

The Effectiveness of Monetary Policy and Imperfect Transmission Through The Banking Interest Rate Channel

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Abstract

Monetary transmission has become increasingly constrained by transmission frictions and the non-linear relationship between the BI Rate and credit growth, reducing the effectiveness of monetary policy in the banking sector. Bank Indonesia's 2025 Financial Stability Review indicates that the relationship between the BI Rate and credit growth is non-linear, challenging the assumptions of traditional monetary theory. Despite a relatively stable and accommodative policy rate, credit growth slowed considerably, declining from 12.36% (year-on-year) in June 2024 to 7.77% (year-on-year) in June 2025, indicating weaker banking intermediation. Although banking liquidity remained adequate, as reflected in 6.96% growth in Third-Party Funds (DPK), this did not translate into stronger credit expansion. Credit growth is projected to remain within the 8–11% range in 2025, suggesting that credit demand remains relatively unresponsive to monetary easing. These findings suggest the presence of transmission frictions, including banks' risk-averse lending behaviour, weak credit demand, and structural constraints within the banking sector. This study aimed to analyse the effectiveness of monetary transmission using an explanatory sequential mixed-methods design that integrates quantitative and qualitative data analysis. The study examines whether reductions in the BI Rate stimulate credit growth or whether banking frictions constrain the effectiveness of monetary transmission, highlighting that the effectiveness of such policies depends on the behaviour of the banking sector, which serves as the main transmission channel. This study contributes to the literature by demonstrating that the effectiveness of monetary policy depends not only on policy rate adjustments but also on the banking sector's role as the primary transmission channel.

Keywords: *BI Rate; Banking Intermediation; Monetary Transmission.*

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Introduction

From a macroprudential perspective, the ideal relationship between the BI Rate and credit growth is countercyclical and stably calibrated. When credit growth rises too rapidly and risks overheating or systemic risk accumulation, Bank Indonesia theoretically needs to raise the BI Rate to curb credit expansion via the interest rate transmission mechanism.¹ Conversely, when credit growth slows and risks hamper economic growth, the BI Rate is lowered to encourage banking intermediation. Thus, under ideal conditions, there is a controlled inverse relationship in which the BI Rate acts as a stabilizer of credit growth dynamics, thereby maintaining financial system stability.²

However, in reality, in 2025, as per Bank Indonesia's 2025 Financial Stability Review, the relationship between the BI Rate and credit growth does not follow a strictly linear pattern as theory suggests. Empirically, although the policy interest rate is on a relatively downward and stable trend, credit growth was recorded at 7.77% (yoy) in June 2025, lower than the 12.36% (yoy) recorded in June 2024. This data indicates a slowdown in intermediation.³

On the other hand, banking liquidity remains adequate with Third-Party Funds (TPF) growing by 6.96% (yoy), yet this has not fully translated into credit expansion. Indeed, in forward-looking projections, credit growth is expected to be 8–11% in 2025, indicating that the transmission of the BI Rate cut into increased credit remains limited.⁴ This fact demonstrates that whilst, in theory, a reduction in interest rates should stimulate credit, in practice, other factors, such as banking prudence (risk appetite) and weak credit demand, mean that the response in credit growth is not commensurate with the direction of interest rate policy.⁵

The disparity between the Bank Indonesia (BI) Rate and credit growth, as highlighted in the 2025 Financial Stability Review, constitutes a notable concern

¹ Perdana Wahyu Santosa, "Macroeconomic Indicators and Yield Curve of Indonesian Government Bond," *Business, Management and Economics Engineering*, 19, No. 1 (March 2021): 34–48, <https://doi.org/10.3846/bmee.2021.13167>.

² M. Shabri Abd. Majid et al., "Does Financial Development Reduce Poverty? Empirical Evidence from Indonesia," *Journal of the Knowledge Economy*, 10, No. 3 (September 2019): 1019–36, <https://doi.org/10.1007/s13132-017-0509-6>.

³ (Bank Indonesia, 2026)

⁴ (Bank Indonesia, 2026)

⁵ (Bank Indonesia, 2026)

within the macroprudential framework. This observation indicates that alterations in the BI Rate are not fully mirrored in credit disbursements, resulting in suboptimal policy efficacy.⁶ Such a scenario may be attributed to credit stickiness, or rigidity, in the banking sector, in which banks prioritise risk management over credit expansion.⁷ To adequately address this efficacy gap within the macroprudential framework, it is essential to deploy complementary policy instruments beyond the BI Rate. These instruments may include, but are not limited to, Loan-to-Value (LTV) regulations, the Countercyclical Capital Buffer (CCyB), and liquidity requirements, all of which are necessary to facilitate more effective policy transmission and enhance overall financial stability.⁸

This article contributes to the theory of traditional monetary policy by demonstrating that monetary transmission is not always linear. The effectiveness of monetary policy is significantly influenced by the degree of nonlinearity and internal responses, as these constitute the primary channels of transmission and are subject to inherent structural constraints and risks. Consequently, the article provides valuable empirical and theoretical insights and merits publication.

Research Method

This research employs a Sequential Explanatory Model within a mixed-methods framework, incorporating a legal analysis of Bank Indonesia's authority. This approach highlights the paper's novelty in exploring the relationship between the BI Rate and credit growth.⁹ By facilitating quantitative analysis, the model identifies patterns and statistical significance, which are then complemented by qualitative analysis to elucidate the policy transmission gap and its shortcomings. This methodology not only measures the extent of the BI Rate's influence on credit growth but also explores why this relationship may not always conform to theoretical

⁶ (Bank Indonesia, 2016)

⁷ (Bank Indonesia, 2016)

⁸ (Bank Indonesia, 2016)

⁹ Alysia Blackham, "When Law and Data Collide: The Methodological Challenge of Conducting Mixed Methods Research in Law," *Journal of Law and Society*, 49, No. S1 (2022): S87–104, <https://doi.org/10.1111/jols.12373>.

expectations, thereby offering a more nuanced understanding of the effectiveness of Bank Indonesia's macroprudential policies.¹⁰

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The research question in this study is to test the relationship between the BI Rate and credit growth within the framework of Bank Indonesia's macroprudential policy effectiveness. This study proposes two main hypotheses: the Null Hypothesis (H0), which states that there is no significant influence of the BI Rate on credit growth;

Alternative Hypothesis (H1): There is a significant negative influence of the BI Rate on credit growth. The study tests whether changes in the BI Rate can influence the dynamics of bank credit disbursement, whilst assessing the extent to which this relationship is consistent with monetary transmission theory in the empirical context of the Indonesian financial system.

The concept of the BI Rate within a macroprudential framework in the context of *Financial Stability* the BI Rate is a monetary policy instrument that guides inflation expectations whilst influencing funding costs in the financial system.¹¹ The underlying assumption is that a reduction in the BI Rate will encourage increased financing, particularly in the non-bank sector, which is more elastic to changes in the benchmark interest rate. If this transmission does not occur perfectly, for instance, if a reduction in the BI-Rate is not reflected in third-party funding and lending rates, this indicates rigidity in the banking funding structure.¹²

Regarding Bank Indonesia's mandate, the BI Rate does not stand alone; it forms part of an integrated policy mix alongside macroprudential policies. Bank Indonesia's policies are directed not only towards price stability but also towards fostering economic growth through reductions in the BI-Rate and the strengthening of other policies.¹³ Therefore, the causal proposition is that the BI-Rate reduces funding costs. However, its effectiveness in stimulating credit growth in the real sector depends heavily on liquidity support and the stability of the financial system.¹⁴

¹⁰ Taha Saedi and Mohammad Amini Farsani, "Exploring Limitations in Mixed Methods Research (MMR): Domains, Functions, and Specificity," *Journal of Mixed Methods Research*, 17 (November 2025), <https://doi.org/10.1177/15586898251396757>.

¹¹ (Bank Indonesia, 2016)

¹² (Bank, Indonesia 2026)

¹³ L Amorello, "Macroprudential Regulation," in *Comparative Financial Regulation*, 2025, 172–90, <https://doi.org/10.4337/9781035306473.00021>.

¹⁴ (Bank Indonesia, 2016)

The concept of banking intermediation is the primary function of the financial system in channelling funds from surplus units to deficit units to support economic growth. In a macroprudential context, banks not only extend credit but also reallocate assets between liquid instruments and credit to optimise returns and risk; consequently, intermediation decisions are endogenous to risk and liquidity conditions.¹⁵

Causally, intermediation is determined not only by the BI Rate, but by a combination of supply and demand factors. In a macroprudential context, Bank Indonesia utilises various instruments such as the KLM, PLM, and RPLN to enhance banking intermediation capacity and liquidity flexibility. The causal proposition is that banking intermediation is a function of liquidity, risk, and credit demand; consequently, macroprudential policies are required to optimise this function, one of which is through the BI-Rate.¹⁶

The concept of monetary transmission refers to the relationship between the BI Rate, market interest rates and financing. In a macroprudential context, the effectiveness of monetary transmission depends heavily on the stability of the financial system and the conditions for intermediation.¹⁷ Bank Indonesia emphasises the importance of policy synergy to maintain the effectiveness of transmission, including through the strengthening of systemic surveillance and cross-authority coordination. The causal proposition is that monetary transmission occurs not only through the interest rate channel (BI Rate, lending rates, credit), but also through the macroprudential channel (liquidity, risk, and intermediation), meaning its effectiveness depends on the integration of these two policy frameworks.¹⁸

¹⁵ Alexander Karminsky and Mikhail Stolbov, *Systemic Financial Risk: An Emerging Market Perspective*, *Systemic Financial Risk: An Emerging Market Perspective*, 2024, <https://doi.org/10.1007/978-3-031-54809-3>.

¹⁶ Van Dang Dan and Khac Quoc Bao Nguyen, "Monetary Policy, Bank Leverage and Liquidity," *International Journal of Managerial Finance*, 17, No. 4 (2020): 619–39, <https://doi.org/10.1108/IJMF-06-2020-0284>.

¹⁷ Cep Jandi Anwar et al., "Monetary Policy, Macroprudential Policy, and Bank Risk-Taking Behaviour in the Indonesian Banking Industry," *Journal of Applied Economics*, 27, No. 1 (2024), <https://doi.org/10.1080/15140326.2023.2295732>.

¹⁸ Fitri Handayani and Sekar Utami Setiastuti, "Monetary-Macroprudential Policy Synergy Through the Bank Lending Channel in Indonesia," *Emerging Markets Finance and Trade*, 61, No. 4 (2025): 1113–29, <https://doi.org/10.1080/1540496X.2024.2404171>.

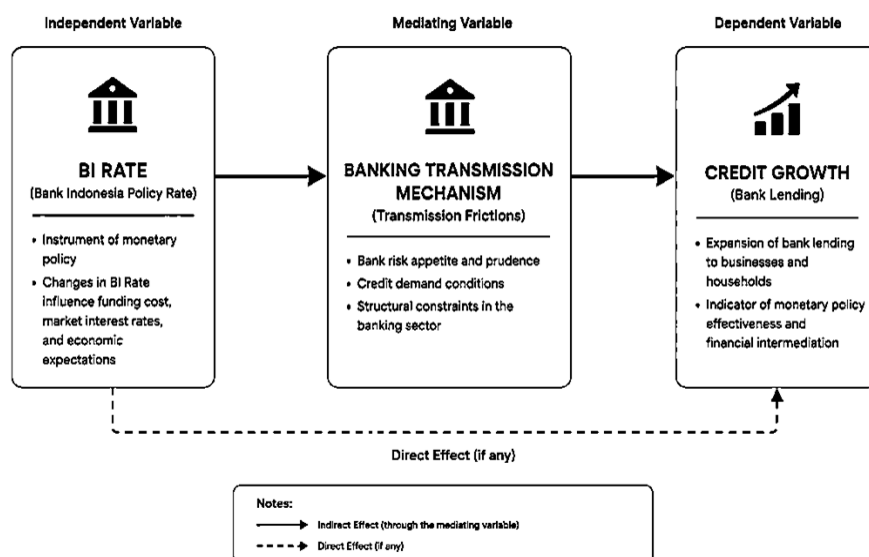


Figure 1: Conceptual Framework of the BI Rate

Based on Figure 1 above, it can be explained that the theoretical framework begins with the 'BI-Rate Decrease Scenario' box, which illustrates monetary transmission through two main, complementary channels in driving the dynamics of credit growth within the financial system. The first channel is indicated by the black arrow connecting the BI-Rate decrease to a Decrease in the Cost of Funds, which endogenously drives an Increase in Loan Approval and Encourages Borrowing, thereby positively influencing *the supply* (bank capacity) and demand components of intermediation to generate Real Credit Growth.

The second channel involves strengthening through macroprudential interventions (KLM, PLM, RPLN instruments), which explicitly enhance banking liquidity to bolster intermediation capacity (green arrow).¹⁹ The integration of these two policies enhances the effectiveness of monetary transmission, thereby promoting optimal real credit growth and economic growth. However, this graph also accurately visualises the causal proposition of constraints via the thick red arrow marked with a cross, which cuts from Imperfect Interest Rate Transmission (Funding Rigidities) towards credit growth dynamics. This illustrates the failure of monetary

¹⁹ Hero Wonida and Sekar Utami Setiastuti, "The Effect of Monetary, Macroprudential Policy, and Their Interaction on Bank Risk-Taking in Indonesia," *Journal of Asian Economics*, 96 (February 2025): 101863, <https://doi.org/10.1016/j.asieco.2024.101863>.

transmission due to rigid funding structures that hinder the reduction of lending rates, thereby resulting in constrained, sub-optimal credit growth.²⁰

The required writing sequence is; Introduction contains background; research objectives and problem solving plan. The problem solving is linked to the relevant literature review and hypothesis development is included in this section as the basis for the direction of problem solving, not included in a separate subchapter. In an effort to improve the quality of the article, the author is encouraged to utilize the results of the literature review to support the argumentation, both in the introduction (the need for research to be carried out) and in the discussion (compared to the findings of previous research / existing theories) from relevant journals as much as 80% of the entire bibliography used.

Concisely describe the research methods used. If there are methods that are not commonly used, they must be described in detail. The procedures used in the research can be described in the form of flow charts, pictures or other diagrams that support. In writing use a direct and concise style. Avoid complex and ambiguous sentences. Briefly define all technical terms that may not be familiar to the reader. Explain abbreviations used at the outset. E.g.: Problem Based Learning (PBL).

Results and Discussion

To explain the impact of the BI-Rate on Credit Growth, the focus is on whether this impact represents the effectiveness of *the reduced-form transmission* of monetary policy to the real sector. Given that in Bank Indonesia's financial stability review (2025), credit growth remained within the range of 8–11% despite the presence of frictions.²¹

This finding implies that, although transmission via the interest rate pass-through is imperfect, the quantity credit channel, or liquidity effect, can still operate through other factors, such as liquidity, macroprudential policy, and banks' funding structures.²² In a sequential explanatory design, this condition actually strengthens the qualitative stage, as weak or insignificant quantitative results can be explained by

²⁰ Solikin M. Juhro, "Future Central Banking in Emerging Market Economies," *Encyclopedia of Monetary Policy, Financial Markets and Banking*, 1 (2025): 189–98, <https://doi.org/10.1016/B978-0-44-313776-1.00118-5>.

²¹ (Bank Indonesia, 2026)

²² (Bank Indonesia, 2025)

banking frictions (risk perception, cost of funds, margins), thereby providing a theoretical justification that the ineffectiveness of the interest rate channel does not mean monetary policy has completely failed, but rather that its transmission mechanisms have been distorted.²³

Before proceeding to the quantitative analysis, the BI Rate data is first described as the independent variable and credit growth data as the dependent variable, based on Bank Indonesia's financial stability review reports for the past five years (2020–2025). Descriptively, the BI Rate variable has an average (mean) of 4.85%. This mean value reflects the equilibrium point of Indonesia's monetary policy over the past five years, during which the monetary authorities have sought to balance growth incentives with inflation control. Meanwhile, the recorded median value of 5.00% indicates that half of the observed data lies below this psychological threshold, reinforcing that the period of low interest rates has been sufficiently significant within the study's timeframe.²⁴

When viewed in the mode, the figure of 3.50% is the most frequent value in the data series, signalling a period of deliberate policy *stagnation* to maintain market certainty. However, the standard deviation, which reaches a fairly significant figure (around 1.05–1.15), indicates a wide dispersion or deviation of the data from the mean. This high standard deviation reflects a highly reactive policy response to economic shocks, meaning the distance between data points is not always linear or stable.²⁵

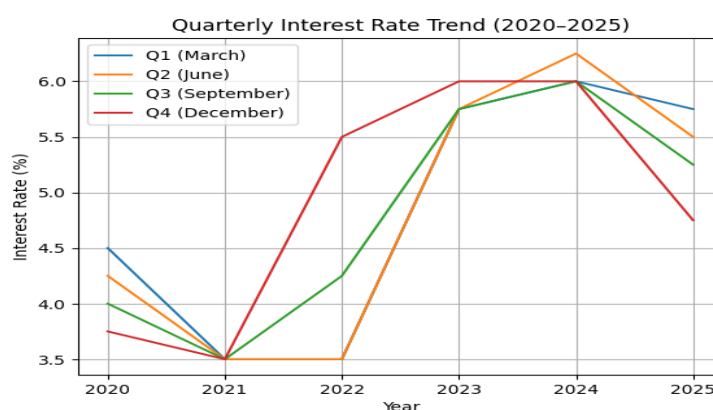


Figure 2: BI Rate (2020–2025)

²³ OJK, "Penguatan Sektor Jasa Keuangan Dalam Menjaga Pertumbuhan Ekonomi: Laporan Kinerja OJK Tahun 2023," 2024.

²⁴ (Bank Indonesia, 2025)

²⁵ (Bank Indonesia, 2026)

The graph above illustrates the dynamics of quarterly interest rates during the 2020–2025 period, with each colored line representing a different quarter: blue for Q1 (March), orange for Q2 (June), green for Q3 (September), and red for Q4 (December). The graph shows a downward trend in 2020–2021, stability in 2021, followed by a sharp rise to a peak in 2023–2024, then a decline in 2025. The differences in line height and fluctuations reflect the statistical characteristics of each quarter.

In terms of measures of central tendency and dispersion, Q4 (red line) has the highest mean of 4.92% and a median of 5.13%, indicating that, generally speaking, interest rates at the end of the year tend to be higher than in other quarters, with a mode of 6.00% as the most frequently occurring value.

A standard deviation of 1.10 indicates fairly significant variation, with a range from 3.50% to 6.00%, making the red line appear quite volatile. Meanwhile, Q1 (blue line) has a mean of 4.83%, a median of 5.13%, a mode of 3.50%, and a standard deviation of 1.16, indicating moderate variation with a range of 3.50% to 6.00%. The line is relatively stable but still changes. Q2 (the orange line) shows a mean of 4.79% and a median of 4.88%, with the highest standard deviation of 1.20, as well as the widest range of values (3.50% to 6.25%), so the orange line appears the most volatile, particularly as it reaches the highest maximum value among all quarters. Conversely, Q3 (the green line) has the same mean as Q2 (4.79%) but a lower median (4.75%) and the smallest standard deviation (1.02), indicating the most stable and concentrated distribution, reflected in the relatively flatter green line.

Generally, the graph above shows that the higher the mean and the range (min–max), the higher the line's position, whilst the larger the standard deviation, the greater the line's fluctuations. Q4 tends to have the highest interest rates, Q2 the most volatile, Q3 the most stable, and Q1 in a moderate position; thus, this overall pattern provides an initial insight into the distribution and dynamics of interest rates within the framework of descriptive statistical analysis.

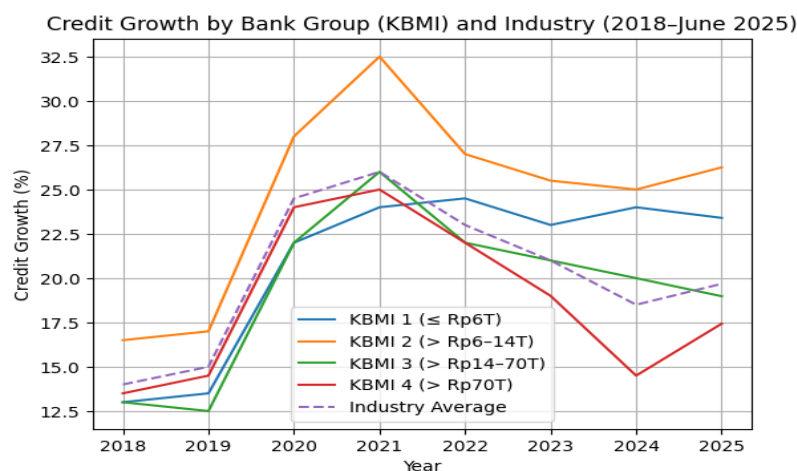


Figure 3: Credit Growth (2020–2025)

The credit growth shown above illustrates the dynamics of credit growth based on bank group classification (KBMI), distinguished by colour: the blue line represents KBMI 1, orange for KBMI 2, green for KBMI 3, red for KBMI 4, and the dotted purple line represents the industry average.²⁶ Overall, KBMI 2 held the highest position throughout the observation period, consistent with a mean of approximately 24.72% and a median of 25.88%, reflecting that this group was the primary driver of credit growth.²⁷ However, the orange line also shows the sharpest fluctuations, in line with the highest standard deviation (5.43) and a wide range of values from 16.50% to 32.50%, indicating high volatility.²⁸

Meanwhile, KBMI 3, represented by the green line, shows a gentler, more stable pattern, with a lower mean (around 19.44%), a median of 20.50%, and the smallest standard deviation (4.61), indicating a more concentrated distribution. Meanwhile, KBMI 1 (the blue line) is in a moderate position with a mean of 20.93%, a median of 23.20%, and a standard deviation of 4.80, reflecting relatively stable growth with variations that are not too extreme.²⁹

Conversely, KBMI 4 (red line) exhibits a more dynamic pattern, rising to around 25.0% in 2021, then declining to 14.5% in 2024, before a slight recovery, suggesting sensitivity to economic conditions. The industry average line (dotted purple) tends to follow the combined pattern of all groups, confirming that the

²⁶ (Bank Indonesia, 2026)

²⁷ Bank.

²⁸ Bank.

²⁹ (Bank Indonesia, 2026)

overall credit growth structure of the banking system is influenced by the dynamics of KBMI 2 and KBMI 3.³⁰

Based on data analysis using a linear regression approach with the annual average BI Rate and credit growth, the following regression test results were obtained:

Variable	Coefficient	Standard Error	t-Statistic	Probability (p-value)
Constant	34.7819	2.307	15.076	0.000
BI Rate	-2.6211	0.468	-5,596	0.005

Based on the model's statistical results, an R-squared value of 0.887 indicates that the model explains approximately 88.7% of the variation in the dependent variable, indicating very strong explanatory power. The result is the Adjusted R-squared of 0.858, which remains high despite the number of variables in the model, indicating that the model specification is relatively efficient and does not suffer from significant overfitting. Consequently, from a prescriptive perspective, this model is suitable for use as a basis for analytical and policy decision-making, as it possesses high and stable explanatory power.

Furthermore, an F-statistic of 31.31 with a probability (Prob) of 0.005 indicates that the model as a whole is statistically significant at the conventional significance level ($\alpha < 0.05$). This result means that the independent variables, when used together, have a significant influence on the dependent variable. Therefore, this model can be relied upon for further analysis to evaluate policy, provided its validity is maintained through classical assumption tests and additional robustness testing.

Descriptively, the regression results show that the BI Rate has a negative coefficient of -2.6211, indicating that a 1% increase in the BI Rate reduces credit growth by approximately 2.62%, *ceteris paribus*. An R-squared value of 0.887 indicates that approximately 88.7% of the variation in credit growth can be explained by variations in the BI Rate, demonstrating a strong relationship between the two variables over the 2020–2025 period. Furthermore, the probability value (p-value) of 0.005, which is smaller than the general significance level ($\alpha = 0.05$), indicates that this effect is statistically significant.

³⁰ (Bank Indonesia, 2026)

With reference to the hypothesis testing question, since the p-value is < 0.05 , the Null Hypothesis (H_0), which states that there is no significant influence of the BI Rate on credit growth, is rejected. Conversely, the Alternative Hypothesis (H_1) is accepted, namely that the BI Rate has a significant negative influence on credit growth.

Given that this model can be used for predictive and evaluative purposes, the results of the regression test will be discussed in relation to an analysis of the effectiveness of the BI rate in controlling credit growth and used to estimate how the BI rate will influence credit growth in the future, particularly in the post-pandemic period. This analysis can help identify the best policy scenarios based on the relationship patterns identified in the model above.

The scope of the study comprises critical insights regarding the theoretical implications for understanding the effectiveness of a central bank's policy in a country, followed by an analysis of the test results in conjunction with other variables not yet included namely inflation, GDP growth, NPLs and banking liquidity given that whilst this model has proven indicative, its perspective requires broadening.³¹

The theoretical implications of the effectiveness of Bank Indonesia's policy through the BI Rate on credit growth in 2025, when analysed by considering the variables of inflation, economic growth (GDP growth), NPLs, and banking liquidity based on the data in the file, indicate that monetary policy transmission is taking place within a relatively accommodative and pro-growth framework.³² Descriptively, the BI Rate is used to guide inflation expectations, which in 2025 remain under control within the target range, with CPI inflation realised at around 2.37% (yoy). In monetary theory, inflation stability enhances the effectiveness of the policy rate by reducing uncertainty and maintaining real interest rates at conducive levels, thereby stimulating credit demand.³³ This is consistent with empirical evidence that low and

³¹ Abdul Aziz and Sri Maulida, "Bank Credit Growth in Indonesia During The Covid-19 Pandemic and Its Regulations," *Journal of Central Banking Law and Institutions*, 3, No. 1 (January 2024): 177–202, <https://doi.org/10.21098/jcli.v3i1.47>.

³² Santosa, "Macroeconomic Indicators and Yield Curve of Indonesian Government Bond."

³³ (Bank Indonesia, 2026)

anchored inflation supports banking intermediation and credit growth, which is projected to reach 8–11% in 2025.³⁴

In terms of economic growth (GDP growth), data indicate that the Indonesian economy grew by approximately 5.12% (year-on-year) in the second quarter of 2025 and is within the annual range of 4.6–5.4%. Theoretically, the relationship between the BI Rate and credit growth is mediated by the business cycle. As economic growth increases, credit demand from the real sector also strengthens (the demand-following hypothesis). In this context, a reduction in the BI Rate and Bank Indonesia's accommodative policy act as catalysts that strengthen transmission to the real sector, rather than being the sole determinants. This means that the effectiveness of the BI Rate in stimulating credit is highly dependent on expansive macroeconomic conditions, as evidenced by the recovery in domestic demand, which serves as the primary driver of banking intermediation.³⁵

Meanwhile, from a credit risk perspective, the banking sector's NPL ratio remains well below 5%. In banking theory, low NPLs increase banks' risk appetite and reduce credit rationing, thereby strengthening the transmission of interest rate cuts into increased credit disbursement. In other words, even if the BI Rate is lowered, credit expansion will not be optimal if asset quality is poor. However, by 2025, stable NPL conditions indicate that risk-related constraints are relatively minor, making interest rate policy more effective in driving credit growth.³⁶

From the perspective of banking liquidity, the data in the file confirms that liquidity is in a loose state, supported by growth in deposit-to-loan ratios (DLR) and macroprudential policies such as the easing of the liquidity coverage ratio (LCR) and liquidity incentives (KLM). Theoretically, this strengthens the credit transmission channel (bank lending channel), in which adequate liquidity enables banks to respond to a BI Rate cut by increasing credit disbursements. It is noted that ample liquidity is a key factor underpinning the banking sector's financing capacity and

³⁴ Majid et al., "Does Financial Development Reduce Poverty? Empirical Evidence from Indonesia."

³⁵ (Bank Indonesia, 2026)

³⁶ (Prawitasari et al., 2020)

maintaining positive credit growth. Thus, the effectiveness of the BI Rate does not stand alone but is reinforced by an accommodative macroprudential stance.³⁷

Overall, the theoretical implication of the above data is that the effectiveness of the BI Rate policy on credit growth in 2025 is conditional, i.e. it is heavily influenced by inflation stability, the strength of economic growth, low NPLs, and ample banking liquidity.³⁸ Under such conditions, monetary policy transmission operates relatively effectively through both the interest rate and credit channels, thereby supporting banking intermediation and sustainable economic growth. Conversely, without the support of these four variables, changes to the BI Rate alone are not sufficiently strong to drive significant credit expansion.³⁹

Theoretical implications regarding the factors hindering the BI Rate's effectiveness in influencing credit growth in 2025, based on a review of financial stability, suggest that although Bank Indonesia's monetary and macroprudential policy stances tend to be accommodative, policy transmission does not operate perfectly due to frictions in macroeconomic and banking variables.⁴⁰ From an inflation perspective, although generally contained within the target range at an actual rate of around 2.37% (yoy), this low inflation environment suggests that interest rate cuts do not automatically lead to a significant increase in credit demand. Within the mild liquidity trap framework, stable, low inflation may reflect aggregate demand that is not yet sufficiently strong, thereby limiting the real sector's response to a reduction in the BI Rate.⁴¹

Regarding economic growth (GDP growth), although it grew by around 5.12% (yoy) in the second quarter of 2025 and remained within the 4.6–5.4% range, the 2025 financial stability review data indicates obstacles in the form of a 'wait-and-see' attitude among corporations and weak purchasing power among the lower-middle

³⁷ Cyril Kopitin, "Managing Risk of Liquidity: A New Dimension of Risk Management," *International Journal of Risk Assessment and Management*, 17, No. 2 (2013): 89–106, <https://doi.org/10.1504/IJRAM.2013.057102>.

³⁸ Edwin Basmar, Carl M. Campbell, and Muhammad Fachmi, "The Green Economy Crisis Turbulence and the Reaction of Finance Distribution in Indonesian Banking," *International Journal of Sustainable Development and Planning*, 19, No. 11 (2024): 4239–50, <https://doi.org/10.18280/ijstdp.191113>.

³⁹ (Bank Indonesia, 2026)

⁴⁰ (Bank Indonesia, 2024)

⁴¹ (Bank Indonesia, 2026)

class.⁴² This indicates a weakness in the credit demand channel. Although borrowing costs have fallen due to the reduction in the BI Rate, the business sector has not yet increased investment or credit demand aggressively. This means that moderate but not yet inclusive economic growth is a factor hindering the transmission of monetary policy to credit growth.⁴³

From a credit risk perspective, although the NPL ratio has remained below 5%, banks continue to exercise a high degree of caution, particularly in the post-pandemic period, as evidenced by their selective lending approach, especially in the SME segment.⁴⁴ Theoretically, this situation reflects risk aversion and the potential for credit rationing, as banks have not fully responded to the BI Rate reduction with credit expansion, due to concerns about asset quality. This means that, although the aggregate NPL indicator remains stable, risk perception continues to act as a barrier to the transmission of policy.⁴⁵

Meanwhile, regarding banking liquidity, although liquidity conditions are relatively loose and supported by various policies, such as the KLM and PLM easing measures, the data indicate that the transmission of the BI Rate cut to bank interest rates has not been fully effective. This is evident from the 50bps reduction in the BI Rate, which a significant decline in deposit and lending rates has not accompanied. Theoretically, this reflects interest rate stickiness due to funding constraints and competition for deposits, suggesting that the interest rate transmission channel remains imperfect despite adequate liquidity.

This implies that the factors hindering the effectiveness of the BI Rate in influencing credit growth in 2025 stem from a combination of low inflation reflecting sub-optimal aggregate demand-economic growth that has not yet fully driven credit demand due to structural factors such as purchasing power and business expectations, banking sector prudence despite contained NPLs, and interest rate transmission rigidity amidst what is actually loose liquidity. The theoretical

⁴² Indonesia, *Memperkuat Stabilitas dan Menjaga Pertumbuhan dari Dampak Rambatan Global*.

⁴³ (Bank Indonesia, 2026)

⁴⁴ Rajan Govil, "Overview: Financial Stability and Systemic Risk," *Presentation at the Bank Indonesia International Workshop and Seminar Central Bank Policy Mix: Issues, Challenges, and Policies*, No. April (2018): 9–13.

⁴⁵ (Bank Indonesia, 2025a)

implication is that the effectiveness of monetary policy is not determined solely by changes in the BI Rate, but is heavily dependent on banking intermediation conditions and the dynamics of the real sector, which mediate the policy transmission channel.⁴⁶

Based on the 2025 financial stability review data, the factors hindering the effectiveness of the BI Rate in influencing credit growth in 2025 are predominantly derived from a combination of structural factors and the substance of macroprudential authority, whilst cultural factors emerge as a complementary element in the form of economic actors' behaviour. Structurally, although inflation remains low and stable at around 2.37% (YoY) and economic growth is in the range of 4.6–5.4% with a second-quarter realisation of 5.12% (YoY), these conditions have not yet fully created a strong impetus for credit demand.⁴⁷

This is evident from the continued weakness in household purchasing power and the 'wait-and-see' attitude of corporations, which theoretically indicates that the structure of aggregate demand is not yet sufficiently robust to respond optimally to a reduction in the BI Rate. In other words, although macroeconomic stability has been achieved, the uneven economic structure remains the primary obstacle to credit demand.

From the banking sector's perspective, structural factors are also reflected in risk and intermediation conditions. Although the NPL ratio remains below 5%, the banking sector continues to exercise caution in extending credit, particularly in certain segments such as SMEs. This indicates structural rigidity in the intermediation function, where credit allocation capacity is determined not only by funding costs (BI Rate) but also by risk perception and borrower quality.

Furthermore, regarding liquidity, although conditions are broadly accommodative and supported by policies such as the KLM and PLM easing, the transmission to lending rates has not been fully effective due to a competitive funding structure and gradual interest rate adjustments. This suggests that there are structural impediments in both the interest rate and bank lending channels.

⁴⁶ (Bank Indonesia, 2026)

⁴⁷ (Bank Indonesia, 2026)

In the context of the substance of macroprudential authority, Bank Indonesia has in fact implemented highly accommodative and pro-growth policies, such as liquidity easing through the KLM, adjustments to the RPLN, and PLM easing to enhance liquidity flexibility and stimulate lending. However, theoretically, this suggests that the macroprudential authority functions more as an enabler (facilitator) than as a primary determinant, meaning its effectiveness remains dependent on the banking sector's and the real economy's responses.

This means that, although policy instruments have been optimised, limitations in transmission (such as the sub-optimal pass-through of lower lending rates and still-limited credit demand) suggest that the bottleneck lies not in a lack of authority, but in the effectiveness of implementation within a complex financial system.

Meanwhile, cultural factors manifest in economic behaviour such as banks' cautious stance and corporations' 'wait-and-see' attitude, which slow the response to interest rate stimulus. However, these factors are, in essence, derivative of structural conditions and economic uncertainty, rather than primary drivers.

The theoretical implication is that the constraints on the BI Rate's effectiveness in influencing credit growth by 2025 stem from an economic structure and financial intermediation that are not yet fully responsive, despite stable inflation, moderate economic growth, controlled NPLs, and ample banking liquidity. The substance of Bank Indonesia's authority within the macroprudential framework is adequate and even accommodative; however, its effectiveness remains constrained by structural conditions and the behaviour of economic actors within the financial system.

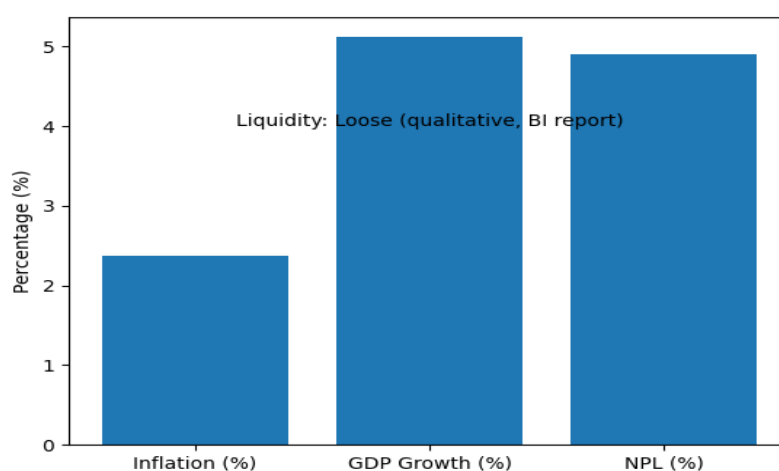


Figure 4: Key Macroeconomic Indicators (Bank Indonesia, 2025)

Based on Azis's findings, the effectiveness of the BI Rate as a macroprudential policy instrument demonstrates significant limitations, as the BI Rate has a negative influence (-1.333493) but is not statistically significant ($0.0682 > 0.05$) on credit growth, despite having been cut by 100 bps to reach 4.00% throughout 2020. During the pandemic crisis, the transmission mechanism still required time and could not immediately stimulate credit disbursement. This is reinforced by the fact that other variables such as inflation (0.007003; not significant; $p=0.2546$), GDP growth (0.001026; not significant; $p=0.4392$), and NPL (-1.501127; not significant; $p=0.2746$) were also not significant, whilst banking liquidity (DPK) emerged as the dominant factor with a coefficient of 0.397561 and was significant ($p \approx 0.0007$).⁴⁸

The implication is that the effectiveness of the central bank's role within the macroprudential framework cannot rely solely on interest rate instruments, but must be reinforced by liquidity policies, credit easing, and fiscal-monetary policy coordination, as all these variables simultaneously have a significant impact on credit growth ($p=0.00002$; $R^2=86.76\%$), but in isolation, the BI Rate is not sufficiently robust as the primary tool for credit control in crisis conditions.⁴⁹

Meanwhile, the research findings regarding the implications of the BI Rate as an independent variable in the context of macroprudential policy effectiveness indicate that the BI Rate is a relatively effective instrument in the short term, as it has a positive and significant influence on bond yields (coefficient 5.9923; $p=0.0492 < 0.05$), meaning that changes in the benchmark interest rate are rapidly transmitted to the financial markets. However, in the long term, the influence of the BI Rate becomes insignificant (coefficient = -0.1819; $p = 0.8726$), thereby limiting its effectiveness as a structural control tool.⁵⁰

⁴⁸ Fita Nurotul Faizah et al., "Fiscal Policy and Islamic Philanthropy: A Strategy for Social Welfare and Economic Stability," *Iqtisad: Reconstruction of Justice and Welfare for Indonesia*, 12, No. 1 (June 2025): 43–62, <https://doi.org/10.31942/iq.v12i1.12697>.

⁴⁹ Muhammad Abdur Rosyid Albana and Bagas Heradhyaksa, "Asymmetric Information in the Determination of Risk in Islamic Peer-to-Peer Lending: A Fiqh Muamalat Perspective," *Iqtisad: Reconstruction of Justice and Welfare for Indonesia*, 12, No. 1 (June 2025): 79–94, <https://doi.org/10.31942/iq.v12i1.12439>.

⁵⁰ Maula Ristya, Ahmad Fauzan Mubarak, and Miswan Ansori, "Komparasi Komitmen BSI dan Bank Muamalat dalam Pencapaian SDGs," *Iqtisad: Reconstruction of Justice and Welfare for Indonesia*, 12, No. 2 (December 2025): 193–210, <https://doi.org/10.31942/iq.v12i2.14544>.

With an R^2 value of 0.7221, the model indicates that approximately 72.21% of the variation in yields is explained by macroeconomic variables, suggesting that central bank policy is quite influential but still requires support from other variables. Within a macroprudential framework, the BI Rate is more effective as a short-term stabilisation instrument than as the primary tool for promoting banking intermediation (including credit growth). It thus needs to be combined with other liquidity and macro-stability policies.

Meanwhile, research by Prawitasari (2020) found that GDP growth (economic growth) has a positive but insignificant effect on credit growth, with a regression coefficient of 0.242 and a significance level of 0.127 (>0.05), meaning that an increase in economic growth only slightly drives an increase in credit, as unstable economic conditions may cause banks to remain cautious.

As for banking liquidity, represented by third-party funds (DPK), it was found to have a positive and significant influence on credit growth, with a coefficient of 0.075 and a significance level of 0.000 (<0.05). However, it is an internal factor with the least influence among the variables. This indicates that the greater the funds mobilised from the public (which can reach 80–90% of a bank's total funds), the greater the bank's capacity to extend credit. Furthermore, other internal variables such as CAR (coefficient 0.183; $p=0.001$) and ROA (coefficient -1.443; $p=0.000$) also play a significant role, confirming that the bank's internal factors are more dominant than macro factors in driving credit growth.

The implications regarding the BI Rate as an independent variable in the context of the effectiveness of macroprudential policy indicate that the BI Rate has a positive but insignificant effect on credit growth (coefficient 0.439; $p=0.269 > 0.05$), thus limiting its effectiveness as the central bank's primary instrument in promoting banking intermediation.⁵¹ Theoretically, an increase in the BI Rate would raise lending rates, thereby suppressing credit demand; however, empirical results indicate that this transmission mechanism is not robust.⁵² Consequently, the central bank's role within the macroprudential framework cannot rely solely on interest rate instruments; rather, it must be combined with the strengthening of internal banking factors such

⁵¹ Maula Ristya, Ahmad Fauzan Mubarak, and Miswan Ansori.

⁵² Maula Ristya, Ahmad Fauzan Mubarak, and Miswan Ansori.

as liquidity (DPK), capital adequacy (CAR), and asset quality (NPL), as these variables are empirically more decisive in determining credit growth dynamics.

Conclusion

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This study concludes that there is a robust, significant relationship between the BI Rate and credit growth, as evidenced by R-squared values of 0.887 and 0.858, respectively. This indicates that approximately 88.7% of the variation in credit growth is attributable to changes in the BI Rate. Furthermore, the F-statistic of 31.31 (Prob = 0.005) confirms the model's statistical significance. The regression coefficient of -2.6211 indicates a negative relationship: a 1% increase in the BI Rate results in a reduction in credit growth of approximately 2.62%. Consequently, the alternative hypothesis (H1) is accepted, asserting that the BI Rate significantly negatively impacts credit growth. However, qualitative findings further elaborate on these results, revealing that this relationship is not entirely linear in practice. Factors such as low inflation (approximately 2.37%), moderate economic growth (around 5.12%), well-managed non-performing loans (NPLs) (less than 5%), and ample liquidity help explain why policy transmission is conditional and effective. Factors that may impede the BI Rate's ability to influence credit growth in 2025 are tied to both macroeconomic conditions and the behaviour of banking intermediaries. Despite low inflation at approximately 2.37% (year-on-year) and economic growth at roughly 5.12% (year-on-year), credit demand remains weak due to diminished purchasing power and a cautious 'wait-and-see' attitude among corporations. Although NPLs remain below 5%, banks continue to exercise caution due to risk aversion and the potential for credit rationing. While liquidity is loose and deposit growth stands at 6.96% (year-on-year), it is hindered by interest rate stickiness. Ultimately, the main challenges stem from the structure of intermediation and the behaviour of economic actors, rather than solely.

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