The Effect Of Credit Risk Management On Profitability Moderated By The Cash Ratio

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Abstract: The purpose of this research is to determine the effect of Credit Risk Management as measured by Loan to Deposit Ratio (LDR) and Non Perfoming Loans (NPL) on Profitability as measured by Return On Assets moderated by Cash Ratio in conventional banking companies listed on the Indonesia Stock Exchange for the 2017-2021 period. This study uses 16 banking samples from purposive sampling results from a total population of 43 banking sectors. The analytical method used is panel data regression analysis and moderating regression analysis using interaction test with the help of Eviews 10 application. These results indicate that the LDR partially has a positive and significant effect on profitability. NPL partially has a negative and significant effect on profitability. In addition, the cash ratio variable as a moderating variable is known to be unable to moderate the LDR to Profitability and the Cash ratio is unable to moderate NPL to Profitability

Keywords: Loan to Deposit ratio, Non Perfoming Loan, Return On Assets, Cash Ratio

INTRODUCTION

Banking is part of the financial institution system in Indonesia. In carrying out its activities, banks have an important role because most people really need services from the banking sector. The banking industry is one that influences national development, acting as a financial intermediary for those who have excess funds and those who need funds, And almost all types of industries require banking services as payment traffic.

Banking can also carry out stock trading transactions on the stock exchange. Apart from aiming to save funds from the public and provide credit to the public, banks also strive to maximize profits by improving operational procedures. Financial perfomence in banking can be seen from how much profit is generated by banks. Because the higher the profit received by the bank, it shows the ability of the bank to manage its operations. Likewise. conversely, if bank profits decrease, there will be constraints on the bank in managing its operations (Sante et al., 2021).

Banking financial performance can be seen from the profitability ratio (Marwansyah & Setyaningsih, 2018), profitability is the most influential thing in determining whether the bank can make a profit or suffer a loss in a period. Good profitability will be a consideration for the public to save their funds in the bank and will also attract investors to invest in the bank.

When carrying out its operational activities, the bank has various kinds of risks that will certainly affect profits in banks (Nadillah & Muniarty, 2021). The main factors affecting bank profits was due to, among other things, the risk of credit growth and the risk of non-performing loans owned by these banking companies. Credit growth risk or what is commonly called the Loan to Deposit Ratio is included in the liquidity risk section. LDR as a performance appraisal in banking (Aji & Manda, 2021), LDR is used to determine the level of bank liquidity as well as to measure the extent to which deposits are used for channeling loans or credit (Serly & Kurniawan, 2020). Distributed credit will be effective if it has good credit quality by obtaining large interest income so that bank income increases (Serly & Kurniawan, 2020).

The second factor causing bank profitability to decline is the risk of non performing loans. Credit risk is a risk that often occurs, considering that one of the bank's business activities is channeling funds to the public (Nadillah & Muniarty, 2021). Ineffective banking performance can cause bank profits to decrease and increase the risk of non perfoming loans or known as credit risk. Credit risk is comparing non-performing loans to the amount of credit that will be given to debtors using Non Performing Loans as a provider of information regarding the extent to which a bank can minimize problem loans. If a bank has high NPL, it will increase costs in banking operations, meaning that a bank's NPL will increase, and the banking performance will experience difficulties. The high level of NPL causes a decrease in the profitability that a bank should receive (Pinasti & Mustikawati, 2018). Banking can be declared unhealthy if Non Performing Loans are more than 5%, this can be seen from the Soundness Rating System for Commercial Banks (Sante et al., 2021).

In managing banking so that it generates good profits and reduces the level of risk that is accepted, namely there is also a Cash Ratio to see the performance of a bank other than Non Perfoming Loans and Loan Deposit Ratio. The cash ratio is part of the liquidity ratio as a tool to see how much cash a company has to pay off loans in accordance with the agreed agreements (Kasmir, 2020). The cash ratio is a contradictory choice for the banking world, if the cash ratio is in a high position then there are idle funds at the bank and the profit that the bank will get decreases because cash is not managed properly. Where the cash ratio is low, the funds are used for realization in the form of loan distribution but the liquidity owned by the bank is limited (Nangur & Pamungkas, 2022). As a financial institution, banks must maintain funds collected from the public such as current accounts, deposits and savings, but on the other hand, banks must also maintain requests for funds or credit provided by banks (Sarnawiah, 2019).

LITERATURE REVIEW

Signaling Theory

Signaling theory can be assumed by two parties when they access different information. Signal theory explains how the ability of the signal giver affects the signal receiver. Signal theory is concerned with understanding how a signal can be said to have value or benefits and the other side of a signal that is declared useless. Signals have various types, both of which must be investigated deeply to find out and those that can be observed directly. The signal issued must contain the power of information to be able to change outsiders assessment of a company (Ghozali, 2020).

Anticipated Income Theory

The theory of income anticipation emerged against the background of the low demand for loans from banks which resulted in banks experiencing excess liquidity so that the profits earned by banks also decreased and this theory encouraged banks to be more aggressive in providing long-term loans. In the income anticipation theory, banks should consider providing long-term loans whose principal and interest payments are in accordance with the terms of the time. Long-term loans for a period of more than one year and can be extended for a period of less than five years (Saeeid Mohammad et al., 2020)

Banking

According to Stuart said The bank is an institution hat has the goal of meeting the loan needs of the community, both with its own means of payment and by using other people's funds, the funds issue a new medium of exchange in the form of mandatory savings when necessary (Abdullah & Wahjusaputri, 2018).

Profitabilty

Bank is a financial institution which carries out achievement activities by selling services to the public to gain profit. According to Hery (2019:17) said Profitability to measure the company's ability to achieve success from the result of its business activities during one period, profitability also aims to measure how

much business efficiency and profits the company is getting Meanwhile, according to Thian (2022:108) said profitability as a tool to measure the level of effectiveness of company performance.

Likuidity

Banking activities often do not run smoothly, they must experience financial difficulties so they are unable to pay their debts, especially short-term debt. According to Siswanto (2021:25) said Liquidity to see how capable the company is of paying off financial debt in less than one year. Meanwhile, according to Hery (2019:149) says that Liquidity is a ratio that assesses the company's ability to meet obligations or pay debts in accordance with the agreed time.

Loan to Deposit Ratio

Loan to Deposit Ratio to see how capable the bank is in disbursing loans. According to Kasmir (2020:319) said The Loan to Deposits Ratio (LDR) is the ratio ussed to how far the amount of loans disbursed to the amount of public funds and own equity used. Meanwhile, according to Darwis (2019:90) says that Loan to Deposit Ratio describes how far lending to customers can offset the bank's obligation to immediately respond to depositors requests to withdraw their funds that have been channeled by banks in the form of loans.

Non Performing Loan

For a bank, this non-performing loan describes a condition where the return approval from the customer is at risk of failure. According to Andrianto (2020:184) said Non-Performing Loans are loans that in practice have not reached or met the targets desired by the bank. According to Rahayu (2020:6) says that Non-performing Loans is a borrower who is unable and or does not want to pay off the obligation to repay the loan in full when it expires or after.

HYPOTESIS

The Effect of Loan to Deposit Ratio on Profitability

The LDR includes a section on assessing the soundness of a bank to know the actual condition of a bank whether it is healthy, unhealthy, or sick. LDR to determine the extent of a bank's ability to extend credit to the public using public funds collected by the bank. The increasing LDR shows that the bank can optimize its distribution and will directly increase the income obtained by the bank so that the profitability will be better (Maulana et al., 2021). However, a loan deposit ratio that is too high in banks is considered too aggressive because excessive loans will disrupt bank liquidity.

This research is in line with (Serly & Kurniawan, 2020) and (Marwansyah & Setyaningsih, 2018) the effect of Loan To Deposit Ratio on Profitability.

H1 : There is a partial influence of the Loan to Deposit Ratio on Profitability

The Effect of Non Perfoming Loan on Profitability

NPL is used to see the level of ability of borrowers to pay or pay off their debts, both principal and interest payments that are due. High problem loans will cause delays in bank revenues that should be received, so that a bank's profitability decreases. The higher the NPL value, the smaller the income (ROA) that the bank will get (Maulana et al., 2021). This is because banks have to bear losses and incur additional costs to make reserves for losses due to an increase in non performing loans, which will affect profitability and other costs for credit default recovery.

This research is in line with (Maulana et al., 2021) and (Marwansyah & Setyaningsih, 2018) the effect of Non Perfoming Loan on Profitability.

H2 : There is a partial influence of the Non Perfoming Loan on Profitability

Cash Ratio is able to moderate The Effect of the Loan to Deposit Ratio on Profitability

LDR terms of bank soundness is limited to 110% so that banks are not too excessive in disbursing funds and will disrupt the supply of cash if at any time the bank needs funds to pay off its obligations immediately. Cash ratio assesses how capable the bank is in paying its obligations with the amount of funds owned by the bank. The higher the level of cash ratio shows the greater the amount of inventory so that payment of obligations does not experience difficulties. A cash ratio that is too high will also affect bank profitability because funds do not circulate and settle in cash so that bank operations are hampered. In the world of banking, cash ratios must be at the right level, so that they have good performance to pay short obligations and increase profitability (Nangur & Pamungkas, 2022).

This research is in line with (Pitoyo & Lestari, 2018) and (Firmanza et al., 2021) Cash Ratio is able to moderate The Effect of the Loan To Deposit Ratio on Profitability.

H3 : Cash Ratio is able to moderate The Effect of the Loan To Deposit Ratio on Profitability

Cash Ratio is able to moderate The Effect of the Non Perfoming Loan on Profitability

High NPL will cause delays in bank revenues that should be received so that a bank's profitability decreases. In addition, banks are reluctant to sell their loans because they have to bear large credit losses which will also affect their liquidity.

Good liquidity is an indicator that the banking business can run optimally. To measure a bank's liquidity state using the variable cash ratio. Because the cash ratio is to see how much cash the bank has that can pay off short-term obligations from withdrawing funds from depositors. As a financial institution, banks are required to maintain funds collected from the public, but other parties, banks are also required to maintain requests for funds or credit provided by banks.

This research is in line with (Firmanza et al., 2021) and (Pitoyo & Lestari, 2018) Cash Ratio is able to moderate The Effect of the Non Perfoming Loan on Profitability.

H4 : Cash Ratio is able to moderate The Effect of the Non Perfoming Loan on Profitability

METHOD

Associative research with a quantitative approach is the method that the authors use for this study, and the materials collected will be processed and evaluated. This research is quantitative in nature and refers to secondary data. The secondary data used in this study was taken from the annual financial reports of conventional banking companies in Indonesia for 2017-2021 through www.idx.co.id. Purposive sampling is the sampling technique chosen in this study. The criteria used as samples are as follows: Conventional banking companies in Indonesia which present annual financial reports for five consecutive years in 2017-2021, Conventional banking companies in Indonesia which present annual financial reports according to the variables studied in 2017- 2021, Conventional banking companies in Indonesia whose profits will not experience a minus or loss in 2017-2021.

There are a total of 43 companies in the conventional banking sector from the entire population and after elimination, 16 samples of companies are obtained which will be analyzed immediately. In this study the analytical method used is panel data regression analysis and moderation regression analysis (MRA) with the help of a computer through the Eviews program and Microsoft Excel.

Variable Operational Definitions

1. Loan to Deposit Ratio (X1) : $\dfrac{Jumlah\ Kredit\ Yang\ Diberikan}{Jumlah\ Dana\ Pihak\ Ketiga}$

   Source : (Serly & Kurniawan, 2020)

2. Non Perfoming Loan (X2) : $\dfrac{Kredit\ Bermasalah}{Total\ Kredit}$

   Source : (Aji & Manda, 2021)

3. Return On Assets (Y) : $\dfrac{Laba\ Bersih}{Total\ Aktiva}$

Source :(Thian, 2022)

4. Cash Ratio (Z): $\dfrac{Kas + Aktiva\ Setara\ Kas}{Hutang\ Lancar}$

Source : (Thian, 2022)

RESULTS AND DISCUSSION

Analysis of Descriptive

Table 1. Analysis of Descriptive

Date : 05/24/23
Time : 10:57
Sampel : 2017-2021

	Y	X1	X2
Mean	1.383904	83.06272	1.471428
Median	1.298450	83.99030	1.364200
Maximum	3.886200	120.6873	3.404200
Minimum	0.018500	42.97470	0.196100
Std. Dev.	0.813132	14.41458	0.804693
Skewness	0.528230	-0.254489	0.451881
Kurtosis	3.017277	3.245006	2.376152
Jarque-Bera	3.721355	1.063624	4.019902
Probability	0.155567	0.587539	0.133995
Sum	110.7123	6645.018	117.7142
Sum Sq. Dev	52.23349	16414.62	51.15489
Observation	80	80	80

Source : Eviews data di olah 10, 2023

Descriptive analysis provides an overview of the sample data. Examine the overall effect of the variable LDR, NPL and ROA contained in the table above. The amount of data (Observations) in this study is 80 data. That ROA (Y), the highest ROA value in conventional banking companies, namely BCA bank in 2017 of 3.886200. and the lowest ROA at Sinarmas bank in 2019 of 0.018500. LDR (X1), the highest LDR value in conventional banking companies is BTN bank in 2019 of 120.6873 and the lowest LDR is Sinarmas bank in 2021 of 42.97470. NPL (X2), the highest NPL value in conventional banking companies, namely Maybank in 2020 of 3.404200 and the lowest NPL at Mandiri in 2021 of 0.196100.

Hypotesis Test

Table 2. Hypotesis Test

Variabel	Coefficient	Nilai t-statistik	Prob
Constanta	0,781515	1,671141	0,0988
LDR (X1)	0.010966	2,284069	0,0251
NPL (X2)	-0,209658	-2,147418	0,0349
LDR*CR	0,000259	0,494349	0,6225
NPL*CR	0,004255	0,317434	0,7518
F-statistik	5,189711		
Adjusted R-squared	0,095897		
Prob	0.007685		

Source : Eviews data di olah 10, 2023

Loan to Deposit Ratio (LDR)

In the variable LDR (X1) the results obtained are t statistic 2.284069 > t-table 1.66488, a probability 0.0251 < 0.05. The conclusion is there is a significant positive effect of the LDR on profitability (ROA).

Non Perfoming Loan (NPL)

In the variable NPL (X2), the t statistic results are -2.147418 or 2.147418 > t-table 1.66488, a probability 0.0349 < 0.05. The conclusion there is a significant negative effect of the NPL on profitability (ROA).

Koefisien Determinasi (R^2)

The Adjusted R-squared test is 0.095897. The results obtained show that the LDR (X1) and NPL (X2) are able to provide moderation and are able to contribute to influencing 9.5897% the rest 90.4103% is influenced by other variables.

Test MRA Loan to Deposit Ratio on moderated by Cash Ratio

The result of the LDR*NPL moderation test, the results obtained was a t statistic of 0.494349, a probability 0.6225 > 0.05. The conclusion is that cash ratio is not able to moderate the LDR on profitability (ROA).

Test MRA Non Perfoming Loan on Profitability moderated by Cash Ratio

In the test results using the moderating variable, namely the NPL variable, the results obtained was a t statistic of 0.317434, a probability 0.7518 > 0.05. The conclusion is that cash ratio is not able moderate the NPL on profitability (ROA).

Disscusion

The Effect of Loan to Deposit Ratio on profitability

The conclusion is that Loan to Deposit Ratio has an effect on profitability (ROA). The LDR includes a section on assessing the soundness of a bank to know the actual condition of a bank whether it is healthy, unhealthy, or sick. LDR to determine the extent of a bank's ability to extend credit to the public using public funds collected by the bank. The increasing LDR shows that the bank can optimize its distribution and will directly increase the income obtained by the bank so that the profitability will be better (Maulana et al., 2021). However, a loan to deposit ratio that is too high in banks is considered too aggressive because excessive loans will disrupt bank liquidity.

This research is in line with (Serly & Kurniawan, 2020) and and (Marwansyah & Setyaningsih, 2018) the effect of loan to deposit ratio on profitability

The Effect of Non Perfoming Loan on profitability

The conclusion is that Non Performing Loan has an effect on profitability (ROA). Therefore NPL are used to see the level of ability of borrowers to pay off their debts, both principal and interest payments that are due. High problem loans will cause delays in bank revenues that should be received, so that a bank's profitability decreases. The higher the NPL value, the smaller the income (ROA) that the bank will get (Maulana et al., 2021). This is because banks have to bear losses and incur additional costs to make reserves for losses due to an increase in non-performing loans, which will affect profitability and other costs for credit default recovery.

This research is in line with (Maulana et al., 2021) and (Marwansyah & Setyaningsih, 2018)the effect of non perfoming loan ratio on profitability

The Effect of Loan to Deposit Ratio on Profitability is moderated by the Cash Ratio

The conclusion is that cash ratio is not able moderate the loan to deposit ratio on profitability. This is because the bank's ability to pay off loans in less than a year by utilizing its cash and cash equivalents does not result in an increase in income for the bank (Sarnawiah, 2019). But a cash ratio that is too high indicates that there are idle funds so that the cash that is owned is not managed optimally. One way to prevent idle funds at banks is by channeling credit. The impact of disbursed loans is to increase the bank's income and increase bank profitability. The cash ratio in banking must be in the right position to provide optimal performance (Nangur & Pamungkas, 2022).

The Effect of Non Performing Loans on Profitability moderated by the Cash Ratio

The conclusion is that cash ratio is not able moderate the non perfoming loan on profitability. The cash ratio is a measuring tool to see the state of a bank's liquidity. A good level of liquidity is an indicator for a bank to run smoothly. The cash ratio does not cause profits for the company (Khairani et al., 2020). However, a cash ratio that is too high indicates the existence of idle funds so that the cash owned by the bank can be used to pay off short-term obligations, namely withdrawing funds by third parties. The cash ratio does not affect profits at the bank but can be used to extend credit (Sarnawiah, 2019). By channeling credit, it is hoped that the bank will benefit, but in the process it is not uncommon for banks to experience problems, namely in the form of NPL. Non-performing credit is the inability of the debtor to pay off the debt. Even though there are non-performing loans, it does not affect its liquidity. This is because the bank has already established a loss reserve so that it will not interfere with its short-term payments or the assets owned by the bank.

CONCLUSION

Result of discussion of the data that has been obtained regarding the Effect of Credit Risk Management on profitability which is moderated by the Cash Ratio. From the discussion that has been obtained through data analysis, several conclusions can be drawn, namely: H_1 There is a partial influence of the LDR on profitability (ROA) because the increasing LDR shows that the bank can optimize its distribution and will directly increase the income. H_2 There is a partial influence of the NPL on profitability (ROA) because High problem loans will cause delays in bank revenues that should be received so that a bank's profitability decreases. H_3 cash ratio is not able moderate the LDR on profitability (ROA) because the bank's ability to pay off loans using cash and cash equivalents does not result in an increase in income for the bank. H_4 cash ratio is not able to moderate the NPL on profitability (ROA) because the bank has established a loss reserve so that it does not interfere with its short-term payments or the assets owned by the bank.

SUGGESTIONS

This researcher tries to make suggestions that might be useful as follows. Banking management, to always maintain good performance and continue to improve it by optimizing the resources they have to obtain good financial performance. This research can be used as a reference in observing the financial performance of banks in making decisions or to see how far the bank's current soundness is. So that both customers and investors can optimize their funds to invest.

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