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Macroprudential Instruments to Minimize the Financing Risk of Islamic Commercial Banks in Indonesia

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ABSTRACT

Bank Indonesia has established macroprudential policy as one of its strategies within the policy mix, utilizing various instruments to support the intermediation function and manage credit or financing risks. This research aims to investigate the impact of the countercyclical capital buffer, financing to funding ratio, and capital adequacy ratio on the non-performing financing ratio at Islamic commercial banks in Indonesia. The study employs a quantitative approach focusing on 13 Islamic commercial banks registered with the Otoritas Jasa Keuangan (Financial Services Authority). Secondary data covering a 6-month period from 2014 to 2023 is utilized for analysis. The research applies the multiple linear regression model using the Ordinary Least Square method. The simultaneous test (F-test) result indicate that the countercyclical capital Buffer, financing to funding ratio, and capital adequacy ratio collectively exert a significant influence on non performing financing in Islamic commercial banks. According to the partial test results (t-test), only the capital adequacy ratio demonstrates a negative and significant impact on non-performing financing. This implies that an increase in the capital adequacy ratio tends to reduce the non-performing financing ratio. The regression model interpretation suggests that all independent variables have a consistent relationship with the dependent variable. Therefore, an increase in the value of the capital buffer value, financing to funding ratio and capital adequacy ratio concurrently reduce the percentage of non-performing financing at Islamic commercial banks. The coefficient of determination indicates that the independent variables collectively explain 92.11% of the variation in the dependent variable. The remaining 7.89% is attributed to other variables not included in this study.

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INTRODUCTION

As a financial institution with an intermediary function, the bank acts as a mediator between parties with surplus funds and those in need of funds, aiming to improve the lives of many people. This intermediation function is also carried out by Islamic banks, which earn income through margins and profit-sharing on receivables and financing provided to customers in need. The income or profit earned enables Islamic banks

to expand their financial services, increase their financing portfolios, and ensure the sustainability of their business in the Islamic financial sector.

However, Islamic banks face business risks when channeling financing to customers, indicated by Non-Performing Financing (NPF), with measures the risk arising from delinquent payment obligations or the inability of financing customers to meet their obligations to the bank. A higher NPF indicates greater losses for an Islamic bank. The issue of in Islamic banks is closely monitored by monetary authorities, especially Bank Indonesia and the Financial Services Authority (OJK). These authorities continuously strive to maintain and supervise Indonesia's financial sector, including Islamic banking, to ensure its health, strength, and resilience to risks by establishing policies, regulations, and prioritizing prudent operational principles.

One of Bank Indonesia's key policies is macroprudential policy. Since the early 2000s, Indonesia has implicitly embraced the concept of macroprudential policy in response to the 1997/1998 financial crisis. This period saw the establishment of the Financial System Stability Bureau (BSSK) by Bank Indonesia and the development of framework aimed at safeguarding the stability of the nation's financial system through both microprudential and macroprudential approaches (Bank Indonesia, 2016).

According to the European Systemic Risk Board (ESRB), tasked with monitoring and preventing systemic risk in the European financial system, macroprudential policy aims to uphold overall financial system stability. It strengthens the financial system and mitigates systemic risk accumulation, thereby ensuring that the financial sector continues to foster economic growth. (ESRB, 2013).

The International Monetary Fund (IMF) similarly defines macroprudential measures as those designed to maintain overall financial system stability by reducing systemic risk (IMF, 2011). Based on these definitions, macroprudential policy is characterized by its role in maintaining financial system stability, its focus on the entire financial system, and its aim to mitigate systemic risk. In simple terms, macroprudential policy applies prudent principles to the financial system to align microeconomic and macroeconomic objectives (Bank Indonesia, 2016).

When applied correctly, macroprudential instruments can effectively address specific risks. An International Monetary Fund (IMF) survey indicates that most country authorities using macroprudential instruments find them effective (Lim et al., 2011).

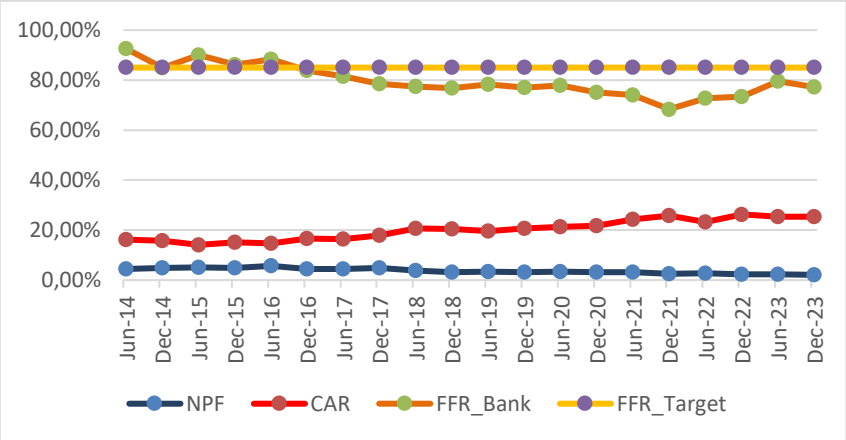

Figure-1 Graph of the Development of Financial Ratios of Islamic Commercial Banks 2014 – 2023
Source: OJK Sharia Banking Statistics, data processed

Figure-1 illustrates the development of financial ratios for Islamic commercial banks from 2014 to 2023, encompassing Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), and both the 'Banks and Target' Financing to Funding Ratio (FFR). The NPF ratio shows a decline from 4.33% in June 2014 to 2.10% in December 2023. During the same period, CAR increased from 16.21% to June 2014 to 25.41%. The Bank's FFR decreased significantly from 92.53% in June 2014 to 77.20% in December 2023. Figure-1 sets the FFR Target at 85%, representing the midpoint between the lower and upper limits of the FFR Target (78% - 92%), as stipulated by Bank Indonesia. Based on the aforementioned trends in financial ratio for Islamic commercial banks, it is evident that these banks have maintained stable condition, adequate capitalization, and effective management of financing risks.

According to the book "Mengupas Kebijakan Makroprudensial" (Bank Indonesia, 2016) published by the Macroprudential Policy Department of Bank Indonesia, macroprudential policy instruments implemented in Indonesia and regulated by Bank Indonesia, include: 1) Loan to Value Ratio (LTV) for Home Ownership Loans (KPR) and Down Payment (DP) Determination on Motor Vehicle Loans (KKB), 2) Reserve

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Requirement (GWM) based on Loan-to-Funding Ratio (LFR), 3) Countercyclical Capital Buffer (CCB). This research focuses on two specific macroprudential instruments: Countercyclical Capital Buffer (CCB) and Financing to Funding Ratio (FFR), in conjuction with Capital Adequacy Ratio (CAR), to assess their impact on financing risks with in Islamic commercial banks, as presented by Non-Performing Financing.

Muhamad (2017) asserts that financing risk arises when a bank fails to recover principal installments, profit sharing, margins, or income from its financing or investments. This risk often stems from banks excessively leveraging their excess liquidity, leading to less rigorous analysis of the risks associated with the businesses they finance.

Non-Performing Financing (NPF) is a critical metric that compares problematic financing amounts to total disbursed financing, expressed as a percentage. Higher NPF ratios indicate poorer quality financing portfolios for Islamic banks, resulting in potential losses. Conversely, lower NPF ratios enhance a bank's profitability (Rosidah, 2017).

The Countercyclical Capital Buffer (CCB) represents additional capital set aside to absorb potential losses during periods of rapid credit expansion that could threaten financial stability. This policy addresses the phenomenon of procyclical credit growth, where credit expands sharply during economic booms and contracts swiftly during downturns (Bank Indonesia, 2016).

According to Bank Indonesia Regulation No. 17/22/PBI/2015 on CCB requirements, all banks must maintain CCB levels ranging from 0% to 2.5% of their Risk Weighted Assets. Bank Indonesia reserves the right to adjust CCB requirements based on macroeconomic developments, the Indonesian financial system's stability, and global economic conditions (Bank Indonesia, 2015b).

The Financing to Deposit Ratio (FDR) assesses a bank's ability to meet short-term obligations by comparing total financing to third-party funds. A high FDR suggests potential liquidity challenges in meeting depositor obligations, while a low FDR indicates sufficient liquidity but may also imply lower profitability, given that a bank's primary income stems from channeled financing (Muhamad, 2017).

Since August 3, 2015, Bank Indonesia Regulation No. 15/15/PBI/2013 on Required Reserves of Commercial Banks in Rupiah and Foreign Currency applies to conventional commercial banks and includes the Loan to Funding Ratio (LFR). LFR is defined as the ratio of loans extended to third parties in both Rupiah and foreign currencies (excluding loans to other banks) to third-party funds comprising current accounts, savings, and deposits in both Rupiah and foreign currencies (excluding interbank funds), as well as securities meeting specific bank-issued requirements for funding. To determine the LFR Reserve Requirement, Bank Indonesia sets an LFR Target, with parameters ranging from a lower limit of 78% to an upper limit of 92%.

Additionally, GWM LFR denotes the minimum deposit in Rupiah that banks must maintain as a current account balance with Bank Indonesia, calculated as a certain percentage of third-party funds (DPK). This calculation is based on the variance between the bank's actual LFR and the LFR Target (Bank Indonesia, 2015a). The LFR for Islamic commercial banks is commonly known as the Financing to Funding Ratio (FFR).

Capital adequacy is a crucial issue in the banking industry, as banks with high levels of capital adequacy are considered healthy. The Capital Adequacy Ratio (CAR) is a key indicator used to assess a bank's capital adequacy. CAR can be calculated in two primary ways: first, by comparing capital to third-party funds; and second, by comparing capital to risk-weighted assets. In 1988, the Bank for International Settlements (BIS) established a global standard adopting the second method to determine CAR. This approach mandates a minimum CAR ratio based on the proportion of capital to risk-weighted assets (Muhamad, 2017).

In accordance with Bank Indonesia regulations, the Capital Adequacy Ratio (CAR) is referred to as Kewajiban Penyediaan Modal Minimum (KPMM). KPMM is defined as the ratio of a bank's capital to its risk-weighted assets, in compliance with the minimum capital requirements stipulated by Bank Indonesia for commercial banks (Bank Indonesia, 2015a).

METHOD

This research examines three independent variables: Countercyclical Capital Buffer (CCB), Bank Financing to Funding Ratio (FFR), and Capital Adequacy Ratio (CAR), along with one dependent variable, Non-Performing Financing (NPF).

The CCB is set at 2.5% of the ATMR of Islamic Commercial Banks in billion Rupiah (Bank Indonesia, 2015b). The FFR, expressed as a percentage (%), is calculated by dividing Total Financing by the sum of Third Party Funds and Securities issued (Bank Indonesia, 2015a). Both CAR and NPF are expressed as percentages (%).

The research utilizes 6-month time series data from 2014 to 2023, comprising 20 observations in total. These secondary data are sourced from the Islamic Banking Statistics provided by the Otoritas Jasa Keuangan website, covering 13 Islamic Commercial Banks (OJK, 2024). The research employs the Multiple Linear Regression Model with the Ordinary Least Squares method to analyze the quantitative data and ascertain the

impact of independent variables on the dependent variable. Data analysis is conducted using E-views 12 software.

The Multiple Linear Regression Model is described by the following equation:

$$\mathbf{Y = \alpha + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3 + e}$$

Remarks:

α	=	The constant
$\beta_1, \beta_2, \beta_3$	=	Regression coefficient of independent variable (Slope)
X_1	=	CCB (Countercyclical Capital Buffer)
X_2	=	FFR (Financing to Funding Ratio)
X_3	=	CAR (Capital Adequacy Ratio)
Y	=	NPF (Non Performing Financing)
e	=	Error (Confounding Variable)

RESULTS

1. Descriptive Statistics Result

To see the data description of the minimum value, maximum value, average value and standard deviation, Descriptive Statistics are used. The data characteristics of all variables studied are described in Table-1, with the same number of samples from each variable, which are 20.

Table-1. Descriptive Statistics Results

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Countercyclical Capital Buffer (X_1)	20	2,897.000	7,607.000	4,856.950	1,259.177
Financing to Funding Ratio (X_2)	20	68.350	92.530	79.687	6.240
Capital Adequacy Ratio (X_3)	20	14.090	26.280	20.050	4.056
Non Performing Financing (Y)	20	2.100	5.680	3.699	1.054
Valid N (Listwise)	20				

Source: Eviews 12, Data processed

Explanation of descriptive statistical results:

a. Countercyclical Capital Buffer (X1) has a minimum value of 2,897 in the June 2014 period and a maximum value of 7,607 in the December 2023 period. While the average value is 4,856.95 and the standard deviation is 1,259.18.
b. Financing to Funding Ratio (X2) has a minimum value of 68.35 in the December 2021 period and a maximum value of 92.53 in the June 2014 period. Meanwhile, the average value is 79.687 and the standard deviation is 6.24.
c. Capital Adequacy Ratio (X3) has a minimum value of 14.09 in the June 2015 period and a maximum value of 26.28 in the December 2022 period. While the average value is 20.05 and the standard deviation is 4.06
d. Non Performing Financing (Y) has a minimum value of 2.10 in the December 2023 period and a maximum value of 5.68 in the June 2016 period. While the average value is 3.699 and the standard deviation is 1.05. This illustrates that Islamic Commercial Banks were able to reduce the NPF ratio during the period June 2014 to December 2023 and are expected to reduce the average NPF value to less than 3.699.

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2. Normality Test

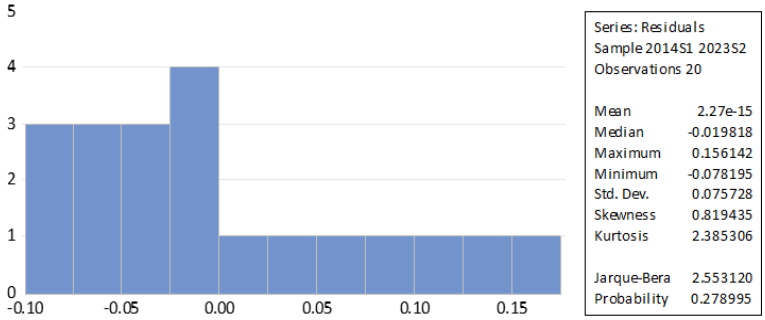

Figure-3. Normality Test Results
Source: Eviews 12, Data processed

Table-2. Hypothesis and Normality Test Criteria

Hypothesis		Criteria	Decision
Ho =	Residual Data is Normally Distributed	Jarque-Berra Prob.Value > Sign.Level (α) 5% or 0,05	Ho Accepted
Ha =	Residual data is not normally distributed	Jarque-Berra Prob.Value < Sign.Level (α) 5% or 0,05	Ha Accepted

According to the Normality Test Results (Figure-3), the Jarque-Bera Probability Value is 0.278995 or > Significance Level (α) 5% or 0.05 and it means Ho Accepted. Therefore, the Residual Data in the Regression Model is Normally Distributed.

3. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.923758	Prob. F(2,14)	0.4199
Obs*R-squared	2.331617	Prob. Chi-Square(2)	0.3117

Figure-4. Auto Correlation Test Results
Source: Eviews 12, Data processed

Table-3. Hypothesis and Criteria of Autocorrelation Test

Hypothesis		Criteria – Breusch-Godfrey	Decision
Ho =	There is no autocorrelation in the regression model	Chi-Square Probability Value > 0,05	Ho Accepted
Ha =	Autocorrelation occurs in the regression model	Chi-Square Probability Value < 0,05	Ha Accepted

According to the results of the Breusch-Godfrey Serial Correlation LM Test Model Autocorrelation Test (Figure-4), the Chi-Square Probability Value is 0.3117 or > Significance level (α) 0.05 or 5% and it means Ho Accepted. Therefore, there is no autocorrelation in the research data.

4. Heteroscedasticity Test

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	0.469424	Prob. F(9,10)	0.8648
Obs*R-squared	5.940065	Prob. Chi-Square(9)	0.7459
Scaled explained SS	2.633219	Prob. Chi-Square(9)	0.9771

Figure-5. Heteroscedasticity Test
Source: Eviews 12, Data processed

Table-4. Hypothesis and Criteria of Heteroscedasticity Test

Hypothesis		Criteria – White's Model	Decision
Ho =	There is no heteroscedasticity problem in the regression model	Chi-Square Prob.Value on Obs*R-squared > Sign.Level (α) 0,05	Ho Accepted
Ha =	There is a heteroscedasticity problem in the regression model	Chi-Square Prob.Value on Obs*R-squared < Sign.Level (α) 0,05	Ha Accepted

According to the White Model Heteroscedasticity Test Results (Figure-5), the Chi-Square Probability Value on Obs*R-Squared is 0.7459 or > Significance Level (α) 0.05 or 5% and it means Ho Accepted. Therefore, there is no heteroscedasticity problem in the regression model.

5. Multicollinearity Test

	NPF	CCB	FFR	CAR
NPF	1.000000	-0.842994	0.782263	-0.949092
CCB	-0.842994	1.000000	-0.626857	0.845952
FFR	0.782263	-0.626857	1.000000	-0.844832
CAR	-0.949092	0.845952	-0.844832	1.000000

Figure-6. Multicollinearity Test Results
Source: Eviews 12, Data processed

Table-5. Hypothesis and Multicollinearity Test Criteria

Hypothesis		Criteria	Decision
Ho =	There is no multicollinearity between independent variables in the regression model	The numbers that are outside the diagonal line have a value of < 1	Ho Accepted
Ha =	There is multicollinearity between independent variables in the regression model	The numbers that are outside the diagonal line have a value of > 1	Ha Accepted

According to the Covariance Analysis Model Multicollinearity Test Results (Figure-6), all numbers that are outside the diagonal line have a value of < 1. it means Ho Accepted. Therefore, there is no multicollinearity problem between the independent variables in the regression model.

Referring to the Classical Assumption Test Results above, it is stated that the observation/research data is free from Classical Assumption problems. The Regression Model is acceptable and can be interpreted

6. Regression Model Formation

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$NPF = 11.25987 - 0.2604CCB - 0.8510FFR - 1.3652CAR$$

By using the Regression Model that is formed, it can be interpreted as follows:

- The constant coefficient value (α) is 11.2599 which means that if CCB (X1), FFR (X2) and CAR (X3) are 0 (Zero), then the average NPF Ratio (Y) is 11.26% (Note: the average amount of the NPF ratio still exists because it comes from the influence of other variables that also affect the NPF ratio, but are not included in the regression model).
- The CCB Variable Regression Coefficient (β1) is negative 0.2604. This means that there is an unidirectional relationship between the CCB variable and the NPF variable. Thus, if CCB (X1) increases by 1%, the average NPF (Y) will decrease by 0.2604%. The increase in Countercyclical Capital Buffer resulted in a decrease in the Non Performing Financing ratio.
- The FFR variable regression coefficient (β2) is negative 0.8510. This means that there is an unidirectional relationship between the FFR variable and the NPF variable. Thus, if FFR (X2) increases by 1%, the average NPF (Y) will decrease by 0.851%. An increase in the Bank's Financing to Funding Ratio results in a decrease in the Non Performing Financing ratio.
- The CAR variable regression coefficient (β3) is negative 1.3652. This means that there is an unidirectional relationship between the CAR variable and the NPF variable. So that if CAR (X3) increases by 1%, the average NPF (Y) will decrease by 1.365%. An increase in the Capital Adequacy Ratio results in a decrease in the Non Performing Financing ratio.

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7. Coefficient of Determination(R2)

To assess the explanatory power of the independent variables on the dependent variable in this study, the Adjusted R-squared value is utilized. In Figure-7, the simultaneous test results yield an Adjusted R-squared value of 0.921076. This value indicates that the independent variables: Countercyclical Capital Buffer, Financing to Funding Ratio, and Capital Adequacy Ratio contribute to explaining 92.11% of the variation in the dependent variable Non-Performing Financing. The remaining 7.89% of the variation is attributed to other factors not considered in this study.

8. Simultaneous Hypothesis Test (F-test)

Dependent Variable: LOG(NPF)
Method: Least Squares
Date: 07/07/24 Time: 02:20
Sample: 2014S1 2023S2
Included observations: 20

R-squared	0.933537	Mean dependent var	1.268015
Adjusted R-squared	0.921076	S.D. dependent var	0.293743
S.E. of regression	0.082523	Akaike info criterion	-1.974631
Sum squared resid	0.108960	Schwarz criterion	-1.775484
Log likelihood	23.74631	Hannan-Quinn criter.	-1.935755
F-statistic	74.91240	Durbin-Watson stat	1.926051
Prob(F-statistic)	0.000000		

Figure-7 Simultaneous Test Results (F-test)
Source: Eviews 12, Data processed

Table-6 Hypothesis and F-test Criteria

Hypothesis	Criteria of F-test result	Decision
Ho → CCB, FFR and CAR simultaneously have no significant effect on NPF	F-Count Value < F-Table Value or Prob. value (F-Statistic) > (α) 0.05	Ho Accepted
Ha → CCB, FFR and CAR simultaneously have a significant effect on NPF	F-Count Value > F-Table Value or Prob. value (F-Statistic) < (α) 0.05	Ha Accepted

a. Determining the F-Table Value
The F-Table value as a comparison criterion with the F-count value (F-statistic) is obtained based on the criterion (α) = 0.05; df1 (Total Variables - 1) = (4 -1) = 3; and df2 (n - k - 1) = (20 - 3 - 1) = 16. With MS-Excell software using the formula =FINV(5%,3,16), the F-table value = 3.238872 is obtained. F-Table values can also be seen in Table-F.

b. Hypothesis Results from Testing F-Count with F-Table
Based on Figure-7, the F-Count (F-Statistic) value = 74.9124 > F-Table 3.2389. Referring to Table-6, then Ha is accepted. It is concluded that CCB, FFR and CAR simultaneously have a significant effect on NPF.

c. Hypothesis Result of F-Statistic Probability Value with Significance Level (α)
Based on Figure-7, the Probability F-statistic value = 0.0000 < (α) 0.05. Referring to Table-6, Ha is accepted. It can be concluded that CCB, FFR and CAR simultaneously (together) have a significant effect on NPF.

9. Partial Hypothesis Test (t-test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.25987	2.644903	4.257194	0.0006
LOG(CCB)	-0.260404	0.141043	-1.846277	0.0834
LOG(FFR)	-0.850990	0.492969	-1.726255	0.1036
LOG(CAR)	-1.365241	0.250274	-5.454984	0.0001

Figure-8 Partial Test Results (t-test)
Source: Eviews 12, Data processed

Table-7. Hypothesis and t-test Criteria

Hypothesis	Criteria of t-test result	Decision
Ho_1 → CCB has no significant effect on NPF	Calculated t value < Table t value, or Calculated -t value > Table -t value, or Probability value > (α) 0.05	Ho_1 Accepted
Ha_1 → CCB has a significant effect on NPF	Calculated t value > Table t value, or Calculated -t value < Table -t value, or Probability value < (α) 0.05	Ha_1 Accepted
Ho_2 → FFR has no significant effect on NPF	Calculated t value < Table t value, or Calculated -t value > Table -t value, or Probability value > (α) 0.05	Ho_2 Accepted
Ha_2 → FFR has a significant effect on NPF	Calculated t value > Table t value, or Calculated -t value < Table -t value, or Probability value < (α) 0.05	Ha_2 Accepted
Ho_3 → CAR has no significant effect on NPF	Calculated t value < Table t value, or Calculated -t value > Table -t value, or Probability value > (α) 0.05	Ho_3 Accepted
Ha_3 → CAR has a significant effect on NPF	Calculated t value > Table t value, or Calculated -t value < Table -t value, or Probability value < (α) 0.05	Ha_3 Accepted

a. Determining the t-Table Value

The t-Table value as a comparison criterion with the t-count value (t-statistic) is obtained based on the criterion (α) = 0.05; and df (n - k - 1) = (20 - 3 - 1) = 16. With MS-Excell software using the formula =TINV(5%,16), the t-table value = 2.1199 is obtained. The t-Table value can also be seen in Table-t.

b. Hypothesis Results Testing t-Count with t-Table (Figure-8)

- The Influence of CCB on NPF
  The t-Count value is negative (-1.8463) > t-Table negative (-2.1199). Referring to Table-7, Ho1 is accepted. It is concluded that CCB has no negative effect on NPF.
- The Influence of FFR on NPF
  The t-Count value is negative (-1.7263) > t-Table negative (-2.1199). Referring to Table-7, Ho2 is accepted. It is concluded that FFR has no negative effect on NPF.
- The Influence of CAR on NPF
  The t-Count value is negative (-5.4550) < t-Table negative (-2.1199). Referring to Table-7, Ha3 is accepted. It is concluded that CAR has a negative effect on NPF.

c. Hypothesis Results Probability Value of t-Statistic with Significance Level (α) (Figure-8)

- Probability value of CCB variable = 0.0834 > (α) 0.05. According to Table-7, Ho1 is accepted and it is concluded that CCB has no significant effect on NPF.
- Probability value of FFR variable = 0.1036 > 0.05. According to Table-7, Ho2 is accepted and it is concluded that FFR has no significant effect on NPF.
- Probability value of CAR variable = 0.0001 < 0.05. According to Table-7, Ha3 is accepted and it is concluded that CAR has a significant effect on NPF.

DISCUSSION

Based on the results of the F-test, the obtained F-statistic (F-Count) value of 74.9124 exceeds the critical F-value (F-Table) of 3.2389, with a significance level (α) of 0.0001 < 0.05. These findings indicate that the Countercyclical Capital Buffer, Financing to Funding Ratio, and Capital Adequacy Ratio variables collectively have a significant influence on the Non-Performing Financing variable.

The Countercyclical Capital Buffer (CCB) has a negative t-Statistic > negative t-Table value of -1.8463 > -2.1199 with a Probability value > Significance level (α) of 0.0834 > 0.05. These results indicate that the CCB variable does not have a statistically significant negative effect on Non-Performing Financing (NPF). Therefore, CCB does not appear to directly impact the risk of non-performing financing at Islamic Commercial Banks from 2014 to 2023. This finding aligns with research conducted by Septiani (2024), which concluded that the capital buffer (CCB) is not influenced by the Non-Performing Financing (NPF) variable, indicating no significant relationship between NPF and capital buffer. Similarly, Apriyani (2021) also found that the level of non-performing financing risk does not affect the level of Capital Buffer. These studies suggest that changes in Capital Buffer are independent of the occurrence of non-performing financing risk (NPF).

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The Financing to Funding Ratio (FFR) has a negative t-Statistic > negative t-Table value of -1.7263 > -2.1199 with a Probability value > Significance level (α) of 0.1036 > 0.05. These results indicate that the FFR variable does not have a statistically significant negative effect on Non-Performing Financing (NPF). Therefore, it appears that changes in the Financing to Funding Ratio do not significantly impact the risk of non-performing financing at Islamic Commercial Banks. The findings of this study are consistent with the research conducted by Nurfadila et al. (2023), which concluded that the Financing to Deposit Ratio (FDR) did not affect Non-Performing Financing (NPF) in Islamic Commercial Banks in Indonesia from 2015 to 2020. This was attributed to the lower risk associated with financing channels like murabaha. Similarly, Muhammad et al. (2020) found that FDR had a significance value above the significance level, indicating that FDR does not have a significant effect on NPF.

The Capital Adequacy Ratio (CAR) exhibits a negative t-statistic of -0.54550, which is less than the critical t-table value of -2.1199, with a probability value (p-value) of 0.0001 lower than the significance level (α) of 0.05. These findings indicate that the CAR variable has a statistically significant negative effect on Non-Performing Financing (NPF). In other words, an increase in the Capital Adequacy Ratio leads to a decrease in the Non-Performing Financing ratio. The findings of this study corroborate the results of research by Ambawani & Wahyudi (2024), indicating that credit risk is significantly influenced by the level of Capital Adequacy Ratio (CAR). One of the primary functions of CAR is to mitigate the risk of deficits that may affect Islamic commercial banks. A higher CAR indicates greater resilience for banks to absorb disruptions in repayments or risks associated with productive assets. Similar conclusions were drawn in research by Akbar (2016), who found a negative relationship between Capital Adequacy Ratio (CAR) and Non-Performing Financing (NPF). This implies that higher levels of capital reduce the likelihood of Non-Performing Financing occurring. Similarly, Amelia (2019) observed a negative and significant effect of CAR on NPF in Islamic Commercial Banks during the 2015-2017 period.

CONCLUSION

Based on the results of the Partial Hypothesis Test (t-test), only the Capital Adequacy Ratio (CAR) variable demonstrates a negative and significant effect on the Non-Performing Financing (NPF) variable. This indicates that an increase in the Capital Adequacy Ratio leads to a reduction in the Non-Performing Financing ratio, and vice versa.

However, according to the results of the Simultaneous Hypothesis Test (F-test), the Capital Adequacy Ratio, Financing to Funding Ratio (FFR), and Countercyclical Capital Buffer (CCB) variables collectively exhibit a significant effect on Non-Performing Financing at Islamic Commercial Banks.

The interpretation of the Regression Model indicates that all independent variable coefficients have a consistent relationship with the dependent variable. Therefore, an increase in the Capital Adequacy Ratio, Financing to Funding Ratio, and Countercyclical Capital Buffer simultaneously results in a decrease in the percentage of non-performing financing at Islamic Commercial Banks.

The Coefficient of Determination (R^2) using Adjusted R-squared is 0.921076, indicating that the independent variables collectively explain 92.11% of the variation in the Dependent Variable. The remaining 7.89% is influenced by other variables not considered in this study.

REFERENCES

[1] Akbar, D. A. (2016). Inflasi, Gross Domesctic Product (Gdp), Capital Adequacy Ratio (Car), Dan Finance To Deposit Ratio (Fdr) Terhadap Non Performing Financing (NPF) Pada Bank Umum Syariah Di Indonesia. I-Economic: A Research Journal on Islamic Economic, 2(2), 19–37.

[2] Ambawani, F. N. P., & Wahyudi, A. (2024). Pengaruh Kebijakan Moneter dan Makroprudensial Terhadap Risiko Kredit di Bank Umum Syariah Periode 2018-2022. JIEI: Jurnal Ilmiah Ekonomi Islam, 10(1), 130–137.

[3] Amelia, E. A. (2019). Pengaruh Capital Adequacy Ratio (CAR), Inflasi dan Financing to Deposit Ratio (FDR) terhadap non Performing Financing (NPF) pada Bank Umum Syariah Periode 2015-2017. Jurnal Intelektualita: Keislaman, Sosial Dan Sains, 8(1).

[4] Apriyani, R. (2021). Analisis Faktor-faktor yang Mempengaruhi Capital Buffer pada Bank Umum Syariah di Indonesia [Skripsi, Universitas Pendidikan Indonesia]. http://repository.upi.edu/id/eprint/67287

[5] Bank Indonesia. (2016). MENGUPAS KEBIJAKAN MAKROPRUDENSIAL (C. A. Harun, S. Rachmanira, & R. Wijayanti, Eds.). Bank Indonesia.

[6] Bank Indonesia, G. (2015a). PBI No. 17/11/PBI/2015 tentang Perubahan Atas Peraturan Bank Indonesia Nomor 15/15/PBI/2013 tentang Giro Wajib Minimum Bank Umum Dalam Rupiah Dan valuta Asing Bagi Bank Umum Konvensional. https://www.bi.go.id/id/publikasi/peraturan/Pages/pbi_171115.aspx

[7] Bank Indonesia, G. (2015b). PBI No.17/22/PBI/2015 tentang Kewajiban Pembentukan Countercyclical Buffer. https://www.bi.go.id/id/publikasi/peraturan/Pages/pbi_172215.aspx

[8] ESRB, E. S. R. B. (2013). Recommendation Of The European Systemic Risk Board of 4 April 2013 on Intermediate Objectives and Instruments of Macro-prudential policy. Official Journal of The European Union, 2013/C(170), 1–19. https://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf

[9] IMF, I. M. F. (2011). Macroprudential Policy: An Organizing Framework. https://www.imf.org/external/np/pp/eng/2011/031411.pdf

[10] Lim, C. H., Columba, F., Costa, A., Kongsamut, P., Otani, A., Saiyid, M., Wezel, T., & Wu, X. (2011). Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences (11/238). https://ssrn.com/abstract=1956385

[11] Muhamad. (2017). Manajemen Dana Bank Syariah (Cetakan ke-2). PT Rajagrafindo Persada.

[12] Muhammad, R., Suluki, A., & Nugraheni, P. (2020). Internal Factors and Non-Performing Financing in Indonesian Islamic Rural Banks. Cogent Business & Management, 7(1), 1–12. https://doi.org/https://doi.org/10.1080/23311975.2020.1823583

[13] Nurfadila, A. P., Juniwati, E. H., & Laksana, B. (2023). Pengaruh Faktor Internal terhadap Profitabilitas dengan NPF sebagai Variabel Intervening Pada Bank Umum Syariah di Indonesia Periode 2015-2020 . Journal of Applied Islamic Economics and Finance, 3(3), 454–465. https://doi.org/https://doi.org/10.35313/jaief.v3 i3. 4490

[14] OJK, O. J. K. (2024, June). STATISTIK PERBANKAN SYARIAH. Https://Www.Ojk.Go.Id/Id/Kanal/Syariah/Data-Dan-Statistik/Statistik-Perbankan-Syariah/Default.Aspx.

[15] Rosidah, E. (2017). Pengaruh Financing To Deposit Ratio Terhadap Non Performing Financing Perbankan Syariah Di Indonesia. Jurnal Akuntansi Unsil, 12(2), 127–134. https://jurnal.unsil.ac.id/index.php/jak/issue/view/44

[16] Septiani, N. (2024). Faktor-faktor yang mempengaruhi capital buffer pada bank umum syariah [Skripsi, Institut Agama Islam Negeri (IAIN) Curup]. http://e-theses.iaincurup.ac.id/id/eprint/6131