

# Analysis of the Factors Influencing Credit Distribution at PT. Bank BTN (Persero) Tbk. Medan Branch Office

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## Abstract

The formulation of the problem in this study is how to influence Third Party Funds (DPK), Return on Assets (ROA) and interest rates on lending at PT. Bank BTN (Persero) Tbk. Medan Branch Office. While the objective of this research is to analyze the effect of third party funds (DPK), Return on Assets (ROA) and interest rates on lending at PT. Bank BTN (Persero) Tbk. Medan Branch Office either partially or simultaneously. The data source in this study is the 2012-2016 financial reports. The data analysis technique used was multiple linear regression using the SPSS version 17.0 program. The results showed that the t-count value for the DPK variable (X1)  $(13.112) > (12.706)$  or  $(0.048) < (0.05)$ , partially DPK has a positive and significant effect on LDR. The t-count value for the variable ROA (X2)  $(11.659) < (12.706)$  or  $(0.054) > (0.05)$ , partially ROA has no positive and significant effect on LDR. The t-count value for the variable interest rate (X3)  $(13.152) > (12.706)$  or  $(0.048) < (0.05)$ , partially the interest rate has a positive and significant effect on LDR. Simultaneously the DPK, ROA and interest rate variables have a significant effect on LDR at PT. State Savings Bank (Persero) Tbk. Medan Branch ( $F_{count} > F_{table} (75.504 > 19.16)$  or  $\text{sig } F < 5\% (0.084 > 0.05)$ ).

**Keywords:** DPK, ROA, Interest Rate, LDR.

## 1. Introduction

Loan classification is divided based on maturity, collateral, business segment, credit purposes, and credit usage (Mardiyanto, 2009). Based on its use, credit is divided into two, namely Working Capital Credit (KMK) and investment credit. According to Siamat, (1999) working capital loans are loans provided by banks to increase the debtor's working capital. In principle, this working capital loan is the use of capital that starts with obtaining capital from bank loans, then these funds are used to purchase merchandise or raw materials that will be processed to make products, then the products are sold, and until cash is obtained from the proceeds of the sale. PT. Bank BTN (Persero) Tbk. Medan Branch Office is a bank that in its business activities can conduct transactions in foreign currencies, after obtaining approval from Bank Indonesia. The activities of foreign exchange banks include: accepting deposits and providing credit in foreign currencies, including financial services related to foreign currencies, for example: letters of credit, travelers checks, money changers. In carrying out payment traffic activities, banks require funds for these activities. Therefore, every bank always tries to obtain optimal funds but with a reasonable cost of money. According to (Hasibuan, 2014), bank funds are classified as consisting of:

- 1) *Loanable Funds*, funds which apart from being used for credit are also used as secondary reserves and securities.
- 2) *Unloanable Funds*, funds that can only be used as a primary reserve.
- 3) *Equity Funds*, funds that can be allocated to fixed assets, inventory, and equity.

Although credit distribution plays an important role for the country's economic growth, the credit extended by banks is not optimal. This can be seen from the Loan to Deposit Ratio (LDR). The Loan to Deposit Ratio (LDR) is a comparison ratio between the amount of funds channeled to the public in the form of credit, with the amount of public funds and own capital used. Loan to Deposit Ratio (LDR) is higher indicating that the lower the ability of bank liquidity, this is because the amount of funds used to finance credit is getting bigger (Anggraini & Budiarti, 2020). According to Sartono (2011: 84), a high loan to deposit ratio indicates that a bank lends all of its funds (loan-up) or becomes illiquid. A low LDR indicates a liquid bank with excess capacity to lend.

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Capital is an important factor so that a company can operate, including for banks, in extending credit to the public also requires capital. Bank capital must also be able to be used to guard against possible risks, including risks arising from the credit itself. To overcome the possibility of risks that occur, a bank must provide a minimum provision of capital. According to Dendawijaya, (2009). Capital Adequacy Ratio is the ratio that shows how far all bank assets that contain risk (loans, investments, securities, claims on other banks) are also financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, such as public funds, loans, etc. The higher the CAR value indicates that the bank has sufficient capital to support its needs and bear the risks that arise, including credit risk. With large capital, a bank can extend more credit, in line with increased credit it will increase the LDR itself.

In addition to capital, a bank's profit absolutely must exist to guarantee the continuity of the bank. One function of the bank's profit is to ensure the continuity of the establishment of the bank (Pohan, 2022). Bank profit occurs if the amount of income received is greater than the amount of expenses (costs) incurred. The bank's income comes from operational results of lending interest, share premiums, and others. In determining the soundness level of a bank which in turn can reflect the sustainability of a bank's financial performance, Bank Indonesia is more concerned with assessing the amount of profit based on Return On Assets (ROA) because Bank Indonesia prioritizes the value of a bank's profitability as measured by assets whose funds mostly come from public savings funds (Dendawijaya, 2009).

Banking in general cannot be separated from what is called credit risk in the form of non-current returns, which is called Non Performing Loans (NPLs). Dendawijaya, (2009), credit facility jams are caused by two factors, namely factors from the banking side and factors from the customer side. Non-performing loans can be measured by their collectability, which is the percentage of non-performing loans (with the criteria of substandard, doubtful and loss) to the total loans issued by the bank. High non-performing loans can lead to a bank's reluctance to extend credit because they have to form large reserves for write-offs, thereby reducing the amount of credit extended by a bank, which will later affect the LDR ratio itself. In knowing the financial condition of a bank, it can be seen the financial reports presented by a bank periodically (Prayoga & Pohan, 2022). This report also describes the bank's performance during this period. This report is very useful, especially for owners, management, government and society as bank customers, to find out the condition of the bank. The analysis used for this report is to use financial ratios in accordance with applicable standards (Kasmir, 2010: 104).

## 2. Literature Review

### 2.1. Definitions of Banks

The definition of a bank according to Law No.7 1992 concerning banking as amended by Law no. 10 1998 are: Banks are business entities that collect funds from the public in the form of savings, and distribute them to the public in the form of credit and or other forms, in order to improve the standard of living of the general public.

Some banking experts provide the following understanding of bank liquidity: (Djuwita & Yusuf, 2018).

- a. Burn "Bank liquidity is related to the ability of a bank to raise a certain amount of funds at a certain cost and within a certain period of time".
- b. According to Wood Jr. "Liquidity is the bank's ability to meet all withdrawals by depositors, obligations that have matured, and fulfill credit requests without any delay".
- c. Glavin stated that "Liquidity means having sufficient sources of funds available to meet all obligations".

### 2.2. Definition of Credit

According to the law of the Republic of Indonesia number 10 of 1998 credit is a lending and borrowing agreement between the bank and the borrower who is required to pay off the debt within a certain period of time plus interest on the loan according to the agreement. Meanwhile, according to Anggraini & Budiarti, (2020) credit is the ability to carry out a purchase transaction with a promise that payment will be made at a time period agreed by both parties.

### 2.3. Interest Rates

Spread often referred to as the difference between the cost of funds (borrowing rate) and the lending rate or the difference between the bidding rate and the offering rate which is often used in money market transactions. The bank determines the interest rate spread to estimate the desired return in percentage terms. According to Herlambang & Komara, (2021) the bank interest rate spread is the main income for the bank which will determine the amount of the

bank's net income. With the higher interest rate spread that can be generated by the bank, it will increase the amount of income for the company, so that the bank will channel more funds for credit.

#### 2.4. Return on Assets (ROA)

According to Mardiyanto, (2009) ROA is the ratio used to measure a company's ability to generate profits from investment activities. This ratio is used to measure management's ability to obtain overall profit (profit). The greater the ROA, the greater the level of profit achieved by the company and the better the position of the company in terms of asset use (Dendawijaya, 2009).

#### 2.5. Hypothesis

Based on the formulation of the problem above, the authors put forward the hypothesis as follows:

- H1 : Partially, third party funds (DPK) have a positive effect on PT. Bank BTN (Persero) Tbk. Medan Branch Office.
- H2 : Partially, the interest rate has a positive effect on PT. Bank BTN (Persero) Tbk. Medan Branch Office.
- H3 : Partially, *Return On Assets*(ROA) has a positive effect on PT. Bank BTN (Persero) Tbk. Medan Branch Office.
- H4 : Simultaneously, third party funds (DPK), interest rates and *Return On Assets*(ROA) has a positive effect on PT. Bank BTN (Persero) Tbk. Medan Branch Office.

### 3. Research Method

Primary data is a source of research data obtained directly from the original source (not through intermediary media). Secondary data, namely those used in this study, are sources of research data obtained and recorded by other parties. The data used is financial report data for 2012-2016.

#### Multiple linear regression analysis

Multiple linear regression analysis technique is a test technique used to determine the independent variable on the dependent variable. The regression analysis equation model in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

where:

- Y = LDR Variable
- a = Constant
- b = Regression coefficient
- X1 = CAR
- X2 = ROA
- X3 = NPLs
- e = Error

### 4. Results and Discussions

#### 4.1. Multiple Linear Regression Equation Analysis

From data processing with the program SPSS obtained "Coefficients". In these coefficients it can be seen the multiple linear regression equation and the influence of DPK, ROA and interest rates on LDR.

**Table 1.** Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Betas		
(Constant)	-1052.756	86.925		-12.111	.052
DPK	37.963	2.895	6.968	13.112	.048
ROA	60.027	5.149	5.277	11.659	.054
Interest rate	52.669	4.005	2.033	13.152	.048

$$\text{LDR} = -1052.756 + 37.963 (\text{DPK}) + 60.027 (\text{ROA}) + 52.669 (\text{interest rate})$$

- 1) The constant value  $a$  is 1052.756 meaning that if there is no variable  $X_1$  (DPK), variable  $X_2$  (ROA) and variable  $X_3$  (interest rate) = 0, then the LDR will decrease by 1052.756 units.
- 2) The DPK variable ( $X_1$ ) is 37.963, which means that for every increase in the TPF variable by 1 unit, the value of the LDR will increase by 37.963 units assuming that the other variables are the same.
- 3) The ROA variable ( $X_2$ ) is 60.027, which means that for every increase in the ROA variable by 1 unit, the value of the LDR will increase by 60.027 units assuming that the other variables are the same.
- 4) The interest rate variable ( $X_3$ ) is 52.669, which means that for every increase in the interest rate variable by 1 unit, the value of the LDR will increase by 52.669 units assuming that the other variables are constant.

#### 4.2. Hypothesis Determination Coefficient ( $R^2$ )

How much influence does DPK, ROA and interest rates have on LDR at PT. State Savings Bank (Persero) Tbk. The Medan branch can be seen in the “ModelSummary” obtained from data processing with the SPSS program as follows:

**Table 2.** Determination Coefficient Value (Adjusted R Square) Model Summary

Model	R	R Square	Adjusted P Square	Std. Error of the Estimate
1	.998	.996	.982	.79692

Based on the table 2, the Adjusted R Square value is 0.996, meaning that the ability of the variable  $X_1$  (DPK), variable  $X_2$  (ROA) and variable  $X_3$  (interest rate) to explain the variation of the LDR variable ( $Y$ ) is 99.6% and the remainder is 0.4% is explained by independent variables not examined in this study.

#### 4.3. Simultaneous Hypothesis Testing (Test $F$ )

**Table 3.** F test Results

Model	Sum of Squares	Df	MeanSquare	F	Sig
Regression	143,853	3	47.951	75.504	.049
residual	0.635	1	0.635		
<b>Total</b>	<b>144.488</b>	<b>4</b>			

From the ANOVA or F testtest, obtained  $F^{\text{tung}}$  of 75.504 with a significance level of 0.049. So  $F_{\text{count}} > F_{\text{tabel}}$  ( $75.504 > 19.16$ ) or  $\text{sig } F < 5\%$  ( $0.049 < 0.05$ ). This means that simultaneously the variables DPK, ROA and interest rates have a significant effect on LDR at PT. State Savings Bank (Persero) Tbk. Medan Branch. With this it can be concluded that the hypothesis of this study can be proven.

#### 4.4. Partial Hypothesis Testing ( $t$ test)

**Table 4.** Test Results  $t$

Model	Unstandardized Coefficients B	std. Error	Standardized Coefficients Betas	t	Sig
(Constant)	-1052,756	86,925		-12,111	.052
DPK	37,963	2,895	6,968	13,112	.048
ROA	60,027	5,149	5,277	11,659	.054
Interest rate	52,669	4.005	2,033	13.152	.048

- 1) The  $t$ -count value for the DPK variable ( $X_1$ ) (13.112), is greater than the  $t$ -table value (12.706) or the  $\text{sig } t$  value for the DPK variable (0.048) is smaller than the  $\alpha$  value (0.05). Based on the results obtained,  $H_0$  is rejected and  $H_1$  is accepted for the DPK variable. Thus, partially DPK has a positive and significant effect on LDR. This means that DPK has a significant effect on increasing LDR.
- 2) The  $t$ -count value for the ROA variable ( $X_2$ ) (11.659), is smaller than the  $t$ -table value (12.706) or the  $\text{sig } t$  value for the ROA variable (0.054) is greater than the  $\alpha$  value (0.05). Based on the results obtained, it accepts  $H_0$

and rejects  $H_a$  for the ROA variable. Thus, partially ROA has no positive and significant effect on LDR. This means that ROA has no significant effect on increasing LDR.

The t-count value for the interest rate variable (X3) (13.152), is greater than the t table value (12.706) or the sig t value for the interest rate variable (0.048) is smaller than the alpha value (0.05). Based on the results obtained,  $H_0$  is rejected and  $H_i$  is accepted for the interest rate variable. Thus, partially the interest rate has a positive and significant effect on LDR. This means that interest rates have a significant effect on increasing LDR.

## 5. Conclusion

Whereas 99.6% of the LDR (Y) variable is influenced by the X1 variable (DPK), X2 variable (ROA) and X3 variable (interest rate), while the remaining 0.4% is determined by other variables outside this research model.

- 1) The t-count value for the DPK variable (X1) (13.112), is greater than the t-table value (12.706) or the sig t value for the DPK variable (0.048) is smaller than the alpha value (0.05). Based on the results obtained,  $H_0$  is rejected and  $H_i$  is accepted for the DPK variable. Thus, partially DPK has a positive and significant effect on LDR. This means that DPK has a significant effect on increasing LDR.
- 2) The t-count value for the ROA variable (X2) (11.659), is smaller than the t-table value (12.706) or the sig t value for the ROA variable (0.054) is greater than the alpha value (0.05). Based on the results obtained, it accepts  $H_0$  and rejects  $H_a$  for the ROA variable. Thus, partially ROA has no positive and significant effect on LDR. This means that ROA has no significant effect on increasing LDR.
- 3) The t-count value for the interest rate variable (X3) (13.152), is greater than the t table value (12.706) or the sig t value for the interest rate variable (0.048) is smaller than the alpha value (0.05). Based on the results obtained,  $H_0$  is rejected and  $H_i$  is accepted for the interest rate variable. Thus, partially the interest rate has a positive and significant effect on LDR. This means that interest rates have a significant effect on increasing LDR.
- 4) From the ANOVA test or F test, we get a Fhituug of 75.504 with a significance level of 00. So  $F_{count} > F_{table}$  ( $75.504 > 19.16$ ) or sig F < 5% ( $0.049 < 0.05$ ). This means that simultaneously the variables DPK, ROA and interest rates have a significant effect on LDR at PT. State Savings Bank (Persero) Tbk. Medan Branch. With this it can be concluded that the hypothesis of this study can be proven.

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