

THE IMPACT OF FINANCING RISK ON ISLAMIC BANKING PERFORMANCE IN INDONESIA

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ABSTRACT - The financing risk is a significant issue in the Islamic banking industry that affects its performance. This research aims to examine the factors that influence financing risk on the financial performance of Islamic banking in Indonesia. This study utilized time-series data quarterly from 2009 to 2020 collected from three types of Islamic banking in Indonesia: Islamic Commercial Bank (ICB), Islamic Business Unit (IBU), and Islamic Rural Bank (IRB). It was analyzed using multiple regression estimation techniques with the Ordinary Least Square (OLS) method. This study revealed that the Islamic banks' financing risk is significantly influenced by bank capital, financing, economic growth, inflation, and central bank rate (BI rates), both negatively and positively. In detail, the increase of bank capital, financing, and economic growth will reduce the financing risks, whilst inflation and BI rate increase the financing risks. The findings also disclosed that Islamic banks' financial performance is influenced by bank capital, operating costs, financing risks, inflation, and BI rates. Thus, the decrease in bank capital, operational costs, and financing risks will subsequently decrease the financial performance, while the increase in Inflation and BI rates will increase the financial performance of Islamic banks. Economic growth is the most influential factor in reducing financing risk, while financing risk is the most significant factor in improving banks' financial performance. The government's efforts to boost economic growth are crucial to reducing financing risks and improving the financial performance of Islamic banks.

Keywords: Economic Growth, Financing to Deposits Ratio, Non-Performing Financing, Profitability

ABSTRAK – Dampak Risiko Pembiayaan terhadap Kinerja Bank Syariah di Indonesia. Risiko pembiayaan merupakan persoalan utama bagi industri perbankan termasuk perbankan syariah. Tujuan dari penelitian ini adalah untuk menganalisis faktor-faktor yang mempengaruhi risiko pembiayaan dan pengaruhnya terhadap kinerja keuangan perbankan syariah di Indonesia. Objek penelitian meliputi Bank Umum Syariah, Unit Usaha Syariah dan Bank Perkreditan Rakyat syariah. Model analisis menggunakan teknik estimasi regresi berganda dengan menggunakan metode Ordinary Least Square (OLS). Penelitian ini menggunakan data time-series periode kuartalan dari 2009-2020. Hasil penelitian ini menunjukkan bahwa risiko pembiayaan bank syariah dipengaruhi oleh modal bank, pembiayaan, pertumbuhan ekonomi, inflasi dan BI Rate. Hasil ini mengindikasikan bahwa peningkatan modal bank, pembiayaan, dan pertumbuhan ekonomi akan mengakibatkan penurunan risiko pembiayaan, sementara peningkatan inflasi dan BI Rate akan meningkatkan risiko pembiayaan. Selain itu, hasil kajian juga mendapati bahwa kinerja keuangan bank syariah dipengaruhi oleh modal bank, biaya operasional bank, risiko pembiayaan, inflasi dan BI Rate. Secara detil, penurunan modal bank, biaya operasional dan risiko pembiayaan akan meningkatkan kinerja keuangan bank syariah, sementara peningkatan inflasi dan BI Rate akan meningkatkan kinerja keuangan. Faktor yang berpengaruh paling terhadap penurunan risiko pembiayaan adalah pertumbuhan ekonomi. Penurunan risiko pembiayaan merupakan faktor yang berpengaruh paling besar terhadap peningkatan kinerja keuangan perbankan syariah. Upaya pemerintah untuk mendorong pertumbuhan ekonomi merupakan langkah yang sangat strategis mengurangi risiko pembiayaan dan meningkatkan kinerja keuangan perbankan syariah di Indonesia.

Kata Kunci: Keuntungan, Pembiayaan bermasalah, Pertumbuhan Ekonomi, Rasio Pembiayaan terhadap Simpanan

INTRODUCTION

The Covid-19 pandemic that spread almost all over the world resulted in the economy contracting and triggered a global recession. The impact of various restrictions and economic policies reduces economic activity and growth (Ozili & Arun, 2020). According to Koju, Koju, and Wang (2018), declining economic growth increases the risk of uncertainty and affects the ability to pay the obligations of businesses (Ibrahim, 2018). Slow economic growth will affect the credit risk and lead to high non-performing loans in banks. Das, Moutushi, and Tofa (2020) stated that providing loans is the main activity of the conventional banking sector, and non-performing loans (NPL) are the most considerable problems faced by banks. The bank's inability to manage credit risk will possibly increase the NPL and decrease its profitability.

Indonesia's economy contracted and experienced an average growth of -1.99% per quarter during the Covid-19 pandemic in 2020. The decline in economic growth reflects the reduction in the economic capacity, as shown by fluctuation and decreased inflation in 2020. In the third quarter of 2020, inflation decreased by minus 0.20% compared to the previous year. Declining economic activity and fluctuations in inflation have an impact on the activities and quality of the banking sector. Bank Indonesia responded to the decline in economic activity and banking activities by lowering the BI rate to 4.5%, 4.25%, 4.00%, and 3.75% in the first quarter, 2nd, 3rd, and 4th quarters of 2020 (Figure 1). The decrease in BI rate is expected to boost credit/financing and increase banking sector profits.

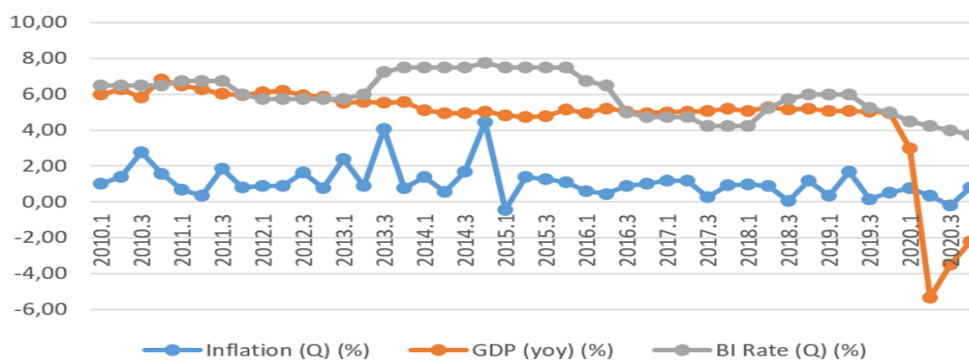


Figure 1. Economic Growth, Inflation and Interest Rates Policy
Period 2010-2020 (quarter, in %)
(Source : Central Bureau of Statistics & OJK, processed)



During the pandemic, loans from conventional banks and financing of Islamic banks experienced different development trends. The loan of conventional banks decreased by an average of 1.99% (yoy), whilst Islamic bank financing increased by an average of 10.57% (yoy) (Table 1). The high growth of Islamic bank financing is not in line with the profits generated (1.55%), which is lower than the conventional bank's average profit (2.15%). Financing/credit is the main activity that should provide banks with a high potential profit level. In line with it, Das et al. (2020) revealed that the increase in LDR (Loan to Deposit Ratio) positively impacted bank rentability. The contradictory fact of financing that is not in line with Islamic bank profits is questionable.

The relationship is not in line between financing and profit levels predicted to be related to macroeconomic and internal conditions of Islamic banks (Mailinda, Ibrahim, & Zainul, 2018; Muarif, Ibrahim, & Amri, 2021). The decrease in economic activity impacts increasing credit risk (Incekaraa & Cetinkaya, 2019). The unstable inflationary developments indicate poor economic conditions and adversely affect banking activity; it affects Islamic banking non-performing financing (NPF) (Mahdi, 2019). The study from Kuswahariani, Siregar, & Syarifuddin (2020) reveals that management's inability to respond to macroeconomic/government policy changes can increase risk and problematic financing and reduce Islamic bank profit levels. During the Covid-19 pandemic, the NPF of Islamic banks shows an average of 3.33%, higher than the average of conventional banks' NPL (3.11%). The high level of non-performing financing (NPF) indicates low performance and problems in financing in Islamic banks.

Table. 1 Growth of Financing & Credit, ROA, and NPF-L

Years- Months	Growth (%)		ROA (%) Bank		NPF-L		
	Fin	Crd	Sharia	Convent.	NPF	NPL	
2019	Nov	10.21	1.64	1.67	2.47	3.47	2.91
	Des	11.29	0.63	1.73	2.47	3.23	2.66
2020	Jan	11.43	0.58	1.88	2.70	3.46	2.91
	Feb	11.22	0.50	1.85	2.49	3.38	2.91
	Mar	10.91	2.49	1.86	2.57	3.43	2.89
	Apr	9.75	0.35	1.55	2.34	3.41	3.02
	May	9.28	-2.26	1.44	2.06	3.35	3.14
	Jun	9.55	-3.84	1.40	1.94	3.34	3.26
	Jul	10.56	-3.82	1.38	1.90	3.31	3.38
	Aug	10.48	-4.33	1.36	1.90	3.30	3.39
	Sep	10.30	-5.21	1.36	1.76	3.28	3.30
	Oct	10.89	-5.82	1.35	1.70	3.18	3.31
	Nov	11.52	-6.81	1.35	1.64	3.22	3.34



Average	10.57	-1.99	1.55	2.15	3.33	3.11
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Source: OJK (2021)

Based on the picture of economic development conditions, it was revealed that the problem is not optimal, and a high risk of Islamic bank financing in Indonesia. Improving the quality and decreasing financing risk is essential to enhance the performance of Islamic banks and help economic recovery. According to Hasan et al.. (2021), Islamic banking can serve as an alternative financial system that provides relief to the community and business sector in the recovery period after Covid-19. A study from Mifrahi & Tohirin (2020) for cases in QISMUT countries revealed the vital role of Islamic bank financing in economic growth through investment and consumption.

This research aims to study the factors that influence financing risk and its effect on the financial performance (profit) of Islamic banking in Indonesia. The study includes an overview of internal and macroeconomic conditions. Internal aspects include capital elements, allocation of third-party funds in the financing, and bank operating costs. Macroeconomic factors include economic growth, inflation, and the central bank's monetary policy. The results of this study are essential information for banks to control financing risks and increase profits. The government/ policyholders can be a reference to focus more on the right policies to boost the economy and quality banking activities.

LITERATURE REVIEW

Financing is the main activity of the bank. The added value obtained from financing is in line with the risks faced by and has an impact on the financial performance of Islamic banks. Financing risk is a problem Islamic banks face when financing disbursed to customers cannot be returned in the after-term agreement (Syamlan & Jannah, 2019). The amount of financing represents the step of risk-taking by the bank; the greater the risk, the greater the expected profit expression (Alam & Tang, 2012). Banking is an economic sector affected by Covid-19. Financing risk in banking is increasing and resulting in non-performing financing. The solution to anticipate financing risk is carried out through restructuring measures by expanding the bank's reserve capital (Rasbin, 2020).

Various studies have been conducted to study financing risks and the factors that affect them. In general, financing risk is influenced by the internal bank



and macro-economic (external) conditions. The results of the study from Iriani & Yuliadi (2015), Radivojevic & Jovovic (2017), and Wood & Skinner (2018) revealed that the bank's internal and macroeconomic variables significantly affect non-performing financing (NPF). Different studies reveal that the bank's decision to take risks by increasing the value of financing is influenced by changes in macroeconomic variables in the long term. Medium and small groups of Islamic banks bear greater risk than large groups due to macroeconomic (external) shocks (Fakhrunnas, 2019). Research from Damanhur, Ghazali, & Muhammad (2017) in the case of Aceh Islamic banks revealed that asset values (internal variables) and external variables (Inflation & economic growth) had a significant effect on non-performing financing' (NPF). In the face of a crisis, the risk management performance of Islamic banks is better than conventional banks (Akram & Rahman, 2018).

Changes in economic activity have an impact on banking activities. Banks have the opportunity to raise and distribute funds. Lending has the potential to provide benefits as well as risk challenges for banks. Credit risk is a significant problem in the banking sector. A study revealed that economic growth (GDP), bank profits, and third-party funds directly impact the increase in non-performing loans (Rahman & Armina, 2020). Economic growth and the inflation rate resulted in a decrease in non-performing loans. Declining economic growth and the global financial crisis increased non-performing loans (Rajha, 2017). Other studies reveal that apart from economic growth and inflation, the unemployment rate, exchange rate, and borrowing rate are the factors that affect non-performing loans (NPL). Unemployment has a proportional impact on underperforming credit, and the exchange rate has a negative effect on the NPL. Credit interest rates positively impact non-performing loans (NPLs) at conventional banks (Szarowska, 2018).

Research from Effendi, Thiarany, & Nursyamsiah (2017) for Islamic banking cases reveals that inflation has a negative impact and GDP positively affects non-performing financing (NPF). The bank's profit, capital, and size negatively impact, and operational costs positively impact non-performing financing. Another study revealed that public deposits positively impact the amount of financing in Islamic commercial banks in Indonesia. Problematic financing (NPF) affects the volume of financing through the mediation role of public deposit funds (DPK) collected by Islamic banks (Permantaningayu & Mahdaria, 2019). There is a mutually affecting interaction between the value of financing and financing risk (NPF) faced by Islamic banks in Indonesia. The



results of other studies revealed that in addition to capital and profit, the increase in financing to deposit ratio (FDR) impacts the decrease in the value of Islamic bank non-performing financing (Ningrum, Samrotun, & Suhendro, 2019).

Tarchouna, Jarraya, & Abdelfettah (2017) revealed that credit/financing is the main activity directly related to credit risk, capital, income, and banking assets. Each bank tries to implement good business governance in the face of various crises and reduce credit/problematic breeding. Small banks are more successful than big banks in corporate governance and reduce non-performing loans/financing. According to Irawati et al. (2019), banks need to make capital and liquidity adjustments to minimize the negative impact on the bank's overall profit and performance. Non-performing loans (NPLs) have a negative but insignificant effect on the bank's financial performance.

The other studies for the Islamic banking case revealed that the musyarakah financing scheme impacts the increasing risk of Islamic banking financings, such as Aprilianto (2020) and Nisak and Ibrahim (2014) studies. Moreover, Warninda, Ekaputra, & Rofik (2019) and Wardiah and Ibrahim (2013) discovered that Mudarabah financing has a linear effect on Islamic bank financing risk, while Musharakah financing provides a non-linear impact. The highest financing risk occurs when the portion of Musharakah financing reaches 37–39% of the total financing in Islamic banks. According to the study by Hasan, Rabbani, and Abdullah (2018), credit risk and inflation negatively affect banking liquidity risk. This study revealed that Islamic banks have better capabilities than conventional banks in credit/financing risk management.

Credit risk and non-performing loans affect the stability of the banking sector. Banking stability in emerging economies is determined by profitability, solvency, market share, and interest rate differences in deposits. Interest rate margins directly impact non-performing loans (NPL) (Kumar, 2015). Another study for Islamic banking cases revealed that efforts to increase profits through increased Financing Asset Ratio (FAR) are faced with the high risk of credit financing. The size and age of the bank contribute to the direction of the risks faced by the bank. Debt burdens and competition levels have the same impact on bank risk. Efforts to reduce risk can be made by diversifying risks through new products that refer to the financing of Mudharabah Muqayyadah (Syamlan & Jannah, 2019).



In addition, Santoso et al. (2019) revealed that each type of financing has different levels of risk and influencing factors. Bank health and inflation levels are the dominant factors affecting non-performing financing (NPF) for all kinds of Islamic banking financing agreements. The other study explains that Islamic banks preferred funding to various investments with debt financing schemes to avoid risk. Islamic banks can effectively regulate risk and improve efficiency and profit (Abusharbeh, 2014). The findings of Budiman, Achsan, & Rifki (2018) disclosed that internal bank factors have more influence than macroeconomic conditions on problematic financing (NPF). The quality of risk management, profit, and capital is important to reduce problematic financing in Islamic banking. Another finding from Aspirantia et al. (2019) revealed that profit is the determining factor in the growth of banking assets. In the long term, the increase in the financing-to-deposit ratio (FDR) has a significant impact on non-performing financing (NPF) in Islamic banking (Ibrahim & Rahmati, 2017).

Financial Performance (Profit)

Credit/financing risks adversely affect financial performance if the bank cannot manage them properly. The increased risk has resulted in a decrease in the bank's overall profit and financial performance. Bitar, Pukthuanthong, and Walker (2018) exposed the effect of credit/financing risk on bank performance. The bank's inability to manage credit risk results in an increased obligation of the bank to provide spare capital. Capital ratio improvement policy negatively impacts the efficiency and profitability of banks. According to Adelopo, Lloydking, and Tauringana (2018), bank size, cost management, and liquidity management have significant relationships with bank profitability. Internal factors (capital, credit risk, and market forces) and sensitive macroeconomic factors (GDP and Inflation) affect bank profits in conditions before, during, and after the financial crisis. Research from Ozili (2021) for South Africa and the United States found that the value of efficiency, problematic loans, and overhead costs determine the banking sector's profitability. The study of Saleh and Afifa (2020) for large banks divulged that an increase in funding cost directly impacts increasing bank profitability (ROE). Various risks, credit or liquidity risks, and bank capital, affect bank profits.

The bank's financial performance (profitability) and being influenced by internal factors are also affected by macroeconomics. Several studies have revealed the effect of macroeconomic variables on bank profitability. Internal



factors (bank size, capital ratio, risk value, cost, and productivity), industry characteristics, and macroeconomic indicators affect bank profitability (Batten & Vinh, 2019). Studies for Islamic banking reveal that problematic financing (NPF) and macroeconomic variables (economic growth, central bank benchmark interest rates, inflation) have a significant effect on Islamic bank profits (Amzal, 2016). The study for the BPR Syariah case revealed that capital and assets positively influence profitability. Problematic financing and operating costs have a negative impact on profitability. Macro-economic variables (Inflation) have no significant effect on profitability. Internal bank variables have more influence on the profitability of Islamic BPR than macroeconomic variables (Sanusi & Zulaikha, 2019). Increased costs represent an increase in managed productive assets and provide opportunities to increase profits for banks. The bank's inability to manage risks, as reflected by the increasing problematic financing, impacts the bank's declining financial performance (profit).

Referring to the problems revealed in the direction, the concept of theory, and previous research, the research process that will be conducted is described in the following research framework follows:

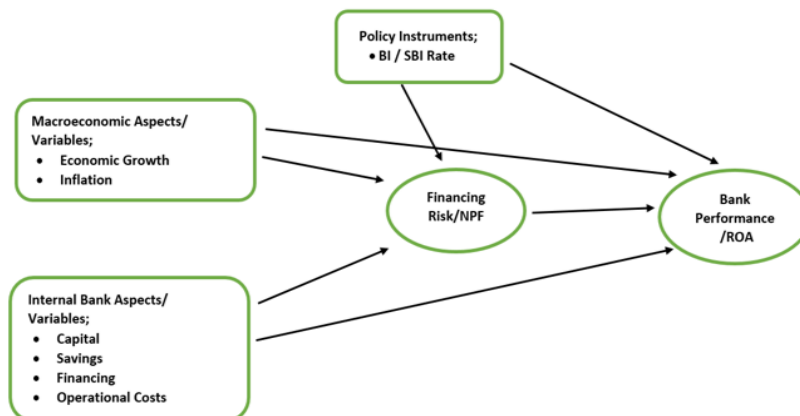


Figure 2. Research Thought Framework
(Source: Processing Result)

Financing risk and financial performance (profit) of Islamic banks are influenced by 1) Internal aspects, including the capital, deposits, financing, and operating costs, 2) Macroeconomic aspects that include elements of economic growth and inflation, and 3) Policy aspects, include elements of monetary policy instruments.



RESEARCH METHOD

The object of this research is the Islamic banking industry in Indonesia, including Islamic Commercial Banks, Islamic Business Unit, and Islamic Rural Bank. The analysis method used in this study is qualitative and quantitative analysis methods that try to explain the phenomenon of problems through time series secondary data collection. In this study, statistical and econometric testing will be conducted to obtain the research conclusion. The analysis model in this study uses multiple regression estimation techniques using the Ordinary Least Square (OLS) method. This relevant analysis model is used for social studies to see, measure, and test relationships between variables. This analysis model is also suitable for research directed at testing hypotheses.

This study employs secondary data in time series for the quarterly period 2009-2020. Research data includes deposit data, bank capital, financing, operational costs, problematic financing, monetary policy instruments, inflation data, economic growth, and bank profits. The data was obtained through library research and computerized search. All data is expected to be obtained from the publications and websites of Bank Indonesia, the Central Bureau of Statistics, and the Financial Services Authority.

The structural equations of this research model are as follows;

$$Npf_t = \alpha_0 + \alpha_1 Fdr_t + \alpha_2 Car_t + \alpha_3 Bopo_t + \alpha_4 Cpi + \alpha_5 Grw + \alpha_6 Int_t + \varepsilon_1 \quad (1)$$

$$ROA_t = \beta_0 + \beta_1 Fdr_t + \beta_2 Car_t + \beta_3 Bopo_t + \beta_4 Cpi + \beta_5 Grw + \beta_6 Int_t + Npf_t + \varepsilon_2 \quad (2)$$

Where:

NPF = Non-Performing Financing (%)

ROA = Rentability of assets (%)

FDR = Financing to deposit ratio (%)

CAR = Capital adequacy ratio (%)

OER = Operating cost ratio (%)

CPI = Consumer price index (%)

INT = Instrument certificate of Bank Indonesia (%)

GRW = Economic growth (%)

The structural equation of the Problematic Financing model (equation 1) and the Profit model (equation 2) are assumed to have linear relationships to qualify for linear regression models. The research model will conduct hypotheses



testing, statistics, and econometrics. Draft hypothesis test to determine problematic financing and bank profits through the influence of internal Islamic bank conditions, policy instruments, and macroeconomic conditions.

RESULT AND DISCUSSION

Descriptive Statistics

In the 2009-2020 period, Islamic banking activities in Indonesia, concerning the value of the Financing to Deposit ratio (FDR), decreased. The highest value of FDR occurred in 2013, and the lowest value occurred in 2020. The decline in banking activity was in line with the decline in economic growth. The highest economic growth occurred in 2010, and the lowest economic growth occurred in 2020. The decline in banking activity and economic growth in 2020 coincided with the Covid-19 pandemic.

Table 2. Descriptive Statistics of the Variables (in %)

Variable	CPI	Grw	BI Rate	FDR	CAR	OER	NPF	ROA
Min	1,70	-2,20	3,75	76,36	14,13	74,75	2,22	0,41
Maks	8,13	6,81	7,75	100,32	21,64	97,01	4,76	2,14
Mean	4,39	4,77	5,89	86,55	17,15	87,50	3,42	1,29
St. Dev	2,22	2,38	1,36	8,24	2,62	7,95	0,85	0,64

Source: Processing Results (2021)

The central bank's efforts to encourage Islamic banking activities were demonstrated by a decrease in the BI rate and supported by a reduction in prices (CPI). Internally, the bank increases the minimum capital (CAR) and reduces operational costs to anticipate increasing financing risk and improve financial performance (ROA). The highest financing risk (NPF) occurred in 2017 and declined, although it did not yet reach the lowest NPF value in 2012. The most deficient financial performance (ROA) appeared in 2014 and increased even though it did not yet reach the highest ROA in 2012. The Covid-19 pandemic resulted in the ROA increasing trend being corrected. In 2020 the financial performance (ROA) was only 1.4%.

Research Data Processing Results

Based on the data processing process, the results of the Non-Performing Financing Model and Profit Model are presented in the table as follows:



Table 3. Non-Performing Financing Model for Islamic Banking

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	54.24627	13.68848	3.962914	0.0003
CAR	-0.175168	0.057924	-3.024114	0.0043
FDR	-0.046954	0.015953	-2.943283	0.0053
OER	0.014139	0.018327	0.771466	0.4449
LGRW	-7.265956	2.237155	-3.247855	0.0023
INT	0.298210	0.099766	2.989102	0.0047
CPI	0.069557	0.020208	3.442034	0.0013
R-squared	0.717248	F-statistic	17.33388	

Dependent Variable: NPF
Method: Least Squares
Date: 03/08/21 Time: 08:00
Sample: 2009Q1 2020Q4
Included observations: 48

Source: Processing Results (2021)

Table 3 displays the Non-Performing Financing (NPF) model's estimated result, showing a determinant coefficient value (R^2) of 0.7172. This value reveals that 71.72% of dependent variable change variations (NPF) are due to independent variable changes. 28.28% variation in Islamic banking financing changes in Indonesia due to variations in other factors outside the model. The estimated parameters of the Non-Performing Financing model through simultaneous testing (Test F) showed the figure of 17.33388 was above the F-table (3,425) at a significance level of one percent and $df_1=5$; ($k-1=6-1$), $df_2=43$; ($n-k=48-5$). The model is considered capable of explaining all variables independent of dependent variable changes. All independent variables jointly affect Non-Performing Financing Islamic banking in Indonesia. Based on the results of the t-test, independent variable for capital (CAR), financing-to-deposit ratio (FDR), economic growth (LGRw), inflation (CPI), and policy interest rate (INT) have a significant influence on dependent variables non-performing financing (NPF) and have a sign in accordance with the hypothesis determined at the confidence level of 95% and 99%.

As displayed in Table 4, the estimated profit model (ROA) showed a determinant coefficient (R^2) of 0.9507. This result revealed that 95.07 variations of dependent variable changes (ROAs) resulted from variations in independent variable changes. There is only a 4.93% variation in Islamic banking profit change in Indonesia due to other factors outside the model. The estimated parameters of the Profit model through simultaneous testing (Test F) show a number of 110.25, above the F-table (3,205) at a significant rate of one percent and $df_1=6$ ($k-1=7-1$), $df_2=44$; ($n-k=48-4$).



Table 4. Financial Performance (Profit) Model for Islamic Banking

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.34543	4.666379	2.217014	0.0324
CAR	-0.042816	0.018569	-2.305785	0.0264
FDR	-0.002702	0.005090	-0.530909	0.5984
OER	-0.080933	0.005351	-15.12525	0.0000
LGRW	-0.395873	0.727143	-0.544422	0.5892
INT	0.088080	0.031915	2.759820	0.0087
CPI	0.014857	0.006650	2.233921	0.0311
NPF	-0.139491	0.045271	-3.081274	0.0037
R-squared	0.950722	F-statistic	110.2464	

Dependent Variable: ROA
Method: Least Squares
Date: 03/08/21 Time: 08:03
Sample: 2009Q1 2020Q4
Included observations: 48

Source: Processing Results (2021)

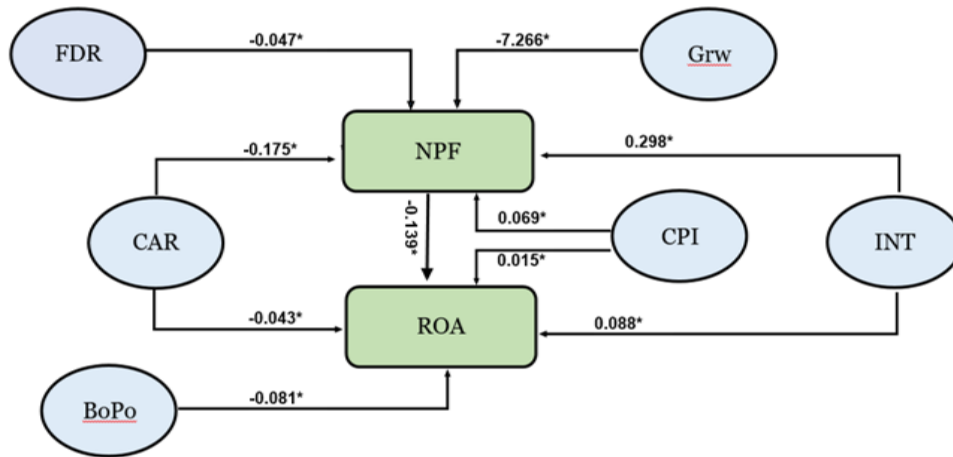
The model can explain all variables independent of dependent variable changes. All independent variables jointly affect the Profit of Islamic banking in Indonesia. Based on the results of the t-test, independent variables for capital (CAR), the ratio of operating costs to operating income (OER), inflation (CPI), problematic financing (NPF), and policy interest rates (INT) have a significant influence on dependent variables (Islamic banking profits, ROA) and have a sign in accordance with the specified hypothesis. F and t-tests were conducted at 95% and 99% confidence levels.

Discussion

In general, the relationship between research variables of the Non-Performance Financing and Financial Performance (Profit) models for Islamic Banking in Indonesia is presented in Figure 3. Through the relationship between variables in the "Non-Performing Financing" model, the increase in the ratio of capital to the value of risk-weighted assets (CAR) decreased non-performing financing in Islamic banking in Indonesia. The increasing capital ratio can reduce the risk of financing. For the 1% increase in CAR, non-performing financing (NPF) decreased by 0.175%. The bank's capital ratio can support the main financing activities for reducing the emergence of non-performing financing in Islamic banking. This research is in line with a study from Effendi et al. (2017), which revealed that the increase in CAR resulted in a decrease in non-performing financing in Islamic banking. The results of this study are different from the study of Kuswahariani et al. (2020), which revealed that CAR has a positive



effect on NPF, increasing the capital ratio resulting in increased non-performing financing in Islamic banks, especially for the micro-segment.



Description : Significant on *critical value* *)=5%,

Figure 3. The relationship between the research variables of the NPF and ROA models for Sharia Banking in Indonesia (Source : processing results)

FDR describes the value of financing supported by public deposits in Islamic banking. Increasing 1% FDR can reduce Islamic banking non-performing financing (NPF) by 0.047%. The decrease in non-performing financing in line with the increasing FDR shows that Islamic banking has implemented risk management in financing well. This study is in line with the research results of Akram and Rahman (2018) and Kuswahariani et al. (2020), which revealed that financing management has a good impact on reducing Islamic bank financing risk. The results of this study are different from the results of studies by Rahmah and Armina (2020) and Aprilianto (2020), who revealed that FDR and financing with musyarakah profit-sharing schemes affect the increased risk of financing.

Economic Growth (GRW) is another variable that can influence the decline of non-performing financing (NPF) in Islamic banking. Each 1% increase in economic growth impacts the decrease in non-performing financing in Islamic banking by 7.266%. Economic growth is the leading and most significant factor influencing the reduction of problematic financing. This study is in line with the research results of Fakhrunnas (2019) and Kuswahariani et al. (2020), which revealed that economic growth is related to Islamic banking risk management in the long term. Economic growth can increase the ability of debtors to meet their obligations, thus lowering problematic financing in



Islamic banking in Indonesia. The results of this study are different from the results of the study by Rahman and Armina (2020). The increase in economic activity followed by the increasing portion of financing without implementing good risk management has an impact on the occurrence of non-performing financing (NPF) in Islamic banks

In the non-performing financing (NPF) model, the inflation rate (CPI) positively affects Islamic bank non-performing financing (NPF). The movement of economic activity resulted in an increase in inflation due to the rise in the ratio of Islamic banking's non-performing financing. Each 1% increase in inflation resulted in non-performing financing (NPF) increase of 0.07%. The value of its influence is not very large, but inflation is a macroeconomic variable that significantly affects Islamic banking's non-performing financing growth. Inflation can increase the burden on businesses and reduce the ability to pay debts, resulting in increased non-performing financing in Islamic banking in Indonesia. This study is in line with the research results of Damanhur et al. (2017), Mahdi (2019), and Kuswahariani et al. (2020). The ability to control inflation from the government is critical for managing risk and non-performing financing for Islamic banking.

Through changes in the instrument of central bank interest rates (INT), central bank policy provides a positive impact on Islamic bank problematic financing (NPF). Each 1% increase in the BI policy rate increased problematic financing in Islamic banks by 0.298%. The Central Bank's efforts to maintain monetary stability by increasing policy rates have increased deposit and credit rates. In the dual banking system, interest rates are still a reference for determining Indonesia's Islamic banking revenue share ratio. Rising policy rates result in increased debtor-borne expenses and potentially increased problematic financing. The results of this study are in line with a study from Santoso et al. (2019), which revealed that the increase in the central bank's benchmark interest rate resulted in increased problematic financing, especially in the financing scheme of the trade agreement (murabahah). The results of this study are different from the results of a review from Mahdi (2019), which revealed that the interest rate of the central bank's monetary policy instrument does not affect the condition of problematic financing in Islamic banks.

Through the relationship between variables in the "Profit" (ROA) model, it was revealed that the increase in capital ratio to risk-weighted assets (CAR) resulted in a decrease in the profit (ROA) of Islamic banking. Each 1% increase in capital ratio (CAR) resulted in a decreased yield of -0.043%—efforts to



increase the capital ratio related to increased financing risk impact the decrease in Islamic bank profits. The effect is small, but CAR is one of the variables that significantly impact the profits of Islamic banks. This study is in line with the research results of Sanusi and Zulaikha (2019). The CAR's increase illustrates the bank's internal efforts to increase financing capacity and anticipate the occurrence of problematic financing impacts the long-term decline in Islamic bank profits. The results of this study are different from the studies of Bitar et al. (2018) and Saleh and Afifa (2020). Efforts to increase the risk-based capital ratio cannot reduce risk but boost efficiency and increase bank profits. The increase in CAR can increase banking profits, especially in developing countries.

The variable of the Operating Efficiency Ratio (OER) of Islamic banking negatively affects the profits of Islamic banks. Each increase of 1% OER resulted in a decrease in Islamic banking profit by 0.08%. OER's increase illustrates the reduction in efficiency, resulting in a decline in Islamic banking profits. The effect is relatively small but is a significant variable effect and deserves attention to increase the profits of Islamic banks. This study is in line with the research results of Adelopo et al. (2018), Sanusi and Zulaikha (2019), and Saleh & Afifa (2020). Increased costs will reduce bank profits in pre-crisis conditions, during the crisis, and after the financial crisis. In the long run, the increase in operational expenses affects the decrease in profits at Islamic banks.

Variable non-performing financing (NPF) negatively influences Islamic banking (ROA). Every 1% increase in the value of non-performing financing resulted in a decrease in Islamic banking profits by 0.139%. The increase in non-performing financing illustrates the increasing risks and costs that banks must bear, thus impacting the decrease in Islamic bank profits. This study is in line with the results of studies from Amzal (2016), Sanusi and Zulaikha (2019), and Saleh and Afifa (2020). Increased bank risk indicated by the increasing value of non-performing financing (NPF) will reduce bank revenues and impact profit reduction for Islamic banks.

Inflation (CPI) has a positive impact on bank profits. Each 1% increase in inflation resulted in a 0.015% increase in bank profits. Rising inflation indicates increased purchasing power and economic capacity, resulting in increased demand for goods and services. Conditions increase the chances of banks increasing financing and gaining additional profits. The effect of rising inflation is not significant, but these macroeconomic variables significantly affect the benefits of Islamic banking. This study aligns with Amzal's (2016) research



results and Sanusi and Zulaikha's (2019). Rising inflation is an opportunity for businesses to increase business activity. Inflation provides a chance to improve quality financing to provide additional profit for Islamic banks in Indonesia.

BI rates (INT) have a positive impact on bank profits. Any 1% increase in policy rates resulted in bank profits increasing by 0.088%. An increase will follow the rise in policy rates, credit interest rates, and income from various instruments in financial markets. If economic activity decreases, the financing channeled to the community decreases. Increased policy rates can buy financial tools that allow Islamic banks to increase profits. The effect of variable BI rates on gains is not significant, but these policy variables significantly affect the advantages of Islamic banking. The results of this study are in line with the study results by Omer (2019). The excess liquidity of Islamic banks is used for investment in various financial market instruments. Islamic banks invest in interest-based securities issued by the government indirectly by utilizing cooperation with conventional banks. Amzal's (2016) results showed different results, in which an increase in the central bank's policy rate resulted in a decrease in profits for the bank. The rise in interest rates will increase the interest rate on deposits and banking loans. In the dual banking system, Islamic banks must respond to changes in interest rates in conventional banking so as not to lose customers. Bank Syariah will adjust the profit-sharing ratio to reduce revenues and profits potentially.

CONCLUSION

Based on the objectives and results of the research, the conclusion can be drawn as follow:

1. Financing risk in Islamic banking, which was proxied by NPF, is influenced by FDR, CAR, growth (GRW), inflation (CPI), and interest rates (INT). It indicates that the NPF would decrease when capital, financing, and economic growth increase. In contrast, the increase in inflation and BI rates contributed to the rise of NPF. The findings also reveal that economic growth is the most influential factor in NPF in Islamic banking.
2. The financial performance proxied by ROA is influenced by the OER, CAR, NPF, CPI, and INT. It shows that the increase in OER, CAR, and NPF resulted in a decrease in the financial performance (ROA). In comparison, the increase in inflation and BI rate have contributed to increased financial performance (ROA). Among the tested factors, the NPF



ratio in Islamic banks is mainly influenced by the financial performance (ROA) ratio.

The findings suggest that Islamic banking institutions in Indonesia should pay attention on reducing the financing risk by improving risk management quality and increasing the CAR. Simultaneously, the government should encourage economic growth, maintain price stability, and keep the BI rate low. Internally, Islamic banking institutions should increase the efficiency ratio and improve the quality of risk management. As previously mentioned, good risk management has a significant influence on reducing the NPF and increasing the CAR. In addition, the findings also propose utilizing the inflation momentum—as a result of the increased purchasing power—by fostering the financing quality. Islamic banks can adjust portfolios and diversify their assets following the increasing BI rates as a stabilizer in monetary aspects.

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