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Research Paper

Analysis of the Effect of Macro and Micro Variables on Non Performing Loan (NPL) Level in PT Bank Mandiri (Persero) Tbk

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ABSTRACT

Bank Mandiri is one of the banks whose job is to extend credit to the public, both through individuals and groups. In the process of lending to the public, Bank Mandiri is faced with a low rate of return on funds that have been lent (non-performing loans) or non-performing loans, where the low rate of refund (NPL) is influenced by several variables, such as macroeconomic variables, such as inflation, economic growth and interest rates and microeconomic variables, such as ROA, ROE, BOPO and CAR. The amount of credit extended by Bank Mandiri during 2008-2018 experienced an increase in value / volume, but was also accompanied by an increase in Non Performing Loans (NPL) experienced by Bank Mandiri, causing a high NPL ratio, where this problem financing appeared due to the low desire of customers to pay debts according to the due date. Data collection in this research was carried out through a documentation study and observation approach with quantitative descriptive research type where the data used were data sourced from quarterly reports of independent banks in 2008-2018, as well as quarterly inflation data, data on quarterly economic growth and quarterly interest rates that were determined by Bank Indonesia. Data analysis method used is to use the Test of Goodness of Fit analysis. The results showed that simultaneous macroeconomic variables, such as inflation, economic growth and interest rates, as well as microeconomic variables, such as ROA, ROE, BOPO and CAR had a positive effect on NPL level variables. Partially macroeconomic variables, such as inflation and economic growth do not significantly influence the NPL level variable, while the interest rate variable has a positive effect on the NPL level variable. For microeconomic variables, variables such as ROA, ROE, BOPO and CAR each influence the NPL level variables. Based on the coefficient of determination test microeconomic variables have a very large influence on the level of NPL, when compared with the NPL level variable.

Keywords: *Macroeconomic Variables, Microeconomic Variables, Non-Performing Loans*

INTRODUCTION

Banks are financial institutions that provide the most complete services, where banks not only serve the collection of funds from the public in the form of savings, deposits and distribution of funds to the public in the form of loans and investments, but also provide pawnshops, giro services and analytical services credit by selecting each person / business entity that will borrow funds for business capital or consumptive capital needs. This is intended so that banks avoid the risks that will be experienced such as defaults which results in an increase in the number of loans that cannot be billed or non-performing loans (NPL), where a decrease in financing funds to be processed in the form of loans or investments will result in the bank's performance decreasing, so that it will affect the quality of the bank in providing funds to the public, thereby affecting the low level of public trust.

According to Firmansyah (2014) in carrying out all forms of business, banks as financial institutions should increase capacity by finding new market shares, so that banks as institutions trusted by the community are able to find new consumers to add to the shortages that have been distributed to the community, as well as to manage new sources of funds by managing funds for operational and investment purposes.

According to Kasmir (2013) banks as lending institutions must be able to analyze each customer who will lend their funds to the bank. Banks must be able to analyze every background of the customer, his ability to return funds, and the extent to which the customer is feasible and capable to be able to borrow investment funds. This is intended to prevent defaults resulting in an increase in non-performing loans (NPL), resulting in a decrease in the rate of return on assets and equity. By decreasing the rate of return on assets and equity, it will disrupt the operations of banks which will impact on the reduction in funds to be processed and channeled to the public in the form of investment / credit.

According to Law No. 10 of 1998 states that there are two types of banks in Indonesia, namely commercial banks and people's credit banks. Commercial banks and rural credit banks are banks that both distribute loans or loans, where the two banks have differences in distribution. For commercial banks, loans are working capital loans, and investment loans for small, medium and large businesses, while for rural credit banks distributed loans are consumer and micro credit.

One of the commercial banks in Indonesia is Bank Mandiri, where Bank Mandiri is a bank that was established in 1998, where this independent bank was formed from the merger of 4 banks, so that there was a merger namely Bank Bumi Daya (BBD), Bank Dagang Negara (BDN), The Indonesian Development Bank (BAPINDO), and the Export-Import Bank (EXIM). This Mandiri Bank was established as part of the government restructuring of banks, both state and private banks due to the 1998 monetary crisis. The restructuring process of banks this is assisted by an international monetary body, the International Monetary Fund (IMF).

In the process of lending to the public, Bank Mandiri is faced with a low rate of return on funds that have been lent (non-performing loans) or problem loans, where the low rate of return of funds (NPL) is influenced by several variables, such as macroeconomic variables and microeconomic variables. Macroeconomic variables consist of macroeconomic variables that occur in a country or a region, such as inflation, economic growth, interest rates. While for microeconomic variables consist of variables that are usually closely related to the level of bank health, where this variable exerts influence when returns are low or the occurrence of non-performing loans. The variables that give effect when NPL occur are return on assets (ROA), return on equity (ROE), operating costs to operating income (BOPO), and capital adequacy ratio (CAR).

According Pratamawati (2018) non-performing loans (NPL) a credit or loan is strongly influenced by the inflation rate, which if the inflation rate increases, it will affect the economic conditions of a country or a region, where high inflation will make the company's income decreases and costs production increases. The decline in income by the business community will result in the company's low ability to repay funds that have been borrowed to banks, as a result of the increasing problematic financing, which can be shown by increasing the NPL ratio. Conversely, if the inflation rate is low, the company's revenue will increase, and the company will easily repay loans to banks, so that problem financing decreases. This can be shown by the decreasing NPL ratio.

According to Febriyanti (2015) NPL is influenced by economic growth, where if economic growth is low, it will have an impact on the deteriorating financial performance of the company, so that revenue will decline, making it difficult for companies to repay bank loans in a timely manner, consequently financing problems (NPL) will increased. Conversely, if high economic growth, it will make the company's financial performance better, so the company will be easy to repay bank loans on time, as a result of non-performing financing (NPL) decreases.

According to Widyastuti (2016) NPL is also influenced by interest rates, where if the loan interest rate charged by banks is high, companies will find it difficult to pay debts and interest that are due, thus increasing the amount of non-performing financing (NPL), so increase the NPL ratio. Conversely, if the interest rate on loans charged by banks is low, the company will be easy to pay debts and interest that are past due, thereby reducing the amount of non-performing financing (NPL).

Problematic financing (NPL) is also influenced by microeconomic variables, namely variables related to the financial health of Bank Mandiri, where these four variables namely ROA, ROE, BOPO and CAR can affect the amount of funds that will be disbursed by Bank Mandiri, so as to increase problematic financing (NPL).

According to Pratamawati (2018) NPL is influenced by the rate of return on assets (ROA), where the low ROA value is caused by high non-performing financing (NPL) which is caused by the low rate of return on bank loans that have been borrowed by the public, thereby affecting the low number of loans to be disbursed to the community in the years to come. Conversely, the high value of ROA is caused by low non-performing financing (NPL) which is caused by an increase in the rate of bank loans that have been borrowed by the public, thus affecting the increasing amount of credit to be disbursed to the public in the years to come.

According to Kasmir (2013) NPL is influenced by the level of return on equity (ROE), where the low ROE is caused by high non-performing financing (NPL) which is caused by the low rate of return on bank loans that have been borrowed by the public, thereby affecting the low amount of credit to be disbursed to society in the years to come. Conversely, the high value of ROE is caused by low non-performing financing (NPL) which is caused by an increase in the rate of bank loans that have been borrowed by the public, thus affecting the increasing number of loans to be disbursed to the public in the years to come.

According to Firmansyah (2014) NPL is influenced by operational costs to operating income (BOPO), where the high BOPO is caused by the increase in non-performing financing (NPL) due to the low rate of repayment of bank loans that have been borrowed by the public, thereby affecting the low number of loans that will be poured out into the community in the years to come. Conversely, the low value of BOPO is caused by low non-performing financing (NPL) which is caused by an increase in the rate of bank loans that have been borrowed by the public, thus affecting the increasing amount of credit to be disbursed to the public in the years to come.

According to Darmawi (2012) NPL are also influenced by Capital Adequacy Ratio (CAR), where the low CAR value is caused by the ability of banks to increase low equity values. The high level of NPL will result in low level of credit absorption to the community and result in a low amount of credit that will be disbursed to the community. Conversely, where the high value of CAR is caused by the ability of banks to increase the value of high equity. This is due to the low increase in credit returns by the public to banks or low non-performing financing (NPL). A lower NPL will increase the level of credit absorption to the public and result in an increase in the amount of credit that will be disbursed to the community.

Hypothesis

Based on the concepts presented, the research hypothesis is formulated as follows:

1. Inflation has a positive effect on the level of Non Performing Loans (NPL).
2. Economic growth has a negative effect on the level of Non Performing Loans (NPL).
3. Interest Rates have a positive effect on the level of Non Performing Loans (NPL).
4. Inflation, Economic Growth and Interest Rates have a positive effect on the level of Non-Performing Loans (NPL).
5. Return On Assets have a positive effect on the level of Non Performing Loans (NPL).
6. Return On Equity has a positive effect on the level of Non Performing Loans (NPL).
7. Operating Costs to Operating Income have a positive effect on the level of Non-Performing Loans (NPL).
8. Capital Adequacy Ratio has a positive effect on the level of Non Performing Loans (NPL).
9. Return on assets, return on equity, Operating Costs to Operating Income and capital adequacy ratio have a positive effect on the level of Non-Performing Loans (NPL).

MATERIAL AND METHODS

This type of research is a quantitative descriptive study. Research is quantitative descriptive including collecting data to test hypotheses or answer questions about the final status of research subjects (Sinulingga, 2011). The approach used in this study is a survey approach that is the activity of collecting as much data as possible about the facts that are supporting the research with the intention to find out the status, symptoms of finding common ground by comparing with standards that have been selected or determined (Ghazali, 2009). The nature of the research is explanatory research Sugiyono (2012) states that, explanatory research is research that aims to explain the position of the variable under study and the relationship between one variable with another variable.

The object of this study is the report data on the number of loans disbursed and the number of problem loans (NPL) quarterly Bank Mandiri which is in the period of 2008-2018. The data collection technique in this research is the Documentation Study, which is a data collection technique carried out by collecting data or information from BPS data and annual reports and reports on the distribution of loans and problem loans at PT. Bank Mandiri (Persero) Tbk (nationally) and by making observations made through BPS data and annual reports as well as reports on lending and non-performing loans at commercial banks throughout Indonesia.

The data used in this research is secondary data, where research data is obtained directly through direct observation (observation) to the North Sumatra BPS website and report data on the number of loans disbursed and the number of problem loans and Bank Mandiri annual report. Where the observed data are data on economic growth, inflation rates, interest rates, ROA, ROE, BOPO, CAR and the number of loans extended by banks as well as the number of problem loans.

RESULTS AND DISCUSSION

Effect of Inflation against Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that partially inflation has a negative but not significant effect on the level of NPL, where the value of t ((-0.389) is smaller than the value of the table (1.683). According to Mankiw (2014) inflation is actually high strongly influences the bank credit NPL, where the higher inflation, it will affect the performance of a company, where company income will continue to decline due to rising prices of goods, so that production costs become expensive, so companies will raise the price of their goods. goods, operational costs will increase, and companies will find it difficult to return loans borrowed to banks, as a result of increasing non-performing financing (NPL), thus impacting on decreasing returns on assets and equity. Inflation that does not affect the NPL is caused when inflation increases by banks independent again incessant increase the amount of credit to help the business world in order to increase production so that goods become cheap, but the NPL obtained by a bank is actually low, so it does not interfere with the ability of the bank to increase capital in order to increase assets, so that the bank can easily increase capital to increase disbursement of credit in the coming year. Conversely, when inflation decreases, the Mandiri bank reduces the amount of credit, but the NPL obtained by the Mandiri bank actually increases, thereby disrupting the ability of the Mandiri bank to increase capital in order to increase assets, so that the Mandiri bank cannot easily raise capital to increase the amount of credit disbursed in the year will come.

According to Kuncoro and Suhardjono (2012) in certain situations inflation does not affect the increase in NPL. This is due to the fact that rising inflation will not always have an impact on declining credit growth rates. This situation is caused by other factors that make an increase in NPL, so that it can interfere with the ability of banks to increase the amount of capital for the purpose of increasing the amount of credit to be disbursed by banks, where the increase in inflation is temporary, so that when there is price intervention from the government, inflation will down and does not make the business world reduce its production, and always increase the return on credit in accordance with the due date. The business world will continue to increase the amount of its production by lending credit to banks as additional capital to improve the quality of its production to increase economic growth.

This situation is in line with Pratamawati's research (2018), where this study explains that inflation does not always affect the increase in a bank's NPL. This is because the existing inflation is temporary, and at any time will go down along with the price intervention from the government, so that the increase in inflation does not significantly influence the increase in NPL. The increase in inflation even triggers entrepreneurs to increase production capacity, because high prices can boost exports of goods abroad, so that it can spur economic growth. As a result, entrepreneurs can still increase the return of the amount of funds lent to banks, so that the NPL level does not rise so significantly and the bank can cover operational costs, and be able to increase the amount of credit that will be disbursed to support economic interests.

In this study, the inflation rate has a negative / opposite direction, but it is not significant with the NPL level / percentage. This is because, when inflation rises where the prices of goods and production costs increase, entrepreneurs need more capital, so they need more financing, in the short term will reduce the percentage of bank NPL, due to increased lending, while non-performing loans / NPL usually appear not in the same period, so the percentage of NPL will decrease when inflation increases. However, the effect of inflation on the percentage of NPL is not significant, because not all entrepreneurs automatically require greater capital, only certain sectors when the price of goods rises, require greater capital, especially the trade sector.

The Effect of Economic Growth on Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that partially economic growth has a negative but not significant effect on the level of NPL, where the t value (-1.115) is smaller than the value of the table (1.683). According to Febriyanti (2015) economic growth influences bank credit NPL. The lower economic growth, the export growth decreases or is low, the currency will weaken, inflation is high and prices of goods tend to rise, so that production costs increase as a result the company cannot repay loans that have been borrowed to banks in a timely manner, thereby increasing problematic financing (NPL).

According to Nopirin (2010) economic growth does not always affect the level of NPL. When a country's economic growth sometimes goes up and then falls back it is not always able to increase or even decrease the NPL. This is because when the economic growth goes down the bank continues to increase the amount of credit that will be disbursed to the business world in order to increase the amount of production to increase economic growth, but in times of economic growth the customer pays credit on time, so that the NPL goes down and impacts on an increase in the amount of capital to improve the performance of banks in increasing the amount of credit. Conversely, when economic growth increases, the amount of credit disbursed is small, but the number of NPL increases, thereby disrupting the performance of independent banks in increasing the amount of capital to increase the amount of credit.

This situation is in line with research by Christian Naibaho and Sri Magesti Rahayu (2018), where this study explains that economic growth has no effect on increasing NPL. This is because the ups and downs of economic growth do not directly make entrepreneurs make efficiency, even entrepreneurs tend to continue to produce their products for the sake of increasing exports to increase economic growth through providing incentives given by the Government to export-oriented companies, so it is unlikely that companies to return borrowed funds not in accordance with the maturity date, so as not to harm the bank's operations in increasing the ability to generate capital to cover operations, as well as increasing the amount of credit to be channeled to help entrepreneurs in order to improve the quality and economic growth of the country.

In this study, the economic growth rate has a negative effect (the opposite direction) with the level of NPL. This is because, when economic growth increases, banks are usually optimistic to extend loans expansively, so that credit distribution will increase and will reduce the level of NPL in the same period, so that the percentage of NPL will decrease when economic growth increases, but the effect significant economic growth affects the NPL, because when economic growth increases not all entrepreneurs dare to be expansive and need credit. For business sectors that are stagnant, economic growth does not automatically require working capital from the Bank in the form of credit, for example the Industrial and Manufacturing sectors.

Effect of Interest Rates on Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that partially the interest rate has a positive effect on the level of NPL, where the t value (5.524) is greater than the value of the table (1.683). According to Widyastuti (2016) the interest rate charged by banks influences bank credit NPL. This is due to an increase in interest rates from Bank Indonesia, so banks will automatically raise their lending rates, both overall and gradually. This condition will make it difficult for entrepreneurs to repay their loans in accordance with the maturity date, resulting in an increase in the number of NPL that will burden bank operations and prevent the bank from increasing the amount of credit to assist the government in lending to drive economic growth.

According to Sukirno (2009) a high interest rate will affect the increase in NPL and will create a low credit absorption in the coming year, making it difficult for banks to increase credit growth, which results in a decline in export productivity, and reduce the performance of economic growth.

This situation is in line with the research of Linda et al (2015), where this study describes that interest rates affect the increase in NPL. This situation is caused by high interest rates which can make it very difficult for customers to repay their funds in accordance with the maturity date, resulting in an increase in NPL that make it difficult for banks to be able to raise capital to increase credit growth to sustain and support a more improved economic quality well.

In this study, the interest rate has a negative (opposite direction) and significant effect on the level of NPL. This is due to the fact that when BI's benchmark interest rate (BI rate) rises, banks quickly respond with an increase in lending rates. The increase in interest rates generally occurs when business conditions decline and liquidity is tighter, so that from the entrepreneur side, demand for goods decreases / sales decrease, but at the same time the burden of obligations increases. This condition will directly affect the ability of debtors to pay obligations and will significantly increase the percentage of NPL. In addition, when interest rates rise, entrepreneurs are reluctant to use loan funds, so that outstanding loans will decrease significantly, this will automatically make the NPL percentage as a percentage will increase, even though in absolute terms the value of the NPL remains.

Effect of Return on Assets (ROA) on Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that partially ROA has a positive and significant effect on the level of NPL, where the value of t arithmetic (4.755) is greater than the value of t table (1.683).

According to Pratiwi (2012) return on assets affects the NPL of bank credit, where increasing NPL is influenced by a decrease in return on assets, where a low rate of return on assets due to credit indicates the number of credit repayments on time also decreases, and will directly reduce the amount of bank assets and banks will be difficult to disburse loans to the public in the years to come due to the lack of funds to cover high operational costs, so that the role of banks as supporters of economic growth will be increasingly reduced.

According to Utari et al (2014) a high level of NPL can influence a decrease in the rate of return on assets, where a low rate of return on assets will impact on a low rate of return on equity (ROE), as well as the ability of banks to increase capital (ROE) to be low, resulting in low credit growth that will be disbursed to the public, thereby affecting the role of banks in improving credit quality to assist entrepreneurs in producing quality products in order to increase economic growth.

This situation is in line with research by Zajiyah Dwi and Yulizar D Sanrego (2011), where this study describes that the return on assets greatly influences the increase in a bank's NPL. If the return on assets is high, it will reduce the value of NPL, so that it will increase the value of ROE and CAR, where capital will increase, and banks will easily increase the amount of credit growth to encourage increased economic activity to increase economic growth. Conversely, if the return on assets is low, it will increase the value of NPL, so that it will reduce the value of ROE and CAR, where capital will decrease, and banks will find it difficult to increase the amount of credit growth to encourage increased economic activity to increase economic growth.

At present, the value of return on assets from independent banks during the period 2008-2018 is classified as very healthy at> 1.5%. The increase in NPL values that occurred during the first quarter to the fourth quarter of 2008-2018 still did not put banks in a capital deficit condition to be able to cover high operational costs, and to increase credit growth, where an increase in NPL still kept banks in the healthy category because the increase in NPL was still in a situation of 2% PL NPL ≤ 5%, so that an independent bank is still able to increase the value of ROA, ROE and CAR, so that it does not interfere with capital increase and does not interfere with the role of the independent bank in increasing credit growth in order to expedite economic activities to enhance economic growth.

In this study, ROA has a significant positive effect (direction) on the level of NPL percentage. This shows that, when Bank Mandiri ROA numbers were low, some of the profits / capital had been used to improve / reduce the percentage of NPL by writing off / erasing books, so that the low NPL actually had eroded bank ROA, and vice versa when ROA was high, banks had not write off NPL, so that bank NPL remain high, but ROA is also well maintained.

The Effect of Return on Equity (ROE) on Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that partially ROE has a positive effect on the level of NPL, where the value of t arithmetic (6.482) is greater than the value of the table (1.683). According to Kasmir (2013) return on equity has an effect on bank credit NPL, where increasing return on equity will reduce the amount of problem financing (NPL). The increased rate of return on equity is due to an increase in the number of loans paid by the due date, thus making the NPL decrease even more and will increase the rate of return on assets. Conversely, the decreasing return on equity will increase the amount of problem financing (NPL). Declining returns on equity are caused by a decrease in the amount of credit paid by the due date, thus making the NPL increase and will reduce the rate of return on assets.

According to Novembinanto (2009) the increasing number of NPL, it will make the value of ROE decreases, so that the impact on the value of ROA and CAR decreases, thus making the amount of credit paid according to the maturity date decreases, so that it impacts on lower credit growth and increasingly reduced credit supply to entrepreneurs who want to produce their products in order to increase quality economic growth.

This situation is in line with the research of Aviliani, et al (2015), which according to this study the lower the value of return on equity, it will impact on increasing the value of NPL. This will make the lower capital generated to be used in the process of lending to entrepreneurs who will produce their products to be able to increase quality economic growth. As a result, the role of banks in increasing credit growth, and supporting credit growth is hindered and not optimal.

For now, the value of return on equity from independent banks during the period 2008-2018 has increased above 15%, in line with a slight decline in NPL. The increase in NPL values that occurred during the first quarter to the fourth quarter of 2008-2018 still did not put banks in a capital deficit condition to be able to cover high operational costs, and to increase credit growth, where an increase in NPL still kept banks in the healthy category because the increase in NPL was still in a situation of 2% PL NPL $\leq$ 5%, so that an independent bank is still able to increase the value of ROA, ROE and CAR, so that it does not interfere with capital increase and does not interfere with the role of the independent bank in increasing credit growth in order to expedite economic activities to enhance economic growth.

In this study, ROE has a significant positive effect (direction) on the level of NPL percentage. This shows that, when Bank Mandiri ROE numbers were low, some of the profits / capital had been used to improve / reduce the percentage of NPL by writing off / erasing books, so that the low NPL actually had eroded bank ROE, and vice versa when ROE was high, banks had not write off NPL, so that bank NPL remain high, but ROE is also well maintained.

Effect of Operating Costs on Operating Income (BOPO) Against the NPL Level of Bank Mandiri

Based on the results of the t test (partial test) shows that partially BOPO has a positive effect on the level of NPL, where the value of t count (8.571) is greater than the value of the table (1.683). According to Firmansyah (2014) operating costs to operating income (BOPO) have an effect on With regard to bank credit NPL, where BOPO is increasing, it will lead to an increase in non-performing financing (NPL), which will make operating costs large and operating income low, thereby disrupting banks' ability to increase return on assets and equity. Conversely, a decrease in the value of BOPO will reduce problem financing (NPL), which will make operational costs lower and operating income increase, making it easier for banks to increase return on assets and equity.

According to Utari et al (2014) the increase in NPL, the operating costs to operating income (BOPO), resulting in large operational costs and low operating income, thereby disrupting the ability of banks to increase ROA, ROE and CAR. As a result, the ability of banks to increase credit growth in the coming year will be relatively low and the tendency for banks to become unreliable will be a support for entrepreneurs to help increase their production in order to increase quality economic growth.

This situation is in line with Pratamawati's research (2018), where this study states that BOPO is very influential on the increase in NPL, where the increased value of BOPO is influenced by increasing NPL. BOPO will be bigger and out of control and affect the decline in the value of ROA, ROE and CAR. As a result, the ability of banks to increase the amount of credit to be disbursed is getting lower, and the resulting capital cannot cover operating costs, thus making the ability of banks to support entrepreneurs to help increase their production in order to increase quality economic growth will be even lower.

For now, the growth of BOPO during the period of 2008-2018 has decreased around 95% ≤ NPL ≤ 96%, where the BOPO ratio is quite good. The increase in NPL values that occurred during the first quarter to the fourth quarter of 2008-2018 still did not put banks in a capital deficit condition to be able to cover high operational costs, and to increase credit growth, where an increase in NPL still kept banks in the healthy category because the increase in NPL was still in a situation of 2% PL NPL ≤ 5%, so that an independent bank is still able to increase the value of ROA, ROE and CAR, so that it does not interfere with capital increase and does not interfere with the role of the independent bank in increasing credit growth in order to expedite economic activities to enhance economic growth.

Effect of Capital Adequacy Ratio (CAR) on Bank Mandiri NPL Level

Based on the results of the t test (partial test) shows that CAR partially has a significant positive effect on the level of NPL, where the value of t arithmetic (6,743) is greater than the value of the table (1,683). According to Darmawi (2012) CAR is very influential on bank credit NPL, where CAR is increasing, the company's ability to increase equity values is better, where banks will be able to increase capital to be able to withstand the risks that will be experienced when lending, so as to reduce NPL, so that if there is a payment that is not according to the due date will not affect the ability of banks to increase the rate of return on equity. Conversely, the lower CAR, the company's ability to increase the value of equity becomes worse, where banks will not be able to increase capital to be able to withstand the risks that will be experienced when lending, so as to increase the value of NPL, consequently if payments occur that do not match the date maturity will affect the ability of banks to increase the rate of return on equity.

According to Hanafi (2009) CAR is one of the risks that must be passed by a banking institution, where if the value of this CAR increases, it will be able to increase the ability of banks to provide capital to increase credit growth in the context of increasing economic growth, as well as with high bank CAR values can cover operational costs to operating income (BOPO), where the high CAR is caused by low NPL. Conversely, if this CAR decreases, it will reduce the ability of banks to provide capital to increase credit growth in the context of increasing economic growth, and with a low CAR value the bank will not be able to cover the operational costs of operational income (BOPO), where the low CAR value this is due to the high NPL.

This situation is in line with the research of Sigit Arie Wibowo and Wahyu Saputra (2017), in which according to this study an increase in NPL will make banks able to increase capital adequacy to be able to increase the amount of credit that will be disbursed to help entrepreneurs to be able to increase their production to increase economic growth. Conversely, a decrease in NPL will make banks unable to increase capital adequacy to be able to increase the amount of credit that will be disbursed to help entrepreneurs to be able to increase their production to increase economic growth, where increasing the amount of credit will help increase ROA, ROE and reduce BOPO, conversely a decrease in the number of creditors will decrease the value of ROA, ROE and increase the value of BOPO.

At present, CAR growth during the 2008-2018 period has increased to over 12%, where the CAR ratio is in very adequate criteria, so that independent banks during the first quarter to the fourth quarter of 2008-2018 were able to increase capital through increasing NPL, where the increased capital is able to increase the value of ROA and ROE, and decrease the value of BOPO, where an increase in the value of ROA and ROE will help independent banks in increasing their role in increasing credit growth in the future, so as to encourage job creation and increase investment in order to boost Indonesia's economic growth.

In this study, CAR has a significant positive effect (direction) on the level of NPL percentage. This shows that, when Bank Mandiri CAR is low, some of the profits / capital have been used to improve / reduce the percentage of NPL by writing off / erasing books, so that low NPL actually have eroded the CARs of banks, and vice versa when CARs are high, banks have not write off the NPL, so that the bank's NPL remains high, but CAR is also well maintained

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The conclusions in this study are:

1. Partially shows that the macroeconomic variable, namely the inflation variable, has a negative effect but is not significant to the NPL level variable.
2. Partially, the macroeconomic variable, the variable of economic growth, has a negative effect but it is also not significant on the NPL level variable.
3. Partially, the macroeconomic variable, namely the interest rate variable, has a positive and significant effect on the NPL level variable.
4. Simultaneously macroeconomic variables, namely inflation, economic growth and interest rates, have a positive effect on NPL level variables.
5. Partially, the microeconomic variable, the ROA variable, has a positive and significant effect on the NPL level variable.
6. Partially, the microeconomic variable, the ROE variable, has a positive and significant effect on the NPL level variable.
7. Partially, the microeconomic variable, the BOPO variable, has a positive and significant effect on the NPL level variable.
8. Partially, the microeconomic variable, the CAR variable, has a positive and significant effect on the NPL level variable.
9. Simultaneously microeconomic variables namely ROA, ROE, BOPO and CAR variables have a significant positive effect on NPL level variables

RECOMMENDATIONS

The suggestions in this study are:

1. It is better for Bank Mandiri to anticipate uncertain macroeconomic conditions, particularly the reference interest rate, where by observing this macroeconomic condition, it is hoped that Bank Mandiri will be able to take steps to create innovations to avoid increasing NPL, namely loans intended for small and medium businesses with low interest rates and low amount of credit. This is done to help MSMEs create quality products that can be relied upon for export, as well as increase the country's foreign exchange, and ultimately be able to encourage high economic growth.
2. Bank Mandiri should be able to select every customer who will lend credit, this is intended so that the bank can prevent an increase in NPL, increase the value of ROA, ROE and CAR, and reduce the value of BOPO. This situation will assist banks in increasing the amount of capital to increase the amount of credit to be distributed, so as to be able to support the business world in order to increase production for export purposes, so as to increase quality economic growth.
3. For further researchers, it is better to add macroeconomic variables, namely the amount of money in circulation, as well as adding microeconomic variables, namely the deposit to deposit ratio (LDR). This is intended so that researchers can thoroughly know the factors that can increase the value of NPL experienced by independent banks, as well as find out how much macroeconomic variables and microeconomic variables on the level of NPL of independent banks.

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