

DISTRIBUTING WORKING CAPITAL LOAN AND INVESTMENT LOAN OF MICRO, SMALL AND MEDIUM ENTERPRISES

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ABSTRACT

Regional Development Bank is a bank owned by local governments that located in each province in Indonesia. The purpose of establishing Regional Development Bank is to encourage economic growth in the region, such as providing loan to micro, small and medium enterprises. The aim of this research is to study the influence of Capital Adequacy Ratio (CAR), Third-Party Fund (TPF), Return on Assets (ROA), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL) and external factors, such as: Inflation and the central bank rates against working capital loans and investment loans at Regional Development Bank of South Kalimantan-Indonesia, regional inflation index and the central bank rates in 2015-2017. Data analysis with panel data regression used software EViews 10. The results showed that the variable of Capital Adequacy Ratio (CAR), Third-Party Fund (TPF), Return on Asset (ROA), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), Inflation and Bank Indonesia Rate influence simultaneously to MSME working capital loans and MSME investment loans. For partial test results, the variables which significantly affected MSME Working Capital Loans were CAR, TPF, LDR and BI Rate. The Partial test results affected MSME investment loans. They were CAR, TPF, LDR, NPL, Bank Indonesia Rate.

Keywords: working capital loan, investment loan, MSME, regional development bank

INTRODUCTION

Micro, Small and Medium Enterprises (MSME) are the backbone of the Indonesian economy that has a strategic and important role in national development also plays a role in economic growth and employment. SME's are also proven to survive in the face of the economic crisis that hit Indonesia in 1997-1998. After the economic crisis, the number of MSME actually increased even able to absorb 85 million to 107 million workers until 2012.

The government now provides a bigger opportunity for MSME by issuing Law Number 20 of 2008 on MSME, in which it regulates the extension of funding and facilitation by banks and non-bank financial institutions. The law provides for the banking sector to assist the government's efforts to increase its loan-to-lending ratio by 2015 to 5% of total loans, 2016 by 10% of total loans, 2017 by 15% of total loans, and by 2018 reached 20% of total credit.

The banking began aggressively to distribute credit to MSME. The MSME business is no longer seen as a second-class business. Loan disbursement to MSME sector experienced rapid growth. The largest share is held by Government Bank by 50%, National Bank by 40%, Regional Development Banks 7%, and Foreign Bank and a mixture of about 3% (Bank Indonesia, LPPI, 2015: p.2). The percentage of MSME loan disbursement by Regional Development Banks is still relatively small due to the largest market share that has been cultivated is consumer credit to Civil Servants, this is the concern of ASBANDA (Association of Regional Development Banks) so that arranged roadmap transformation to Regional Champion which aims to realize Regional Development Banks become a strong bank, highly competitive, can contribute to economic growth in the region.

The credit of MSME showed good resilience in the fourth quarter of 2017. This was indicated by credit growth which was still quite high, which reached 9.10% with a credit risk that declined compared to the previous period. By sector, slowing growth in credit of MSME was mainly in the agriculture, mining, construction, trade and accommodation sectors. The slowing growth in these sectors is one of the factors causing increased banking prudence in lending. This is reflected in the distribution of working capital loans and investment loans. The NPL ratio of MSME credit was recorded at 4.32%, decrease from the third quarter of 2017 which was 4.87%. The NPL ratio decrease occurred in almost all economic sectors.

Table 1. Growth and NPL of MSME in Indonesia

Indicator & Area	Credit Growth (% YoY)			NPL (%)		
	2016		2017	2016		2017
	IV	III	IV	IV	III	IV
Total Credit	10.56	10.55	9.10	4.38	4.87	4.32
- Working Capital Loan	11.06	10.79	10.49	4.36	4.88	4.42
- Investment Loan	9.43	10.01	5.98	4.43	4.84	4.07
- Agriculture	17.35	30.26	25.92	2.83	2.81	2.08
- Mining	(7.08)	29.77	(3.71)	7.98	7.24	4.74
- Industry	11.88	6.73	10.58	4.07	4.13	4.08
- Construction	9.12	8.38	2.48	10.74	10.51	10.22
- Trade	10.79	5.97	5.94	3.70	4.59	4.14
- Accommodation	19.81	19.28	12.77	5.00	5.68	4.28
Kalimantan	7.14	10.91	9.57	4.95	5.16	4.27

Sulawesi	8.97	8.95	9.88	4.46	4.87	4.60
Maluku & Papua	10.89	12.23	0.77	7.26	8.34	7.39
Bali & Nusa Tenggara	17.11	11.56	10.91	2.43	3.21	2.89

South Kalimantan Bank is one of the Regional Development Banks owned by the Provincial Government and Local Government in South Kalimantan-Indonesia, which has the vision to be a bank that excels in the region and play a role in encouraging economic growth. The mission is to mobilize and encourage the local economy and to assist the establishment of credit institutions or Rural Banks owned by Provincial and Local Governments. South Kalimantan Bank was appointed by Bank Indonesia as “Apex BPR” which is the guard against 23 Rural Banks in South Kalimantan. Apex's own function is focused on the role of pooling, providing financial assistance and technical support.

During 2015, the MSME loan portfolio of South Kalimantan Bank has experienced a drastic decline both in terms of the number of debtors and outstanding loans. In October 2015, the KUR program (people’s business credit) is re-run by Indonesian Government, but the South Kalimantan Bank is not appointed as the channeling bank of KUR in 2015 to September 2016. South Kalimantan Bank still provides credit with its own MSME products that have a higher lending rate than KUR interest rate only 9% effective per year. No significant increase, the number of debtors reduced every month, while the outstanding credit is still fluctuating.

Table 1. The Growth of MSME Credit

Period	Debtor		Outstanding (million)		NPL	Share	
	Amount	+/-	Amount	+/-			
2015	Quarter I	6,345	-	1,070,286	-	1.71%	15.68%
	Quarter II	6,204	-141	986,608	-83,678	1.66%	14.10%
	Quarter III	5,952	-252	885,460	-101,148	1.64%	12.48%
	Quarter IV	5,444	-508	696,339	-189,121	1.63%	9.77%
2016	Quarter I	5,145	-299	727,904	31,565	1.63%	9.89%
	Quarter II	4,991	-154	856,770	128,867	1.88%	10.71%
	Quarter III	4,865	-126	871,003	14,233	1.80%	11.17%
	Quarter IV	4,658	-207	751,959	-119,044	1.88%	9.82%
2017	Quarter I	4,624	-34	762,058	10,099	2.25%	9.69%
	Quarter II	4,712	88	810,721	48,663	2.25%	10.11%
	Quarter III	4,403	-309	819,856	9,135	2.07%	10.33%
	Quarter IV	4,208	-195	653,752	-166,104	1.40%	8.50%

The phenomenon of the decline in the number of borrowers and the credit distribution of the South Kalimantan Bank is interesting to do research. As a bank owned by the Provincial Government and Local Government that operates to serve the people in South Kalimantan, it is better to know the potential of the region and the characteristics of the community. The South Kalimantan region also has many industries and trades belonging to micro and small businesses that can be targeted for market credit products.

Bank lending is likely to be influenced by several factors, either internal or financial ratios such as Capital Adequacy Ratio (CAR), which is the main capital for banks to develop their business, Third-Party Fund (TPF) is a community fund collected by banks to be distributed to loan, Return on Assets (ROA) as a measure of asset returns indicating the percentage of profit earned by the bank, Loan to Deposit Ratio (LDR) is the amount of loan volume disbursed compared to Third-Party Funds, Non-Performing Loans (NPL) are non-performing loans that fall under the Substandard, Doubtful and Loss criteria. While the external factors that can affect the lending of SME's such as Inflation, related to the increase in the price of goods thereby decreasing the interest of public spending, then the Bank Indonesia Rate is the policy of interest rate reference issued by Bank Indonesia. Several previous studies show the effect of CAR, TPF, ROA, LDR, NPL, and Inflation variables on credit distribution.

LITERATURE REVIEW

1. Credit

According to Golin and Delhaise (2013, p.1), credit is the realistic belief or expectation, upon which a lender is willing to act, that funds advanced will be repaid in full in accordance with the agreement made between the party lending the funds and the party borrowing the funds.

2. Bank

According to Golin and Delhaise (2013, p.89), a Bank is one type of financial intermediary and probably the most ubiquitous but not the only type.

3. Capital Adequacy Ratio

Bank capital is the ultimate measure of bank creditworthiness. The CAR as a measure of bank soundness and the capital measure functions as some supreme indicator of the market's confidence. Although these functions of capital are operative in all businesses, they are especially critical to banks. This may be explained by a very peculiar attribute of banks that historically has served to underline the comparative importance of their capital levels: high leverage. (Golin and Delhaise, 2013, p.450).

The formula of Capital Adequacy Ratio is described as follows:

$$\text{Capital Adequacy Ratio (CAR)(\%)} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk weighted Assets}} \times 100$$

The numerator, capital, was separated into core (Tier 1) capital and supplementary (Tier 2).

4. Third-Party Funds (Customer Deposits)

Funding liabilities can be broadly divided into customer deposits and purchased Funds. Third-Party Funds or Customer Deposits are also referred to as core deposits, although core deposits might sometimes include stable or relatively stable deposits from other sources (Golin and Delhaise, 2013, p.210).

According to Bank Indonesia Regulation (2015, p.3), Third-Party Funds or customer deposits is a Bank's obligation to residents and non-residents in Rupiah and foreign currencies covering Third-Party funds covering demand deposits, savings deposits and time deposits in Rupiah and foreign currency, excluding interbank funds.

5. Return on Assets

Profitability is measured using ratios such as Return on Assets. Return on equity (ROE) and ROA are two fundamental return-type ratios used in bank credit analysis. ROA shows how efficiently the enterprise is able to extract earnings from its assets (Golin and Delhaise, 2013, p.275).

The formula of Capital Adequacy Ratio is described as follows:

$$ROA (\%) = \frac{Net\ Income}{Total\ Assets} \times 100$$

6. Loan to Deposit Ratio

According to Golin and Delhaise (2013, p.605), Loan to Deposit Ratio (LDR) is the availability of credit. The LDR may be expressed in terms of customer lending (excluding interbank lending) or in terms of total bank lending. It is also calculated to include credit provided by nonbank financial intermediaries as well. These include the bank intermediation ratio, growth in credit (lending) and the loan-to-deposit ratio.

According to Bank Indonesia Regulation (2015, p.4), Loan to Deposit Ratio is the ratio of credits granted to third parties in Rupiah and Foreign Currency excluding credits to other banks. Used to measure the total amount of credit granted by banks to funds obtained from third parties (savings, demand deposits, and time deposits).

7. Non-Performing Loan

Non-Performing Loan (NPL) are problem loans. Bank Indonesia categorize into 5 parts there is: substandard, doubtful and stuck. According to Bank Indonesia Regulation (2015, p.6), Non-Performing Loan (NPL) hereinafter referred as NPL Ratio of Total Credit is the ratio between total credit with substandard, doubtful and stuck to Total Credit. Used to measure the number of non-performing loans (criteria: Doubtful, Substandard, Stuck) on total loans disbursed by banks. NPLs shall not exceed 5% of total credit.

According to Golin and Delhaise (2013, p.337), not all of a bank's customers will pay back the funds they have borrowed. Some will make repayments for a period of time and then default on the full payment of interest and principal. In other words, some loans that a bank makes will become non-performing. Indeed, that a portion of a bank's loans will become non-performing loans or NPLs, is practically certain and an inherent risk and cost of banking.

8. Inflation

According to Golin and Delhaise (2013, p.596), monetary inflation is the increase in money supply, and price inflation is the actual upward changes to the price of a set of goods or service.

9. Bank Indonesia Rates

The reference rate is determined by the central bank, is one of the monetary policies including official discount rate, interbank rate, real interest rate, yield curve shape (Golin and Delhaise (2013, p.587),

According to Bank Indonesia Regulation (2005, p.3), Bank Indonesia rate is the interest rate with a tenor of one month periodically determined for a certain period by Bank Indonesia and announced to the public as a signal of monetary policy.

RESEARCH HYPOTHESIS

Research Models:

This research was conducted on two research models as follows:

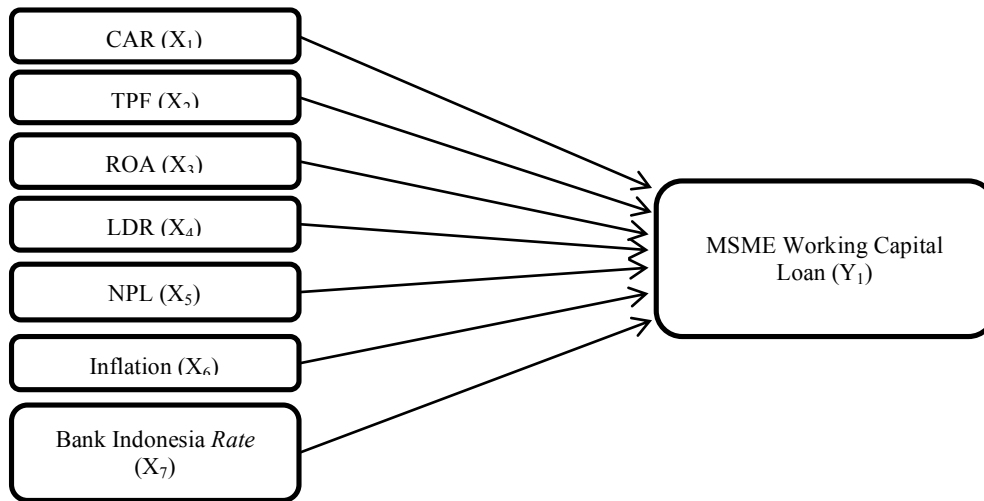
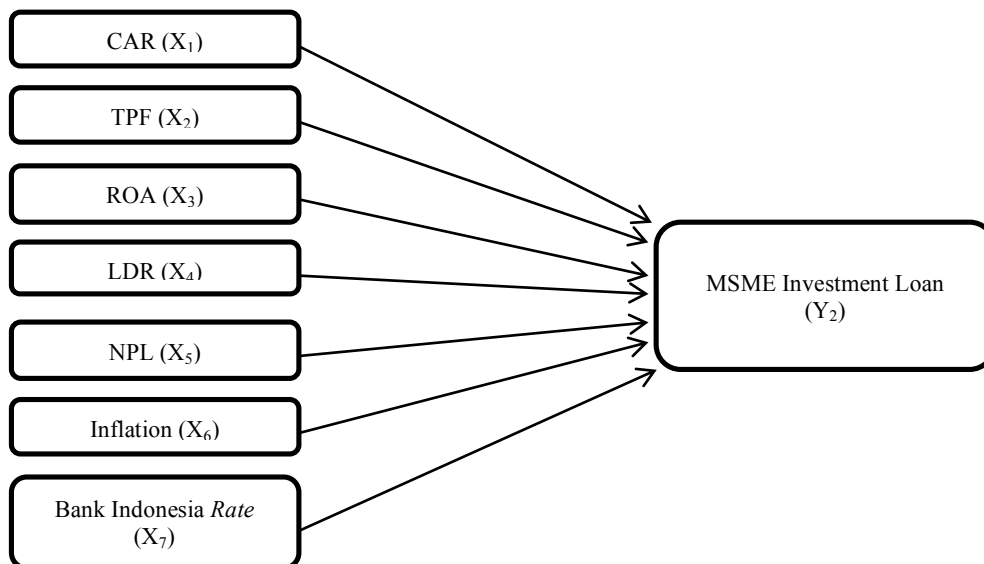


Figure 1. First Research Model

Figure 2. Second Research Model



Hypothesis:

1. Influence of Capital Adequacy Ratio (CAR) on MSME Loans
According to Barus and Lu (2013) in his research hypothesis states that CAR affects both simultaneously and partially to the credit distribution of MSME. According to Santoso and Dewi (2017) in his research hypothesis states that CAR partially and simultaneously affect credit on PT. Bank Mandiri (Persero) Tbk.
H1: CAR variable suspected to negatively affects toward MSME working capital loans
H2: CAR variable suspected to negatively affects toward MSME investment loans
2. Influence of Third-Party Funds (Customer Deposits) on MSME Loans
According to Sari and Abundanti (2016) in his research hypothesis stated that Third-Party Funds has a positive and significant impact on the banking credit distribution.
H3: Third-Party Funds variable suspected to positively affects toward MSME working capital loans
H4: Third-Party Funds variable suspected to positively affects toward MSME investment loans
3. Influence of Return on Assets (ROA) on MSME Loans
According to Riadi (2018) in his research hypothesis that ROA has a positive effect on lending. According to Sari and Abundanti (2016) in his research hypothesis states that ROA has a positive and significant impact on lending.
H5: ROA variable suspected to positively affects toward MSME working capital loans
H6: ROA variable suspected to positively affects toward MSME investment loans
4. Influence of Loan to Deposit Ratio (LDR) on MSME Loans
According to Barus and Lu (2013) in the research, the hypothesis states that the LDR effect both simultaneously and partially to the credit distribution of MSME by commercial banks in Indonesia. According to Riadi (2018) in his research hypothesis states that the LDR has a positive and significant effect on lending. According to Santoso and Dewi (2017) in his research hypothesis states that the LDR effect both simultaneously and partially on the channeling of credit.
H7: LDR variable suspected to positively affects toward MSME working capital loans
H8: LDR variable suspected to positively affects toward MSME investment loans
5. Influence of Non-Performing Loan (NPL) on MSME Loans
According to Barus and Lu (2013) in his research hypothesis states that the NPL has an effect both simultaneously and partially on the channeling of MSME loans disbursed by Commercial Banks in Indonesia. According to Riadi (2018) in his research hypothesis states that the NPL has a negative effect on lending. According to Santoso and Dewi (2017) in his research hypothesis states the NPL effect on lending.
H9: NPL variable suspected to negatively affects toward MSME working capital loans
H10: NPL variable suspected to negatively affects toward MSME investment loans
6. Influence of Inflation on MSME Loans
According to Sari and Abundanti (2016) in his research hypothesis states that Inflation has a negative and significant effect on lending.
H11: Inflation variable suspected to negatively affects toward MSME working capital loans
H12: Inflation variable suspected to negatively affects toward MSME investment loans
7. Influence of Bank Indonesia Rate on MSME Loans
According to Barus and Lu (2013) explain the results of his research that Spread interest rates negatively affect the lending of SMEs.
H13: Bank Indonesia Rate variable suspected to negatively affects toward MSME working capital loans
H14: Bank Indonesia Rate variable suspected to negatively affects toward MSME investment loans

RESEARCH METHODS

Research Object

The object of research are Capital Adequacy Ratio (CAR), Third-Party Funds (Customer Deposits), Return on Assets (ROA), Loan to Deposit Ratio (LDR), Non-Performing Loan (NPL), Inflation and Bank Indonesia Rate.

Research Methods

The research population used in this research is all Branch of South Kalimantan Bank which distributed MSME credit period 2015-2017 as many as 15 Branches. Sampling method in this study using purposive sampling is desirable to sample criteria based on the research objectives of the South Kalimantan Bank Branch operating in South Kalimantan region, Jakarta Branch removed from the sample.

Data Collection

The data used in this study is secondary data sourced from:

1. Monthly data of financial reports and the distribution of South Kalimantan Bank MSME working capital loan and MSME investments loan, period 2015-2017.
2. Monthly data on Inflation and Bank Indonesia Rate, period 2015-2017.

Data Analysis Methods

Data were analyzed by the panel data regression analysis model using software EViews version 10 to determine the effect of CAR, DPK, ROA, LDR, NPL, Inflation and Bank Indonesia Rate on Working Capital Loans and Investment Loans for MSME in South Kalimantan Bank Branch in South Kalimantan Province.

Panel data regression test used Generalized Least Squares (GLS) or Weighted Least Square (WLS) estimators to obtain BLUE estimator values (Best Linear Unbiased Estimator).

OPERATIONAL VARIABLES

The operational definition of the variables in this study as follows :

Table 2. Operational Variables

Variable	Notation	Concept Variable	Measurement of Variables
Independent Variable			
1. Capital Adequacy Ratio (CAR)	X1	Capital Adequacy Ratio of Banks	CAR = (tier 1 capital + tier 2 capital / ATMR) x 100%
2. Third-Party Funds (Customer Deposits)	X2	Demand deposits, savings deposits, and time deposits	TPF = total demand deposits + total savings deposits + total time deposits
3. Return on Assets (ROA)	X3	Profitability indicator	ROA = (Net Income / Total Assets) x 100%
4. Loan to Deposit Ratio (LDR)	X4	Availability of credit	LDR = (Total Credit / Third-Party Funds) x 100%
5. Non-Performing Loan (NPL)	X5	Problem loans (criteria: Doubtful, Substandard, Stuck)	NPL = (Total NPL / Total Credit) x 100%
6. Inflation	X6	the actual upward changes to the price of a set of goods or service	Measured by Consumer Price Index (CPI)
7. Bank Indonesia Rate	X7	Reference interest rate by the central bank	Data available on www.bi.go.id
Dependent Variable			
8. Working Capital Credit	Y1	lending of working capital of MSME	Monthly data of MSME working capital credit
9. Investment Credit	Y2	lending of investment of MSME	Monthly data of MSME investment credit

DATA ANALYSIS METHOD

The data obtained from the results of further research is analyzed by the panel data regression analysis model using Software EViews version 10 to determine the effect of CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate on Working Capital Loans and Investment Loans for MSME at Branch of South Kalimantan Bank in South Kalimantan Province.

The data panel regression equation in this study as follows:

$$Y_{1it} = b_0 + b_1X_{1it} + b_2X_{2it} + b_3X_{3it} + b_4X_{4it} + b_5X_{5it} + b_6X_{6it} + b_7X_{7it} + e_{it}$$

$$Y_{2it} = b_0 + b_1X_{1it} + b_2X_{2it} + b_3X_{3it} + b_4X_{4it} + b_5X_{5it} + b_6X_{6it} + b_7X_{7it} + e_{it}$$

Explanation :

- Y_{1it} : MSME working capital credit
- Y_{2it} : MSME investment credit
- β_0 : Constanta
- β_1 : CAR regression coefficient
- X_{1it} : CAR variable
- β_2 : TPF regression coefficient
- X_{2it} : TPF variable
- β_3 : ROA regression coefficient
- X_{3it} : ROA variable
- β_4 : LDR regression coefficient
- X_{4it} : LDR variable
- β_5 : NPL regression coefficient
- X_{5it} : NPL variable
- β_6 : Inflation regression coefficient
- X_{6it} : Inflation variable
- β_7 : Bank Indonesia Rate regression coefficient
- X_{7it} : Bank Indonesia Rate variable
- e_{it} : error

RESULT AND DISCUSSION

- 1. Panel Data Regression
 - 1.1. First Research Model

Table 7. Panel Data Regression Test of First Research Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CAR	-3.30E+08	60362132	-5.470481	0.0000
X2_TPF	0.010572	0.001978	5.345257	0.0000
X3_ROA	2.47E+08	2.18E+08	1.135850	0.2566
X4_LDR	-4.71E+08	96487014	-4.879867	0.0000
X5_NPL	-1.66E+08	1.61E+08	-1.029667	0.3037
X6_INFLASI	-1.75E+08	4.11E+08	-0.425264	0.6708
X7_BIRATE	2.65E+10	2.66E+09	9.963769	0.0000
C	4.69E+10	3.24E+09	14.48065	0.0000

Weighted Statistics

R-squared	0.969476	Mean dependent var	1.01E+11
Adjusted R-squared	0.968212	S.D. dependent var	7.85E+10
S.E. of regression	1.23E+10	Sum squared resid	7.25E+22
F-statistic	767.0387	Durbin-Watson stat	0.354305
Prob(F-statistic)	0.000000		

1.1.1. t-Test

In the panel data regression analysis, the t-test is used to test the effect of independent variables (CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate) partially to dependent variable (MSME Working Capital Loans).

Table 8. t-Test Summary of First Research Model

Variable	Coefficient	Prob.	Hypothesis	Results
CAR	-3.30E+08	0.0000	< 0.05	Negative effect and significant
TPF	0.010572	0.0000	< 0.05	Positive effect and significant
ROA	2.47E+08	0.2566	> 0.05	Positive effect and not significant
LDR	-4.71E+08	0.0000	< 0.05	Negative effect and significant
NPL	-1.66E+08	0.3037	> 0.05	Negative effect and not significant
Inflation	-1.75E+08	0.6708	> 0.05	Negatif effect and not significant
Bank Indonesia Rate	2.65E+10	0.0000	< 0.05	Positive effect and significant

1.1.2. F-Test

The Simultaneous Test (F-Test) is conducted to find out whether the independent variables in the model has an effect simultaneously on the dependent variable.

Hypothesis:

H0: Prob. (F-statistic) > 0.05 received H0

Ha: Prob. (F-statistic) < 0,05 received Ha

Based on Table 7. obtained F-statistic value 767.0387 with Prob. (F-statistic) 0.000 < 0.05 Ha accepted, it can be concluded that independent variables CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate simultaneously affect the dependent variable.

1.1.3. Determination Coefficient-Test (R²)

Table 7. shows the amount of Adjusted R-squared (R-squared value that has been corrected by standard error value) of 0,968212, it means that 96.82% of MSMEs Working Capital Loan variables can be explained by variations of independent variables CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate, the rest of 3.18% is explained by other causes outside the model.

1.1.4. Regression Equation

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + e_{it}$$

$$\text{MSME Working Capital Loan}_{it} = 4.69E+10 + (-3.30E+08) \times \text{CAR}_{it} + 0.010572 \times \text{TPF}_{it} + 2.47E+08 \times \text{ROA}_{it} + (-4.71E+08) \times \text{LDR}_{it} + (-1.66E+08) \times \text{NPL}_{it} + (-1.75E+08) \times \text{Inflasi}_{it} + 2.65E+10 \times \text{BIRATE}_{it} + e_{it}$$

1.1.5. Interpretations

- 1) The result of panel data regression in Table 7. shows the CAR regression coefficient was $-3.30E+08$ and the probability value $0.0000 < 0.05$ which states CAR has a negative and significant effect on the distribution of MSME Working Capital Loans. The results accepted the H1 hypothesis which states CAR has a negative effect on the distribution of MSME Working Capital Loans. The results of this study support the research conducted by Barus and Lu (2013) in the results of his research stated that the CAR negatively affects the lending of SMEs. Riadi (2018) in the results of his research that the CAR has a significant effect on credit.
- 2) The result of panel data regression in Table 7. shows the TPF regression coefficient was 0.010572 and the probability value $0.0000 < 0.05$ which states the TPF has a positive and no significant effect on the distribution of MSME Working Capital Loans. These results accepted H3 hypothesis that TPF has a positive effect on the distribution of MSME Working Capital Loans. The results of this study support research conducted by Sari and Abundanti (2016) in the results of his research that TPF has a positive effect and significant to lending.
- 3) Results of panel data regression in Table 7. shows ROA regression coefficient was $2.47E+08$ and the probability value $0.2566 > 0.05$ which states that ROA has a positive and no significant effect to the distribution of MSME Working Capital Loans. These results accept the hypothesis H5 which states ROA has a positive effect on the distribution of MSME Working Capital Credits. The results of this study support research conducted by Sari and Abundanti (2016) in the results of his research states that ROA has a positive and not significant effect on lending.
- 4) The result of panel data regression in Table 7. shows the LDR regression coefficient was $-4.71E+08$ and the probability value $0.0000 < 0.05$ which states LDR has a negative and significant effect on the distribution of MSME Working Capital Loans. The results rejected the H7 hypothesis that LDR has a positive effect on the distribution of MSME Working Capital Credits. The results of this study support research conducted by Barus and Lu (2013) in the results of his research states LDR has a negative and significant impact on the MSME lending. Riadi (2018) in the results of his research states LDR has a significant effect on credit. Santoso and Dewi (2017) in the results of his research states LDR has a significant effect on lending.
- 5) The result of panel data regression in Table 7. shows the NPL regression coefficient was $-1.66E+08$ and the probability value $0.3037 > 0.05$ which states NPL has a positive and no significant effect on the distribution of MSME Working Capital Loans. The results of this study support research conducted by Riadi (2018) in the results of his research NPL has a positive effect is not significant to credit.
- 6) The result of panel data regression in Table 7. shows the Inflation regression coefficient was $-1.75E+08$ and the probability value $0.6708 > 0.05$ which states Inflation has a negative and no significant effect on the distribution of MSME Working Capital Loans. The results of this study support research conducted by Jenkins and Hussain (2014) in the results of his research stated Inflation has a negative effect on Small and Medium Enterprise Bank Credit.
- 7) The result of panel data regression in Table 7. shows the regression coefficient of BI Rate of $2.65E+10$ and the probability value $0.0000 < 0.05$ which states Bank Indonesia Rate has a positive and significant effect to the distribution of MSME Working Capital Loans. The results of this study support research conducted by Sari (2013) in the results of his research stated Bank Indonesia Rate has a positive and significant effect on bank lending.

1.2. Second Research Model

Table 9. Panel Data Regression Test of Second Research Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1_CAR	-1.35E+08	13831556	-9.734901	0.0000
X2_TPF	-0.001781	0.000412	-4.324933	0.0000
X3_ROA	11489190	49731089	0.231026	0.8174
X4_LDR	-90710992	22016694	-4.120101	0.0000
X5_NPL	1.75E+08	39134439	4.465462	0.0000
X6_INFLASI	-85626115	85801917	-0.997951	0.3188
X7_BIRATE	5.54E+09	5.60E+08	9.891069	0.0000
C	1.25E+10	8.02E+08	15.54479	0.0000
Weighted Statistics				
R-squared	0.959255	Mean dependent var		1.45E+10
Adjusted R-squared	0.957568	S.D. dependent var		1.15E+10
S.E. of regression	2.38E+09	Sum squared resid		2.74E+21
F-statistic	568.5617	Durbin-Watson stat		0.294085
Prob(F-statistic)	0.000000			

1.2.1. t-Test

In the panel data regression analysis, t-test is used to test the effect of independent variables (CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate) partially to dependent variable (MSME Investment Loans).

Table 8. t-Test Summary of Second Research Model

Variable	Coefficient	Prob.	Hypothesis	Results
CAR	-1.35E+08	0.0000	< 0.05	Negative affect and significant
TPF	-0.001781	0.0000	< 0.05	Negative affect and significant
ROA	11489190	0.8174	> 0.05	Positive affect and not significant
LDR	-90710992	0.0000	< 0.05	Negative affect and significant
NPL	1.75E+08	0.0000	< 0.05	Positive affect and significant
Inflation	-85626115	0.3188	> 0.05	Negative affect and not significant
Bank Indonesia Rate	5.54E+09	0.0000	< 0.05	Positive affect and significant

1.2.2. F-Test

The Simultaneous Test (F-Test) is conducted to find out whether the independent variables in the model has an effect simultaneously on the dependent variable.

Hypothesis:

H0: Prob. (F-statistic) > 0.05 received H0

Ha: Prob. (F-statistic) < 0,05 received Ha

Based on Table 9. obtained F-statistic value 568.5617 with Prob. (F-statistic) 0.000000 < 0.05 Ha accepted, it can be concluded that independent variables CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate simultaneously affect the dependent variable.

1.2.3. Determination Coefficient-Test (R²)

Table 9. shows the amount of Adjusted R-squared (R-squared value that has been corrected by standard error value) were 0.957568, it means that 95.7% of MSME Investment Loan variables can be explained by variations of independent variables CAR, TPF, ROA, LDR, NPL, Inflation and Bank Indonesia Rate, 4.3% is explained by other causes outside the model.

1.2.4. Regression Equation

$$Y_{2it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + e_{it}$$

$$\text{MSME Investment Loan}_{it} = 1.25E+10 + (-1.35E+08) \times \text{CAR}_{it} + (-0.001781) \times \text{TPF}_{it} + 11489190 \times \text{ROA}_{it} + (-90710992) \times \text{LDR}_{it} + 1.75E+08 \times \text{NPL}_{it} + (-85626115) \times \text{Inflasi}_{it} + 5.54E+09 \times \text{BIRATE}_{it} + e_{it}$$

1.2.5. Interpretations

- 1) The result of panel data regression in Table 9. shows the CAR regression coefficient was -1.35E+08 and the probability value $0.0000 < 0.05$ which states CAR has a negative and significant effect on the distribution of MSME Investment Loans. These results accepted H2 hypothesis which states CAR has a negative effect on the distribution of MSME Investment Loans. The results of this study support the research conducted by Barus and Lu (2013) in the results of his research stated CAR negatively affect the lending of SMEs. Riadi (2018) in the results of his research CAR has a significant effect on credit.
- 2) The result of panel data regression in Table 9. shows the TPF regression coefficient was -0,001781 and the probability value $0.0000 < 0.05$ the TPF has a negative and significant effect on the distribution of MSME Investment Loans. The result rejects the H4 hypothesis which states TPF has a positive effect on the distribution of MSME Investment Loans. The results of this study support research conducted by Sari and Abundanti (2016) in the results of his research that TPF has a positive effect and significant to lending.
- 3) The result of panel data regression in Table 9. shows the ROA regression coefficient was 11489190 and the probability value of $0.8174 > 0.05$ which states ROA has a positive and no significant effect on the distribution of MSME Investment Loans. These results accepted the H6 hypothesis which states ROA has a positive effect on the distribution of MSME Investment Loans. The results of this study support research conducted by Sari and Abundanti (2016) in the results of his research states that ROA has a positive and not significant effect on lending.
- 4) The result of panel data regression in Table 9. shows the LDR regression coefficient was -90710992 and the probability value $0.0000 < 0.05$ which states LDR has a negative and significant effect on the distribution of MSME Investment Loans. The results of this study support research conducted by Barus and Lu (2013) in the results of his research states LDR has a negative and significant impact on the MSME lending. Riadi (2018) in the results of his research states LDR has a significant effect on credit. Santoso and Dewi (2017) in the results of his research states LDR has a significant effect on lending.
- 5) The result of panel data regression in Table 9. shows the NPL regression coefficient was 1.75E+08 and the probability value $0.0000 < 0.05$ which states NPL has a positive and significant effect on the distribution of MSME Investment Loans. These results rejected the H10 hypothesis which states NPL has a negative effect on the distribution of MSME Investment Loans. The results of this study support the research conducted by Sari (2013) in the results of his research states NPL has a significant effect on bank lending.
- 6) The result of panel data regression in Table 9. shows the regression coefficient of Inflation of -85626115 and Probability $0.3188 > 0.05$ which states that Inflation has a negative and no significant effect on the distribution of MSME Investment Loans. The result accepts H12 hypothesis which states Inflation has a negative effect on the distribution of MSME Investment Loans. The results of this study support research conducted by Jenkins and Hussain (2014) in the results of his research stated Inflation has a negative effect on Small and Medium Enterprise Bank Credit.
- 7) The result of panel data regression in Table 9. shows the regression coefficient of Bank Indonesia Rate of 5.54E+09 and the probability value $0.0000 < 0.05$ which states Bank Indonesia Rate has a positive and significant effect on the distribution of MSME Investment Loans. These results rejected the hypothesis H14 which states Bank Indonesia rate has a negative effect on the distribution of MSME Investment Loans. The results of this study support research conducted by Sari (2013) in the results of his research stated Bank Indonesia Rate has a positive and significant effect on bank lending.

CONCLUSIONS

1. Capital Adequacy Ratio (X1) has a negative and significant effect on the distribution of MSME Working Capital Loans. The probability value of 0.0000 is less than 0.05 with a regression coefficient of -3.30E+08 which means that every increase of CAR of 1% will reduce the distribution of MSME Working Capital Loans by IDR 330 million. Capital Adequacy Ratio (CAR) also has a negative and significant effect on the distribution of MSME Investment Loans. The probability value is 0.0000 less than 0.05 with a regression coefficient of -1.35E+08 which means that every increase of CAR by 1% will reduce the distribution of MSME Investment Loans by IDR 135 million.
2. Third Party Funds (X2) have a positive and significant effect on the distribution of MSME Working Capital Loans. The probability value is 0.0000 less than 0.05 with a regression coefficient of 0.010572, which means that each DPK increase of IDR 1 billion will increase the distribution of MSME Working Capital Loans with a value that is not too high. Third Party Funds (DPK) have a significant negative effect on the distribution of MSME Investment Loans. The probability value of 0.0000 is less than 0.05 with a regression coefficient of -0.001781 which means that each DPK increase of IDR 1 billion will reduce the distribution of MSME Investment Loans with a value that is not too large.
3. Return on Assets (X3) has a positive and insignificant effect on the distribution of MSME Working Capital Loans and MSME Investment Loans. The probability value for Working Capital Credit is 0.2566 more than 0.05 with a regression coefficient of 2.47E+08, while the probability value for Investment Credit is 0.8174 more than 0.05 with a regression coefficient of 11489190.

4. Loan to Deposit Ratio (X4) has a negative and significant effect on the distribution of MSME Working Capital Loans. The probability value of 0.0000 is less than 0.05 with a regression coefficient of $-4.71E+08$, which means that each LDR increase of 1% will reduce the distribution of MSME Working Capital Loans by IDR. 471 million. Loan to Deposit Ratio (LDR) also has a negative and significant effect on the distribution of MSME Investment Loans. The probability value of 0.0000 is less than 0.05 with a regression coefficient of -90710992 which means that every LDR increase of 1% will reduce the distribution of MSME Investment Loans by IDR. 90.7 million.
5. Non-Performing Loans (X5) have a negative and insignificant effect on the distribution of MSME Working Capital Loans. The probability value of 0.3037 is more than 0.05 with a regression coefficient of $-1.66E+08$, inversely proportional to the distribution of MSME Investment Loans which have a positive and significant effect. The probability value of 0.0000 is less than 0.05 with a regression coefficient of $1.75E+08$ which means that every increase in NPL of 1% will increase the distribution of MSME Investment Loans by IDR 175 million.
6. Inflation (X6) has a negative and insignificant effect on the distribution of MSME Working Capital Loans and MSME Investment Loans. The probability value for Working Capital Credit is 0.6708 more than 0.05 with a regression coefficient of $-1.75E+08$, while the probability value for Investment Credit is 0.3188 more than 0.05 with a regression coefficient of -85626115 .
7. The Bank Indonesia Rate (X7) has a positive and significant effect on the distribution of MSME Working Capital Loans. The probability value is 0.0000 less than 0.05 with a regression coefficient of $2.65E+10$, which means that every 1% increase in the Bank Indonesia Rate will increase the distribution of MSME Working Capital Loans by IDR. 26.5 billion. The Bank Indonesia Rate also has a positive and significant effect on the distribution of MSME Investment Loans. The probability value is 0.0000 less than 0.05 with a regression coefficient of $5.54E+09$, which means that every 1% increase in the Bank Indonesia Rate will increase the distribution of MSME Investment Loans by IDR 5.54 billion.

SUGGESTION

- 1) Capital Adequacy Ratio (CAR) is an important factor as a measure of bank health. The decline in the value of the CAR will increase lending to MSME. This means that the bank has channeled a lot of credit resulting in an increase in Risk Weighted Assets (RWA). The banks need to maintain capital balance by making additional capital deposits from shareholders and from profit gains so that the CAR ratio is maintained according to the provisions.
- 2) Third-Party Funds (TPF) are factors that significantly influence the distribution of credit to MSME, but statistically only increase with a nominal amount that is relatively small to increase in working capital loans and investment loans. This reflects the still very low lending to the MSME sector with funding from the public. In this case, the Third-Party Fund can still be optimized for distribution in the form of credit.
- 3) Return on Assets (ROA) has a low probability (probability 0.2566 for working capital credit and 0.8174 for investment credit), thus it can be concluded that ROA is not too strong in influencing lending to MSME.
- 4) Loan to Deposit Ratio (LDR) is a factor that significantly influences lending to MSME. Each increase in the LDR will reduce the distribution of working capital loans and investment loans. This illustrates the still low lending to the MSME sector. Ideally, an increase in the LDR ratio will increase lending, in line with the Third-Party Funds that can still be used by optimizing credit distribution.
- 5) Non-Performing Loans (NPL) have a significant influence on investment loan distribution but have no effect on working capital loans. Every increase in NPL will increase the distribution of investment credit in the bank. This happened because the percentage of investment credit distribution was lower than the working capital loan distribution. Management can consider if the bank's NPL consolidation increases can further increase investment loan distribution.
- 6) Inflation has a low probability (probability 0.6708 for working capital credit and 0.3188 for investment credit), thus it can be concluded that inflation is not too strong in influencing lending to MSME.
- 7) The Bank Indonesia Rate has a significant influence on the distribution of working capital loans and investment loans. Every increase in the Bank Indonesia Rate actually increases lending. Bank management does not need to worry about raising the interest rate reference from the central bank. It is expected that lending to the MSME sector can be optimized.

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