Mutanaqishah: Journal of Islamic Banking
Mut. Jou. Isl. Ban **Vol. 4 No. 2, pp. 205-217, December 2024**
Journal Homepage: https://ejournal.iaingorontalo.ac.id/index.php/mut
DOI: https://doi.org/10.54045/mutanaqishah.v4i2.1952

The Effect of Bank Fundamentals, Profit-Loss Sharing Financing, and Covid-19 on the NPF of Islamic Commercial Banks in Indonesia

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Abstract

This study analyzes the influence of bank fundamentals, profit-sharing financing, and Covid-19 on financing default as measured by non-performing financing (NPF) in Islamic commercial banks. The Islamic commercial banks studied were 12 banks in the 2014-2022 period with quarterly data and unbalanced panel data. The estimation method used is the panel regression. The results show that the bank's strong fundamentals, namely bank size, bank capital, and profitability have a negative effect on NPF. Profit-sharing financing, namely Mudharabah, and Musharakah, has a positive effect on NPF. Meanwhile, the stability of banks, bank efficiency, and Covid had no effect on NPF. There are several important policy implications of these findings. First, banks must have strong fundamentals to be able to minimize NPF. Second, profit-sharing financing must be followed by good monitoring so it can reduce NPF.

Keywords:
Bank fundamentals; Profit-sharing financing; Covid; NPF

Abstrak

Penelitian ini menganalisis pengaruh fundamental bank, pembiayaan bagi hasil, dan Covid-19 terhadap pembiayaan bermasalah yang diukur dengan non-performing financing (NPF) pada bank umum syariah (BUS). Bank umum syariah yang diteliti sebanyak 12 bank pada periode 2014-2022 dengan data kuartalan. Metode estimasi yang digunakan adalah metode regresi panel data. Hasilnya menunjukkan bahwa fundamental bank yang kuat yang ditunjukkan oleh besarnya asset, CAR, dan keuntungan berpengaruh negatif terhadap NPF. Pembiayaan bagi hasil yaitu Mudharabah dan Musyarakah berpengaruh positif terhadap NPF. Sementara itu, stabilitas bank, BOPO, dan Covid tidak berpengaruh terahdap NPF. Ada beberapa implikasi kebijakan penting dari temuan ini. Pertama, bank harus mempunyai fundamental yang kuat untuk mampu menimimukan NPF. Kedua, pembiayaan bagi hasil harus diikuti dengan monitoring dengan baik agar mampu menurunkan NPF.

Kata Kunci:
Fundamental bank; Pembiayaan bagi hasil; Covid; NPF

How to cite:

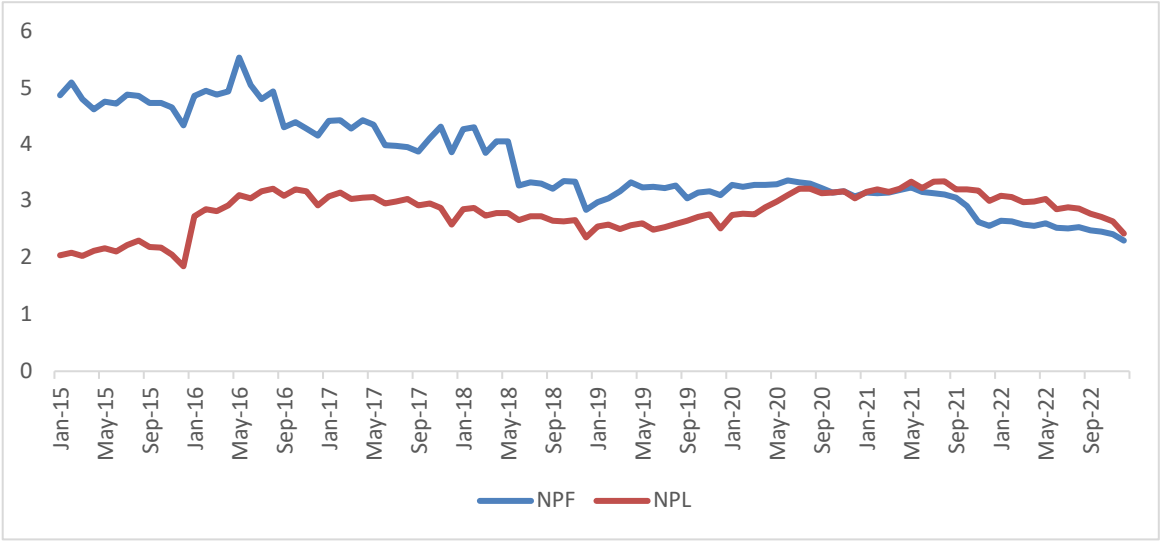
Fitrah, J. & Widarjono, A. (2024). The Effect of Bank Fundamentals, Profit-Loss Sharing Financing, and Covid-19 on the NPF of Islamic Commercial Banks in Indonesia. *Mutanaqishah : Journal of Islamic Banking*, 4(2), 205-217. https://doi.org/10.54045/mutanaqishah.v4i2.1952

1. Introduction

Financing in Islamic banking is divided into two parts, namely profit-loss sharing (PLS) financing and non-profit sharing financing (NPLS). PLS financing consists of Mudharabah and Musyarakah while NPLS financing consists of Murabahah, Istisna, Salam, Ijarah, and Qardh (Ibrahim & Alam, 2018). Mudharabah is a cooperation contract between Islamic banks and their customers. Islamic banks provide 100% of their capital and customers manages them in their business. Profits are divided according to the agreed ratio. If there is a loss, the one who bears the loss is the Islamic bank as long as there is no cause of loss found due to negligence from the customer. Meanwhile, Musyarakah is a cooperation contract between Islamic banks and customers by combining capital, funds, and manpower from both parties to be managed in a business. The distribution of profits is in accordance with the portion of capital and the agreement at the beginning of the contract. PLS financing is a financing contract that has a high risk of non-performing financing (NPF), especially in large Islamic commercial banks (Witherjon, 2020). As a result, if PLS financing increases, the risk of non-performing financing will also increase.

Financing risk is a significant challenge for Islamic banking in Indonesia. Financing risk, in the form of non-performing loans (NPLs) for conventional banks or NPF for Islamic banks, plays an important role in maintaining bank stability (Priyadi et al., 2021). The Financial Services Authority (OJK) places significant emphasis on financing risk management issues. All banks, both Islamic banks and conventional banks, are required by the OJK to maintain financing or non-performing loans at a maximum of 5%. Figure 1 shows the financing risks of Islamic banks and conventional banks. Islamic banks have an average NPF (3.66%) which is higher than the conventional NPLs of banks (2.82%) as their competitors. However, since May 2021 the NPLs of conventional banks are higher than the NPFs of Islamic banks.

Figure 1. Comparison of NPF and NPL in 2015-2022



Managing NPFs has always been a big challenge for Islamic bank management (Pratami, et al., 2023). Islamic banking faces significant challenges in financing due to profit-sharing financing (PLS) which is vulnerable to issues asymmetric information and moral hazard (Widarjono et al., 2023). In addition, as the last player to enter the banking industry in Indonesia, Islamic banks have not experienced much in managing financing like conventional banks. According to Hosen and Fitria (2018), the lack of a thorough financing analysis can result in increased financing risks, which can increase NPFs and further reduce the profitability of Islamic banks. Inadequate financial management is a major factor contributing to increased financial risk, which often results from the negligence of those responsible for handling financial matters.

For this reason, it is important to thoroughly analyze the factors that contribute to the increase and decrease in the NPF of Islamic banks to effectively manage this financial risk. There are various factors that can affect NPF, including internal and external factors. Internal factors include bank capital, financing, and cost efficiency (Alandejani & Asutay, 2017; Priyadi et al., 2021). External factors are Interest rates and inflation (Saputri et al., 2020) and Gross Domestic Product (Retnowati & AMP; Jayanta, 2020; Munifatussa, 2020).

The purpose of this study is to examine the influence of bank fundamentals, profit-sharing financing, and the Covid-19 pandemic on the level of financing risk faced by Islamic commercial banks in Indonesia. A fundamental bank consists of stability, bank size, capital, efficiency, and profitability. This study also includes the element of profit-loss sharing financing in influencing financing risk. Meanwhile, the external variable is the Covid-19 pandemic. Covid-19 has caused a decline in the ability of customers to repay their financing. The contribution of this study is to include the variables of profit-loss sharing financing and Covid-19 in influencing financing risk as measured by NPF.

2. Literatur Review

Rani and Eko (2017) analyze the comparison of the financing quality of Islamic banks with conventional banks in Indonesia for the period of January 2003 – October 2015. The results of this study show that economic performance has a positive effect on NPF and NPL while variables of financing, loans, financing rate, and inflation have a negative effect on NPF and NPL. In addition, the dummy variable of the global financial crisis has a negative effect on NPF and positive on NPL.

Purnamasari and Musdholifah (2018) investigated the external and internal factors on the financing risks of Islamic commercial banks in Indonesia in the period 2012-2015. The independent variables are return on assets (ROA), assets, capital adequacy ratio (CAR), ratio of operating cost to operating income (CIR,) exchange eate, inflation, and gross domestic product (GDP). The results of this study show that the bank size has a positive effect on NPF and the ROA variable has a negative effect on NPF. However, CAR, CIR, inflation, exchange rate, and GDP have no effect on NPF.

Asmara (2019) explored the impact of internal and external factors on the NPF of Islamic banking in Indonesia in the period of 2015-2018. The study used independent variables of GDP, CAR, financing deposit ratio (FDR), and CIR. The results of the study document that CIR has a positive influence on NPF. Meanwhile, the GDP, FDR and CAR have no influence on NPF.

Munifatussa (2020) analyze the influence of Gross Domestic Product (GDP), Financing to Deposit Ratio (FDR), CAR, CIR in the case of 12 Islamic commercial banks in Indonesia in the 2014-2019 period. The results partially show that the FDR and CAR have a negative influence on NPF, while GDP and CIR have a positive influence on NPF.

Isnaini et al. (2021) examine the influence ROA, CAR, CIR, FDR, and inflation on non-performing financing in Islamic banks in Indonesia using monthly data from January 2015 to 2020. The results show that the CAR and inflation have a negative effect on NPF. Meanwhile, CIR has a positive effect on NPF. However, the ROA and FDR had no effect on NPF

Yuniarti Zs et al. (2022) analyze the effect of impairment loss reserves, CIR, Inflation, and GDP on the NPF of Islamic banks for the 2015-2019 period using quarterly data. The results of the study show that the reserve for impairment losses has a positive effect on NPF. Meanwhile, CIR, inflation and GDP have no effect on the NPF of Islamic commercial banks.

Hypothesis

As a financial institution to carry out its operations, banks must have a healthy status. The health of a bank can be reflected in the bank's level of stability. A measure that is often used to determine the stability of a bank is the Z-score (Widarjono et al., 2022). The higher the ratio Z-score is the higher profitability so that the bank is in a stable condition. A stable bank will be able to overcome the problem of non-performing loans (NPF).

H_1: Stability of Islamic banks has a negative effect on NPF of Islamic commercial banks

Assets are very important for Islamic banks in carrying out their functions as institutions that collect and distribute funds. By having enough assets to carry out financing, Islamic banks will make a profit. The larger the size of the Islamic bank, the larger the assets it owns and the more effective the bank manages its financing and can subsequently reduce non-performing loans (NPF) (Ibrahim et al., 2017).

H_2: Assets that have a negative impact on the NPF of Islamic commercial banks

Capital is one of the instruments that must be owned by banks in carrying out their operations. In overcoming financing risks, a strategy is needed to overcome them. One way to overcome these risks is by fulfilling the obligation to meet the minimum capital adequacy ratio (Widarjono & Misanam, 2024). Capital adequacy ratio (CAR) is a ratio that shows a bank's ability to maintain capital, and meet for the development of existing businesses, as well as to cover possible losses. This CAR has been set by Bank Indonesia at 8% to prevent large losses that will be experienced by Islamic banks. With a high CAR, banks can overcome the non-performing financing.

H_3: CAR has a negative effect on the NPF of Islamic commercial banks

Financing in Islamic banking is divided into two parts, namely profit-loss sharing financing and non-profit-sharing financing. PLS contract consists of Mudharabah and Musharakah. Mudharabah is a financing provided by Islamic banks to their client with a cooperation contract system between Islamic banks as capital owners and customers as capital managers in carrying out economic business activities. Musharakah is a cooperation agreement between an Islamic bank and the Customer by combining capital, both capital and energy from both parties to be used in managing a business and profit distribution in accordance with the portion of capital and the agreement at the beginning of the contract. However, the PLS contract leads to a high financing risk due to the existence of asymmetric information and moral hazard (Widarjono et al., 2020).

H_4: Profit-loss sharing financing has a positive effect on the NPF of Islamic commercial banks

The activities of Islamic banks in collecting and distributing funds certainly require considerable costs. To find out how effective the activities of Islamic banks in collecting and distributing funds, the ratio of operating cost to operating income (CIR) is widely used. According to Andiman (2020), CIR is a ratio used by banking institutions to calculate how efficient a bank's

operational activities are. This is because the resources owned by banks must be used efficiently in carrying out their operations. As CIR is low, the bank efficiency is better but as the CIR is high, the bank is more inefficient. As a results, the more efficient the operational costs, the more banks are able to overcome financing problems.

H_5: CIR has a positive effect on NPF of Islamic commercial banks

One of the indicators used to improve the performance of a bank is profitability A ratio that is often used as a measure of profitability in banking is the return on assets (ROA) (Sutrisno & Widarjono, 2022). The profits obtained by banks can later affect the ability of Islamic banks when experiencing financing default. The higher the profit obtained, the better the ability to overcome financing default and vice versa.

H_6: profits have a negative effect on the NPF of Islamic commercial banks

In addition to internal factors, external factors are also one of the factors that cause high financing risk. This external factor arises due to beyond the control of Islamic banks and customers. The external factor in our study is the Covid-19 pandemic. All countries affected by the Covid-19 pandemic are threatened with an economic crisis due to the disruption of economic activities. As a result of the Covid-19 pandemic, it is difficult for customers to make repayments, causing an increase in financing defaults that occurred starting in the second quarter of 2020.

H_7: COVID has a positive effect on the NPF of Islamic commercial banks

3. Method

Population and Sample

Islamic banks in Indonesia consist of Islamic commercial banks and Islamic business units. Islamic business unit is a conventional bank that opens a Islamic unit. In this study, the sample used was 12 Islamic commercial banks in Indonesia from 2014:Q1 – 2022:Q4. The Islamic commercial banks include Bank Aceh, Bank NTB Syariah, Bank Muamalat Indonesia, Bank Victoria Syariah, Bank Syariah Indonesia (Bank Mandiri Syariah, BRI Syariah, and BNI Syariah from 2014:Q1 to 2020:Q4), Bank Jabar Banten, Bank Mega Syariah, Bank Panin Dubai, Bank Bukopin Syariah, Bank BCA Syariah, Bank BTPN Syariah, Bank Aladin Syariah. The bank's financial data in this study is taken from the balance sheet as well as income statement published by the Financial Services Authority (OJK).

Variable Operational Definition

The dependent variables used in this study are Non Performing Financing (NPF). NPF is the ratio of total non-performing financing to total financing (Alandejani & Asutay, 2017). NPF can be calculated using the following formula:

$$NPF = \frac{Total\ non{-}performing\ financing}{Total\ financing}\ X\ 100\% \quad (1)$$

The independent variables consist of stability, assets, CAR, profits, PLS financing, efficiency and Covid-19. In this study, to find out how much stability Islamic commercial banks are using *Z-score* (Widarjono et al., 2022). The *Z-score* in this study is measured as follows:

$$\text{Zscore} = \frac{(ROA+CAR)}{SD\ ROA} \quad (2)$$

Where ROA is return on assets, CAR is capital adequacy ratio and SDROA is the standard deviation of ROA.

Assets show bank size. The larger the assets, the bigger the bank. Assets are measured by the total assets owned by the bank. CAR is a ratio that shows a bank's ability to maintain capital, and meet for the development of existing businesses, as well as to cover possible losses (Sutrisno & Widarjono, 2018). The CAR formula in this study is as follows:

$$CAR = \frac{Equity}{Asssets\ weighted\ risk}\ X\ 100\% \quad (3)$$

The PLS contract in this study includes Mudharabah and Musyarakah. Thus, the total PLS financing is calculated as follows:

$$PLS = Mudharabah + Musyarakah \quad (4)$$

CIR is the ratio of operating expenses to operating income Andiman (2020). The formula for calculating CIR is as follows:

$$CIR = \frac{Operating\ expense}{Operating\ income}\ x\ 100\% \quad (5)$$

The ratio that is often used as a measure of profitability in banking is the ratio Return on Assets (ROA) (Sutrisno & Widarjono, 2022). The formula for calculating ROA is as follows:

$$ROA = \frac{earning\ after\ tax}{Total\ assets}\ x\ 100\% \quad (6)$$

The Covid-19 pandemic has made it difficult for customers to make repayments from the second quarter of 2020 to the fourth quarter of 2022. In this study, the Covid 19 variable is a dummy variable, where the period 2014 quarter I – 2020 quarter I is notated with the number 0 while the period 2020 quarter II – 2022 quarter IV is notated with the number 1.

Estimation equation

In this study, the panel data regression is utilized. The panel data is a combination of time series data with cross section data. The panel regression provides more observation data so that it will give rise to a larger degree of freedom. In addition, panel data regression provides a solution to the problem that arises due to the problem of ommited variable (Widarjono, et al., 2023). The model of the panel regression is as follows:

$$NPF_{it} = \beta_0 + \beta_1 Zscore_{it} + \beta_2 Lasset_{it} + \beta_3 CAR_{it} + \beta_4 LPLS_{it} + \beta_5 BOPO_{it} + \beta_6 ROA_{it} + \beta_7 Covid_{it} + +e_{it} \quad (7)$$

The panel regression can be estimated by three methods, consisting of the Common Effect Method (CEM), Fixed Effect Method (FEM), and Random Effect Method (REM). As for choosing which model is the best, there are several tests that can be carried out, namely: (1) F test. The F test is used to choose between the Common Effect Method and Fixed Effect Method; (2) the Lagrange Multiplier (LM) test. The LM test is used to determine the best estimation model between the

Common Effect Method and the Random Effect Method; (3) Hausman Test. The Hausman test is used to determine the estimation model between the Fixed Effect Method and the Random Effect Method.

4. Result and Discussion

Data Description

This study aims to analyze the factors that can affect the Non-Performing Financing (NPF) of 12 Islamic commercial banks in Indonesia. Table 1 presents a descriptive statistics of the observed variables.

Table 1. Descriptive statistics

Variable	Average	Standard Deviation	Minimal	Maximum
NPF(%)	4.1092	5.2626	0.0000	46.5500
Zscore (%)	30.1507	25.6026	0.2584	114.6800
Aset (trillion)	20.5442	39.3524	0.5560	305.7274
CAR (%)	38.8665	67.5587	10.1600	506.4300
PlS (trillion)	5.2853	49.8312	0.0000	71.6319
CIR (%)	97.7046	42.8146	40.3600	497.1300
ROA (%)	1.3379	4.1024	-20.1300	17.2300
Covid-19	0.3275	0.4698	0.0000	1.0000

Bank Indonesia has set an NPF assessment category for soundness Islamic bank. As the NPF was above 5%, it can be categorized as doubtful, illiquid financing to sluggish financing. In table 1, the minimum NPF value was 0 and the maximum value was 46.55%, while the average NPF was 4.11% with a standard deviation of 5.26%. Zscore is a ratio that calculates how stable an Islamic commercial bank is in carrying out its operations. The higher Zscore, the more stable the bank's condition. The minimum score of Zscore was 0.26% and the maximum score is 114.68% while the average was 30.15% with a standard deviation of 25.63%. Assets are the total assets of a bank. The larger the assets owned can be used to cover the non-performing financing. The minimum assets was IDR 0.5560 trillion and the maximum value was IDR 305.7274 trillion while the average asset value was IDR 20.5442 trillion with a standard deviation of 39.3524 trillion

CAR is a ratio that is used to minimize the risk of non-performing financing. Bank Indonesia has set the CAR ratio at 8% to prevent large losses from non-performing financing experienced by a bank. The minimum CAR was 10.16% and the maximum was 506.43% meanwhile, the average value was 38.87% and the standard deviation is 67.56%. The amount of PLS financing ranges from 0 and 18.08075. The average value of PLS was 13.08895 with a standard deviation of 67.55877. CIR is a ratio used to calculate how efficient the operations are run by a bank. The average value of CIR was 97.46% with a standard deviation of 40.83%. The CIR ranges from 40.36% to 497.13%. ROA is a ratio that provides information on the measure of profitability obtained by a bank. The average ROA was 1.34% with a standard deviation of 4.07% with a range between -20.13% and 17.23%.

Regression Results

There are three methods to estimate pane regression, namely Common Effect Method, Fixed Effect method and Random Effect Method. The results of the CEM method estimation are shown in table 2.

Table 2. Common Effect Model (CEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.93659	3.505504	3.119834	0.0019
ZSCORE	-0.055216	0.010142	-5.444028	0.0000
LNASET	-0.093528	0.236377	-0.395674	0.6926
CAR	-0.006362	0.006144	-1.035614	0.3010
LNPLS	-0.073230	0.083963	-0.872177	0.3836
CIR	-0.014035	0.010491	-1.337826	0.1817
ROA	-0.691275	0.098328	-7.030263	0.0000
COVID	-0.507428	0.509090	-0.996735	0.3195
R-squared		0.33175		
F-statistic		27.80101		
Prob(F-statistic)		0.00000		

The second estimation result is the Fixed Effect method. The results of the FEM estimates are shown in table 3.

Table 3. Fixed Effect Method (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.05181	8.722161	1.840347	0.0665
ZSCORE	-0.002859	0.022718	-0.125860	0.8999
LNASET	-0.991451	0.580584	-1.707678	0.0885
CAR	-0.018956	0.007480	-2.534430	0.0117
LNPLS	0.512935	0.107918	4.753006	0.0000
CIR	-0.008996	0.009577	-0.939357	0.3481
ROA	-0.653147	0.096177	-6.791083	0.0000
COVID	-0.590366	0.527499	-1.119180	0.2638
R-squared		0.519587		
F-statistic		22.89261		
Prob(F-statistic)		0.00000		

The last estimate is the Random Effect method. The results of the REM method estimation are presented in table 4.

Table 4. Random Effect Method (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.16090	5.095638	3.171516	0.0016
ZSCORE	-0.047513	0.013774	-3.449478	0.0006
LNASET	-0.690595	0.343683	-2.009398	0.0452
CAR	-0.013912	0.006486	-2.144909	0.0326
LNPLS	0.220716	0.090021	2.451830	0.0146
CIR	-0.009960	0.009365	-1.063483	0.2882
ROA	-0.629234	0.091349	-6.888243	0.0000
COVID	-0.313872	0.469798	-0.668099	0.5045
R-squared		0.343445		
F-statistic		29.29369		
Prob(F-statistic)		0.00000		

The next step is to choose the best method for estimating the panel data regression model. Table 5 presents the F test, LM test and Hausman Test. The results of the F test show that the computed F was 13.54243 with a probability of F of 0.000, so the best model to use in this study is FEM, instead of CEM. The results of the Lagrange Multiplier (LM) test show that computed Chi Squares is 129.1254 with a probability of 0.0000 so that the best model is REM instead of CEM. The final step is to test between FEM and REM using the Hausman test. The results of the Hausman test show that the Chi Squares value is 52.21307 with a probability of 0.000, so the best model of the three models to be used in this study is FEM instead of REM.

Table 5. Model Selection Test

Statistical Test	Statistical Value	Prob.
Test F	13.5424	0.0000
LM Test	129.1254	0.0000
Uji Hausman	52.2130	0.0000

Based on the selection test, the best is the FEM method. The results of the FEM show that the R-Square is 0.519587. This means that the non-performing financing (NPF) can be explained by eight independent variables, namely Zscore, Assets, CAR, PLS, CIR, ROA and Covid 19 by 51.96%. While the remaining 48.04% is explained by other variables outside the model. The results of the F test show that F-statistic is 22.89261 with a probability of 0.0000. The conclusion is that all independent variables simultaneously affect non-performing financing (NPF) in 12 Islamic Commercial Banks in Indonesia.

Next is the t-test to determine the effect of each independent variables on dependent variables. Stability (Z-score) is negative but not significant to non-performing financing. Asset is negative and statistically significant towards non-performing financing. The CAR is negative and significant to non-performing financing. PLS financing is a positive and significant to non-performing financing. The CIR is marked negatively but not statistically significant to non-performing financing. The ROA is negative and significant to non-performing financing The Covid marked negative but not statistically significant to non-performing financing.

Discussion

Z-score is used to describe the ability to manage the assets of a company. In addition to describing the company's ability to manage its assets, Zscore is also used to measure the potential for failure experienced by the company. In this study, Zscore was used to find out how stable Islamic commercial banks are in dealing with non-performing financing (NPF). If the Zscore value is low, the condition of Islamic commercial banks is unstable in facing non-performing financing (NPF) and vice versa. As the Zscore is high, the condition of Islamic commercial banks is more stable in facing non-performing financing (NPF). The regression results of the FEM method show that Z-score is negative but insignificant . The results of this study are in line with previous research conducted Hapsari & Widarjono (2023) who examined the the impact of bank stability on Non Performing Financing (NPF) of Islamic rural bank in the province of West Java, Indonesia.

In carrying out its function as a financial institution that collects funds and distributes them in accordance with Islamic law, Islamic commercial banks definitely need capital to carry out their duties. Assets are the most important part that comes from most of the public savings funds owned by Islamic commercial banks which are reported in the balance sheet and liabilities of each period. If the assets owned by the bank are not used optimally for activities according to their functions, it will have an effect on the amount of management costs incurred. From the results of the FEM above, it shows that total assets have a negative effect on non-performing financing (NPF). This is in

accordance with the hypothesis that assets owned by Islamic commercial banks have a negative effect on non-performing financing. Banks with large assets are able to manage their financing well so as to reduce bad financing. This research is in line with previous research conducted by Hapsari & Widarjono (2023) who investigate Non Performing Financing of Islamic rural banks (BPRS) in West Java province.

CAR is a ratio used to calculate capital adequacy and maintain liquidity owned by financial institutions in absorbing losses due to non-performing financing and fulfilling the provisions of the Minimum Capital Provision Obligation. If the CAR is high, the bank's ability to reduce the risk of non-performing loans (NPF) will be greater. The results of the FEM estimate above indicate that CAR has a negative effect on non-performing financing. Banks with high CAR leads to the bank's ability to cover the risk of non-performing loans faced by Islamic commercial banks. The results of the research are supported by the results of previous studies, such as the research conducted Isnaini et al. (2021) about NPF in Islamic Commercial Banks.

Profit-Loss Sharing (PLS) is the total of profit-loss sharing financing from Islamic commercial banks. This revenue sharing financing includes Mudharabah, and Musharakah. These financing generates high financing risk faced by Islamic commercial banks. The results of the FEM estimate suggests that PLS has a positive effect on non-performing financing (NPF). Profit- Loss Sharing is a type of financing that is subject to asymmetric information and moral hazard. If banks are not able to monitor this financing properly, it will increase financing risk so that NPF will increase (Widarjono et al., 2022). The results of this study are also supported and in accordance with previous research conducted Widarjono et al. (2020) who researched the influence of PLS financing on NPF of Islamic rural banks.

Operating Expenses to Operating Income (CIR) is used to determine the effectiveness of the operational activities of Islamic banks, especially in the financing. The CIR reflects the bank's management ability to manage and control operational costs against operating income. The lower the CIR, the better the bank's management performance. This happens because banks are able to use their resources more efficiently, so that the potential for banks to fall into the bank default is smaller and the profitability obtained by banks is greater. The results of the FEM method show that CIR has no effect on non-performing financing (NPF). CIR has no effect on NPF because of the large amount of funds collected by Islamic commercial banks, making the CIR even larger and not having an impact on NPF. In addition, Bank Indonesia has determined that the CIR is under normal circumstances if it is 94% but in this study, some Islamic commercial banks have CIR under the stipulation of Bank Indonesia. This research is in line with previous research conducted by Sari et al. (2022).

ROA is a ratio used to measure all profits obtained by the bank itself so that these profits can increase the bank's performance. The high or low profits obtained by a bank will affect the bank's performance and also have an impact on the bank's condition in facing non-performing financing. The results of the FEM method documents that ROA has a negative effect on non-performing financing. The higher the profit obtained by a bank, the better the bank's performance and the better the condition of the bank facing non-performing financing. This research supports several previous studies such as Sholihah & Sriyana (2014) for the case of Islamic commercial banks and Nugrohowati & Bimo (2019) for the case of Islamic rural banks.

In mid-March 2020, the government issued a policy restricting economic activities, education and worship. This policy was issued by the government due to the emergence of the first case of the Covid-19 outbreak in Indonesia. Covid-19 is an outbreak of a new type of virus from the coronavirus that can be transmitted by attacking the human respiratory system. The impact of the Covid-19 outbreak has caused an economic crisis in several countries. The results of the FEM method indicated that Covid 19 has no effect on non-performing financing. This is due to the decline in

people's income in Indonesia, making people unable to apply for financing at Islamic commercial banks so that the non-performing financing during the pandemic decreased. The results of this study are also in accordance with previous research for the case of Islamic commercial banks (Ajizah & Widarjono (2023) and for the case of Islamic rural banks (Hapsari & Widarjono (2023).

Another important finding in the FEM method is the difference in intercepts between Islamic commercial banks. Table 6 presents the differences in intercepts between Islamic commercial banks in the research period. In this study, the Islamic bank that obtained the lowest intercept value was Bank BCA Syariah at 11.151427. These findings conclude that Bank BCA Syariah has the lowest non-performing financing (NPF) condition among Islamic commercial banks in Indonesia. Meanwhile, the Islamic commercial bank that obtained the highest intercept value was Bank Aladin Syariah with 24.053418. This finding concludes that Bank Aladin Syariah has the highest non-performing financing condition among Islamic commercial banks in Indonesia.

Table 6. Intercept of Every Islamic Commercial Bank in Indonesia

Name Bank	Cow Physin Bank	General coefficients	Intersept
Bank Aceh	-2.169136	16.05181	13.882674
Bank NTB Syariah	-3.128112	16.05181	12.923698
Bank Muamalat Indonesia	-0.846020	16.05181	15.205790
Bank Victoria Syariah	-1.459290	16.05181	14.592520
Bank Syariah Indonesia	-0.553989	16.05181	15.497821
Bank Jabar Banten	2.156048	16.05181	18.207858
Bank Mega Syariah	-2.045001	16.05181	14.006809
Bank Panin Dubai	-2.983771	16.05181	13.068039
Bank Bukopin Syariah	-1.118475	16.05181	14.933335
Bank BCA Syariah	-4.900383	16.05181	11.151427
Bank BTPN Syariah	7.159729	16.05181	23.211539
Bank Aladin Syariah	8.001608	16.05181	24.053418

5. Conclusion

This study analyzes the influence of bank fundamentals, profit-loss sharing financing, and Covid-19 on the financing risk of Islamic banks. The Islamic banks studied are Islamic commercial banks consisting of 12 banks. The research period is from 2014 to 2022 with quarterly data. The results show that banks with strong fundamentals are able to reduce financing risk problems. The assets, capital, and profits will reduce financing risks. Meanwhile, the profit-loss sharing financing (PLS) will increase the financing risk of Islamic commercial banks.

The results of this study have important policy implications for supporting Islamic commercial banks in the future. First, strong bank fundamentals exists if banks are able to increase the scale of their business. By increasing the scale of business, Islamic commercial banks will be able to increase efficiency and encourage profits so that banks are able to minimize financing risks. Second, Islamic banks must disburse their financing in the form of profit-loss sharing financing as the core activity of Islamic banks. However, this profit-sharing financing needs to be monitored properly so as not to generate a high financing risk.

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