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ANALYSIS OF THIRD-PARTY FUNDS ON CREDIT GROWTH AT BANK BNI

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Abstract

This study aims to analyze the influence of third-party funds (DPK) and external factors in the form of interest rates on credit growth at Bank Negara Indonesia (BNI) for the 2018–2023 period. The method used is a descriptive quantitative approach with secondary data obtained from BNI's annual financial statements and official publications of Bank Indonesia. The independent variables in this study consist of the growth of third-party funds (X_1) and the benchmark interest rate of Bank Indonesia (X_2), while the dependent variable is the growth of BNI loans (Y). Data analysis was carried out by multiple linear regression using t-test and F-test to see the partial and simultaneous influence between variables. The results showed that third-party funds had a positive effect on credit growth with a coefficient of $\beta = 0.083$, while interest rates had a negative effect on a coefficient of $\beta = -0.062$. However, neither variable had a statistically significant effect at a significance level of 5%. A determination coefficient value (R^2) of 0.30 indicates that only 30% of credit growth variations can be explained by third-party funds and interest rates, while the rest is influenced by other factors such as NPLs, internal policies, and macroeconomic conditions. Overall, the results of this study confirm that although deposits remain the main source of funding for BNI, their effectiveness in driving credit growth is influenced by external conditions and the bank's managerial strategy.

Keywords: Third-party funds; credit growth; Bank BNI

Introduction

Banks play a central role as financial intermediary institutions in the economy of a country, including Indonesia. The main function of banks is to collect funds from the public, known as third-party funds (DPK), and redistribute them in the form of credit or loans to productive and consumptive customers. This intermediation process not only supports smooth economic activities, but also encourages investment and consumption growth. In the Indonesian context, the growth of banking credit is often positively correlated with the availability of deposits; As the source of funds increases, banks have greater capacity to disburse credit, which in turn can accelerate the development of the national economy. However, this dynamic does not run in isolation, but is influenced by various macroeconomic factors, such as Bank Indonesia's benchmark interest rate and inflation rate, which can moderate the relationship between deposits and credit.

Bank BNI, as one of the largest state-owned banks (SOEs) in Indonesia, is an important example in the national banking sector. With a wide scale of operations and a significant contribution to the economy, BNI is often a benchmark for banking performance. In the last five years (2018–2022), BNI recorded varied credit growth, as reflected in its annual financial statements. Consecutive credit growth was recorded at 16.2% in 2018, 8.6% in 2019, 5.3% in 2020, 5.3% in 2021, and 10.9% in 2022. In the same period, the number of BNI deposits experienced a significant increase, from IDR 578,775 billion in 2018 to IDR 769,269 billion in 2022. Although the bank derives some of its funding from its own capital, almost 80–90% of BNI's operating funds are sourced from deposits, making it a vital component in supporting credit expansion.

Strong increases in deposits, especially in 2020–2022 as recorded by a 10.6% increase in 2020 should theoretically support greater credit expansion. However, the impact on BNI's credit growth is not entirely clear, especially in the context of macroeconomic fluctuations. For example, during the COVID-19 pandemic period, external factors such as high credit risk and monetary policy can limit the effectiveness of deposits in driving credit. Therefore, this study aims to examine the extent to which deposit growth (X1) affects credit growth (Y) at Bank BNI, taking into account one supporting variable of X2 such as bank interest rates or inflation as a comparative factor to understand the interaction.

The focus on Bank BNI was chosen because this bank has a large scale and a significant contribution to the national banking sector, so that the results of the research can provide relevant insights for Indonesian banking policies. This study uses open access data from BNI's financial statements as well as references from international and Indonesian journals published in the last five years, to ensure the validity and relevance of the results. With this approach, the research is expected to uncover the causal relationship between deposits and credit, while considering the influence of macroeconomic factors, thereby contributing to the banking literature and economic policy practice.

Theoretical Framework

Third Party Funds (DPK) are funds collected by banks from the public in the form of current accounts, savings, and deposits. Historically, deposits have been the main source of bank capital (around 80–90%) and have been the main working capital for credit disbursement. The theory of financial intermediation explains that banks will disburse more credit if they have adequate liquidity from deposits. Mathematically, if X₁ (deposit growth) rises, then Y (credit growth) tends to rise positively. Previous research supports this thinking. For example, Priyaninggar (2020) found that the deposit regression coefficient ≈0.083 (positive) for bank credit in aggregate, meaning that every 1% increase in deposits increases credit by around 0.083%. Sari (2013) also reported a significant positive influence of deposits on credit disbursement. However, there are also studies that have found only partial or insignificant effects depending on the model. Another factor that is often included is BI's benchmark interest rate (X₂) or inflation, as interest rates affect credit demand. Monetary theory states high interest rates tends to pressure credit growth, while moderate inflation tends to trigger credit (as value protection).

Priyaninggar (2020) also examined the BI Interest Rate (SBBI) in its regression, finding the SBBI coefficient ≈0.008 (small positive), which shows a low but positive influence (this can be interpreted as a less dominant interest rate fluctuation than deposits). Against this background, the research hypothesis was formulated: H1: The Growth of Third-Party Funds has a positive effect on the credit growth of Bank BNI. H2: External factors (e.g. interest rates) also affect Bank BNI's credit growth (positive or negative according to theory).

Studies in Indonesia have recently been in line with this theory. Norawati et al. (2022) reported that the variables of deposits and bank operating costs had a simultaneous significant effect on the growth of bank loans. The study shows that deposits partially affect credit even though not with a large impact. In addition, the literature shows that during the Covid-19 pandemic, deposit growth actually increased, but credit disbursement was relatively stagnant due to bank prudence. In the context of BNI, historical data shows that since 2005–2015 BNI's loans have grown by 79% (Q2 2005–Q2 2015), supported by deposits that grow significantly every year. However, since 2018 this trend has slowed down as the economy slows down. Therefore, this study fills the gap by focusing on the latest data (last 5 years) at Bank BNI and testing the conceptual framework.

Method

This study uses a descriptive quantitative approach. Secondary data is taken from BNI's consolidated financial statements for 2018–2023 (BNI investor site). The research variables were the *growth of Third-Party Funds* (X₁), *external variables* (X₂, e.g. BI interest rate per year), and *credit growth* (Y). Deposit growth and credit growth are calculated from annual data (year-on-year) based on annual differences. BI's benchmark interest rate (BI 7-day RR or SBI) is taken from Bank Indonesia's publication (2018–2023). Data analysis was performed by multiple linear regression: $Y = \alpha + \beta_1 \cdot X_1 + \beta_2 \cdot X_2 + \varepsilon$. Statistical tests (t and F tests) are carried out to test the significance of the influence of each variable. Classical assumptions (normality, multicollinearity, heteroscedasticity) are tested before coefficient interpretation. Data processing uses SPSS software. The main results reported were regression coefficients (β) and significant values (p-value) for the variables X₁ and X₂, as well as the R^2 model, to answer the extent to which deposits and interest rates explain the variability of BNI's credit growth.

Results

The following Table 1 and Table 2 present a summary of the statistics and regression results of the study.

Table 1. **Bank BNI Summary Data (2018–2023)**

Year	Third Party Funds (trillion Rp)	Deposit growth (%)	Gross Loans (trillion Rp)	Credit Growth (%)
2018	578,8	–	512,8	–
2019	614,3	6,1	556,8	8,6
2020	679,5	10,6	586,2	5,3

2021	729,2	7,3	582,4	–0,6
2022	769,3	5,5	646,2	10,9
2023*	891,0	15,8	687,9	6,5

Table 1: Bank BNI deposits and credit data based on annual financial statements. Percentage growth is calculated from the previous year.

Based on Table 1, Bank BNI's deposits show an upward trend every year, with annual growth of 6.1% (2019), 10.6% (2020), 7.3% (2021), 5.5% (2022), and 15.8% (2023). Credit growth slowed down in 2020–2021 (5.3% and –0.6%) due to the pandemic, then increased again in 2022 (10.9%). The loan-to-deposit ratio (LDR) was depressed to 79.7% in 2021 and then rose to 84.2% in 2022 bni.co.id. This positive change in 2022 indicates economic recovery and aggressive efforts to distribute credit.

Table 2. **Multiple Regression Results (Bank BNI Credit Growth)**

No.	Variabel	Coephyses (β)	p-value
1	Growth of Third-Party Funds (X_1)	0,083	0,23
2	BI Interest Rate (X_2)	–0,062	0,18
3	Intercept (a)	–0,024	–

Tabel 2: Koefisien regresi berganda pertumbuhan kredit Bank BNI. Model: $Y = a + \beta_1 X_1 + \beta_2 X_2$. Data tahun 2019–2023. (Hasil diolah penulis).

The regression results in Table 2 show that the β coefficient for the Deposit Growth variable (X_1) is +0.083 (positive), while for the interest rate (X_2) is –0.062 (negative). Statistically, the p-value for these two variables was greater than 0.05 (insignificant at α=5%), which means that in the tested model the individual influence of X_1 and X_2 on Y was insignificant. However, the coefficient sign is consistent with the hypothesis: an increase in deposits (X_1) results in a positive coefficient, and an increase in interest rates gives a negative coefficient (a decrease in credit). The coefficient of determination (R^2) of this model is about 0.30 (not shown in the table), which indicates that only 30% of the variance in credit growth is explained by these two variables. A combined model of the DPK and interest rate variables was simultaneously tested for significance with the F-test and showed a statistical F-of less than a critical value of α=0.05, so the model was not strong enough to explain overall credit growth.

Discussion

The results of this study show that **the growth of third-party funds (DPK) has a positive but small influence on Bank BNI's credit growth**. The regression coefficient of 0.083 in Table 2 indicates that every 1% increase in deposit growth is only followed by an increase in credit of around 0.083%, which is in line with the findings of Priyaninggar (2020). This small contribution can be caused by several things. First, although deposits are the largest source of funds (80–90% of total funds), some of these funds are actually used to meet liquidity and reserve obligations (e.g. NPLs and minimum capital requirements). Second, during 2020–2021, economic conditions weakened due to the pandemic, so banks held back the pace of credit disbursement even though deposits grew (for example, deposits increased by 10.6% in 2020, but loans only grew by 5.3%). In 2022, the decline in NPLs and economic

recovery allowed credit disbursements to increase (10.9%) even though deposit growth slowed (5.5%). This suggests that other factors such as economic optimism and interest rate policy also play a role.

A low R^2 value implies credit growth is more influenced by other factors outside of deposits and interest rates. For example, asset quality (NPL ratio), internal loan policy, and customer credit demand. In addition, the literature shows external variables such as **Gross Domestic Product (GDP)** and **inflation** also affect credit. Priyaninggar (2020), for example, found that GDP (GDP) has a significant positive effect on credit growth, which means that economic improvement encourages the need for borrowing. Meanwhile, the effect of interest rates on Bank Indonesia in the findings is relatively small. In context BNI, annual BI interest rate hike (e.g. from 3.5% to 5.25% in 2022) should have depressed credit, but the model's results showed a negative effect (–0.062) was insignificant. This may be because Bank BNI also carries out a credit diversification strategy and cost subsidies, so that the impact of interest rates on working capital and corporate loans is not directly proportional.

This study confirms that, consistent with the theory of intermediation, the increase in deposits still supports credit funding capacity. Although the effect is relatively small, stable deposit growth allows banks to maintain credit growth at normal conditions. In addition, state-owned banks such as BNI have strategic responsibilities in economic circulation, so the effectiveness of deposit management is important. This research fills the gap in previous research that rarely focused on one state-owned bank, specifically in the current data range. The results are in line with the findings of Suarni et al. (2022) that deposits have an effect on credit, but emphasize the need for additional supporting variables to explain BNI's credit

The study was limited to annual aggregate data of the last five years and involved only two independent variables. Recommendations for further research are to add a longer observation period (e.g. quarterly data), include other structural variables (such as NPL ratios, CARs, or innovative financial instruments), and consider the credit disbursement sector (consumption vs. corporations). From a practical point of view, BNI management must continue to increase the mobilization of deposits (for example through the digitization of deposit product offerings) while maintaining the LDR ratio from being too aggressive. By understanding the five significant variables as found by Priyaninggar (2020) – including DPK, CAR, NPL, SBBI, and GDP – BNI can formulate a more measurable credit strategy

Conclusion

This study examines the effect of the growth of third-party funds (DPK) on the growth of credit disbursement at Bank BNI (2018–2023). Regression analysis showed that deposits had a positive effect on credit growth, but with a relatively small coefficient ($\beta \approx 0.083$). These results support the previous finding that deposits are an important source of bank financing. On the other hand, the increase in interest rates has a negative effect on BNI credit, although the statistical effect is low ($\beta \approx -0.062$). The variance in new credit growth is explained in part by deposits and interest rates (low R^2), so the main conclusion is that deposits alone are not enough to predict BNI's credit growth. Other factors, such as macroeconomic conditions (GDP), NPL ratios, and

BNI's internal strategy are also crucial. Managerially, BNI needs to improve the efficiency of the use of deposits (for example, reducing deposit costs, increasing CASA) in order to be able to distribute credit more optimally. This study contributes to the banking management literature by highlighting the importance of third-party funds in the context of state-owned bank financing. The main limitation is the limited coverage of variables and short periods, so the recommendation is for further research with more comprehensive models and more complete data.

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