in channeling their funds. ARDL test results in the short term show that FDR has a negative and insignificant effect on NPF. Financing that banks have disbursed to customers has good capacity and increased returns because Islamic banks are said to provide financing efficiently. As a result, banks can get maximum profit because their operations continue to apply clear principles and be vigilant in selecting prospective customers. Meanwhile, FDR has a negative and significant impact on NPF in the long term. It means that if the FDR ratio increases, it affects the NPF which decreases. A healthy bank is a bank with a high level of liquidity and a bank that carries out its operations well. When the bank does not channel its funds through financing to the customer, it makes the bank lose the income taken from the customer, making it difficult for the bank to make mandatory returns. So, it can be concluded that H5 is not supported in both the short and long term.

Effects of BOPO Towards NPF

BOPO is the ratio of the effectiveness and efficiency of bank operations. The ARDL test results in the short term show that BOPO has a negative and significant effect on NPF. That is, the higher the BOPO, the higher the NPF. The decrease in NPF was due to an increase in banks' profits through financing given to customers who had good capacity, which resulted in the profit being generated and continuing to grow. Meanwhile, BOPO has a positive and significant impact on NPF in the long term. It means that the increase in BOPO does not affect changes in the NPF ratio. Insignificant BOPO means that the profits obtained by the bank are not channeled into financing because the source of funds channeled for financing comes from third-party funds (DPK). So, it can be concluded that H6 was not supported in both the short and long term.

Effect of Covid-19 on NPF

The ARDL test results in the short and long term show that Covid-19 has a positive and significant effect on NPF. It means that the Covid-19 pandemic caused the NPF of Islamic banks to increase. So, it can be concluded that H7 was supported. Bad loans can occur due to external factors related to the condition of the debtor's business, which is constrained due to a disaster, whether from a natural disaster or an unexpected major disaster that affects the debtor's business failure. In this case, the existence of COVID-19 is a very troubling incident. Micro, Small and Medium Enterprises (MSMEs) had been greatly affected by the pandemic. They experienced low-profit levels due to insufficient community income and making the community difficult to fulfill their consumption needs. Furthermore, it affects the company with a very low level of sales of production goods. As a result, debtors who Islamic banks have given financing have difficulty in returning their obligations. It resulted in an increase in NPF of Islamic banks. A high NPF ratio affects the effectiveness of Islamic banks and causes a loss effect because Islamic bank debtors find it difficult to repay their obligations.

Conclusion

This study reported that inflation, BI-Rate, and exchange rate affected NPF in Islamic commercial banks. It indicates that Islamic banks must always be vigilant in paying attention to macroeconomic conditions. Inflation that affects the NPF ratio shows that Islamic banks must be careful in determining the amount of financing, profit sharing ratio, and income achievement. In addition to paying attention to macroeconomic conditions, Islamic banks are also required always to prioritize risk in financing located in internal financial performance such as CAR, FDR, and BOPO. Unexpected conditions also

need to be considered in looking at the financing risks of Islamic Commercial Banks, such as the pandemic, which shows a relatively more prominent influence. It is because the impact is felt by almost all aspects of society, especially customers who must pay for the financing provided by the bank. The limitations of this study are that the research data period was still limited. There were also still many variables that can affect the NPF but were not included in this study. Further studies are recommended to conduct research on other Islamic banking such as in BPRS to make comparisons between the research results discussion from one research object to another to enrich insight.

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