Risk of Non-Performing Financing of Islamic Banks Based on Bank Financial Performance and Macroeconomic Conditions

Anisa Ilmia[1], Evi Sopiah[2], Nisa Sania[3], Yuda Septia Fitri[4], Reza Fauzi Nazar[5]
[1,2,3,4,5] UIN Sunan Gunung Djati Bandung, Indonesia

Email correspondent: anisailmia@uinsgd.ac.id [1] , evisopiah@uinsgd.ac.id [2] , nisasania59@gmail.com [3], yuda.fitri@uinsgd.ac.id [4] , rezafauzinazar@uinsgd.ac.id [5]

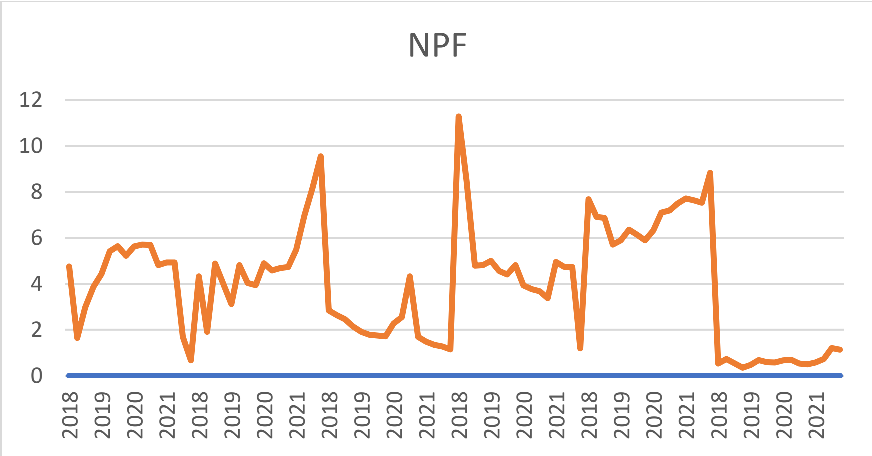
ABSTRACT: *Non-Performing Financing (NPF) is an important indicator in measuring the level of risk of problematic financing in the Islamic banking sector. Many factors, both internal and external factors of the bank, influence NPF. Internal factors include the bank's financial performance while external factors can be macroeconomic factors. This study aims to analyze the influence of bank financial performance; Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Return on Assets (ROA), Gross Domestic Product (GDP), and inflation on Non-Performing Financing (NPF) in the Islamic banking industry. The population in this study were Islamic Commercial Banks registered with the Financial Services Authority (OJK) for 2018 - 2021, with a sample size of 6 Islamic Banks. The data used in this study are secondary, taken from the financial statements of Islamic banks and macroeconomic data for a certain period. The sampling technique used is purposive sampling. The data analysis technique uses SEM-PLS with the help of SmartPLS 3.0. This study shows that ROA has a significant negative effect on NPF. Furthermore, CAR, GDP, and inflation have a negative but insignificant effect on NPF, while FDR has a positive but insignificant impact on NPF.*

Keywords: *Non Performing Financing Risk, Financial Performance, Microeconomics, Sharia Commercial Banks*

1. INTRODUCTION

Indonesia has the largest Muslim population in the world according to the report of The Royal Islamic Strategic Studies Center (RISSC) and according to Fitria's research (2018). The development of Islamic banks in Indonesia has become a benchmark for the success of the existence of Islamic Economics (Fitria, 2018: 7). Meanwhile, Islamic banks are defined as banking institutions whose entire activities are by Sharia principles (Islamic values). Banks that operate based on Sharia principles have changed the credit distribution system to financing distribution. This is because financing has elements of agreement and transparency. Law Number 10 of 1998 concerning Islamic banking states that the function of banks as intermediary institutions is one form of financing distribution. Several banking provisions regulate the financing distribution system at Islamic Commercial Banks (Sudarsono et al., 2019). This is due to its important role in managing the liquidity of Islamic banks. Active and smooth financing management can affect the level of liquidity and improve bank performance. Therefore, banks can avoid risks if their financing management runs well (Supriani & Sudarsono, 2018).

There are several ways to view the risk profile of Islamic banks. One of them is the risk that occurs due to customer failure to fulfill their obligations based on the agreement with the bank. An indicator that is often used to see the level of customer smoothness is the Non-Performing Financing (NPF) ratio. NPF is a comparison of financing problems with the total amount of financing. In addition, NPF is also one of the indicators of financing problems seen from its fluctuating and uncertain nature (Rahman & Fatmawati, 2020). The level of non-performing financing that is outside the limit will disrupt the profits of Islamic banks. This can force the cessation of Islamic bank operations due to several factors both from the microeconomic and macroeconomic sides (Permataningayu & Mahdaria, 2020). Therefore, the determinant factors that influence the financial performance of Islamic Commercial Banks in Indonesia are the theme of this research.



Gambar 1. Non Performing Financing Bank Umum Syariah di Indonesia (%)

The development of NPF from 2018 to 2021 per quarter shows that the growth of the non-performing financing ratio has experienced a fluctuating increase, which in the 2018 period, the NPF level at Islamic Commercial Banks. This is due to the increasing public trust in the distribution of funds to Islamic banks in the previous period. However, in the following period in 2021, there was a fluctuating decline. Previous researchers such as Supriani and Sudarsono (2018), researched the influence of microeconomic and macroeconomic variables on NPF in Indonesian Islamic banking. The results of the data analysis show that in the short term, the CAR variable has a negative and insignificant effect, while the FDR, ROA, and OER variables have a significant positive impact on NPF. However, the inflation variable has a significant negative impact. In the short term the CAR, FDR, and BOPO variables have a significant positive impact on NPF, while the ROA variable has a positive and insignificant impact on NPF. Finally, the inflation variable has a negative and significantimpact on NPF.

Meanwhile, Popita's (2013) research examined all Islamic Commercial Banks in Indonesia. This study used quarterly financial reports of Islamic Commercial Banks in Indonesia with purposive sampling techniques. The results of this study indicate that real GDP growth and FDR have a positive but insignificant effect on NPF, while inflation has a negative but insignificant effect on NPF. Total assets have a negative and significant impact on NPF (Popita, 2013). Several previous researchers have researched the factors that influence NPF in Islamic Commercial Banks. In this study, eight variables were identified, namely CAR, FDR, BOPO, ROA, IPI, BI Rate, Inflation, and SBIS (Amelia, 2019; Firdaus, 2015; Sari & Amran, 2019). Research on NPF determinants is still being conducted in various countries. This is done because the NPF ratio can also measure the bank's ability to allocate and overcome credit risks arising from Islamic banks (Cahyati, 2018; Nugrohowati & Bimo, 2019).

In the NPF factor, several important things must be studied by banks. This aims to be used as a reference in managing and overcoming the risks that arise in problematic financing. Based on the background description, this study was conducted to identify the determinant factors that affect problematic financing using bank financial performance variables (CAR, FDR, ROA) and macroeconomic variables (GDP and Inflation). All of these variables are determining factors that cause problematic financing. Therefore, this study will be very useful for banks, Bank Indonesia, and the Government in taking appropriate and effective policies to be applied to Islamic banking in Indonesia.

2. METHOD

The research was conducted using quantitative methods on Islamic Banks in Indonesia period 2018-2021. The population is all Islamic banks registered with Bank Indonesia and OJK, namely 14 Islamic commercial banks (BUS). The sample is all Islamic banks registered with the Financial Services Authority (OJK) in 2018-2021 with a Non-Probability sampling technique with a Purposive Sampling type, namely 6 (six) BUS.

The data are secondary data obtained from several institutions such as OJK (Financial Services Authority), BI (Bank Indonesia), BPS (Central Statistics Agency), and IFS (International Financial Statistics). The data is published and updated every month so that every year there will be a clear picture of Islamic financial data. The variables in this research consist of NPF as the dependent variable and CAR, FDR, ROA, Inflation, and GDP as independent variables. The data obtained is based on quarterly data with the aim of data density so that it can represent the research object and data variation in each variable can be minimized. NPF, CAR, FDR, and ROA data were obtained from the Islamic banking statistics report through the official website of the Financial Services Authority (OJK). In addition, inflation data was obtained from the official website of Bank Indonesia (BI), and GDP data from the official website of the Central Statistics Agency (BPS) for the period 2018 to 2021.4.

3. RESULT AND DISCUSSION

3.1 Structural Equation Modeling Analysis – Partial Least Square (SEM-PLS)

PLS-SEM analysis in this study was conducted in 2 (two) levels, namely First Order Confirmatory Factor Analysis (First-Order CFA) and Second Order Confirmatory Analysis (Second-Order CFA). This section consists of an evaluation of the measurement model (outer model) and an evaluation of the structural model (inner model).

3.1.1 Evaluation of the Measurement Model (Outer Model)

Evaluation of the measurement model (outer model) is carried out to ensure that the measurements used are feasible (valid and reliable). This study is research with a formative construct, so the assessment of the outer model is carried out by looking at the collinearity and significance of its outer weight.

a. Evaluation of Measurement Models in the First Order

1) Collinearity Between Indicators

Table 1 *Outer* VIF

	Outer* VIF *Values
CAR	1.000
FDR	1.000
ROA	1.000
GDP	1.000
INFLASI	1.000

Source: Secondary data, processed by researchers (2023)

Based on Table 1, it can be seen that all measurement items that make up the variable have an outer VIF of less than 5, so it can be concluded that there is no multicollinearity between measurement items.

2) Significance and Relevance of Outer Weight

Table 2 *Outer Weight*

	Outer Weight	***Outer Loading***	**T Statistic**	***P Values***
CAR → *Capital Adequacy Ratio*	1.000	1.000	-	-
FDR → *Financing to Deposit Ratio*	1.000	1.000	-	-
ROA → *Return On Asset*	1.000	1.000	-	-
GDP → *Gross Domestic Product*	1.000	1.000	-	-
INFLASI	1.000	1.000	-	-
NPF → *Non Performing Financing*	1.000	1.000	-	-

Source: Secondary data, processed by researchers (2023)

Based on Table 2, it can be seen that all outer weight values are not significant p-values > 0.05. However, if the indicator / dimension is not significant, then it is checked whether the outer loading value is > 0.5. If the outer loading value is > 0.5, then the indicator is maintained. It is known that all outer loading values are > 0.5 so that the indicator or dimension is maintained in the analysis process.

3.2 Structural Model Evaluation (Inner Model)
3.2.1 Determination Coefficient (R2)

Table 3 R *Square*

	R Square	**R Square Adjusted**
NPF	0.315	0.277

Source: Secondary data, processed by researchers (2023)

Based on Table 3, it is known that the R Square Value means the ability of the Capital Adequacy Ratio (CAR), Financing to Deposit Ratio (FDR), Return On Asset (ROA), Gross Domestic Product (GDP) and Inflation in explaining Non Performing Financing (NPF) is 31.5% and is categorized as moderate.

a. Value and Significance of Path Coefficient / Hypothesis Test
1) Direct Effect

Table 4 Direct Hypothesis Testing

	***Original Sample* (O)**	***Sample Mean* (M)**	***Standard deviation* (STDEV)**	**T *Statistic* (|O/STDEV|)**	***P values***
CAR → NPF	-0.010	0.000	0.111	0.087	0.931
FDR → NPF	0.179	0.162	0.106	1.686	0.092
ROA → NPF	-0.510	-0.529	0.056	9.118	**0.000**
GDP → NPF	-0.043	-0.050	0.096	0.447	0.655
INFLASI → NPF	-0.032	-0.036	0.112	0.283	0.777

Source: Secondary data, processed by researchers (2023)

Based on the output of the significance test results in Table 4, it can be seen that:

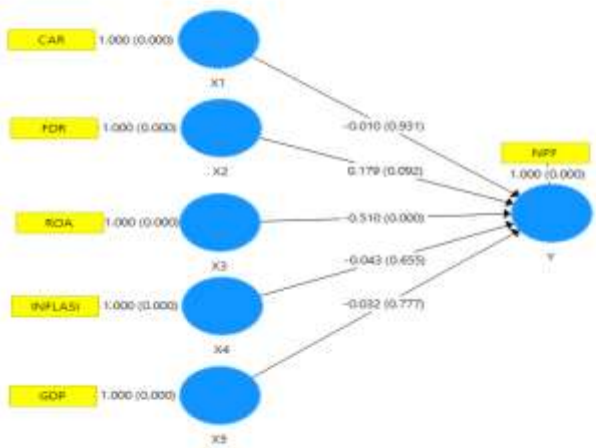
a) Capital Adequacy Ratio (CAR) has a negative effect on Non Performing Financing (NPF) with a coefficient value of -0.010 and is not significant with p-values = 0.931> 0.05.

b) Financing to Deposit Ratio (FDR) has a positive effect on Non Performing Financing (NPF) with a coefficient value of 0.179 and is not significant with p-values = 0.092> 0.05.

c) Return On Asset (ROA) has a negative effect on Non Performing Financing (NPF) with a coefficient value of -0.510 significant with p-values = 0.000 <0.05.

d) Gross Domestic Product (GDP) has a negative effect on Non Performing Financing (NPF) with a coefficient value of -0.050 and is not significant with p-values = 0.655> 0.05.

e) Inflation has a negative effect on Non Performing Financing (NPF) with a coefficient value of -0.032 and is not significant with p-values = 0.777 > 0.05.



Gambar 2
Uji Hipotesis *Path Coefficient Direct Effect*

The effect of CAR on NPF

The results of the analysis show that CAR has a negative but insignificant effect on the NPF of Islamic Commercial Banks in 2018-2021. This illustrates that Islamic bank management can manage the collected capital used to overcome several bank capital risk problems. Therefore, in the short and long term, CAR does not have a direct effect on the NPF level. This is also due to the increasing ease of managing the CAR level that has been regulated by the OJK. These results were also found in Purnamasari and Musdholifah (2018), Haifa and Wibowo (2015), and Firdaus (2015). This study is not by the results of research by Asrini et al. (2018), and Atiqoh (2014) showing a negative relationship between CAR and NPF. If CAR is high, the Risk Weighted Assets (RWA) value is low. This is because low RWA will cause high non-performing financing. CAR also shows the level of the total amount of assets containing risk from the capital owned for the allocation of Islamic bank financing. Thus, in this case, CAR will not affect the performance of Islamic banks in determining financing system policies. In the long term, CAR will not affect NPF.

The Effect of FDR on NPF

The results of the study show that FDR had a positive but insignificant effect on the NPF of Islamic Commercial Banks in 2018-2021. FDR indicates how much customer funds the bank allocates for financing. A high FDR indicates that most of the third-party funds are used for financing. A high FDR can potentially increase NPF, namely the risk of problematic financing. This happens because if too many funds are channeled as financing, the bank may face greater risks, which can increase the possibility of default.

An FDR that is too high can indicate that the bank is not selective in channeling funds, thereby increasing the risk of problematic financing. These results are not by research conducted by Auliani and Syaichu (2016), Pradana (2018), and Rosidah (2017) which resulted in a significant negative relationship to NPF. When the amount of financing channeled by Islamic banks increases, the FDR ratio may also increase along with the increase in fund distribution. The greater the amount of credit through increased financing carried out by Islamic banks, the more it will have side effects in the form of a fairly high financing risk.

The Effect of ROA on NPF

Based on data analysis, it can be seen that the profitability variable (ROA) has a significant negative effect on the NPF level. The better the bank's profitability, the more efficient the bank is in managing its financing and assets, so that the risk of problematic financing is lower. With high profits, banks can be better prepared to handle financing risks, reducing the NPF figure. This is not in line with the results of research conducted by Cahyati (2018) which shows that ROA has a positive relationship with NPF

The Effect of GDP on NPF

GDP is a measure of a country's economic growth. When GDP grows positively, it means the economy is growing, which tends to encourage business activity and consumption. The results of the analysis show that GDP has a negative but insignificant effect on NPF. A growing economy usually improves the ability of debtors to repay their loans, so the risk of non-performing financing decreases. Conversely, if GDP decreases, economic activity slows down and the ability of debtors to repay debts can decrease, which can increase NPF. The relationship between GDP and the banking world is where GDP is related to savings and based on the results of the analysis, GDP does not have a significant effect on the NPF non-performing financing ratio.Pengaruh

Effect of Inflation on NPF

Inflation shows a negative insignificant effect on NPF. This study is by the results of research by Setiawan and Bagaskara (2016), and Firmansyah (2015) which showed that there is a negative effect between inflation and NPF. Increasing inflation results in rising prices which make prices relatively more expensive. This has an impact on decreasing consumption levels and has an impact on production levels. This relationship also has an impact on Islamic Commercial Banks which will cause higher ratios and margins but fail to pay debts. Thus, inflation in the long term will result in financing failures.

4 CONCLUSION

The results of the research and discussion can conclude that ROA has a significant negative effect on NPF. While CAR, GDP, and Inflation have a negative but insignificant effect on NPF. While FDR has a positive but insignificant effect on NPF. The results of the study can be concluded that Islamic Commercial Banks in Indonesia have a greater ability to overcome financing distribution problems. So that this situation can protect Islamic Commercial Banks from excessive credit risk in the long term. In addition, stable inflation can also help Islamic Commercial Banks from various risks due to problematic financing.

This research is far from perfect, in other words, there are still many weaknesses in this model. With the addition of variations in variables, NPF can be more stable and the results are better. In addition, several macroeconomic variables can affect the NPF level.

3 REFERENCES

Amelia, E. A. (2019). Pengaruh capital adequacy ratio (CAR), inflasi dan financing to feposit ratio (FDR) terhadap non performing financing (NPF) pada bank umum Syariah Periode 2015- 2017. *Jurnal Intelektualitas: Keislaman, Sosial Dan Sains*, *8 (1)*, 11–18. https://doi.org/10.19109/intelektualita.v8i1.4223

Asrini, K. S., Suwendra, I. W., & Suwarna. (2018). Pengaruh CAR, LDR dan Ukuran Bank terhadap NPL pada Lembaga Perbankan yang Terdaftar di Bursa Efek Indonesia. *Bisma Jurnal Manajemen*, *4(1)*, 34–41. http://dx.doi.org/10.23887/bjm.v4i1.21977

Atiqoh, N. (2014). Pengaruh CAR, LDR, BOPO, inflasi dan GDP terhadap NPL bank konvensional. *Universitas Bakrie Jakarta*. https://media.neliti.com/media/publications/253299-none-e9e753a6.pdf

Auliani, M. M., & Syaichu, M. (2016). Analisis pengaruh faktor internal dan faktor eksternal terhadap tingkat pembiayaan bermasalah pada bank umum Syariah di Indonesia periode tahun 2010-2014. *Diponegoro Jurnal dari Pengelolaan*, *5(3)*, 1–14. https://ejournal3.undip.ac.id/index.php/djom/article/view/14644

Cahyati, A. I. (2018). *Analisis pengaruh LDR, MOBIL, BOPO, KIJANG Dan PANJANG terhadap NPL/NPF pada perbankan Dari Indonesia*. 1–12. https://dspace.uii.ac.id/handle/123456789/12641

Firdaus, R. N. (2015). Pengaruh faktor internal dan eksternal yang mempengaruhi pembiayaan bermasalah pada bank umum syariah di Indonesia. *Makan siang*, *3(1)*, 82–108. https://doi.org/10.18860/ed.v3i1.3339

Firmansyah, I. (2015). *Penentu kredit bermasalah: Kasus bank syariah di Indonesia.Buletin Ekonomi Moneter Dan Perbankan*. *17 (2)*, 241–258. https://doi.org/10.21098/bemp.v17i2.51

Fitria, T. N. (2018). Perkembangan Bank Syariah di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, *Vol. 01*(No. 02).

Haifa, & Wibowo, D. (2015). Pengaruh faktor internal bank dan makro ekonomi terhadap non performing financing perbankan Syariah di Indonesia periode 2010. *Jurnal Perbandingan*, *1(2)*, 74–87. http://dx.doi.org/10.30997/jn.v1i2.253

Nugrohowati, R. N. I., & Bimo, S. (2019). Analisis pengaruh faktor internal bank dan eksternal terhadap Non-Performing Financing (NPF) pada Bank Perkreditan Rakyat Syariah di Indonesia. *Jurnal Ekonomi & Keuangan Islam*, *5(1)*, 42–49. https://doi.org/10.20885/jeki.vol5.iss1.art6

Permataningayu, G., & Mahdaria, S. (2020). Pengaruh Non Performing Financing dan Financing to Deposit Ratio terhadap Pembiayaan Bank Umum Syariah di Indonesia. *Asia Jurnal dari Islam Pengelolaan*, *1(1)*, 28–37. https://doi.org/10.20885/ajim.vol1.iss1.art3

Popita, M. S. A. (2013). Analisis penyebab terjadinya non performing financing pada bank umum Syariah di Indonesia. *Akuntansi Analisis Jurnal*, *2(4)*, 404–412. https://doi.org/10.15294/aaj.v2i4.2884

Pradana, M. N. R. (2018). Pengaruh likuiditas dan variabel eksternal terhadap non performing financing pada bank syariah. *Eksis*, *13(2)*, 131–144. https://ejournal.stiedewantara.ac.id/index.php/001/issue/view%0AHalaman

Purnamasari, A. E., & Musdholifah, M. (2018). Analisis faktor eksternal dan internal bank terhadap risiko pembiayaan bank umum Syariah di Indonesia periode 2012-2015.

Ilmu Manajemen, *4(2)*, 425–436. https://doi.org/10.26740/bisma.v9n1.p13-25

Rahman, T., & Fatmawati, K. (2020). Pengaruh rasio keuangan terhadap non performing financing pada Bank Perkreditan Rakyat Syariah Daerah Istimewa Yogyakarta (BPRS DIY) periode 2015-2018. *Asia Jurnal dari Islam Pengelolaan*, *2(1)*, 25–35.

Rosidah, E. (2017). Pengaruh financing to deposit ratio terhadap non performing financing perbankan Syariah di Indonesia. *Jurnal Akuntansi*, *12*, 128–134. http://jurnal.unsil.ac.id/index.php/jak/article/view/385/281

Sari, N., & Amran, E. (2019). Determinasi non performing financing pada bank umum Syariah di Indonesia. *Media Ekonomi*, *27(1)*, 1–8. https://doi.org/10.25105/me.v27i1.5170

Setiawan, C., & Bagaskara, B. (2016). Non-performing financing (NPF) dan efisiensi biaya bank syariah di Indonesia periode 2012.Q1 s/d 2015.Q2. *Jurnal dari Muncul Masalah di dalam Ekonomis, Keuangan, Dan Perbankan*, *(1)*, 1–13. https://globalbizresearch.org/economics/images/files/74631_T632_JEIEFB_Chandra%0A Setiawan_Bhirawa Praditya Bagaskara.pdf

Sudarsono, H., Mifrahi, M. M., Susantun, I., Rudatin, A., & Ruchba, S. M. (2019). Analisis faktor yang mempengaruhi pembiayaan pada bank syariah sektor pertanian. *Asia Jurnal dari Islam Pengelolaan*, *1(1)*, 80–100. https://doi.org/10.1108/AJIM.vol1.iss2.art6

Supriani, I., & Sudarsono, H. (2018). Analisis pengaruh variabel mikro dan makro terhadap NPF perbankan Syariah di Indonesia. *Keseimbangan: Jurnal Ekonomi syariah*, *6(1)*, 1–18. https://doi.org/10.21043/equilibrium.v6i1.3040