



Analysis of the Effect of Third Party Funds, Non-Performing Loans, Loan to Deposit Ratio on Lending Before and After Covid-19 with Profitability as a Moderating Variable in Conventional Banks Listed on the Indonesian Stock Exchange for The Period 2017 – 2022

Ricky Martin Sitorus¹, Iskandar Muda², Rujiman³

^{1,2,3} Faculty of Economics and Business, University of North Sumatra, Medan

ABSTRACT: This study aims to analyze the factors that influence lending in banking companies on the Indonesia Stock Exchange, with a focus on third-party funds, non-performing loans, and loan-to-deposit ratios. Profitability is also evaluated as a moderating variable. The research object includes 40 conventional banks of the Indonesia Stock Exchange from 2017 to 2022. The analysis method involved multiple linear regression, moderated regression analysis, and paired sample t-tests. The results show that third-party funds have a significant positive effect on lending. Non-performing loans also affect lending positively although not significantly. Loan to deposit ratio has a positive and significant effect on lending. There is a significant difference in the level of third-party funds and loan-to-deposit ratio before and after the Covid-19 pandemic. However, there is no significant difference in the level of non-performing loans. Profitability does not moderate the effect of variables on lending.

KEYWORDS: Lending, Loan to Deposit Ratio, Non-performing Loans, On Assets, Return, Third Party Funds.

INTRODUCTION

In December 2019, the coronavirus emerged in Wuhan, China (World Health Organisation, 2020). In March 2020, WHO declared the virus a pandemic (Borio, 2020; Ashraf et al., 2022). COVID-19 spread globally in early 2020 and was confirmed in Indonesia in March 2020 (Susanto et al., 2023; Diantimala et al., 2021). The pandemic significantly affected the world economy, including Indonesia (Maria et al., 2022), creating huge pressure on the global economic sector and financial system. The impact is not only in the health sector, but also damages banking functions, causes losses and crises, and weakens the financial system as a whole (Seelye & Ziegler, 2020; Hasan et al., 2021). As a pandemic disease, COVID-19 has a complex impact and threatens the stability of the bank financial system (Aldasoro et al., 2020). Bank performance since the outbreak of COVID-19 is similar to the 2008 crisis, with all banks vulnerable to declines in risk-weighted asset values, capital adequacy ratios, and interest income (Aldasoro et al., 2020; Barua & Barua, 2020).

High economic growth in a country cannot be separated from the dynamics of development (Sudirman, 2020) and the contribution of banking (Fitri et al., 2017; Amrozi & Sulistyorini, 2020; Cintiya & Riswan, 2022). In the era of globalization, banking remains the main pillar in supporting economic growth, both in Indonesia and globally (Cornelia, 2022; Kurniati & Putri, 2020). In its operational activities, lending by banks is a high-risk activity that affects the sustainability of its business. Pasaribu and Mindosa (2021) stated that the banking sector is vulnerable in all countries due to the economy's dependence on bank loans. Credit expansion strategies by commercial banks can provide huge financial benefits, catalyze economic prosperity, and improve quality of life (Vinh et al., 2022). During the pandemic, commercial banks play an important role as a liquidity buffer for the private sector and the economy (Mano et al., 2021). However, research shows that bank lending during the COVID-19 pandemic has negative mechanisms, such as increased credit risk, inappropriate lending decisions, and decreased credit demand (Susanto et al., 2023; Wu et al., 2020). Views on the impact of lending during the COVID-19 pandemic vary, with some studies concluding that the spread of the virus is detrimental to economic activity and financial stability of banks (Disemadi & Shaleh, 2020), while other studies find positive effects on lending of weakly capitalized banks (Dursun-de Neef & Schandlbauer, 2021).

In providing credit to the public, banks need to have a source of funds (Bernardin & Sofyan, 2019) to support lending (Khairiyah et al., 2022). Banks raise funds from the public by attracting them to place deposits in the bank (Adha & Riwayati, 2019; Sinaga et al., 2020). Third-party funds, which include savings, current accounts, and deposits (Indrajaya et al., 2021), are the main



source for banks (Pinto et al., 2020). During the Covid-19 pandemic, the effect of third-party funds on lending has been the focus of research. Dursun-de Neef and Schandlbauer (2022) showed that mobility restrictions during the pandemic encouraged the accumulation of funds in deposits, increasing lending. Li et al. (2020) found that large banks experienced a decrease in deposits, while small banks experienced an increase. Although banks increased lending, the total credit supply remained unchanged. Levine et al. (2021) concluded that the increase in deposits during the pandemic was triggered by supply rather than demand, especially in regions with high COVID-19 infection rates.

In lending, banks face the risk of default or non-performing loans, which can be caused by customers who do not pay off their obligations intentionally or not, as well as analysis errors by banks (Djati & Kamal, 2017; Syukriah et al., 2020; Masrunsyah, 2018; Marsela & Suci, 2022). This condition can harm the bank's performance and reduce its profitability. During the COVID-19 pandemic, Cao and Chou's (2022) study in China showed a significant increase in banks' non-performing loan ratios despite a decline in total loan growth. Banks with high-quality capital more effectively control NPL ratios, and large banks, state-owned enterprises, and domestic banks have lower non-performing loan ratios. Hardiyanti and Aziz's (2021) research in Indonesia found a significant effect of COVID-19 on non-performing loans, with the COVID-19 variable being an external indicator of increased non-performing loans in Indonesian commercial banks. Hladika (2021) in Croatian National banks found an increase in expected credit losses and a decrease in banking sector profitability due to higher levels of provisions for non-performing loans during the pandemic.

Loan to deposit ratio is a bank performance indicator that compares the number of loans disbursed with third-party funds received, reflecting the efficient use of customer funds for lending (Asmara & Supardi, 2019; Riadi, 2018). Loan to deposit ratio also reflects the liquidity of the bank and its ability to meet short-term obligations (Amelia & Murtiasih, 2017). During the COVID-19 pandemic, banks faced high liquidity demands, highlighting the importance of good liquidity management (Irawati et al., 2019). Research by Li et al. (2020) showed that large banks in the US at the beginning of the pandemic experienced significant loan commitment withdrawals and provided loans without relying too much on deposits or capital ratios. Mano et al. (2021) emphasized the role of commercial banks as liquidity providers during the pandemic, making banks a liquidity provider for borrowers. The COVID-19 pandemic has also prompted an expansion of research into the impact of credit risk on bank lending and the role of banks as liquidity providers in the face of significant economic threats (Çolak & Öztekin, 2021).

Banks, as the main pillar of the economy, require effective performance monitoring, especially through the return on assets indicator, which reflects operational success and its impact on profit achievement (Sehany & Nurhidayati, 2022). Return on assets is a critical assessment for banks that focus on maximizing profits, as a measure of the bank's effectiveness in utilizing assets for profit and strengthening asset governance (Angraini, 2018). The availability of sufficient funds in banks is recognized as crucial in increasing the volume of lending and banks' opportunities for profit. An increase in third-party funds not only expands lending capacity but also increases the bank's interest income and profits, opening up greater opportunities for lending and improving the return on assets ratio (Angraini, 2018). Although banks seek high profits, prudent credit management is necessary to avoid high risks that can compromise the health of banks. Failure risks, such as non-current payments, can affect banking health (Safitri & Muslihat, 2021). Non-performing loans are very detrimental to banks, reducing interest income and opportunities, and negatively affecting return on assets and credit quality (Rohimah, 2022). The level of loan-to-deposit ratio is also an important factor, reflecting the bank's ability to channel third-party funds and increase return on assets (Susilawati & Nurulrahmatiah, 2021). Loan to deposit ratio that meets Bank Indonesia standards has the potential to increase bank profits through effective lending (Setyarini, 2020). During the COVID-19 pandemic, the operations of financial institutions were negatively affected, including deposit mobility, profitability, and lending (Mersha & Worku, 2020). Research by Vinh et al. (2022) showed a decrease in credit growth during the pandemic, resulting in a decrease in bank profitability. The impact of the pandemic on commercial banks in the Eurozone, especially lending and profitability, is also recognized (Lasak, 2021). Therefore, research that examines factors such as third-party funds, non-performing loans, and loan-to-deposit ratio with profitability as a variable can provide insight into their influence on bank lending, especially in the face of significant economic challenges such as the COVID-19 pandemic.

THEORETICAL FOUNDATION

Agency Theory

The concept of agency theory, developed by Jensen and Meckling in 1976, explains the dynamics of the relationship that exists between the owners of economic assets referred to as principals, and the individuals responsible for the supervision and



administration of those assets known as agents. Hence, in this particular theory, there is a contractual relationship between shareholders (owners of funds) and management (banks).

Signal Theory

The signal theory proposed in 1973 by Michael Spence refers to signals or cues given by the sender (bank) in the form of a signal or providing relevant pieces of information that can be utilized by the receiver. The recipient of the information will then adjust its behavior according to its understanding of the signal.

Credit

The term "credit" comes from Latin, specifically the word "credere" which contains the concept of trust. In this context, trust refers to the creditor's belief that the debtor, to whom credit is extended, will fulfill its obligations by returning the loan as agreed. For the debtor, this means accepting the trust and the obligation to pay according to the agreed terms and conditions. The definition of credit according to Banking Law No. 10 of 1998 is the provision of money or equivalent bills based on lending and borrowing agreements between banks and other parties.

Third-Party Funds

In banking operations, obtaining sources of funds is crucial. Simanjuntak (2021) identifies three types of sources of funds, namely: (i) internal capital from shareholders; (ii) external sources such as call money, interbank loans, non-bank financial institutions, and funds from Bank Indonesia; (iii) public funds from deposits such as current accounts, savings, deposits, and temporary deposits. Funds from the public, or what is referred to as Third Party Funds, are considered easier to obtain and are a broad source of funds (Tantri et al., 2018).

In a banking framework, shareholders and fund owners act as principals, while bank management acts as agents. Agency theory highlights the importance of this relationship. The efficient management of Third Party Funds by banks is expected to provide benefits for fund owners. The success of banks in managing Third Party Funds can increase the profits of fund owners, encouraging reinvestment motivation which in turn increases funds that can be channeled as credit. This creates a positive cycle where the bank's success not only provides financial benefits to fund owners but also encourages further growth to support the credit needs of the community. With the increase in the amount of bank funds, the bank's opportunities as an intermediary institution are increasingly wide open, allowing it to be more flexible in channeling its credit.

H1: Third-party funds have a positive effect on lending.

Non-Performing Loan

The quality of a loan can be assessed by the individual quality level of each loan, which directly affects the risk of default. A high level of credit quality reduces the potential risk of default and its negative impact on a bank's revenues and profits. The emergence of non-performing loans can have a significant negative impact on a bank's financial health. A high level of non-performing loans reflects a large risk in lending by the bank, while a low level of non-performing loans signifies a smaller credit risk. Therefore, before disbursing loans, adequate credit analysis needs to be conducted by adhering to prudent lending principles.

The application of the concept of agency theory provides deep insight into the relationship between banks as agents and shareholders or fund owners as principals. In this context, the failure of banks as agents in managing the distribution of funds to productive assets can lead to an increase in non-performing loans. An increase in non-performing loans in a bank can be an indicator of problems in the loan portfolio, indicate a lack of professionalism, increase credit risk, and limit the allocation of bank resources in lending.

H2: Non-performing loans have a negative effect on lending.

Loan to Deposit Ratio

Bank operations basically involve an intermediation function, where banks collect funds from the public as deposits and channel them back through loans. A bank's success in performing this function can be measured by its loan-to-deposit ratio. A low loan-to-deposit ratio indicates potential inefficiency in lending, with a large amount of funds remaining in the form of unproductive deposits (idle funds). On the other hand, loan to deposit ratio also serves as an indicator of bank liquidity. According to Tantri et al. (2018), the liquidity of a bank can be measured by its ability to pay debts, especially short-term debts, when collected.



Referring to Signaling Theory, a high loan-to-deposit ratio reflects significant lending by the bank to meet short-term liabilities. Conversely, a low loan-to-deposit ratio indicates the bank's limited capacity to extend credit to meet short-term liabilities. The higher the loan-to-deposit ratio, the greater the capacity of credit that has been extended to pay liabilities. A high loan-to-deposit ratio increases bank lending, given that the loan-to-deposit ratio measures the level of bank liquidity by using the amount of credit as its main source of liquidity.

H3: Loan to Deposit Ratio has a positive effect on lending.

Return on Asset

Profit is the main objective of every company, including banks, related to investment and income. The return on assets ratio is a measure of the company's ability to generate profits from assets. Profit as net income reflects the performance of the company and supports the continuity of banking. High profits increase public confidence, enabling increased deposits and lending by banks.

As bank profitability increases, the amount of third-party funds that can be channeled as credit by the bank also increases. A high level of profitability makes the bank more attractive to investors and customers, encouraging them to place their funds in the bank. As a result, banks have greater access to third-party funds that can be used to increase lending (Sari, 2022). Profitability in banks can affect the amount of non-performing loans against bank lending. More profitable banks tend to have lower credit risk because they have more resources to conduct more rigorous credit evaluations and handle non-performing loans. Conversely, less profitable banks may tend to result in increased credit risk and non-performing loans, so banks will face pressure and constraints to increase their lending (Riswana et al., 2019). Banks that have a high level of profitability have a greater capacity to manage their loan-to-deposit ratio efficiently and effectively. Bank profitability has the potential to influence the loan-to-deposit ratio in lending. Therefore, it can be concluded that an increase in bank profitability can have an impact on the loan-to-deposit ratio, which in turn can affect bank lending.

H4: Profitability moderates the effect of third-party funds on lending.

H5: Profitability moderates the effect of non-performing loans on lending.

H6: Profitability moderates the effect of loan-to-deposit ratio on lending.

RESEARCH METHODS

This study uses predetermined selection criteria to identify companies to be included in the sample. Company data was obtained through downloads from the websites www.idx.co.id and www.ojk.id. The research sample consists of 240 data, covering 40 conventional banks over a 6-year period listed on the Indonesia Stock Exchange between 2017 and 2022. The years 2017-2019 are considered as the period before the Covid-19 pandemic, while the years 2020-2022 are considered as the period during the Covid-19 pandemic.

Operational Definition and Variable Measurement Scale

This study uses six variables, specifically the Lending variable as the dependent variable, Profitability (ROA) as a moderating variable, and third-party funds (DPK), Non-performing Loans (NPL), and Loan to Deposit Ratio (LDR) as independent variables.

Credit Disbursement.

This research focuses on analyzing the dependent variable, which relates to the quantity of credit extended to the public by financial institutions. The amount of credit provided is denoted in nominal rupiah, presented in the allocation of funds based on loan and borrowing agreements between financial institutions and other parties. The equation formula for calculating the amount of credit distribution:

Lending = Ln (Total Loans Disbursed)

Third Party Funds.

Husin et al., (2022) define third-party funds as deposits such as demand deposits, deposits, and savings, where people entrust banks as a place to deposit funds. The equation formula calculates the amount of third-party funds:

Third-Party Funds = Ln (Current Account + Savings + Deposit)

Non-performing Loans.



Non-performing loans are loans that are not smoothly paid so that the credit becomes bad, which in turn will have an impact on the bank's health. The ratio of non-performing loans is shown in the following equation:

$$\text{Non-performing Loans} = (\text{Non-performing Loans}) / (\text{Total Loans}) \times 100\%$$

Loan to Deposit.

Loan to Deposit Ratio is a key indicator in measuring the intermediation function of banks in Indonesia, in accordance with Bank Indonesia Circular Letter No. 6/23/DPNP dated May 31, 2004. The equation formula calculates the Loan to Deposit Ratio:

$$\text{Loan to Deposit Ratio} = (\text{Total Loans Provided}) / (\text{Funds Received}) \times 100\%$$

Return On Assets.

The moderating variable in this study is profitability (ROA), which plays a role in strengthening or weakening the correlation between the independent variable and the dependent variable. Return on assets is used to measure the bank's ability to manage assets and liabilities while affecting the level of profit. As a moderating variable, return on assets will be tested to see the extent of its impact on the relationship between other variables in this study. The equation formula for calculating profitability (ROA) is as follows:

$$\text{Return On Asset (ROA)} = (\text{Profit Before Tax}) / (\text{Total Assets}) \times 100\%$$

RESEARCH RESULTS

Descriptive Statistics

The observations in this study cover 240 samples from 2017 to 2022. The variables described include the mean, standard deviation, lowest value, and highest value. Calculations were carried out for each company during the study years, with the following calculation results.

Table 1. Results of Descriptive Statistical Analysis

	CD	TPF	NPL	LDR	ROA
Mean	30.79746	31.02021	0.034920	0.845560	0.004800
Median	30.39340	30.64606	0.028800	0.840700	0.007600
Maximum	34.64132	34.80719	0.222700	1.712800	0.047400
Minimum	26.25139	26.96147	0.000000	0.123500	-0.158900
Std. Dev.	1.82933	1.792955	0.026368	0.227609	0.02996
Skewness	0.229837	0.228159	2.705175	0.692042	-2.903047
Kurtosis	2.243510	2.307926	15.73708	5.423888	14.59152
Jarque-Bera	7.835781	6.871928	1915.052	77.90922	1680.740
Probability	0.019883	0.032194	0.000000	0.000000	0.000000
Sum	7391.391	7444.851	8.380900	202.9343	1.152100
Sum Sq. Dev.	799.8038	768.3106	0.166176	12.38165	0.202336
Observations	240	240	240	240	240

Source: Eviews 12 output, 2023

Paired Sample T-Test

The Wilcoxon test is used as a non-parametric method when the data does not meet the normal distribution assumption in the difference test. Wilcoxon test results are evaluated based on their significance value. The following are the test results using the Wilcoxon test:



Table 2. Wilcoxon Test Results

Test Statistics ^a			
	TPF After Covid-19 - TPF Before Covid-19	NPL_after Covid-19 - NPL_before Covid-19	LDR_after Covid-19 - LDR_before Covid-19
Z	-6.452 ^b	-.539 ^c	-3.632 ^c
Asymp. Sig. (2-tailed)	.000	.590	.000
a. Wilcoxon Signed Ranks Test			
b. Based on negative ranks.			
c. Based on positive ranks.			

Source: IBM SPSS Statistics 26 output, 2023

Moderated Regression Analysis

In this study, hypothesis testing was conducted using Moderated Regression Analysis to evaluate the effect of third-party funds, non-performing loans, and Loan to Deposit Ratio on lending, with profitability as a moderating variable. Based on the selection of regression models using Eviews 12, the results show that the most appropriate regression model is the Random Effect Model, the results of hypothesis testing will be presented as follows:

Table 3. Moderated Regression Analysis Results

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-1.379371	0.236506	-5.832288	0.0000
DPK => PK	1.003413	0.007493	133.9189	0.0000
NPL => PK	0.003254	0.004506	0.722172	0.4709
LDR => PK	0.012231	0.000413	29.62792	0.0000
ROA => PK	-0.040689	0.053728	-0.75732	0.4496
DPK*ROA => PK	0.001175	0.001873	0.627274	0.5311
NPL*ROA => PK	0.0000976	0.001122	0.086934	0.9308
LDR*ROA => PK	0.0000975	0.000119	0.821654	0.4121
R-squared	0.990976	Mean dependent var		17.95701
Adjusted R-squared	0.990703	S.D. dependent var		1.101198
S.E. of regression	0.106176	Sum squared resid		2.615424
F-statistic	3639.479	Durbin-Wats on stat		1.352967
Prob(F-statistic)	0.000000			

Source: Eviews 12 output, 2023

RESEARCH DISCUSSION

The Effect of Third-Party Funds on Lending

The results of this study indicate that third-party funds have a positive and significant effect on lending. This is reinforced by a positive coefficient of 1.003413 and a positive t-statistic of 133.9189, with a probability value of less than 0.05 (0.0000 < 0.05). The t-test also shows a significant difference between the condition of third-party funds before and after Covid-19 (p-value: 0.000). Thus, it can be concluded that the Covid-19 pandemic contributed to an increase in the influence of third-party funds on lending.

The test results show a positive and significant effect of third-party funds on lending. Bank performance increases along with the growth of third-party funds collected. Third-party funds, which are collected from the public, play a central role as the main source of funds to support lending by banks. In its operations, banks rely on resources from third parties, and optimizing the use of these funds is crucial to achieving maximum income and greater lending (Sinaga et al., 2020; Husin et al., 2022). During the COVID-



19 pandemic period (2020-2022), the growth of third-party funds continued to increase, albeit with lower growth each year. This trend was especially noticeable in 2020 when people responded to the uncertainty by increasing their deposits in banks. However, lending experienced negative growth in the same year. This can be explained as banks' strategic response to manage risk and preserve capital amid the economic uncertainty caused by the pandemic. This finding is consistent with previous research which shows that third-party funds have a positive and significant impact on lending. Several studies such as those conducted by Cornelia (2022), Sinaga et al., (2020), Langodai & Lutfillah (2019), Indrajaya et al., (2021), and Pinto et al., (2020) also support this finding.

The Effect of Non-Performing Loans on Lending

Based on the research, the non-performing loan variable has a positive but insignificant effect on lending. This is indicated by the positive coefficient (0.003254) and positive t-statistic (0.722172) with a probability value greater than 0.05 ($0.4709 > 0.05$). T-tests also support this finding, showing no difference between the condition of non-performing loans before and after Covid-19 (asympt. sig. $0.590 > 0.05$). In conclusion, the Covid-19 pandemic has had no significant impact on the relationship between non-performing loans and lending.

Despite the increase in non-performing loans, lending continued to increase as the level of non-performing loans was still below the maximum limit set by Bank Indonesia, which is 5%. This situation shows that banks continue to maintain compliance with these provisions so that lending can continue despite the increase in non-performing loans from 2017 to 2022. In this study, it was found that the Covid-19 pandemic did not have a significant impact on the effect of non-performing loans on lending. This finding is different from the research by Ngatno and Apriatni (2022), who found that non-performing loans were higher during the COVID-19 pandemic and affected the bank's ability to distribute credit. This study shows that fluctuations in non-performing loans during the pandemic have no effect on bank lending. This finding is in line with previous studies which show that partially, non-performing loans have a positive but insignificant effect on lending. Other studies that support this finding include research by Kurniati and Putri (2020), Marsela and Suci (2022), Haryanto and Widyarti (2017), and Prabowo et al., (2018). This finding is not in accordance with the initial hypothesis which indicates a negative impact of non-performing loans on lending to conventional banks during the period 2017 to 2022.

The Effect of Loan-to-Deposit Ratio on Lending

In the results of this study, the coefficient value of the loan-to-deposit ratio was found to be positive at 0.012231, with a positive t-statistic of 29.62792 and a probability value of less than 0.05 ($0.0000 < 0.05$). Partially, it can be concluded that the loan-to-deposit ratio variable has a positive and significant influence on lending. This finding is reinforced by the results of a t-test with an asympt. sig. (2-tailed) of 0.000 ($0.000 < 0.05$), indicating a difference between the loan-to-deposit ratio before and after the Covid-19 pandemic. This conclusion indicates that the COVID-19 pandemic has had an impact on the effect of loan to deposit ratio on lending.

Based on the test results, it can be concluded that the loan-to-deposit ratio has a positive and significant effect on lending to conventional banks during the period 2017 to 2022. These results indicate that the higher the loan-to-deposit ratio, the greater the lending, and vice versa, a low loan-to-deposit ratio can lead to a decrease in lending. Therefore, the loan-to-deposit ratio variable is a crucial factor in determining the extent to which banks are able to distribute third-party funds that have been collected. During the study, it was found that the Covid-19 pandemic had a significant impact on the relationship between loan-to-deposit ratio (LDR) and lending. It was revealed that the pandemic caused a significant negative impact on the liquidity of conventional banks in Indonesia. During the Covid-19 pandemic period (2020 to 2022), the growth of the loan-to-deposit ratio tended to show a decline, especially in 2020 and 2021, when Covid-19 first emerged in Indonesia. The decrease in the loan-to-deposit ratio was caused by an increase in the receipt of funds from third parties without being offset by an increase in lending. This creates surplus liquidity in the bank with most of the funds becoming unproductive, lowering the loan-to-deposit ratio. The imbalance between fund receipts and lending is the main factor in the dynamics of the decline in the loan-to-deposit ratio during the Covid-19 pandemic. The findings of this study are in line with the results of previous studies which show that the loan-to-deposit ratio partially has a positive and significant impact on lending. This research is consistent with the findings conducted by Riadi (2018), Harmayati & Rahayu (2019), Amrozi & Sulistyorini (2020), Mesrawati et al., (2020), Puspasari et al., (2020), Nasedum et al., (2020), and Mamangkey et al., (2021). Thus, the results of this study support the hypothesis stating that there is a positive relationship between the loan-to-deposit ratio and lending to conventional banks in the period 2017 to 2022.



Profitability Is Not Able to Moderate the Effect of Third-Party Funds on Lending

From the results of the interaction test between the variables of third-party funds, return on assets, and lending, it can be concluded that return on assets is not effective as moderation on the effect of third-party funds on lending. This happens because of the bank's main role as an intermediary institution. Banks function as intermediaries that collect and flow funds without regard to the level of profitability. The bank's intermediary function continues regardless of whether the bank is profitable or not (Martynova et al., 2020). Therefore, the level of profitability is not a crucial factor in influencing the mechanism of collecting and channeling third-party funds in the form of credit (Sidharta et al., 2022). The most important thing for banks is to maintain the smooth running of the intermediary function.

Profitability Is Not Able to Moderate the Effect of Non-Performing Loans on Lending

The results of the interaction test between the variables of non-performing loans, return on assets, and lending concluded that return on assets is not as effective as moderation on the effect of non-performing loans on lending. The increase in non-performing loans in banks is not always related to profitability. Sometimes, banks may increase lending to achieve short-term profits, despite the risk of increasing non-performing loans. Credit risk management is a key aspect for banks, where its effectiveness plays an important role in maintaining the sustainability and profitability of the bank's business (Zaid & Khan, 2022).

Profitability Is Not Able to Moderate the Effect of Loan to Deposit Ratio on Lending

From the results of the interaction test between the loan-to-deposit ratio variable as the independent variable, return on assets as the moderating variable, and lending as the dependent variable, it can be concluded that return on assets did not succeed in moderating the effect of loan to deposit ratio on lending. This is due to the key role of the loan-to-deposit ratio as an indicator of bank liquidity, focusing on the bank's ability to meet depositors' payment obligations through the utilization of credit disbursed (Sudarmawanti & Pramono, 2017). Meanwhile, return on assets reflects the extent to which banks earn profits from productive assets, including loans. In this context, the loan to deposit ratio evaluates liquidity risk, while return on assets measures solvency risk or bank profitability. These two metrics are not always directly correlated. Fluctuations in loan to deposit ratio are not always in line with changes in return on assets. Other factors such as asset quality and operational efficiency also affect profitability (Darmawan et al., 2023). Conversely, changes in profitability do not always have a significant impact on bank liquidity, as reflected in the loan-to-deposit ratio in lending from third-party funds. Therefore, fluctuations in profitability do not directly affect the relationship between loan-to-deposit ratio and lending.

CONCLUSION

The research analyzed the impact of third-party funds, non-performing loans, and loan-to-deposit ratio on lending in 40 Indonesian banking companies from 2017 to 2022. Results indicate a positive and significant influence of third-party funds on lending, suggesting a strong link between external funding and bank lending. Non-performing loans showed an insignificant positive effect on lending, emphasizing the need to stay within a safe limit. Additionally, the loan-to-deposit ratio had a positive and significant impact on lending, highlighting a strong relationship between the two variables. The T-test analysis reveals a significant difference in third-party funds before and after the COVID-19 pandemic, indicating a notable impact on the relationship with lending. However, there is no significant difference in non-performing loans, suggesting the pandemic did not significantly affect their association with lending. On the other hand, the T-test shows a significant difference in the loan-to-deposit ratio before and after the pandemic, signifying its significant impact on lending during this period. The moderation tests indicate that profitability does not have a significant moderating effect on the relationships between third-party funds and lending, non-performing loans, and lending, as well as loan-to-deposit ratio and lending. In other words, profitability does not play a significant role in altering or strengthening these associations.

REFERENCES

1. Adha, S. N., & Riwayati, H. E. (2019). Analisis Faktor-faktor yang Memengaruhi Penyaluran Kredit Perbankan (Studi pada Bank Umum Milik Negara). *INOBISS: Jurnal Inovasi Bisnis dan Manajemen Indonesia*, 3(1), 106-117. <http://inobis.org/ojs/index.php/jurnal-inobis/article/view/124>



2. Aldasoro, I., Fender, I., Hardy, B., & Tarashev, N. (2020). Effects of Covid-19 on the banking sector: the market's assessment (No. 12). Bank for International Settlements. <https://ideas.repec.org/p/bis/bisblt/12.html>
3. Amelia, K. C., & Murtiasih, S. (2017). Analisis pengaruh DPK, LDR, NPL Dan CAR terhadap jumlah penyaluran kredit pada PT. Bank Qnb Indonesia, Tbk periode 2005-2014. *Jurnal Ilmiah Ekonomi Bisnis*, 22(1). <https://ejournal.gunadarma.ac.id/index.php/ekbis/article/view/1511>
4. Amrozi, A. I., & Sulistyorini, E. (2020). Pengaruh DPK, NPL, CAR, dan LDR Terhadap Penyaluran Kredit (Studi Kasus Pada Bank yang Terdaftar di Indeks LQ45 Tahun 2014-2018). *Jurnal Penelitian Teori dan Terapan Akuntansi (PETA)*, 5(1), 85-98. <http://journal.stieken.ac.id/index.php/peta/article/view/420>
5. Angraini, D. (2018). Pengaruh Dana Pihak Ketiga, Non Performing Financing, Tingkat Bagi Hasil Dan Modal Sendiri Terhadap Profitabilitas Dengan Pembiayaan Bagi Hasil Sebagai Variabel Intervening Pada Perbankan Syariah. *Jurnal Akuntansi Berkelanjutan Indonesia*, 1(1), 122-146. <https://garuda.kemdikbud.go.id/documents/detail/1064565>
6. Ashraf, D., Rizwan, M. S., Adiwibowo, D. H., & Yusan, R. I. (2022). Loan Portfolio Composition Of Islamic And Conventional Banks Pre-And Post-Covid-19 Pandemic? Case Of Indonesia. *Journal of Islamic Monetary Economics and Finance*, 8(3), 407-428. <http://www.jimf-bi.org/index.php/JIMF/article/view/1561>
7. Asmara, E. N., & Supardi. (2019). Determinant of Credit Distribution: Indonesian Banking Evidence. *KnE Social Sciences*, 139-159. <https://www.knepublishing.com/index.php/KnE-Social/article/view/5367>
8. Barua, B., & Barua, S. (2021). COVID-19 implications for banks: evidence from an emerging economy. *SN Business & Economics*, 1, 1-28. <https://link.springer.com/article/10.1007/s43546-020-00013-w>
9. Bernardin, D. E. Y., & Sofyan, I. (2019). Penyaluran kredit dengan eksistensi dana pihak ketiga. *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, 2(1), 126-135. <https://doi.org/10.36778/jesya.v2i1.52>
10. Borio, C. (2020). The Covid-19 economic crisis: Dangerously unique. *Business Economics*, 55, 181-190. <https://link.springer.com/article/10.1057/s11369-020-00184-2>
11. Cao, Y., & Chou, J. Y. (2022). Bank resilience over the COVID-19 crisis: The role of regulatory capital. *Finance Research Letters*, 48, 102891. <https://doi.org/10.1016/j.frl.2022.102891>
12. Cintiya, C., & Riswan, R. (2022). Pengaruh kinerja keuangan terhadap penyaluran kredit. *Sibatik journal: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, dan Pendidikan*, 1(10), 1931-1938. <https://www.publish.ojs-indonesia.com/index.php/SIBATIK/article/view/282>
13. Cornelia, S. (2022). Pengaruh Dana Pihak Ketiga, Loan to Deposit Ratio, Biaya Operasional terhadap Pendapatan Operasional, Return on Asset, dan BI Rate terhadap Penyaluran Kredit pada Bank Umum Konvensional di Bursa Efek Indonesia. *FIN-ACC (Finance Accounting)*, 6(12), 1914-1925. <https://journal.widyadharma.ac.id/index.php/finacc/article/view/1814>
14. Darmawan, M. W., Sutisna, E., & Suhara, E. The Influence of Capital Adequacy Ratio (Car), Loan to Deposit Ratio (Ldr) and Operational Costs of Operational Income (Bopo) On Profitability at Pt. Bank Negara Indonesia (Persero) Tbk. <https://doi.org/10.47191/ijsshr/v6-i6-82>
15. Diantimala, Y., Ridwan, R., Darwanis, D., & Arfan, M. (2021, November). The Impact of Conditional Conservatism on Bank Loan During Pandemic Covid 19 in the Asia Pacific Countries. In *International Conference on Business and Technology* (pp. 297-309). Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-031-08087-6_21
16. Disemadi, H. S., & Shaleh, A. I. (2020). Banking credit restructuring policy amid COVID-19 pandemic in Indonesia. *Jurnal Inovasi Ekonomi*, 5(02). <http://ejournal.umm.ac.id/index.php/JIKO/article/view/11790>
17. Djati, S. R. R., & Kamal, M. (2017). Analisis Pengaruh ROA, NPL, Suku Bunga Bank Indonesia (BI Rate), Dan Pertumbuhan Ekonomi (GDP) Terhadap Penyaluran Kredit KPR (Studi Pada Bank Persero Periode 2011-2015). *Diponegoro Journal of Management*, 6, 1-7. <http://eprints.undip.ac.id/54893/>
18. Dursun-de Neef, H. Ö., & Schandlbauer, A. (2021a). COVID-19 and lending responses of European banks. *Journal of Banking & Finance*, 133, 106236-106236. <https://doi.org/10.1016/j.jbankfin.2021.106236>
19. Dursun-de Neef, H. Ö., & Schandlbauer, A. (2022b). COVID-19, bank deposits, and lending. *Journal of Empirical Finance*, 68, 20-33. <https://doi.org/10.1016/j.jempfin.2022.05.003>



20. Fitri, L., Maulida, Y., & Indrawati, T. (2017). Pengaruh Suku Bunga Kredit, Dana Pihak Ketiga (DPK), dan Giro Wajib Minimum Terhadap Penyaluran Kredit Pada PT. Bank Central Asia, TBK. di Indonesia Tahun 2001-2015. *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, vol. 4, no. 1, Feb. 2017, pp. 379-392. <https://www.neliti.com/publications/123761/pengaruh-suku-bunga-kredit-dana-pihak-ketiga-dpk-dan-giro-wajib-minimum-terhadap>
21. Hardiyanti, S. E., & Aziz, L. H. (2021). The Case of COVID-19 impact on the level of non-performing loans of conventional commercial banks in Indonesia. *Banks and Bank Systems*, 62-68. [http://dx.doi.org/10.21511/bbs.16\(1\).2021.06](http://dx.doi.org/10.21511/bbs.16(1).2021.06)
22. Harmayati, W. R., & Rahayu, D. (2019). Faktor-faktor yang mempengaruhi penyaluran kredit pada bank umum yang go publik di bursa efek indonesia. *Jurnal Ekonomi Manajemen Akuntansi*, 26(46). <http://ejournal.stiedharmaputra-smg.ac.id/index.php/JEMA/article/view/345>
23. Haryanto, S. B., & Widyarti, E. T. (2017). Analisis Pengaruh NPL, NIM, BOPO, BI Rate dan CAR Terhadap Penyaluran Kredit pada Bank Umum Go Public Periode Tahun 2012-2016. Semarang, Universitas Diponegoro, 2015. <http://eprints.undip.ac.id/55691/>
24. Hasan, I., Politsidis, P. N., & Sharma, Z. (2021). Global syndicated lending during the COVID-19 pandemic. *Journal of Banking & Finance*, 133, 106121. <https://doi.org/10.1016/j.jbankfin.2021.106121>
25. Hladika, M. (2021). Impact of COVID-19 pandemic on the loans quality, provisions and profitability of the banking sector. *Economic and Social Development: Book of Proceedings*, 138-149. <https://doi.org/10.2139/ssrn.3863403>
26. Husin., Bangun, C. S., Suhara, T., Septiani, N., & Williams, A. (2022). Influence Of Third Party Funds on Credit Distribution. *ADI Journal on Recent Innovation*, 4(1), 34-42. <https://doi.org/10.34306/ajri.v4i1.749>
27. Indrajaya, D., Astuti, M., Maulidizen, A., & Kurniawan, N. (2021). The Effect of Third-Party Funds, Capital Adequacy Ratio, Casa Ratio, Bi Rate, And Inflation Towards The Distribution of Credit Banking in Indonesia. *International Journal of Economics Development Research (IJEDR)*, 2(3), 171-185. <https://doi.org/10.37385/ijedr.v2i3.282>
28. Irawati, N., Maksum, A., Sadalia, I., & Muda, I. (2019). Financial performance of indonesian's banking industry: the role of good corporate governance, capital adequacy ratio, non performing loan and size. *International Journal of Scientific and Technology Research*, 8(4), 22-26. https://api.elsevier.com/content/abstract/scopus_id/85065747976
29. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower. <http://hupress.harvard.edu/catalog/JENTHF.html>
30. Khairiyah, N. M., Fardafa, A., & Arazy, D. R. (2022). Pengaruh car, npl, dan ldr terhadap penyaluran kredit pada bank konvensional yang terdaftar di BEI periode 2017-2021. *INOVASI*, 18(3), 710-716. <https://journal.feb.unmul.ac.id/index.php/INOVASI/article/view/11637>
31. Kurniati, E. R., & Putri, F. E. (2020). Pengaruh Npl, Car, Roa Dan Bi Rate Terhadap Penyaluran Kredit Pada Bank Umum Yang Terdaftar Di Bursa Efek Indonesia Periode 2014-2016. *Medikonis*, 11(1), 71-84. <https://doi.org/10.52659/medikonis.v11i1.28>
32. Langodai, D. J., & Lutfillah, N. Q. (2019). The Influence of Third Party Funds, Capital Adequacy Ratio, Non Performing Loans to Credit Distribution on the Indonesia Stock Exchange. *Research In Management and Accounting (RIMA)*, 2(1), 14-25. <http://jurnal.wima.ac.id/index.php/RIMA/article/view/2599>
33. Lasak, P. (2021). The commercial banking sector in Eurozone after the Pandemic: The paths to recovery. <https://www.um.edu.mt/library/oar/handle/123456789/100000>
34. Levine, R., Lin, C., Tai, M., & Xie, W. (2021). How did depositors respond to COVID-19?. *The Review of Financial Studies*, 34(11), 5438-5473. <https://doi.org/10.1093/rfs/hhab062>
35. Li, L., Strahan, P. E., & Zhang, S. (2020). Banks as lenders of first resort: Evidence from the COVID-19 crisis. *The Review of Corporate Finance Studies*, 9(3), 472-500. <https://doi.org/10.1093/rcfs/cfaa009>
36. Mamangkey, J. H., Saerang, I. S., & Tulung, J. E. (2021). The Effect Of Third Party Funds, Capital Adequacy Ratio, Non Performing Loan, And Loan to Deposit Ratio On Total Lending At Commercial Banks Listed In Ojk Indonesia For The 2011-2018 Period. <https://doi.org/10.35794/emba.v9i1.32619>



37. Mano, R., Anamali, A., & Shosha, B. (2021). COVID-19, Business Failure and Bank Loan Collapse: Albanian Case. *Universal Journal of Accounting and Finance*, 1058-1066. <http://dx.doi.org/10.13189/ujaf.2021.090516>
38. Maria, S., Yudaruddin, R., & Yudaruddin, Y. A. (2022). The impact of COVID-19 on bank stability: Do bank size and ownership matter? *Banks and Bank Systems*, 17(2), 124–137. [http://dx.doi.org/10.21511/bbs.17\(2\).2022.11](http://dx.doi.org/10.21511/bbs.17(2).2022.11)
39. Marsela, K., & Suci, N.M. (2022). Pengaruh Inflasi, Bi Rate, Dan Non Performing Loan Terhadap Penyaluran Kredit Pada Bpr Konvensional Kabupaten Kelungkung Yang Terdaftar Di Otoritas Jasa Keuangan Indonesia. *Jurnal Manajemen*, 8(3), 519-528. <https://repo.undiksha.ac.id/10427/>
40. Martynova, N., Ratnovski, L., & Vlahu, R. (2020). Bank profitability, leverage constraints, and risk-taking. *Journal of Financial Intermediation*, 44, 100821. <https://doi.org/10.1016/j.jfi.2019.03.006>
41. Masrunsyah, A. P. (2018). Analisis Penyaluran Kredit pada Perbankan Indonesia Ditinjau dari Rasio Keuangan. *Ekonomia*, 7(1), 48-59. <https://core.ac.uk/download/pdf/290030111.pdf>
42. Mersha, D., & Worku, A. (2020). Effect of COVID-19 on the Banking Sector in Ethiopia. *Horn of African Journal of Business and Economics (HAJBE)*, 28-38. <https://ejhs.ju.edu.et/index.php/jbeco/article/download/2131/1206>
43. Mesrawati, M., Hutajulu, W., Siregar, S., Venny, V., Panggabean, S. R., & Halawa, F. (2020). Analisis Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio (CAR), Non Performing Loan (NPL) dan Loan to Deposit Ratio (LDR) terhadap Penyaluran Kredit Perbankan. *Journal of Economic, Bussines and Accounting (COSTING)*, 4(1), 109-116. <https://doi.org/10.31539/costing.v4i1.1442>
44. Nasedum, M. I., Murni, S., & Untu, V. N. (2020). Analisis Pengaruh Non Performing Loan (NPL) Loan to Deposit Ratio (LDR) Dana Pihak Ketiga (DPK) Dan Tingkat Suku Bunga Terhadap Penyaluran Kredit Pada Bank Sulutgo Pusat Manado Periode 2011-2018. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(1). <https://doi.org/10.35794/emba.v8i1.28013>
45. Ngatno., & Apriatni. (2022). Impact of the Covid-19 Pandemic on Performance of Rural Banks in Central Java–Indonesia. <https://ijcsrr.org/wp-content/uploads/2022/07/37-20-2022.pdf>
46. Pasaribu, P., & Mindosa, B. (2021). The bank specific determinants of loan growth and stability: evidence from Indonesia. *Journal of Indonesian Economy and Business*, 36(2), 93-123. <https://journal.ugm.ac.id/v3/jieb/article/view/1385>
47. Pinto, N. G. D. C. G., Bagiada, K., & Parameswara, A. A. G. (2020). Pengaruh DPK, NPL dan Inflasi Terhadap Penyaluran Kredit Pada PT. Bank Mandiri Periode Tahun 2014–2018. *Warmadewa Economic Development Journal (WEDJ)*, 3(2), 73-79. <https://doi.org/10.22225/wedj.3.2.2319.73-79>
48. Prabowo, E. S., Kristianti, F. T., & Dillak, V. J. (2018). Pengaruh Non Performing Loan (Npl), Capital Adequacy Ratio (Car), Dan Bi Rate Terhadap Penyaluran Kredit Perbankan (Studi Pada Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode 2012-2016). *eProceedings of Management*, 5(1). <https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/6294>
49. Puspasari, D., Dewi, K. H., & Sopilah, P. (2020). Pengaruh Dana Pihak Ketiga (Dpk), Loan to Deposit Ratio (Ldr), Non Performing Loan (Npl) dan Return On Asset (Roa) terhadap Jumlah Penyaluran Kredit. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(3), 1556-1566. <https://doi.org/10.31955/mea.v4i3.679>
50. Riadi, S. (2018). The effect of third parties fund, non performing loan, capital adequacy ratio, Loan to Deposit Ratio, return on assets, net interest margin and operating expenses operating income on lending (study in regional development banks in Indonesia). In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 1015-1026). <http://ieomsociety.org/ieom2018/papers/295.pdf>
51. Riswana, P. P., Soebroto, N. W., & Suriana, I. (2019). Pengaruh Dana Pihak Ketiga (Dpk), Capital Adequacy Ratio (Car), Dan Return On Assets (Roa) Terhadap Penyaluran Kredit. *Jmap: Jurnal Tugas Akhir Mahasiswa Akuntansi Poltekba*, 1, 183-191. <https://ejournal.poltekba.ac.id/index.php/jmap/article/view/63>
52. Rohimah, E. (2021). Analisis Pengaruh BOPO, CAR, Dan NPL Terhadap ROA Pada Bank BUMN Tahun 2012-2019 (Studi pada Bank BUMN yang Go Public di Bursa Efek Indonesia). *Jurnal Ilmiah Mahasiswa Akuntansi*, 1(2), 133-145. <https://jom.universitassuryadarma.ac.id/index.php/jima/article/view/39>
53. Safitri, D., & Muslihat, A. (2021). Pengaruh Capital Adequacy Ratio, Non Performing Loan dan Return On Asset Terhadap Penyaluran Kredit. *Journal of Economic, Bussines and Accounting (COSTING)*, 4(2), 565-574. <https://doi.org/10.31539/costing.v4i2.1581>



54. Seelye, N., & Ziegler, P. (2020). Impacts of COVID-19 on banking. Available at SSRN 3645556. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3645556
55. Sehany, D. M., & Nurhidayati, M. (2022). Pengaruh dana pihak ketiga dan inflasi terhadap profitabilitas pada bank umum syariah BUMN pada tahun 2016-2020. *Jurnal Asy-Syarikah: Jurnal Lembaga Keuangan, Ekonomi Dan Bisnis Islam*, 4(2), 92-108. <https://doi.org/10.47435/asy-syarikah.v4i2.1051>
56. Setyarini, A. (2020). Analisis Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap ROA (Studi Pada Bank Pembangunan Daerah di Indonesia Periode 2015-2018). *Research Fair Unisri*, 4(1). <https://doi.org/10.33061/rsfu.v4i1.3409>
57. Sidharta, R. B. F. I., Anggriani, R., Ibrahim, I. D. K., & Marchyta, N. K. (2022). Profitability: Third Party Funds and Credit Risk Study on Indonesian Digital Banking (Doctoral dissertation, Petra Christian University). <https://repository.petra.ac.id/id/eprint/19886>
58. Simanjuntak, H. (2021). Analisis faktor-faktor yang mempengaruhi penyaluran kredit mikro pada perbankan swasta (Doctoral dissertation, Universitas Sumatera Utara). <https://repositori.usu.ac.id/handle/123456789/31487>
59. Sinaga, J. S., Muda, I., & Silalahi, A. S. (2020). The effect of BI rate, exchange rate, inflation and third party fund (DPK) on credit distribution and its impact on non performing loan (NPL) on XYZ commercial segment bank. *Universal Journal of Accounting and Finance*, 8(3), 55-64. <https://pdfs.semanticscholar.org/5c3f/5e665b197f1fb0d45e6623b8c6392891bc6a.pdf>
60. Sudarmawanti, E., & Pramono, J. (2017). Pengaruh CAR, NPL, BOPO, NIM dan LDR Terhadap ROA (Studi kasus pada Bank Perkreditan Rakyat di Salatiga yang terdaftar di Otoritas Jasa Keuangan Tahun 2011-2015). *Among Makarti*, 10(1). <http://dx.doi.org/10.52353/ama.v10i1.143>
61. Sudirman, S. (2020). Analysis of credit distribution in government's bank listed on Indonesian stock exchange. In *Forum Ekonomi* (Vol. 22, No. 1, pp. 95-104). <https://doi.org/10.30872/jfor.v22i1.6619>
62. Susanto, A. A., Octavio, D. Q., Risfandy, T., & Wardani, D. T. K. (2023). Public ownership and local bank lending at the time of the Covid-19 pandemic: Evidence from Indonesia. *Pacific-Basin Finance Journal*, 102072. <https://doi.org/10.1016/j.pacfin.2023.102072>
63. Susilawati, S., & Nurulrahmatiah, N. (2021). Pengaruh Non-Performing Loan (NPL) dan Loan to Deposit Ratio (LDR) terhadap Return on Asset (ROA) dengan Net Interest Margin (NIM) sebagai variabel mediasi pada bank BUMN yang terdaftar di BEI. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 11(1), 69-89. <http://dx.doi.org/10.30588/jmp.v11i1.833>
64. Tantri, W., Sadalia, I., & Daulay, M. (2018). Factors Affecting Credit Distribution In Rural People's Bank In Sumatera Province North With Return Ratio On Asset As Intervening Variables. <https://core.ac.uk/download/pdf/229765012.pdf>
65. Vinh, L. H., Minh, N. H., Nguyen Thai Thanh, N.T., & Thanh, N. P. B. (2022). Impact Of The Covid-19 Pandemic On Loan Growth Of Commercial Banks In Vietnam. *Forbes & Fifth*, 3. <https://doi.org/10.5195/forbes5.2013.11>
66. Vinh, L. H., Minh, N. H., Nguyen Thai Thanh, N.T., & Thanh, N. P. B. (2022). Impact Of The Covid-19 Pandemic On Loan Growth Of Commercial Banks In Vietnam. *Forbes & Fifth*, 3. <https://doi.org/10.5195/forbes5.2013.11>
67. World Health Organization. (2020, June 29). Listings of WHO's response to COVID-19. World Health Organization. Retrieved August 29, 2023. <https://www.who.int/news/item/29-06-2020-covid-timeline>
68. Wu, J., Yao, Y., Chen, M., & Jeon, B. N. (2020). Economic uncertainty and bank risk: Evidence from emerging economies. *Journal of International Financial Markets, Institutions and Money*, 68, 101242. <https://doi.org/10.1016/j.intfin.2020.101242>
69. Zaid, M., & Khan, M. F. (2022). Non-Performing Loans Effects on Profitability and Lending Behavior of Commercial Banks: Empirical evidence. *Studies in Economics and Business Relations*, 3(2), 28-35. <https://doi.org/10.48185/sebr.v3i2.737>
70. Çolak, G., & Öztekin, Ö. (2021). The impact of COVID-19 pandemic on bank lending around the world. *Journal of Banking & Finance*, 133, 106207. <https://doi.org/10.1016/j.jbankfin.2021.106207>

Cite this Article: Ricky Martin Sitorus, Iskandar Muda, Rujiman (2023). Analysis of the Effect of Third Party Funds, Non-Performing Loans, Loan to Deposit Ratio on Lending Before and After Covid-19 with Profitability as a Moderating Variable in Conventional Banks Listed on the Indonesian Stock Exchange for The Period 2017 – 2022. International Journal of Current Science Research and Review, 6(12), 8419-8430