Determinants of Non-Performing Financing Islamic Finance Bank (BPRS) in Indonesia

Minoto*
Diponegoro University
**corresponding author e-mail :* minotofine@gmail.com

Article Info

Keywords:
Determinants;
Non-Performing Finance;
Internal Factors;
External Factors

DOI:
10.33830/elqish.v3i1.4162.2023

Abstract
This study aims to empirically test the determinants or factors that affect Non- Performing Finance (NPF) in Islamic Finance Banks (BPRS) in Indonesia. The determinants analyzed are internal and external factors. Internal factors consist of the Capital Adequacy Ratio (CAR), Financing to Deposits Ratio (FDR) and Operating Costs for Operating Income (BOPO). Meanwhile, external factors are inflation, exchange rate and interest rate (BI rate). This study uses a quantitative approach. The research data is secondary data obtained from the websites of the Otoritas Jasa Keuangan (OJK) and Bank Indonesia. The data collection technique is through time series data collection from 2013 to 2020. As for data analysis using multiple linear regression analysis. **Findings:** based on the results of the study showed that simultaneously internal and external factors had an effect on Non-Performing Finance. While some of the internal factors, namely CAR, FDR and BOPO have a positive and significant effect on the NPF. On external factors, the exchange rate variable partially has a positive and significant effect on the NPF, while the BI Rate has a negative and significant effect on the NPF, but the inflation variable partially has no significant effect on the NPF.

1. Introduction

The world of banking has risks inherent in the services provided. BPRS as a financial institution also has the same risks. As a type of financial institution, BPRS also has a risk of disbursed financing or known as non - performing financing. Determinants of problematic financing can be influenced by internal factors and external factors. Internal factors are the influence of operational activities within the bank itself which can be analyzed from the results of the bank's financial statements while external factors are the influence of macroeconomic variables.

Based on NPF empirical data in BPRS is higher than the NPF of Islamic Commercial Banks (BUS) and Islamic Business Units (UUS). Level the NPF of BPRS exceeds the safe limit set by Bank Indonesia (BI), which is a maximum of 5% (Utami and Fatoni, 2019). Based on statistical data released by the Financial Prosecutor Authority (OJK) as of January 2020, the NPF of BPRS has reached 7.5%. Based on these problems, it is necessary to analyze the internal and external determinants or factors that increase the risk of non-performing financing.

Table 1. Percentage of BPRS NPF in Indonesia in 2019-2020

Financing-BPRS Based on Quality of Financing				
Financing Collectibility	**2019**			**2020**
	October	**November**	**Desember**	**January**
Fluent	9,375,734	9,516,524	9,242,948	9,554,187
Non-Current	846,446	819039	700,372	773,416
Not that smooth	232,807	203,592	141,161	208016
Doubtful	128,900	130,607	124,271	121,168
Congested	484,739	484,840	434,940	444,231
Total Financing	10,222,181	10,335,563	9,943,320	10,327,603
NPF percentage	8.28%	7.92%	7.04%	7.49%

Source: Sharia Banking Statistics (January 2020)

Research on problem financing has been widely carried out. However, this research was carried out again because it contributes to troubled financing with various internal and external variables as well as the latest data. several internal and external variables from previous research including Fatoni and Utami (2019) who examined CAR, FDR, BOPO, and BI Rate variables and their influence on problem financing. Second, research by Wibowo & Saputra (2017) which tested the effect of CAR, FDR, inflation variables on NPF. Third, Putri's research (2016) examined the effect of the CAR, FDR, inflation and BI rate variables on NPF. Fourth, Auliani & Syaichu's research (2016) tested the effect of the variables CAR, FDR BOPO, BI Rate on NPF. Subsequent research is from Hernawati & Puspasari (2018) which tests the effect of inflation, exchange rates and BI-rate variables on NPF. From some of these studies found inconsistencies in research results both in terms of internal and external factors. From the several gaps in the results of this study, it is necessary to conduct further research on the factors that cause problematic financing.

2. Research Method

This type of research is library research, namely research in which the formulation of the problem can only be answered from library data or literature. This research is intended to obtain empirical evidence, test and explain how the influence of CAR, FDR, BOPO, inflation, exchange rates, and interest rates on NPF in BPRS in Indonesia for the 2013-2020 period. The research approach uses a quantitative approach which is based on a positive approach, namely conducting an analysis on a predetermined sample. The sampling technique uses purposive sampling, namely by determining the criteria according to the research objectives. data collection methods using finance from BPPRs. Data analysis is quantitative in nature with the aim of testing predetermined hypotheses (Sugiyono, 2006).

Population and Sample

The population in this research is Islamic People's Financing Banks registered with the OJK from 2013 to 2020, namely 164 Islamic People's Financing Banks as of January 2020. In determining the sample for this study using a purposive sampling technique, namely a sampling technique with certain considerations or criteria (Sugiyono, 2006). The sample of this research is the Islamic People's Bank with the following criteria:

1. Sharia People's Financing Bank registered with Bank Indonesia and the Financial Prosecutor Authority during the 2013-2020 period.
2. Islamic People's Financing Bank that issues audited financial reports.
3. Islamic People's Financing Bank which contains CAR, FDR and BOPO ratios for the 2013-2020 period.

From the criteria above, the sample taken was 162 Islamic People's Financing Banks with data that had been processed by the OJK. So that the data sample used in this study is monthly data for Islamic People's Financing Banks in Indonesia from June 2013 to January 2020, namely 80 data samples. As for the inflation variable, the exchange rate (exchange rate) and interest rates are taken from Bank Indonesia data.

Hypothesis Development

The effect of CAR (Capital Adequacy Ratio) on troubled financing

CAR is assumed to affect non-performing financing because CAR increases the risk in financing. In the research journal Firdaus (2015), it shows that the CAR variable has an effect on problematic financing. Based on previous theory and research, the hypothesis can be formulated:

H_1 : CAR (Capital Adequacy Ratio) has a significant positive effect on Non Performing Finance

The effect of FDR (Financing to Deposits Ratio) on non-performing financing

FDR is assumed to affect non-performing financing because BOPO increases the risk in financing. Research by Fatoni and Utami (2016), shows that the FDR variable with problem financing has a positive influence. Based on the theory and previous research, the hypothesis can be formulated:

H_2 : FDR (Financing to Deposits Ratio) has a significant positive effect on Non Performing Finance

Effect of BOPO (Operational Income Operational Cost) on problem financing

BOPO is assumed to affect problem financing because BOPO increases the risk in financing Research by Auliani & Syaichu (2016), shows that the BOPO variable with problem financing has a significant positive effect. Based on theory and previous research, the hypothesis can be formulated:

H_3 : BOPO has a significant positive effect on problem financing

The effect of inflation on problem financing

Inflation is assumed to affect non-performing financing because inflation increases the risk in financing. Research by Auliani & Syaichu (2016), shows that the inflation variable with problem financing has a negative effect. If this negative value is associated with sharia banking problem financing, it means that there is a demand for goods that will push up inflation. This means that economic activities including businesses financed by Islamic banks will be more widespread so that the return on financing to Islamic banks will increase. When at a certain point, with the fulfillment of the demand for goods, it is clear that inflation will decrease and economic activity will slow down, businesses that have so far obtained financing from Islamic banks will find it difficult to return the principal of their financing. Based on previous theory and research, a hypothesis can be formulated:

H_4 : inflation has a significant negative effect on problem financing

The effect of the exchange rate (exchange rate) on problem financing

The exchange rate is assumed to affect non-performing financing because the exchange rate can increase the risk in financing. In the research journal Hernawati & Puspasari (2018), it shows that the exchange rate variable (exchange rate) with problem financing has a positive influence and based on previous theory and research, the hypothesis can be formulated:

H_5 : the exchange rate (exchange rate) has a significant positive effect on problem financing

The effect of the interest rate (BI-Rate) on troubled financing

It is assumed that interest rates can affect non-performing financing because high interest rates increase the risk in financing. Research by Hernawati & Puspasari (2018), shows that the interest rate variable (BI-Rate) with problem financing has a positive influence. Based on previous theory and research, the hypothesis can be formulated:

H_6 : the interest rate (BI-Rate) has a significant positive effect on problem financing

3. Results and Discussions

Multiple linear regression analysis is used to determine the effect of independent variables on the dependent variable, namely to determine the effect of internal variables (CAR, FDR, BOPO) and external (inflation, exchange rate, BI Rate) on non-performing financing (NPF).

$Y = a+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b6X6+e$

$NPF = 0 +0.157X_1+0.349X_2+0.126X_3+0.017X_4+ 0.351X_5 – 0.425X_6 e$

Information:

Y : NPF
a : constant
b_1 : CAR regression coefficient
b_2 : FDR regression coefficient
b_3 : BOPO regression coefficient
b_4 : inflation regression coefficient
b_5 : exchange rate regression coefficient
b_6 : regression coefficient of interest rate
X_1 : CAR
X2 : : FDR
X_3 : BOPO
X_4 : Inflation
X_5 : Exchange rate
X_6 : Interest rate level
e : standard error

Simultaneous Significance Test Results (Statistical F Test)

This F test was applied to test the effect of all independent variables (CAR, FDR, BOPO, inflation, exchange rate, BI Rate) which are meant in simultaneous regression on the dependent variable (financial problems) being tested. Simultaneous significance test contained in the results of statistical calculations can be shown by the $_{calculated}$ F value. The F distribution table is searched by the formula: F_{table}. This test uses the F test, namely by juxtaposing F count with F table.

Table 2. Statistical Test F

Model	Sum of Squares	df	MeanSquare	F	Sig.
Regression	358,549	6	59,758	60,969	.000 b
residual	71,550	73	.980		
Total	430,099	79			

Based on the table above it can be explained that from the results of the F test above for F table = F (6; 80-6) where F table = F (6; 74) so that the calculated F value is 60.969 > F table 2.22 and a ρ value of 0.000 which is below the 5% level of significance. This means that H1 is accepted which can be interpreted as variables (CAR, FDR, BOPO, inflation, exchange rate, BI Rate) have an effect on non-performing financing (NPF).

Statistical Test t

The t test is used to determine whether or not there is an influence of each independent variable individually on the dependent variable being tested. Test the significance of individual parameters contained in the results of statistical calculations can be shown by the value of t count. The t distribution table is searched by the formula: t table = t (α/2 ; nk-1).

Table 3. Statistical Test t

Items	B	Error	Betas	t	Sig.
CAR	.161	0.79	.157	2023	0.000
FDR	085	0.19	.349	4,472	0.047
BOPO	076	0.37	.126	2060	0.000
Inflation	.020	.110	.017	0.182	0.043
Exchange rate	001	.000	.351	4,666	0.000
BI Rate	089	.140	.425	-5,798	0.000

Note: Dependent Variable: NPF

The following is an explanation of the t test table:

(1) Effect of CAR on NPF

CAR variable with the results of the t value test table = t (0.05/ 2 ; 80-6-1) where t table = t (0.025 ; 73) so that the value of t is obtained calculate 2.023 > t table 1.666 and a ρ value of 0.047 which is below 5% of the significance value. This can be interpreted that H1 is accepted and it can be concluded that CAR is an independent variable that really influences non-performing financing (NPF).

(2) Effect of FDR on NPF

Based on the FDR t test by producing t_{table} = t (0.05/ 2 ; 80-6-1) where t_{table} = t (0.025 ; 73) so that the t count value is 4.472 > t_{table} 1.666 and the ρ value is 0.000 less than 5% significance level. The data shows that H2 is accepted and proves that there is a significant effect of FDR on NPF.

(3) Effect of BOPO on NPF

Based on the BOPO t test it produces t table = t (0.05/2 ; 80-6-1) where t table = t (0.025 ; 73) so that the t count value is 2.060 > t table 1.666 and a ρ value of 0.043 which is below 5% significance level. This means that H3 is accepted so that it can be concluded that the BOPO variable is problematic financing (NPF).

(4) Effect of inflation on Non-Performing Financing (NPF)

Based on the t test the inflation variable produces t table = t (0.05/ 2 ; 80-6-1) where t table = t (0.025 ; 73) so that the t count value is 0.182 < t table 1.666 and the ρ value is 0.856 which is above 5% significance level. This means that H4 is rejected and inflation is stated to have no effect on non-performing financing (NPF).

(5) Effect of the exchange rate on Non-Performing Financing (NPF)

Based on the t test above the exchange rate, it produces t table = t (0.05/ 2 ; 80-6-1) where t table = t (0.025 ; 73) so that the calculated t value is 4.666 > t table 1.666 and a ρ value of 0.000 which is below the 5% level of significance. This means that H5 is accepted and it can be concluded that the exchange rate has an influence on non-performing financing (NPF).

(6) The influence of the BI Rate on NPF

Based on the t test above the BI Rate using a two-way test t table = t (0.05/ 2 ; 80-6-1) where t table = t (0.025 ; 73) so that the calculated t value is - 5.798 < t table 1.666 and ρ value of 0.000 which is above the 5% level of significance. This means that H 6 is accepted which means that the BI Rate has a negative effect on problem financing (NPF).

Effect of CAR (Capital Adequacy Ratio) on Non-Performing Financing

The first hypothesis states that the variable CAR (Capital Adequacy Ratio) (X_1) has an influence on problem financing. This is in accordance with research from Putri (2016) which states that CAR has an effect on problem financing. CAR itself can be assumed to increase the risk of financing in BPRS. The results of this study are also in accordance with previous research conducted by Firdaus (2015) that only the CAR and GDP variables have a significant positive effect on NPF. Financing growth variable has no significant positive effect on NPF. Meanwhile, inflation and exchange rate variables have a significant negative effect on NPF.

The Effect of FDR on Non-Performing Financing

hypothesis states that the FDR (Financing to Deposits Ratio) variable has a significant positive effect on problem financing (NPF). Based on the research, there is a positive and significant influence on troubled financing. This is in accordance with previous research put forward by Dwi Suwiknyo (2010) stating that FDR is an indicator of the health of bank liquidity in providing financing. Where the more financing distributed to customers, the lower the level of bank liquidity.

The results of the study show that FDR has an influence on troubled financing. This study resulted in significant conclusions with empirical evidence from previous research, namely research from Fatoni & Utami (2019) stating that the variables GDP, CAR, FDR, and inflation have a significant positive effect on NPF. The PLS variable has a significant negative effect on NPF. Meanwhile BOPO, ROA, LTV and BI-Rate have a negative effect on NPF.

The Effect BOPO on Non-Performing Financing

The next hypothesis concludes that the BOPO variable (X_3) has a positive effect on problem financing. BOPO has a positive effect on NPF. This is in accordance with previous research conducted by Auliani and Syaichu (2016) that a large BOPO means that the operational costs incurred as a result of problematic financing are greater than the operating income received from rewards or profit sharing for financing that has been provided (Fatoni & Utami, 2019). The research results show that the BOPO variable has a significant effect on non-performing financing (NPF). In accordance with the results of previous research conducted by Auliani & Syaichu (2016) showed that the BOPO variable has a significant positive effect on NPF. FDR and Exchange Rate variables have no significant positive effect on NPF. Meanwhile, the CAR and inflation variables have a significant negative effect on NPF.

The effect of inflation on Non-Performing Financing

The fourth hypothesis states that the inflation variable (X_4) has a significant negative effect on troubled financing. This is because the inflation rate that occurred in the period June 2013 to January 2020 experienced fluctuating changes and tended to decrease. This means that inflation did not increase in this study and the increase that hit was not as high as during the 1998 monetary crisis which reached hyper inflation with a rate of 17.95% or the 2008 economic crisis where the figure reached 12.14 % in September (Riyandi, 2020). Meanwhile, inflation in this research is still less than 10% or moderate inflation. In other words, debtors still have the ability to fulfill their obligations to pay financing installments, so that inflation will not affect the increase in non- performing financing. This is in accordance with previous research conducted by Hernawati & Puspasari (2018) .

The Effect of Exchange Rate (Exchange) on Non-Performing Financing

hypothesis states that the exchange rate variable (X_5) has a significant positive effect on troubled financing. This is in accordance with previous research conducted by Herni Hernawati & Puspasari (2018) that exchange rates have a positive effect on non-performing financing (NPF). The exchange rate of the rupiah against other countries' currencies, especially the dollar, can affect the level of payment of customer debt so that it will increase financing risk. While the results of this study also resulted in the conclusion that the exchange rate has an influence on non-performing financing (NPF). This conclusion was obtained from the results of a significance coefficient value of 0.000 (0.000 <0.05) so that it can be indicated that the exchange rate has a significant effect on non-performing financing (NPF).

The Effect of Interest Rates (BI-Rate) on Non-Performing Financing

This research is in line with research conducted by Putri (2016) which states that the BI Rate has a negative effect on problem financing because Islamic banks implement different actions from conventional banks, namely by issuing financing products that use a profit-sharing system so that applying financing is not too dependent on interest rates. BI interest.

The results also show that the BI Rate variable has a significant influence on problem financing (NPF). While the significance coefficient value is -0.000, it can be explained that there is a negative effect of the BI Rate on non-performing financing (NPF). This is in accordance with previous research conducted by Putri (2016) which stated that the BI Rate has a negative effect on non-performing financing (NPF).

4. Conclusions

Based on the results of the research and discussion, it can be concluded that internal factors are proxied by variables CAR, FDR and BOPO partially affect NPF. Meanwhile, external factors, namely inflation, have no effect on NPF. Inflation in the study period tends to decrease. However, different results were obtained by exchange rate variables that had a positive effect on NPF. Meanwhile, the BI Rate variable has a negative effect on NPF. This is because when interest rates are high, people prefer to raise funds, and when interest rates fall, people have the potential to increase loan funds.

This research can be used as material for consideration for BPRS to be more careful in channeling financing to creditors. BPRS must pay close attention to internal financial conditions but must also be alert to factors outside the BPRS such as the exchange rate and BI rate because they can also have an impact on financing. This research is limited to testing several independent variables and the sample is limited to only 2017-2020 so the results obtained cannot be generalized broadly. For future researchers, it is hoped that they can add other variables or increase the research period in order to obtain better research results.

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