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The Influence of Bank Specific Factors and Macro Economics on Non-Performing Financing in Islamic Rural Banks

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Research article

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Abstract: During 2017-2021, the BPRS NPF ratio has exceeded the threshold set by the Financial Services Authority, which is 7%. The average NPF ratio of BPRS for the 2017-2021 period is 8.25%. The population in this study are Islamic Rural Banks in Indonesia, namely 167 Islamic Rural Banks. The samples in this study were 157 Islamic Rural Banks. The sampling technique in this study used purposive sampling. Based on the discussion and results, ROA, CAR, FDR, Inflation, GDP, and unemployment on the dependent variable, namely NPF at Islamic Rural Banks during 2017-2021, the results show that ROA has a negative effect on NPF while FDR and inflation have a positive effect on NPF. Meanwhile CAR, GDP, and unemployment have no effect on NPF at Islamic Rural Banks in Indonesia.

Keywords: NPF; Islamc rural banks; internal factors; external factors.

1. Introduction

Financing is the main business activity carried out by Islamic banking (Effendi et al., 2017). By providing financing to customers, banks can earn profits. However, financing provided by banks does not always provide the expected benefits or profits (Damanhur et al., 2018). This is because there are a number of problematic financing caused by customers not being able to pay installments according to the agreed time (Hosen & Muhari, 2019). Problematic financing conditions which can be represented through the NPF ratio in the 2020-2021 period have increased due to the corona virus disease. MSME actors and employees who dominate as debtor customers experience difficulties in paying installments because of the PPKM regulation, which reduces the income earned by debtors(Otoritas Jasa Keuangan, 2022). Through the picture below, the problematic financing conditions are presented through the NPF ratio in the 2017-2021 period.

Referring to figure 1, the condition of problem financing as reflected by the NPF ratio for a period of five years, namely 2017-2021 fluctuates every year with a mean ratio of 8.25%. The high NPF condition reflects that BPRS debtor customers have difficulty paying installments according to the agreement in the contract (Nihayah & Walyoto, 2018). This needs to get attention, because a bad NPF value at a BPRS can disrupt the continuity of business activities carried out so that the BPRS has difficulty getting the profit as expected (Effendi et al., 2017).

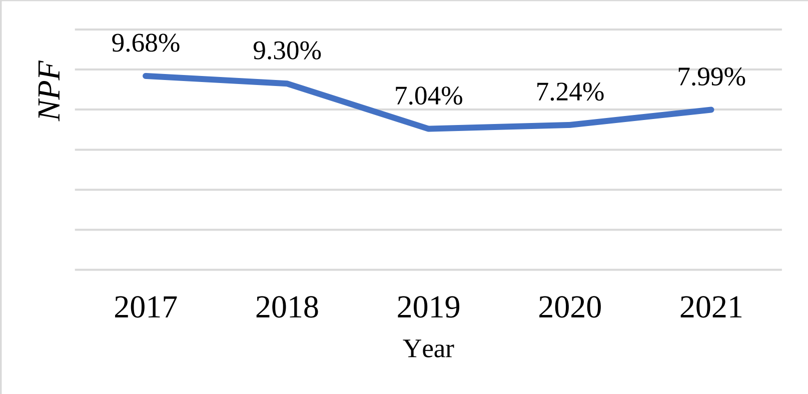

Figure 1. NPF Condition on BPRS

Return on Assets (ROA) is a crucial factor to be studied because the amount of profit generated by a bank indicates the good management of financing risk at the related bank (Priyadi et al., 2021). Within a five-year period, namely 2021-2021, the condition of the BPRS' ROA is in a good position above the minimum ROA requirement, which is 1.5%(Otoritas Jasa Keuangan, 2022). Even though the ROA condition is in a "very adequate" position, the decline in the ROA ratio over the past three years is quite worrying. If the Return On Assets (ROA) ratio is in poor or even bad condition, the bank is considered unable to manage its capital so that the financing distributed to debtors cannot provide the expected profit due to an increase in the NPF ratio (Nugrohowati & Bimo, 2019). According to research conducted by Ozili (2019)on banks in Nigeria, it shows that ROA has a negative correlation with NPF. whereas research conducted by Nihayah & Walyoto (2018) and Sudarsono (2018) Islamic Commercial Banks shows that ROA has no correlation with NPF.

The level of capital owned by a bank can be reflected in the CAR ratio (Widarjono et al., 2020). The CAR of BPRS during the 2017-2021 period had a mean of 22.37%, which means that it has exceeded the minimum CAR ratio set by Bank Indonesia, which is 8% (Otoritas Jasa Keuangan, 2022). CAR is crucial to study because a large capital ratio can minimize the occurrence of NPF because banks have sufficient loss reserves (Retnowati & Jayanto, 2020). On the other hand, a low CAR ratio can make it difficult for banks to manage financing risks that may occur.

The Financing Deposit to Ratio is a ratio that reflects the state of liquidity in Islamic banking (Retnowati & Jayanto, 2020). Within five years, namely 2017-2021, the condition of the BPRS' FDR was 107.93%. The high FDR value reflects a larger distribution of funds than collection and, where this can have implications for reduced bank liquidity and lead to increased NPF conditions (Chalid & Bella, 2021). Excess liquidity conditions are a demand for banks to channel funds to customers with little regard to business risks and the risk of problematic financing that can occur (Munifatussa, 2020). Based on research conducted at Development Banks in Aceh Damanhur et al., (2018) and on Islamic Commercial Banks by Visca Wulandari et al., (2019) resulted in a statement that FDR has a positive relationship with NPF while research produced by Wood & Skinner (2018) on Commercial Banks in Barbados shows that FDR has a negative relationship with NPF.

Inflation is a condition where product prices continue to increase, which triggers a decline in people's purchasing power. During 2017-2021, the average inflation rate in Indonesia is 2.06% (Badan Pusat Statistik, 2021). When inflation conditions are high, debtors will experience difficulties in fulfilling their installment obligations to the bank. Referring to the results of research conducted at the Regional Development Bank in Aceh by Damanhur et al., (2018)states that inflation has a negative relationship with NPF. Meanwhile, research conducted on Islamic Commercial Banks by Effendi et al., (2017) and Hasanah& Septiarini (2020)shows that inflation has a positive relationship to NPF.

Gross Domestic Product (GDP) is a measure of progress or not in a country's economic conditions. If the GDP in a country decrease, it can have an impact on the return on financing due to a decrease in the ability of producers. (Muqorrobin et al., 2021). The decline in the condition of GDP in 2020, amounting to 2.07% was due to the corona virus disease that hit Indonesia. According to research conducted at the Development Bank in Aceh by Damanhur et al., (2018), GDP has a negative relationship with NPF. Meanwhile, research conducted on Islamic Commercial Banks by Retnowati & Jayanto, (2020) states that GDP has no relationship with NPF.

Unemployment has a great urgency to be researched related to Non-Performing Financing. Debtors who have installment obligations will experience obstacles to fulfilling their obligations when they become unemployed so that this can have implications for worsening problematic financing conditions. In 2020, the number of unemployed people in Indonesia increased by 60,000 people from the previous year, which was due to the corona virus disease in Indonesia (Badan Pusat Statistik, 2021) Based on research on Commercial Banks in Barbados by Wood & Skinner, (2018) and a number of banks in developing countries by Mazreku et al., (2018) explained that unemployment has a positive relationship to NPF while the results of research on Banks in Nigeria by (Marouf & Guellil, 2017) stated that unemployment has a negative relationship with NPF.

The results of research conducted at Regional Finance Banks in Aceh by (Damanhur et al., 2018) used the variables FDR, Total Assets, Inflation, and GDP as independent variables. In this study, ROA and unemployment are added as research novelties. Return On Assets is an important factor in this study because in unfavorable and even bad conditions, banks are considered unable to manage their capital so that financing distributed to debtors cannot provide the expected profit due to an increase in the NPF ratio (Nugrohowati & Bimo, 2019). Meanwhile, unemployment is one of the important macro factors in this study because unemployment conditions can have an impact on the social and economic conditions of the country. to worsening problematic financing conditions. Based on the problems that have been described and there are a number of research gaps in previous research, this research has an urgency to be carried out.

2. Literature Review

2.1. Non Performing Financing

Banks as intermediary institutions, have the duty to collect funds and give them back to the community through financing products offered to prospective debtors (Retnowati & Jayanto, 2020). However, when the bank concerned distributes financing, there are a number of risks, one of which is the emergence of financing (Visca Wulandari et al., 2019).

Financing risk has provided the greatest involvement which has an impact on deteriorating the condition of a bank. The size of the risk condition of bank financing can be presented based on the NPF ratio. A high NPF ratio indicates that a bank has a large volume of problematic financing (Hosen & Muhari, 2019). In addition, the poor NPF condition reflects the bank's inability to utilize capital properly (Nugrohowati & Bimo, 2019).

2.2. Return On Asset

High or low profits generated by banks through asset utilization can be represented through the Return on Assets ratio (Effendi et al., 2017). ROA is a benchmark for whether the bank's performance is considered good or bad (Wood & Skinner, 2018). If a bank succeeds in obtaining a high ROA ratio, it indicates that the bank is considered capable of utilizing its capital.The high value of ROA reflects that the bank has intelligence in managing capital so that the bank can suppress the possibility of bad financing conditions (Hasanah & Septiarini, 2020). Bank Indonesia has determined the rules for the minimum value of ROA, which is 1.5%.

2.3. Capital Adequacy Ratio

The level of capital owned by a bank can be represented by the CAR ratio. Bank Indonesia enforces provisions for sharia banking related to the minimum CAR ratio requirement of 8%. A large CAR ratio for banks shows that banks have large capital to channel financing to the public (Rahmah & Armina, 2020). CAR has an urgency to be studied in this research because banks need to mitigate financing risks to develop their business (Rahmah & Armina, 2020). Adequate CAR conditions imply that banks can mitigate risks compared to CAR conditions that are assessed as poor (Widarjono et al., 2020). Bank Indonesia enforces provisions for banks with a minimum CAR ratio of 8% (Otoritas Jasa Keuangan, 2019).

2.4. Financing to Deposit Ratio

Liquidity in Islamic financial institutions are defined as the bank's ability to make short-term debt payments to customers if customers collect them suddenly. Liquid bank conditions can carry out obligations such as paying all debts (Effendi et al., 2017). Liquidity conditions can be represented through the Financing to Deposit Ratio (Marella et al., 2017). FDR reflects the bank's ability to provide funds collected by the bank. These conditions can lead to reduced liquidity and provide opportunities to increase NPF (Chalid & Bella, 2021).

2.5. Inflation

Inflation is known as a word that describes a situation where the prices of goods and services are increasing. When inflation conditions are high, debtors will experience difficulties in fulfilling their installment obligations to the bank(Cili & Alkhaliq, 2022). High inflation resulted in a currency value that continued to decline and a decrease in production activity(Cili & Alkhaliq, 2022). In addition, the occurrence of inflation will have an impact on people's purchasing power which will decrease so that it will pose a risk to producer financing (Hasanah & Septiarini, 2020).

2.6. Gross Domestic Product

GDP or often known as Gross Domestic Product, is a measure of progress or not the economic conditions of a country. If the GDP in a country decrease, it can have an impact on the return on financing due to a decrease in the ability of producers (Muqorrobin et al., 2021). If GDP decreases, it can cause the ability of producers to repay financing to decrease (Damanhur et al., 2018). However, on the contrary if the economic conditions in the country improve, Islamic banks can provide financing to economic actors.

2.7. Unemployment

Unemployment is someone in a productive age working, but not having a job (Axelrad et al., 2018). Unemployment is a crucial problem for a country because it can make a negative contribution to the country's economy (Oktafianto et al., 2019). One of the economic problems that arise due to increased unemployment is bad credit or problem financing. This is because debtors will have difficulty paying debt burdens so that there is the potential for problematic financing (Mazreku et al., 2018).

2.8. Hypothesis

2.8.1. ROA and NPF

High profits at a bank indicate a low NPF ratio, and vice versa, low profits at a bank indicate a high NPF ratio(Priyadi et al., 2021). According to research produced by Ozili,(2019), ROA has a negative correlation with NPF. This is directly proportional to research that has been tested Nugrohowati & Bimo, (2019), and Rahmah & Armina (2020). However, research produced by Nihayah & Walyoto (2018) and Sudarsono (2018) stated contradictory results that ROA has no correlation with NPF.

H_1: ROA has negative corellation to NPF.

2.8.2. FDR and NPF

Excess liquidity is a demand for banks to provide financing to customers. However, this has had a negative impact such as banks being not selective in providing financing so that problematic financing conditions have worsened (Munifatussa, 2020). Therefore, the FDR condition has a positive correlation with problem financing (Chalid & Bella, 2021). This is directly proportional to research produced by (Setiawan & Sherwin, 2017) and (Wood & Skinner, 2018), but inversely proportional to research produced by Damanhur et al., (2018) where FDR has a negative correlation with problem financing.

H2: FDR has positive corellation to NPF.

2.8.3. CAR and NPF

The large CAR ratio for banks shows that banks have large capital to channel financing to the public (Rahmah & Armina, 2020).According to research conducted by Retnowati & Jayanto, (2020), CAR has a negative correlation with NPF. This, in direct proportion to research produced by Effendi et al., (2017), and Visca Wulandari et al., (2019), explained that CAR has a negative correlation with NPF. However, research produced by Wood & Skinner, (2018), states that CAR has a positive correlation with NPF.

H3: CAR has negative corellation to NPF.

2.8.4. Inflation and NPF

Conditions of high inflation, debtors will experience difficulties in fulfilling their installment obligations to the bank (Mazreku et al., 2018). Rising prices of goods and services without being synchronized with the increase in income earned by the community, the community will prefer to use their income to meet primary needs rather than spending income on financing installments. This is directly proportional to the research produced by Effendi et al., (2017) and Hasanah & Septiarini, (2020) that inflation is positively correlated with NPF, but inversely proportional to the results of research produced by Marella et al., (2017) and Damanhur et al., (2018) which stated that inflation has a negative correlation with NPF.

H4: Inflation has positive corellation to NPF.

2.8.5. GDP and NPF

When the GDP in a country decrease, it can have an impact on the return on financing due to a decrease in the ability of producers. In general, an increase in GDP indicates that the economy of the people in that country is increasing. This is directly proportional to research produced by Damanhur et al., (2018) and Hosen & Muhari (2019) that GDP has a negative correlation with NPF.

H5: GDP has negative ccorellation to NPF.

2.8.6. Unemployment and NPF

High unemployment conditions cause the purchasing power of goods or services to decrease, including banking service products, namely financing products (Nugrohowati & Bimo, 2019). Research that has been carried out by (Wood & Skinner, 2018) and (Mazreku et al., 2018) results that unemployment is positively correlated with NPF while research produced by Marouf & Guellil (2017) proves that unemployment is negatively correlated with NPF.

H6: Unemployment has negative ccorellation to NPF.

3. Research Methods

The research design used in this study is an explanatory research design because it explains the cause-and-effect relationships that occur between existing variables by conducting hypothesis testing. The explanatory research design used in this study aims to determine the factors that influence Non-Performing Financing at Islamic Rural Banks. The population in this study are Islamic Rural Bank in Indonesia, namely 167 Islamic Rural Banks. The samples in this study were 157 Islamic Rural Banks.

The sampling technique in this study used purposive sampling. In this study, samples were taken based on the following criteria:

a) Islamic Rural Banks that are still running business activities during 2017-2021.
b) Islamic Rural Bank which publishes complete annual financial reports for 2017-2021.
c) Islamic Rural Bank which publishes data on the variables used in research from 2017-2021.

The data analysis technique that will be used in this study is panel data regression analysis. Panel data is a combination of time series and cross section data into one observation. The panel data regression test in this study uses the E-Views 9 tool. Multiple linear regression is a regression model that is used to analyze the influence of more than one independent variable (X) on the dependent variable (Y). This research model can be formulated as follows.

$$NPF = \beta_0 + \beta_1 ROA + \beta_2 CAR + \beta_3 FDR + \beta_4 Inf + \beta_5 GDP + \beta_6 Un + \varepsilon$$

β_0= contanta

β_1= ROA regression coefficient

β_2= CAR regression coefficient

β_3= FDR regression coefficient

β_4= Inflation regression coefficient

β_5= GDP regression coefficient

β_6= Unemployment regression coefficient

ε= Random error

4. Results and Discussion

4.1. Results

Based on the results of panel data regression with the Random Effect Model as the most appropriate model in this study, the following results of the simultan test (f) and partial test (t) were obtained:

Table 1. Simultan Test Result (f test)

F-statistic	14.35810
Prob(F-statistic)	0.000000

Based on the table above, it shows that the F-Statistics or calculated F value is 14.3580 so that the calculated F value is greater than the f table value, which is equal to 1.0000. Therefore, it can be concluded that the independent variables, namely ROA, CAR, FDR, inflation, GDP, and unemployment simultaneously affect the dependent variable.

Table 2. Partial Test Result (t test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.93525	234.6736	0.080688	0.9357
ROA	-0.291582	0.041615	-7.006685	0.0000
CAR	-0.019794	0.012615	-1.569096	0.1170
FDR	0.038736	0.010417	3.718557	0.0002
Inflation	2.082996	0.672922	3.095447	0.0020
GDP	-1.479321	14.37161	-0.102934	0.9180
Unemployment	1.438613	0.964898	1.490948	0.1364

Based on the results of the regression test that has been carried out on several independent variables on the dependent variable, as follows:

a) Return On Asset have negative effect on Non-Performing Financing
b) Financing to Deposit Ratio has positive effect on Non-Performing Financing
c) Capital Adequacy Ratio has no effect on Non-Performing Financing
d) Inflation has positive effect on Non-Performing Financing
e) Gross Domestic Product has no effect on Non-Performing Financing
f) Unemployment has no effect on Non-Performing Financing

4.2. Discussion

4.2.1. Return on Asset to Non-Performing Financing

Referring to the regression results in this research, it proves that the ROA ratio in the 2017-2021 period has a negative effect on the NPF of Islamic People's Funding Banks. The results of this research are directly proportional to research that has been tested by Effendi et al., (2017), Nugrohowati & Bimo (2019), and Rahmah & Armina (2020) that ROA has a negative relationship with NPF. The largest share of profits is obtained based on the distribution of financing. If the financing provided to customers is not problematic or in smooth condition, then this will increase the income and profitability of the bank (Nugrohowati & Bimo, 2019).

4.2.2. Financing to Deposit Ratio to Non-Performing Financing

Based on the results of multiple linear regression, proving that FDR has a positive correlation with NPF in 2017-2021, where the results of this research are the same as research that was carried out by Nihayah & Walyoto (2018). Furthermore, based on actual conditions, the magnitude of the FDR ratio at 157 Islamic People's Financing Banks during 2017-2021 fluctuated every year, with an average of 92%. Where the FDR condition gets the criteria of "adequate" because it is close to the maximum value of the FDR ratio, which is 100%. The large FDR ratio indicates that the BPRS has provided large volumes of financing to the public with relatively low third-party fund liquidity conditions. In addition, the relatively high FDR ratio is in line with the soaring NPF value of Islamic Rural Banks in the 2017-2021 period.

4.2.3. Capital Adequacy Ratio to Non-Performing Financing

Referring to the results of the regression that has been carried out, it proves that the NPF is not affected by CAR in the 2017-2021 period. These results are inversely proportional to the theory that CAR has a positive relationship which is stated in research that has been carried out by Rahmah & Armina (2020) and Retnowati & Jayanto (2020) that banks with large levels of capital can more easily accommodate risks that may occur, including financing risk. Even though this research is inversely proportional to the theory that has been described, this research is in direct proportion to the research that has been carried out by Priyadi et al., (2021) and Chalid & Bella, (2021). This condition may apply if the existing capital at the bank is used ineffectively and efficiently so that the capital used to provide financing only increases the occurrence of problem financing and does not provide benefits for the bank (Chalid & Bella, 2021).

4.2.4. Inflation to Non-Performing Financing

Referring to the regression tests that have been carried out, this research shows that inflation has a relationship that is directly proportional or positive to NPF so that this research is directly proportional to research that has been conducted by Effendi et al., (2017) and Hasanah & Septiarini (2020) which stated the increase in inflation was in line with the increase in the condition of non-performing financing at banks. This situation can occur if conditions of increasing inflation are not followed by increased income earned by the community so that in the end the community has to spend a larger portion of income to cover primary needs which has implications for delays in payment of financing installment obligations to banks (Mazreku et al., 2018).

4.2.5. Gross Domestic Product to Non-Performing Financing

Based on the results of the regression test that has been done, it shows that GDP has no effect on NPF. In general, an increase in GDP indicates that the economy of the people in that country is increasing. However, not all people feel an increase in economic conditions. This can happen if GDP increases, Indonesian people who are consumers prefer to spend their income compared to paying mortgage obligations to banks so that high GDP does not necessarily reduce the amount of problem financing that occurs (Latifah et al., 2021).

4.2.6. Unemployment to Non-Performing Financing

Based on the results of the regression test conducted, it proves that unemployment has no effect on Non-Performing Financing (NPF) at Islamic People's Financing Banks in Indonesia during 2017-2021. The results of this study are in accordance with research conducted by

Nugrohowati & Bimo (2019) that unemployment has no effect on non-performing financing. This can happen, if the unemployed cannot obtain financing from Islamic Rural Banks so that the number of problematic financings that occurs will decrease Nugrohowati & Bimo (2019).

5. Conclusion

Based on the discussion and results of research that has been conducted regarding the influence of the independent variables, namely ROA, CAR, FDR, Inflation, GDP, and unemployment on the dependent variable, namely NPF at Islamic Rural Banks during 2017-2021, the results show that ROA has a negative effect on NPF while FDR and inflation have a positive effect on NPF. Meanwhile CAR, GDP, and unemployment have no effect on NPF at Islamic Rural Banks in Indonesia. Therefore, based on the discussion and results of research that has been carried out, Islamic Rural Banks in Indonesia need to use capital to optimally channel financing so that financing distributed to debtors can provide profits for banks and reduce the occurrence of problematic financing which can be detrimental to the bank. and customers. In addition, Islamic Rural Banks need to carry out a financing analysis by considering the internal conditions of customers and economic conditions that may occur so as to reduce the occurrence of bad loans or problem financing.

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