



**INSIDE THE CREDIT ENGINE: THE MODERATING ROLE OF CAPITAL  
ADEQUACY RATIO ON THE EFFECTS OF INTERNAL AND  
MACROECONOMIC FACTORS ON BANK  
CREDIT DISTRIBUTION DECISIONS**

Danancy<sup>1</sup>, I Nyoman Sunarta<sup>2</sup>

Universitas Pendidikan Nasional<sup>1,2</sup>

Address: Jl. Bedugul No.39, Sidakarya, Denpasar, Bali 80224

E-mail: [leenancy023@gmail.com](mailto:leenancy023@gmail.com)

**ABSTRACT**

*This study aims to analyze the effect of Non-Performing Loans (NPL) and inflation rate on credit distribution decisions, with Capital Adequacy Ratio (CAR) serving as a moderating variable. The study focuses on the banking sector listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. Credit distribution represents a core function of the banking industry, which is heavily influenced by internal financial conditions and external macroeconomic factors. Fluctuations in profitability, asset quality, capital strength, and inflationary pressure play a crucial role in determining the banking sector's capacity to extend credit to businesses and households.*

*This research adopts a quantitative approach using secondary data obtained from the annual financial statements of conventional banks listed on the IDX between 2022 and 2024. The sample consists of 37 banks selected through a purposive sampling method. Data were analyzed using panel data regression to examine both the partial and simultaneous effects of each independent variable on credit distribution decisions.*

*The study is theoretically grounded in Herbert A. Simon's (1960) Decision-Making Theory and the Financial Intermediation Theory developed by Gurley and Shaw (1956). These frameworks explain how banks make on credit distribution decisions which refer to banks decisions in providing loans to borrowers, by balancing internal performance indicators, risk management, and macroeconomic conditions. The findings are expected to contribute theoretically to the development of these two theories and provide practical insights for bank management in formulating effective, data-driven credit policies. Furthermore, the study has implications for regulators in maintaining financial system stability through credit policies that account for both internal bank performance and broader macroeconomic dynamics.*

**Keywords:** *Non-Performing Loans, inflation, Capital Adequacy Ratio, credit distribution decision.*

**A. Introduction**

The growth of bank on credit distribution in Indonesia has shown a steady upward trend, reflecting the banking sector's vital role in supporting national economic performance. According to the Financial Services Authority (OJK), bank credit grew by 10.38% at the end of 2023 and reached 10.39% by the end of 2024, with a total credit volume of IDR 7,827 trillion. Despite this positive growth, banks continue to face challenges such as rising asset quality pressure and inflation risks that could affect financial stability. As intermediary institutions, banks are responsible for channeling funds from surplus to deficit units, making them key agents in stimulating the real economy (Babela et al., 2023; Sugianto, 2023). The effectiveness of this intermediation process directly impacts productivity, job creation, and economic growth, while also being influenced by internal and external factors (Epi et al., 2025).

One major internal factor is the Non-Performing Loan (NPL) ratio, which indicates the level of credit risk. A higher NPL reflects greater potential for default, prompting banks to be more cautious in disbursing new loans. Bank Indonesia data show an increase in the gross

NPL ratio from 1.93% in February 2024 to 2.22% in February 2025, with MSME loans contributing around 4%. This rising trend demonstrates increasing credit risk that must be mitigated. Several studies (Aini et al., 2024; Frans et al., 2024) found that NPLs negatively and significantly affect credit distribution, whereas Fayaupon (2021) reported different results, suggesting variations in risk management strategies among banks.

Externally, inflation represents a macroeconomic factor that can influence credit distribution decisions. High inflation typically reduces purchasing power and raises default risk, while moderate inflation may stimulate credit demand (Hidayat et al., 2025). In 2024, Indonesia's inflation rate decreased from 3.05% to 1.57%, creating relatively stable banking conditions. However, research results vary: Biyati et al. (2023) found a positive relationship between inflation and credit distribution decisions, while Marsela et al. (2022) observed the opposite, showing that inflation's effect depends on broader economic conditions and monetary policy.

The Capital Adequacy Ratio (CAR) represents the bank's ability to absorb risk through sufficient capital buffers (Tionarto et al., 2022). A high CAR allows more flexibility in credit distribution decisions, while a low CAR prompts prudence to maintain solvency. At the end of 2023, Indonesian banks recorded CAR levels of around 24–25%, well above the 8% Basel Accord minimum. However, some institutions experienced a decline due to rising NPLs and shrinking profits. Therefore, this study investigates the influence of NPLs and inflation on credit distribution decisions of conventional banks listed on the Indonesia Stock Exchange (IDX) during 2022–2024, using CAR as a moderating variable. The aim is to understand how capital adequacy strengthens or weakens the relationship between internal and external determinants of credit policy.

#### **Financial Intermediation Theory**

Gurley and Shaw (1956) explained the role of banks as financial intermediaries, channeling funds from those with excess funds to those in need. This theory asserts that the effectiveness of a bank's intermediary function is heavily influenced by internal factors such as credit risk, profitability, capitalization, and liquidity, as well as external factors such as inflation, which impact the stability of the financial system. This intermediary role is highly dependent on the bank's ability to maintain a balance between fundraising and credit distribution. The greater the bank's credit distribution, the greater its contribution to economic growth. However, increased credit must also be accompanied by sound risk management capabilities to prevent the emergence of non-performing loans (NPLs). When banks fail to manage credit risk, banking stability can be compromised. Therefore, financial intermediation theory emphasizes the importance of efficiency, liquidity, and profitability in maintaining the continuity of the banking intermediary function. (Sugianto, 2023).

#### **Decision-Making Theory**

Simon (1977) explains that the decision-making process consists of three main stages: intelligence, design, and choice. The intelligence stage is the process of identifying problems and gathering relevant information. In the banking context, this includes analyzing economic conditions, debtor quality, and potential credit risk. The design stage involves formulating policy alternatives based on the information obtained, while the choice stage is the process of selecting the best decision. This theory emphasizes that good decisions must be based on accurate data and information. In banking, credit distribution decisions are the result of a systematic deliberation process based on analysis of financial indicators and macroeconomic conditions. Nungki et al. (2024). Therefore, this theory is relevant to research analyzing how internal and external factors influence bank credit distribution decisions.

Non-Performing Loans (NPLs), or problem loans, are an important indicator reflecting a bank's credit risk. NPLs are measured by comparing total problem loans to total loans disbursed. A high NPL ratio indicates an increased risk of debtor default, which can impact a bank's profitability (Sabeth 2021). Bank Indonesia has set a maximum NPL limit of 5% to maintain control over credit risk. Several studies have shown a negative relationship between NPLs and credit distribution. (Aini et al., 2024) and (Frans et al., 2024) found that increasing

NPLs reduced banks' ability to disburse new credit. This was because banks became more cautious and tended to restrain credit expansion to maintain asset quality. However, other studies, such as (Fayaupon, 2021) shows different results, where NPL does not have a significant effect on credit distribution, depending on the risk management policies of each bank.

Inflation is a macroeconomic variable that influences the supply and demand of credit. According to (Hidayat et al. (2025), high inflation reduces purchasing power, increases interest rates, and suppresses borrowers' ability to repay their obligations. Conversely, moderate inflation can stimulate economic activity and credit demand. Research by (Marsela et al. 2022) found that inflation has a negative effect on credit distribution, while Biyati et al. (2023) showed the opposite result. This difference is due to varying economic conditions across study periods and the monetary policies implemented by Bank Indonesia.

Based on the theoretical description and previous research, the relationship between variables can be formulated as follows:

The Capital Adequacy Ratio (CAR) is a bank's capital adequacy ratio used to cover the risk of loss. The higher the CAR, the greater the bank's ability to cover potential risks from its productive assets. (Tionarto et al. 2022). According to the Basel Accord, the minimum CAR required is 8%. In Indonesia, the average banking CAR is above this threshold, at around 24–25% (OJK, 2024). Previous research has shown mixed results regarding the effect of CAR on credit distribution. Some studies, such as Rahman dan Rani (2022) shows that CAR has a positive effect on credit distribution, because strong capital provides room for expansion. However, other studies such as Lestari (2023) found that a CAR that is too high can indicate that there is unproductive placement of funds, so it does not always encourage an increase in credit.

In this study, CAR is also used as a moderating variable, strengthening or weakening the influence of NPLs and inflation on credit distribution decisions. Thus, CAR is treated not only as an independent variable but also as a controlling factor for bank financial stability.

Non-Performing Loan (NPL) is a loan that faces difficulties in paying off the principal and interest, either due to internal factors of the debtor or external factors that affect the ability to pay. (Sabeth 2021). High Non-Performing Loans (NPLs) indicate an increasing proportion of non-performing loans in a bank's portfolio. This situation forces banks to increase their allowance for impairment losses (CKPN), which automatically reduces the capital available for new credit distribution decisions. As a result, bank management tends to make more cautious and selective decisions in disbursing credit, thus limiting the scope for credit expansion.

### **H1: Non-Performing Loans (NPLs) has a negative effect on bank credit distribution decisions**

High Non-Performing Loans (NPLs) indicate that the proportion of problematic loans in a bank's portfolio has increased. This condition forces banks to increase their allowance for impairment losses (CKPN), which automatically reduces the capital available for new disbursements. As a result, bank management tends to be more cautious and selective in disbursing loans, thereby limiting the scope for credit expansion. Previous studies have shown that non-performing loans (NPLs) have a negative impact on credit distribution (Rahmayanti et al., 2025). Nadira et al. (2024) state that NPLs limit credit expansion capacity.

### **H2: Inflation has a negative effect on bank credit distribution decisions**

Inflation is a condition in which the prices of goods and services experience a sustained increase over a period of time. High inflation also impacts bank funding costs, for example through increases in interest rates or liquidity costs, thereby limiting banks' ability to disburse credit broadly. (Sinta et al., 2025) states that inflation negatively impacts credit distribution. Therefore, it is understandable that inflation negatively impacts credit distribution because this macroeconomic condition directly impacts the level of risk and potential profits a bank can achieve.

### **H3: The Capital Adequacy Ratio (CAR) weakens the negative influence of NPLs on bank credit distribution decisions**

The Capital Adequacy Ratio (CAR) reflects a bank's ability to provide adequate capital to cover credit and other risks. When NPLs increase, banks must bear the potential losses from non-performing loans. However, banks with a strong CAR are better able to absorb these losses without significantly reducing their credit distribution capacity. this hypothesis proposes that

CAR weakens the negative relationship between NPL and credit distribution decisions. Research by (Arhinful et al., 2025) found that the Capital Adequacy Ratio (CAR) acts as a significant moderating variable in the relationship between Non-Performing Loans (NPLs) and bank growth.

#### **H4: The Capital Adequacy Ratio (CAR) weakens the negative influence of inflation on bank credit distribution decisions**

High inflation generally discourages credit distribution decisions by increasing risks and reducing borrowers' repayment capacity. However, banks with strong capitalization (high CAR) have greater financial strength and risk tolerance, enabling them to mitigate the negative effects of inflation on credit distribution. This means that CAR can act as a financial stabilizer, allowing banks to continue extending credit even during inflationary periods (Tionarto et al., 2022). Accordingly, this hypothesis proposes that CAR weakens the negative relationship between inflation and credit distribution decisions by improving banks' ability to manage macroeconomic pressures.

The hypothesis is designed to test how internal and external factors influence banks' decisions in disbursing credit, and the extent to which capital (CAR) is able to strengthen this relationship.

**Tabel 1. Definition of Variable**

Type of variable	Variable	Indicator
Variabel Dependen (Y)	Credit Distribution	Total credit data listed in the bank's annual financial report.
Variabel Independen (X <sub>1</sub> )	Non Performing Loan (NPL)	$NPL = \frac{\text{Non Performing Loan}}{\text{Total Loans}}$
Variabel Independen (X <sub>2</sub> )	Inflation	Annual inflation percentage (%)
Moderating Variable (Z)	Capital Adequacy Ratio (CAR)	$CAR = \frac{\text{Total Capital}}{\text{Risk Weighted Assets}} \times 100\%$

## **B. Research Method**

This study uses a quantitative approach to analyze the influence of Non-Performing Loans (NPLs) and inflation on bank credit distribution, as well as how the Capital Adequacy Ratio (CAR) moderates the independent and dependent variables. The quantitative approach was chosen because it is able to objectively measure the relationship between variables and provides statistically testable results. The analysis was conducted using panel data, which combines time series and cross-sectional data, so that the research results can illustrate the dynamics of banking financial conditions over time. (Sihombing, 2022).

The population in this study includes all conventional banks listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. This population selection was based on the consideration that banks listed on the IDX are required to publish annual financial reports publicly, ensuring that the data used can be accessed and verified.

The sample was determined using a purposive sampling technique, which selects samples based on specific criteria tailored to the research objectives (Sugiyono, 2019). These criteria include:

1. Conventional banks listed on the IDX during 2022–2024.

2. Banks that consistently publish annual financial reports during the study period.
3. Banks that have complete data related to the research variables

Based on these criteria, 37 conventional banks were selected as research samples.

This study uses secondary data, namely data obtained from published sources. Data were collected from:

1. Each bank's annual financial report available on the official IDX website ([www.idx.co.id](http://www.idx.co.id)).
2. The Indonesian Banking Statistics Report published by the Financial Services Authority (OJK).
3. Inflation data obtained from official publications of the Central Statistics Agency (BPS).

The data were collected documentary-style and processed into panel data to simultaneously depict interbank and inter-temporal variations.

Data analysis was conducted using panel data regression, as this method is able to capture both inter-temporal and inter-entity variations in a single model. (rerung, 2022). Panel data provides more efficient and accurate results than pure cross-section or time series regression models.

The analysis steps are as follows:

Descriptive Statistical Tests, to describe the data characteristics of each variable, such as maximum, minimum, mean, and standard deviation values.

1. Panel Data Model Selection Tests, which include:
  - a) Chow Test, to determine whether a Common Effect or Fixed Effect model is more appropriate.
  - b) Hausman Test, to choose between a Fixed Effect and Random Effect model.
  - c) Lagrange Multiplier Test (LM Test).
2. Classical Assumption Tests, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation, to ensure the validity of the regression model.
3. Partial Regression Test (t-Test), to examine the effect of each independent variable on the dependent variable.
4. Simultaneous Test (F-Test), to examine the joint effect of independent variables on credit distribution.
5. Coefficient of Determination ( $R^2$ ) Test, to measure the extent to which independent variables can explain variations in credit distribution.

All analyses were conducted using EViews version 13, a program commonly used in economics and financial research.

The basic regression model used in this study is formulated as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 (X_{1it} Z_{it}) + \beta_4 (X_{2it} Z_{it}) + \varepsilon_{it}$$

Keterangan:

$Y_{it}$	= Dependent Variable (Bank Credit Distribution Decision)
$\alpha$	= Constanta ( <i>intercept</i> )
$\beta_1, \beta_2$	= Regression coefficients of independent variables
$X_1$	= Variabel Independen 1 (Non Performing Loan)
$X_2$	= Variabel Independen 2 (Inflation)
$z$	= <i>Capital Adequacy Ratio (Z)</i> as a moderating variable
$\beta_3 (X_{1it} Z_{it})$	= Interaction between Non-Performing Loan (NPL) and Capital Adequacy Ratio (CAR).
$\beta_4 (X_{2it} Z_{it})$	= Interaction between Inflation and the Capital Adequacy Ratio (CAR).
$\varepsilon$	= <i>Error term</i>
$i$	= Data <i>cross section</i>
$t$	= Data <i>time series</i>

## C. RESEARCH & DISCUSSION RESULTS

### Descriptive Statistic

**Tabel 2. Descriptive Statistic Test Results**

Variabel	Obs	Mean	Std.Dev	Min	Max
<b>Credit Disbursement Volume</b>	<i>111</i>	7.128420	0.947411	3.161068	9.210376
<i>NPL</i>	<i>111</i>	0.025622	0.018437	0.000100	0.094500
<b>Inflation</b>	<i>111</i>	0.032300	0.016747	0.015700	0.055100
<i>CAR</i>	<i>111</i>	0.351812	0.205362	0.105000	1.274200
<i>Z1</i>	<i>111</i>	0.009778	0.014124	4.64E-05	0.115570
<i>Z2</i>	<i>111</i>	0.011477	0.010278	0.001649	0.070208

Based on the results of descriptive statistical analysis using EViews 13 with a total of 111 observations, a general overview of the characteristics of the research variables is obtained as follows. Credit distribution has an average value of 7.128420 with a standard deviation of 0.947411, a minimum value of 3.161068, and a maximum value of 9.210376. This indicates significant variation in credit distribution between banks during the observation period, reflecting differences in each bank's credit expansion capacity and strategy.

The Non-Performing Loan (NPL) variable has an average value of 0.025622 with a standard deviation of 0.018437, a minimum value of 0.000100, and a maximum value of 0.094500. This value indicates that the average level of non-performing loans in banking remains relatively low, despite significant variation between banks.

For inflation, the average value was recorded at 0.032300 with a standard deviation of 0.016747, with a minimum value of 0.015700 and a maximum of 0.055100. This means that the inflation rate during the study period was relatively stable and within a controlled range, in line with the national inflation target.

Meanwhile, the Capital Adequacy Ratio (CAR) had an average of 0.351812 with a standard deviation of 0.205362, a minimum value of 0.105000, and a maximum of 1.274200. These values indicate that most banks have a capital adequacy level above the minimum limit set by the authorities, indicating the banks' ability to bear operational risk.

Variable Z1 had an average value of 0.009778 with a standard deviation of 0.011424, while Z2 had an average value of 0.011477 with a standard deviation of 0.010278. These two variables show that there are variations in the level of interaction between variables in the study.

### Model Test

**Tabel 3. Model Test Test Results**

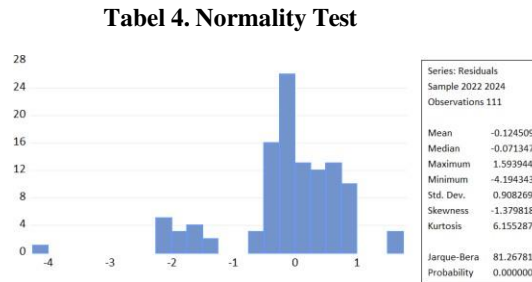
Test	Statistic	Prob.	Result
Chow	383.065019	0.0000	FEM
Hausman	2.599857	0.9781	REM
LM	0.0000	0.0000	REM

Based on the results of a series of panel data model selection tests, the Chow Test shows a probability of 0.0000 (<0.05) so that the Fixed Effect model is more appropriate than the Common Effect. However, the Hausman Test with a probability of 0.9781 (>0.05) and a Chi-square statistic of 2.599857 indicates that the Random Effect model is more appropriate because

it is considered efficient and unbiased. These results are supported by the Lagrange Multiplier (LM) Test with a probability of 0.0000 ( $<0.05$ ), which indicates that the Random Effect is better than the Common Effect. Thus, this study establishes the Random Effect Model as the most appropriate model for use in further analysis.

### Classic Assumption Test Results

#### Normality Test



The normality test results show a Jarque-Bera value of 81.26781 with a probability of 0.000000 ( $<0.05$ ), indicating that the residual data is not normally distributed. Even if the assumption of normality is not met, regression analysis can still be continued because panel data models emphasize estimation consistency rather than the form of the residual distribution (Knief et al., 2021).

### Heteroscedasticity Test Results

**Tabel 5. Heteroscedasticity Test Results**

Heteroskedasticity Test: Breusch-Pagan-Godfrey  
Null hypothesis: Homoskedasticity

F-statistic	1.226151	Prob. F(5,105)	0.3021
Obs*R-squared	6.123543	Prob. Chi-Square(5)	0.2944
Scaled explained SS	13.35631	Prob. Chi-Square(5)	0.0203

The Breusch-Pagan-Godfrey test results show a Prob. Obs\*R-squared value of 0.2944, which is bigger than the significance level of 0.05. the model is declared to show no heteroscedasticity. The assumption of homoscedasticity is fulfilled.

### Autocorrelation Test Results

**Tabel 6. Autocorrelation Test Results**

Weighted Statistics			
R-squared	0.065351	Mean dependent var	7386866.
Adjusted R-squared	0.020844	S.D. dependent var	37582773
S.E. of regression	37189028	Sum squared resid	1.45E+17
F-statistic	1.468323	Durbin-Watson stat	1.060913
Prob(F-statistic)	0.206427		

The Durbin-Watson test yielded a Durbin-Watson value of 1.060913. This value is close to 2, indicating that there is no autocorrelation in the regression model. Thus, the regression model is free from autocorrelation issues.

**Multicollinearity Test Results****Tabel 7. Multicollinearity Test Results**

Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.526583	69.22769	NA
X1	0.026636	11.98245	1.007986
X2	0.151975	48.92667	1.002143
Z	0.189314	7.384243	1.006127

The multicollinearity test results show that all independent variables have a Centered VIF value below 10, even close to 1. This indicates that there is no high correlation between the independent variables. Thus, the regression model is free from multicollinearity issues and meets the classical assumptions.

**Multiple Linear Regression Test Results****Tabel 8. Multiple Linear Regression Test Results**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	8.084277	0.039762	203.3178	0.0000
X1	-11.94419	0.858309	-13.91596	0.0000
X2	-0.746460	0.957349	-0.779716	0.4356
Z	-1.841348	0.095116	-19.35900	0.0000
Z1	14.16530	1.475056	9.603227	0.0000
Z2	0.705654	2.390280	0.295218	0.7678

Robust Statistics			
R-squared	0.156146	Adjusted R-squared	0.115962
Rw-squared	0.184831	Adjust Rw-squared	0.184831
Akaike info criterion	181.2719	Schwarz criterion	207.7366
Deviance	49.24834	Scale	0.523828
Rn-squared statistic	1528.191	Prob(Rn-squared stat.)	0.000000

Non-robust Statistics			
Mean dependent var	7.128420	S.D. dependent var	0.947411
S.E. of regression	0.938416	Sum squared resid	92.46554

**Coefficient of Determination R<sup>2</sup> Test**

Based on the regression test results in the table, the R-squared value of 0.156146 and the Adjusted R-squared of 0.115962 indicate that approximately 11.5% of the variation in changes in bank credit distribution can be explained by the independent variables (NPL, inflation, CAR, and moderating interactions). The remaining 88.5% is influenced by factors outside the model, such as monetary policy, interest rates, or global economic conditions.

A Prob (Rn-squared) value of 0.000000 < 0.05 indicates that the overall model is significant, meaning that the independent variables simultaneously have a significant influence on bank credit distribution.

## F Test Results

The simultaneous test or F-test is used to examine whether all independent variables jointly influence the dependent variable, namely bank credit distribution. Based on the test results, a probability value of 0.000000 is obtained, which is below the 0.05 significance level. This result indicates that the regression model used is simultaneously significant, so that the variables NPL and inflation, and the moderating variables (Z1–Z4) jointly influence credit distribution.

## Z Test Results

The results of the study indicate an NPL coefficient of -11.94419 with z-tests show that NPL (X1) -13.91596 with a probability value of 0.0000 <0.05, indicating that NPLs have a negative and significant effect on bank credit distribution. meaning that increasing non-performing loans suppress credit distribution. Meanwhile, inflation (X2) has a negative result with inflation coefficient is -0.746460 and z-test -0.779716 However, the p-value of 0.4356 >0.05, indicating an inverse relationship with credit distribution decisions. This suggests that higher inflation tends to be associated with lower credit distribution. indicates that the relationship is statistically insignificant. These findings imply that inflation fluctuations during the study period do not provide enough explanatory power for changes in bank credit distribution decisions.

The interaction term between NPL and CAR has a positive coefficient 14.16530 and z-test result is 9.603227 and statistically 0.0000 <0.05 which significant. These findings indicate that CAR strengthens the negative effect of NPL on credit distribution. The interaction term between inflation and CAR has a positive coefficient 0.705654 and z-test result is 0.295218. variable produces a positive but statistically 0.7678 >0.05 insignificant z-statistic. Although the z-test suggests a positive direction, the large p-value indicates that the interaction does not contribute meaningfully to the model. This means the variable does not function as a moderator, as it not to alter, strengthen, or weaken the relationship between the independent variable and bank credit distribution decisions.

## Discussion

### The Effect of Non-Performing Loans (NPLs) on Credit Distribution Decisions

The results of the study indicate that NPL have a negative and significant effect on bank credit distribution. This means that the higher the level of non-performing loans, the less willing banks are to disburse new loans. An increase in NPLs reflects a higher risk of default, leading banks to tighten their credit policies. This is in line with the theory of financial intermediation (Gurley & Shaw, 1956), which states that credit risk hinders the intermediation function. Based on Decision- Making Theory (Simon, 1977), this condition reflects prudent management decisions in dealing with the risk of default.

### The Effect of Inflation on Credit Distribution Decisions

The results of the study indicate that inflation has a negative but insignificant effect on credit distribution. This means that changes in the inflation rate during the study period were not strong enough to influence banks' decisions to disburse credit, likely due to relatively controlled inflation during the observation period (2022–2024). Stable inflation maintains public confidence, but is not strong enough to trigger credit expansion. These results confirm that external factors such as inflation are more influenced by macroeconomic conditions than internal bank policies.

### The Role of the Capital Adequacy Ratio (CAR) in Moderating the Effect of NPLs on Credit Distribution Decisions

The results of the moderation test indicating that CAR significantly moderates the effect of NPLs on credit distribution decisions. The positive direction of the coefficient indicates that CAR strengthens the negative effect of NPLs on credit distribution decisions. In other words, when banks have strong capital, the adverse impact of increasing NPLs on credit distribution decisions can be mitigated because the bank has a greater risk-bearing capacity. Theoretically, this confirms the role of CAR as a risk buffer in financial intermediation and as a basis for rational decision-making in dealing with internal risks.

### The Role of the Capital Adequacy Ratio (CAR) in Moderating the Effect of Inflation on Credit Distribution Decisions

The results of the moderation test indicating that CAR is unable to significantly moderate

the effect of inflation on credit distribution decisions. This means that bank capital levels do not play a significant role in altering the relationship between inflation and credit policy. The influence of inflation on credit distribution decisions is likely more determined by external factors such as benchmark interest rate policy or national macroeconomic conditions.

## D. CONCLUSION AND SUGGESTIONS

This study shows that bank credit distribution on the Indonesia Stock Exchange for the 2022–2024 period is influenced by internal and external factors, with a relatively moderate level of influence. Based on the test of determination ( $R^2$ ) of 0.1561, it is known that the NPL, inflation, and their interaction with the moderating variable CAR explain approximately 11.5% of the variation in credit distribution, while the remaining 88.5% is influenced by factors outside the model. Simultaneous testing indicates that all variables have a significant effect on credit distribution, indicating empirical feasibility of the research model.

Partially, the z-test results indicate that NPL has a significant negative effect on credit distribution. This means that increasing non-performing loans reduces banks' ability to disburse new loans due to the increased risk of default. Meanwhile, inflation has a negative but insignificant effect, indicating that changes in the inflation rate do not directly influence bank credit distribution policies. The moderating variable, CAR, also proved to have a significant negative effect on credit distribution, indicating that the higher the capital adequacy level, the more cautious banks are in expanding credit to maintain financial stability and comply with minimum capital regulations.

The moderating role of CAR showed varying results. The interaction between NPL and CAR (Z1) had a significant positive effect on credit distribution with a probability value of  $0.0000 < 0.05$ , indicating that CAR is able to attenuate the negative impact of NPL on credit distribution. In other words, when bank capital is strong, the adverse impact of increasing NPLs can be mitigated because banks have sufficient capital reserves to cover risks. However, the interaction between inflation and CAR (Z2) was not significant ( $p=0.7678 > 0.05$ ), indicating that CAR is unable to meaningfully moderate the relationship between inflation and credit distribution.

Based on these results, it can be concluded that internal bank factors, such as NPL and CAR, have a stronger influence on credit distribution policy than external factors, such as inflation. This indicates that risk and capital management policies are key aspects of credit distribution decisions in the Indonesian banking sector.

Recommendations:

1. Banks are advised to continue strengthening credit risk management to reduce the NPL ratio and optimize the intermediation function while still adhering to the principle of prudence.
2. Banks need to utilize capital more efficiently so that it serves not only as a risk buffer but also as a driver of productive credit growth.
3. Financial authorities such as the Financial Services Authority (OJK) and Bank Indonesia are expected to strengthen macroprudential policies that maintain a balance between financial system stability and economic growth.
4. For further research, it is recommended to add other macroeconomic variables, such as benchmark interest rates or exchange rates, to obtain a more comprehensive picture of the factors influencing bank credit distribution.

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