DETERMINING THE DEMAND FOR MSME CREDIT THROUGH MACROPRUDENTIAL INCENTIVE POLICIES AS AN ECONOMIC RECOVERY EFFORT

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Abstract

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A bank is a financial institution that plays an important role in maintaining economic stability, supporting economic growth and facilitating financial activities. One of the efforts made by the banking sector is to channel credit to Micro, Small and Medium Enterprises (MSMEs) so that they can develop. This study aims to see how the influence of Non Performing Loan (NPL), Lending Interest Rate, Inflation and Macroprudential Incentive Policy on MSME credit demand in Indonesia. The research period is from 2018 to 2022. This research was conducted using secondary data obtained from the Central Bureau of Statistics, Bank Indonesia and the Financial Services Authority. The data analysis technique used is multiple linear regression. The results of this study indicate that the Non Performing Loan (NPL) variable has no significant effect on MSME loan demand in Indonesia, while the loan interest rate variable has a negative and significant effect on MSME loan demand in Indonesia and the inflation variable and macroprudential incentive policies have a significant effect on MSME loan demand in Indonesia. The conclusion is that the existence of Macroprudential Incentive Policy can increase the demand for MSME loans in Indonesia, this can have an impact on national economic growth.

Keywords: *macroprudential incentive policy; MSME credit demand; national economic growth.*
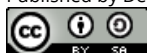
JEL Classification: E6; E7; O4

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INTRODUCTION

Credit distribution is one of the means used by financial institutions such as banks to increase economic activity and growth. Banks are financial institutions that play an important role in maintaining economic stability, supporting economic growth, and facilitating economic activity. The bank also functions as a collector of funds from the public and distributes these funds to sectors in need, such as the business, industrial and investment sectors (Winarsih & Purnomo, 2022). Banks channel funds to the public in various forms, such as general financing, murabahah receivables, qardh receivables, savings returns, and revolving funds for MSMEs which are carried out in various forms and carried out in accordance with existing credit SOPs.

The distribution of funds from banks to the community can help encourage economic growth by providing financial access to various business sectors including Micro, Small and Medium Enterprises (MSMEs). MSMEs are businesses managed by individuals or business entities as one of the economic livelihoods of the community that can improve the economy. MSMEs have an important role in increasing community income and national income (Sugiana et all., 2023). MSMEs refer to businesses that have a small operational scale, limited resources, and a small number of employees.

Based on the Law of the Republic of Indonesia No. 20 of 2008, which is included in the Micro Business criteria is a business that has a net worth of at most IDR 50 Million excluding land and buildings of the place of business and has annual sales of at most IDR 300 Million. Included in the small business criteria if a business has a net worth of more than Rp50 Million to a maximum of Rp500 Million excluding land and buildings of the place of business or has annual sales of more than Rp300 Million to a maximum of Rp2.5 Billion. Medium-sized business if it has a net worth of more than Rp500 Million up to a maximum of Rp10 Billion excluding land and building of business premises, and has annual sales of more than Rp2.5 Billion up to a maximum of Rp50 Billion.

MSME credit in Indonesia channeled to the community from 2018 to 2022 continues to increase. This is due to the support from the government in the form of financing facilities through partnership and community development programs (PKBL), Ultra Micro Financing (UMI), and People's Business Credit (KUR). Based on Bank Indonesia Regulation No.17/12/PBI/2015, every commercial bank is required to provide twenty percent of MSME credit from the total credit provided. The distribution of credit or financing to MSMEs in Indonesia aims to strengthen the country's economy (Bank Indonesia, 2015).

Financial support to MSME players can help in economic diversification. This is important to reduce dependence on one economic sector, increase economic resilience, and reduce economic risk. Types of credit are divided into several categories of use such as working capital credit, investment credit, consumption credit, bank guarantees and so on (Supriyanto, 2011). Demand data for MSME loans in Indonesia in 2018 amounted to Rp969 billion and continued to increase to reach Rp.1.3 trillion in 2022.

Figure 1. MSME Credit Demand Data in Indonesia (Billion Rupiah) 2018-2022
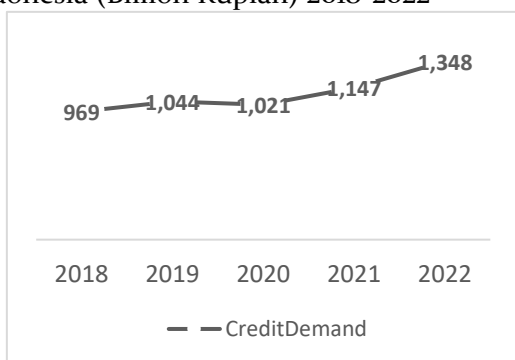
Source: OJK (2022) reprocessed

Based on data from the Coordinating Ministry for Economic Affairs (2023) Increased demand for MSME credit can support the growth of the MSME sector, which is important in improving the Indonesian economy. However, it should be noted that banks and financial institutions must still manage credit risk well to ensure that borrowers have the ability to repay credit. The contribution of MSMEs to job creation in 2022, amounted to 97

percent and managed to contribute 61 percent to the national GDP. The MSME sector, in order to improve performance, still requires special attention from the government, both at the national and regional levels, to ensure development and competition with larger businesses.

Government support is very important for the growth of MSMEs which can encourage increased employment opportunities and the ability of the trade sector in Indonesia. One form of government support for MSME players is the issuance of Bank Indonesia Regulation Number 24/5/2022 concerning incentives for banks that provide funds for certain and inclusive activities stipulated on February 25, 2022. The incentives are in the form of easing the obligation to fulfill the minimum reserve requirement or the minimum amount of funds that must be maintained by banks (Bank Indonesia, 2022).

Financial authorities may set a maximum limit on credit that can be provided to the MSME sector by commercial banks. Limits on the amount of credit provided to the MSME sector through financial authorities can help prevent over-leveraging or a situation where MSMEs have too much debt that is difficult to manage, which can lead to bad debts and bankruptcy. MSMEs that experience over-leveraging will face a heavy financial burden due to high interest and principal payments.

This can reduce profitability and make it difficult to reinvest profits in business growth.

Non-performing loans are a concern for banks and other financial institutions as they can lead to financial losses and decreased profitability. Banks try to manage and reduce Non Performing Loan (NPL) through various strategies, such as improving credit risk assessment, restructuring loans, or selling NPLs to specialized companies. Based on data from the Financial Services Authority, NPL cases in Indonesia have increased every year. The following is the NPL data for 2018-2022:

**Figure 2.** NPL data (IDR billion) in Indonesia 2018-2022
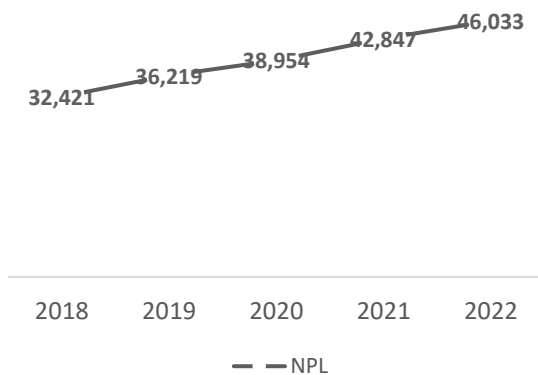
Source: OJK (2022) reprocessed

Figure 2 illustrates the level of non-performing loans in Indonesia from 2018 with an amount of Rp32 billion. This figure continues to increase until 2022 with an amount of Rp.46 billion. The increase in non-performing loans can be caused by various factors, such as unfavorable economic conditions, manual management or weak forms of savings and loan

contracts (Chosyali & Sartono, 2019). In addition to NPLs, banks must also pay attention to the loan interest rates set, because loan interest rates can affect bank profitability. If banks increase lending rates, this can reduce demand for MSME loans. Therefore, banks should consider lending rates when setting them to ensure they are not too high. The percentage of commercial bank lending rates based on working capital in 2018 was 10.34 percent, this figure continues to decline until 2022 when it reaches 8.6 percent (BPS, 2022).

Figure 3. Lending Interest Rates 2018-2022
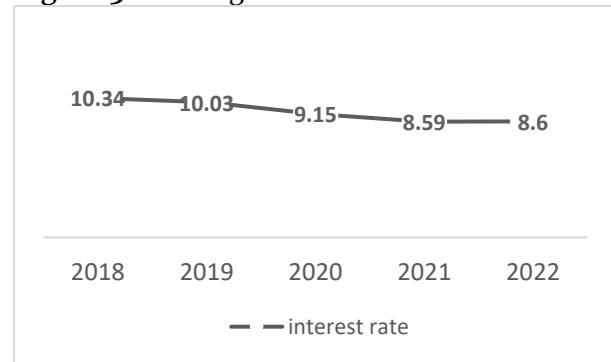
Source: BPS (2022), reprocessed

The reduction in lending rates in 2022 provides opportunities for MSMEs to obtain more affordable credit. This can boost demand for credit as the cost of repayment becomes lower. Lower lending rates make it easier for MSME players to invest in developing their business, increasing production, or expanding their business, which can drive economic growth. A decrease in lending rates can increase public interest in applying for credit, especially for MSME players who need business capital.

These conditions encourage banks to distribute credit by paying more attention to lending rates and the inflation rate.

Inflation is a term used to describe the general increase in the price level of goods and services in an economy. Inflation is measured using the Consumer Price Index (CPI) over a period of time. Inflation can be caused by various factors such as an increase in the money supply in society, a decrease in the supply of goods and services, and an increase in the demand for goods and services. A high inflation rate can reduce the purchasing power of money. This means that money channeled in the form of loans to customers has a lower purchasing power at the time of loan repayment. This condition can have a negative impact on the ability of customers to return their loan funds.

Based on data from Bank Indonesia, the inflation rate in 2018 was 3.13 percent. This figure continues to decline until 2021, reaching 1.87 percent. But on the other hand, the inflation rate increased again in 2022 to reach 5.51 percent.

Figure 4. Inflation in Indonesia 2018-2022
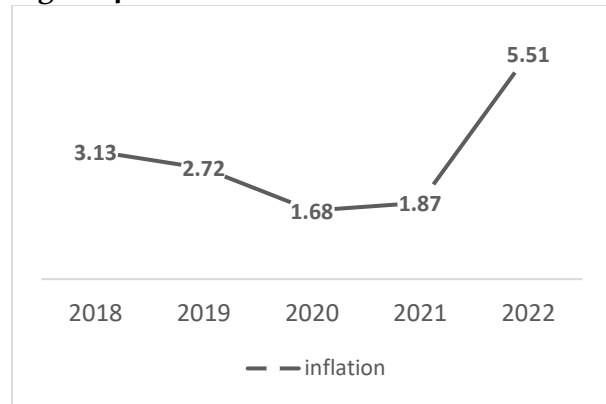
Source: Bank Indonesia (2022), reprocessed

The increase in the inflation rate in 2022 occurred due to various factors such as an increase in raw materials and economic instability. These increases may affect MSME production costs, which may impact demand for credit to cope with high operational costs. An increase in the inflation rate can impact MSME activities including increased production costs, pressure on selling prices as MSME players must maintain profitability, difficulty in accessing credit, tougher competition and the need to innovate in developing businesses.

This study focuses on the growth of MSME credit demand before and after the Macroprudential Incentive Policy that was set by the government on February 25, 2022. The purpose of this study is to analyze how the influence of NPL, lending rates, inflation and Macroprudential Incentive Policy on MSME loan demand in Indonesia.

THEORETICAL FOUNDATION
Credit Demand

Demand for credit refers to the need for capital that can be obtained on credit to enhance business activities or project development. Demand is the combination of price and quantity of a good that consumers are willing to buy at various price levels. If the price of goods rises while income remains, the demand for these goods will fall and if the price of goods falls while income remains, the demand for these goods will increase (Rompas, 2018).

Keynes' theory states that another function of money is as a store of value and not just as a medium of exchange. In his theory, Keynes categorized the demand for money into three motives, namely for transactions, precautions and for speculation (Sabar & Kuslin, 2018).

Non Performing Loan (NPL)

Credit is a process of granting and lending money provided by financial institutions, such as banks, to meet the financial needs of individuals or institutions. However, credit can also pose a risk of bad credit if the borrower cannot repay the loan as agreed.

According to Suyanto & Utomo (2022) NPL bad credit is a term used in the banking world that refers to a loan that cannot be repaid by the borrower or debtor. The NPL ratio can be formulated as follows:

$$NPL = \frac{loan\ defaults}{credit\ realization} \times 100$$

NPL is a loan that is experiencing congestion or a debtor who has failed to make payments that have been scheduled for a certain period of time (Khairi, A., et all, 2021). NPL is the ratio between total loans with substandard or doubtful and loss quality to total loans. In accordance with the Financial Services Authority Regulation No.40 / POJK.03 / 2019 regarding the assessment of the quality of commercial bank assets as follows: (1) Collectibility 1 if credit payments are in accordance with the date of the debtor's agreement with the creditor. (2) Collectibility 2 if the debtor does not pay credit for 1 to 90 days. (3) Collectability 3 if the debtor does not pay credit for 91 to 120 days. (4) Collectibility 4 if the debtor does not pay credit for more than 120 to 180 days. Collectibility 5 if the debtor does not pay credit for more than 180 days (Financial Services Authority of the Republic of Indonesia, 2019).

High NPLs can cause pressure on financial institutions. In the presence of high credit risk, banks may increase lending rates or tighten lending criteria. This may reduce demand for credit from MSMEs as they may struggle to meet stricter requirements or pay higher interest rates. This is supported by the research of Jufriadi & Imaduddin (2022) which states that NPL has a negative and significant

effect on MSME lending in Indonesia. Therefore, the hypothesis can be proposed as follows:

H1: NPL has a negative effect on credit demand

Credit Interest Rates

According to Keynes' view, the interest rate is influenced by the amount of money in circulation and liquidity preference or demand for money, which means liquidity preference, namely the demand for money by all people in the economy. Credit interest rates are interest rates charged by financial institutions such as banks in providing loans to customers. The level of credit interest rates can affect the demand for credit, because when credit interest rates are low, people tend to be more interested in applying for loans so that the demand for credit will increase. Conversely, when the credit interest rate is high, the demand for credit tends to decrease (Deviana., et all., 2021).

Research conducted by Rahayu et all (2022) states that lending interest rates have a negative and significant effect on lending. The greater the credit interest given by banks to customers, the lower the demand or purchasing power (Meitofano., et all., 2022). therefore, the hypothesis can be proposed as follows:

H2: Credit interest rates have a negative effect on credit demand

Inflation

According to the theory developed by Keynes, the demand-pull theory states that inflation is caused by an increase in demand for goods and services that exceeds supply. Inflation is a general increase in the price level of goods and services in an economy. Inflation is an important indicator that must be maintained in economic stability and can affect the economic growth of a country (Mayasari & Mahinshaputri, 2022). Based on research conducted by Polihu, et all., (2023) & Saputra & Busari, (2021) stated that the inflation rate has a significant influence on credit demand. therefore, the hypothesis can be proposed as follows:

H3: Inflation has a positive effect on credit demand

Monetary Policy

Monetary policy is a policy conducted by the central bank or monetary authority to control monetary quantities such as money supply, polymer money, or bank credit to achieve the desired development of economic activity. There is a transmission theory in monetary policy that explains how monetary policy can affect the economy. This theory states that monetary policy can affect consumer and investor decisions and overall economic activity (Utami & Andrian, 2022).

Research conducted by Alwy (2023) states that macroprudential policy directly has

a significant effect on lending. Therefore, the hypothesis can be proposed as follows:

H4: Macroprudential Incentive Policy has a positive effect on credit demand.

METHOD
Data

This research was conducted using secondary time series data from January 2018 to December 2022 sourced from the Central Bureau of Statistics, Bank Indonesia and the Financial Services Authority. The data used are data on the number of MSME credit requests in Indonesia as the dependent variable, the number of bad debts, the percentage of credit interest rates, the percentage of inflation rates as independent variables and macroprudential incentive policies as dummy variables.

This study uses multiple linear regression analysis techniques. Multiple linear regression analysis is used to test the effect of two or more independent variables on one dependent variable (Janie, 2012). This model assumes a relationship between the dependent variable and each independent variable. This relationship is usually expressed in a formula as below:

$$DC = \beta_1 NPL_t + \beta_2 SBK_t + \beta_3 INF_t + \beta_4 KIM_t + e_t$$

Where DC is MSME Credit Demand as the dependent variable, NPL or bad credit, SB is the Lending Interest Rate, INF is the Inflation Rate respectively as independent variables and

KIM is the Macroprudential Incentive Policy as a dummy variable for the period before the policy using the number 0 while the period after the policy using the number 1. The symbol e represents Error term (confounding variable), t means year and B is a constant.

RESULTS AND DISCUSSION

The MSME credit demand equation analysis model is processed using the Eviews 10 application. The results obtained are as follows:

Table 1. Multiple Linear Regression Results

V	Coeff	Std.E	T-stat	Prob
C	2160791	213503.2	10.12065	0.0000
NPL	-3.057146	2.332665	-1.310581	0.19454
SB	-113597.6	14999.13	-7.573611	0.0000
INF	33009.06	8217.816	4.016768	0.0002
KIM	115752.0	34319.28	3.372797	0.0014
R-squared	0.912561			
F-stat	143.5027			
Adj R-squared	0.906202			
D-W stat	1.823604			

Source: data processed (2023)

Bad debts do not have a negative influence on MSME loan demand, while loan interest rates have a negative influence on MSME loan demand and inflation and macroprudential incentive policies have a positive influence on MSME loan demand in Indonesia. The t-test results show that the NPL variable is not significant while the interest rate, inflation and macroprudential incentive policy variables are statistically significant at α = 5

percent. The coefficient value of 115,752.0 on the macroprudential incentive policy variable means that the existence of this policy causes MSME credit demand in Indonesia to increase by 115,752 billion.

To see the joint effect of the independent variables on the dependent variable, the F test can be done. Table 1 shows that the probability value (F-statistic) of 0.0000 <0.05 is significant at α = 5 percent. This means that the independent variables, namely NPLs, interest rates, inflation and macroprudential incentive policies jointly affect the dependent variable, namely MSME credit demand. The regression results show that the R² value is 0.906202, which means that the model's ability to explain the independent variables to the dependent variable is 90 percent, the remaining 10 percent is explained by several variables outside the model.

According to Widarjono, (2018) the OLS method with certain assumptions produces an unbiased linear estimator with minimum variance BLUE (Best Linear Unbiased Estimator). The tests used in the model are multicollinearity test, normality test, heteroscedasticity test, and autocorrelation test. From the classical assumption test, the following results are obtained:

Table 2. Classical Assumption Test Results

Normality	
Prob.Jarque-bera	0.605077
Heteroscedasticity	
Prob. Chi-Square	0.1205
Autocorrelation	
Durbin-Watson stat	1.823604
Multicollinearity	
Variable	CentereVIF
C	NA
NPL	6.565423
SB	5.530182
INF	3.387129
KIM	6.692166

Source: data processed (2023)

Based on the multicollinearity test results in Table 2, there is a VIF value of the NPL-, interest rate, inflation and macroprudential incentive policy variables (<10.00), so it can be concluded that the model used does not occur multicollinearity symptoms or multicollinearity test assumptions are met. Table 2 shows that the Jarque-Bera probability value is 0.605077 (>0.05), so it can be concluded that the regression model is normally distributed. From the heteroscedasticity test results in Table 2 shows that the Obs * R-squared probability value is 0.1205 (>0.05), it can be concluded that the data does not occur symptoms of heteroscedasticity or the assumptions of the heteroscedasticity test are met.

The last classic assumption test is the autocorrelation test to test the assumption of no correlation between the disturbance variables of one observation and another observation. To test autocorrelation, this study uses the Durbin-Watson (DW) method. The

calculated statistical value (d = 1.823604) while the critical value of d at α = 5% with n = 60 and k = 4 for dL = 1.444 and dU = 1.727. The value of 4-dU = 2.273 and dL-4 = -2.556, then dU1.727 < 1.823604 < 4-dU = 2.273 because the calculated statistical value of d lies between dU and 4-dU, it can be concluded that there is no autocorrelation problem.

The Effect of Non Performing Loan (NPL) on MSME Demand in Indonesia

Based on statistical testing that has been carried out, the NPL variable has no effect on MSME credit demand in Indonesia, as indicated by the t value = -1.310581 and a probability value of 0.19454 (>0.05). This research is in accordance with research conducted by (Permana & Dillak, 2019), (Sari et all, 2021) which states that NPL has no effect on lending, meaning that if the amount of funds channeled increases every year and NPL shows a negative direction because the number of bad debts in banks is still within the limits that can be controlled and tolerated by Bank Indonesia (BI), which is a maximum of 5 percent, then lending will not decrease. The level of NPLs can vary during the business cycle, in times of economic expansion, NPLs tend to be low while in times of recession they can increase. Thus, the NPL level is not a key indicator in debtor decision-making during normal economic conditions.

The Effect of Lending Interest Rates on MSME Loan Demand in Indonesia

The second statistical test result is that the loan interest rate variable has a negative effect on MSME loan demand in Indonesia, as indicated by the t value = -7.573611 and a probability value of 0.0000 (<0.05). This means that if the lending rate increases, the demand for MSME loans will decrease. Because if banks increase lending rates, the cost of borrowing becomes more expensive so that MSME players will be more careful in taking loans. This research is in accordance with research conducted by (Permana & Dilla, 2019).

The Effect of Inflation on Demand for MSME Loans in Indonesia

Based on the results of statistical testing of the inflation variable, the t value = 4.016768 with a probability value of 0.0002 (<0.05). This means, if there is a change in the inflation rate in Indonesia, it can significantly affect the demand for MSME loans in Indonesia. From 2018 to 2022, inflation in Indonesia increased, which was followed by an increase in the amount of MSME lending.

When the inflation rate increases, it can indicate that it can increase economic growth, which of course can encourage MSME players to take credit to support their business growth. This is in accordance with research conducted by (Hasanah & Priantina, 2017). In addition, with an increase in the inflation rate, of course, the operational costs of MSME businesses will

also increase along with the increase in commodity prices for the goods used, in this case the demand for MSME credit can increase because MSME actors must continue to invest in their business to keep it running.

The Effect of Macroprudential Incentive Policy on MSME Credit Demand in Indonesia

Based on the results of the regression output, the KIM coefficient value is 115.7852 with a probability value of 0.0014 and a constant value of 2,160,791. This means that before the Macroprudential Incentive Policy, the value of MSME credit demand was 115752, while the MSME credit demand after the policy had a value of 2,276,543. This value is the result of the sum of the constant value with the KIM coefficient, namely 115,752. The output results show that KIM has a significant positive effect, this can be interpreted that there is a strong or measurable relationship between KIM and MSME credit demand. This result indicates that the implementation of macroprudential intensive policies significantly increases MSME credit demand.

MSMEs may feel more secure and encouraged to take out credit as these policies improve financial system stability and make credit conditions more favorable for them. The link between Macroprudential Intensive Policies and MSME credit demand is significant. These policies can enhance financial system stability, improve lending conditions, reduce credit risk, and increase MSMEs' confidence in the banking system. All these factors contribute to an increase in credit demand by MSMEs, which in turn can promote the growth and development of the MSME sector.

CONCLUSION

Based on the research conducted, it can be concluded that the reduction in lending rates in 2022 will most likely make credit more affordable for MSME players, thus stimulating credit demand and potentially driving economic growth. The inflation rate in Indonesia has decreased from 2018 to 2021 but increased again in 2022 to 5.51 percent, which has an impact on production costs and MSME credit demand. The Macroprudential Incentive Policy set on February 25, 2022 has an effect on MSME credit demand in Indonesia. With this policy, financial institutions will tend to provide credit to MSME players. This can be caused by several factors such as; increased liquidity, decreased borrowing costs and decreased risk for financial institutions. The impact of the Macroprudential Incentive Policy depends on existing market conditions, one example is if the economy is experiencing a recession or economic uncertainty.

Suggestions that can be given from the results of this study are that the government is expected to maintain the level of macro stability

including the inflation rate. Banks should be more considerate in determining lending rates and consider the risks that will occur due to the interest rates set. Because this can affect the demand for MSME loans in Indonesia. Future researchers can conduct research using variables other than those contained in this study, such as analyzing risks that can affect MSME loans in Indonesia such as market risk and credit risk.

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