



## Analysis of the Effect of Credit Restructuring on the Liquidity Level of Banks Listed on the Indonesian Stock Exchange (IDX) Before and After the COVID-19 Pandemic

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### ABSTRACT

This research aims to determine the effect of credit restructuring on liquidity levels through the Loan to Deposit Ratio before the COVID-19 pandemic and after the COVID-19 pandemic. The data used is secondary data in financial reports for 2019 before the COVID-19 pandemic and 2020-2023 after the COVID-19 pandemic. The results of this research show that the Loan to Deposit Ratio experienced a decrease, as evidenced by the results of descriptive statistical research, which showed the average difference (Loan to Deposit Ratio decreased by 0.1423).

## **INTRODUCTION**

One aspect that determines how advanced or developed a country is is its economy. The global economy is currently facing many problems as time goes by. Before the COVID-19 pandemic emerged, every country had to maintain stable and sound economic growth. Banking is an industry that is very important for the survival of a country. According to Republic of Indonesia Law No. 10 of 1998 concerning banking, banks are business entities that collect funds from the public in the form of savings and distribute them to the public through credit and other forms to improve the standard of living of many people. Therefore, banks are companies that operate in the financial sector and function as the center of a country's economy.

Bank loans provide funding for long-term investments, while bank deposits serve as a safe and liquid transaction medium at the core of the payment infrastructure in the modern economy (Beck et al., 2023). The performance of a bank or banking sector is greatly influenced by the bank's management of its assets and liabilities. Managing these assets and liabilities is considered to be very important in order to gain profits and increase company value (Ahmad et al., 2020). Good asset and liability management also shows a high level of company liquidity. Liquidity is the ability of a company to fulfill its obligations to pay its short-term debts. Liquidity is easy to change because it is flexible and changeable. Adequate liquidity has been proven to increase the confidence of market players, thereby ensuring financial market stability (Mullings, 2023). Many variables can influence a company's liquidity level. The COVID-19 pandemic is one of the external factors that has influenced the current level of liquidity in the Indonesian banking sector. The COVID-19 pandemic is one of the external factors that has influenced the current level of liquidity in the Indonesian banking sector.

The COVID-19 pandemic in Indonesia began in February 2020. The government made policies and regulations to suppress the spread of the virus. The government is starting to limit crowd activities such as social distancing, staying at home, reducing working hours, and even requiring businesses to work from home (WFH). To help all citizens affected by the pandemic, policyholders must immediately take appropriate policies for all their citizens. Indonesia's unstable economy has been improved through various policies and stimuli..

In SP 138/GKPB/OJK/X/2023 on the development of the banking sector in July 2023, credit grew by 8.54% yoy (from 7.76% yoy in June 2023) to IDR 6,686 trillion, with the highest growth in investment of 11.15% yoy. Per type of ownership, credit growth for state-owned banks was the highest at 9.81% yoy. Annual growth in Third Party Funds (DPK) rose to 6.62% yoy in July 2023 from 5.79% yoy in June 2023, or IDR 8,064 trillion. Current accounts experienced the highest growth of 10.92% yoy.

Considering the banking situation in Indonesia, which is indicated by the decline in operating income. The Financial Services Authority (OJK) has issued a stimulus and restructuring policy for the financial industry to overcome Indonesia's economic instability. The government provides relief by

restructuring credit for debtors affected directly or indirectly by COVID-19. In POJK Number 11/POJK 03/2020 concerning National Economic Stimulus as Policy Countercyclical Impact of the spread of COVID-19, there is an OJK credit restructuring policy to continue to drive the economy amidst the weak economy due to the spread of COVID-19.

Credit restructuring is an improvement effort carried out in credit activities for debtors who have the potential to experience difficulties fulfilling their obligations. According to this policy, banks or finance companies can restructure or relieve bank credit installments or lease loans for debtors or borrowers whose businesses and jobs have been directly or indirectly affected by the COVID-19 pandemic. This may include reducing credit interest rates, extending installment terms, reducing principal and interest arrears, or adding credit facilities or leasing.

This policy asks banks to provide relief by reducing credit interest rates or extending credit terms. POJK Number 11/POJK 03/2020 aims to improve banking performance, especially the intermediation function, maintain financial system stability, and support economic growth. By providing exceptional treatment for credit or bank financing to debtors affected by the spread of COVID-19. On the other hand, banking liquidity levels could also be disrupted by this policy.

By maintaining a balance between financing growth and maintaining liquidity, OJK encourages intermediation performance. Banking sector liquidity was adequate, and liquidity ratios remained stable in July 2023. Liquid Assets/Non-Framework Deposits (AL/NCD) ratios fell to 118.37% (from 119.05% in June 2023) and 26.57 % (from 26.73% in June 2023), remaining well above the 50% and 10% thresholds, respectively. Credit quality remains maintained, with a banking net NPL ratio of 0.80% (from 0.77% in June 2023) and gross NPL of 2.51% (from 2.44% in June 2023). On the other hand, the recovery of the real sector has caused a decrease in COVID-19 restructuring credit of IDR 21.91 trillion from IDR 361.04 trillion to IDR 339.13 trillion, with the number of customers falling by 90 thousand from 1.57 million to 1.48 million.

Based on the explanation above encourages researchers to conduct research entitled "Analysis of the Effect of Credit Restructuring on the Liquidity Level of Banks Listed on the Indonesian Stock Exchange (BEI) Before and After the COVID-19 Pandemic". This research aims to analyze whether there are significant differences in liquidity levels before and after the COVID-19 pandemic.

## **LITERATURE REVIEW**

### **Banking**

Banks in a country are institutions that play an essential role in carrying out the function of flowing funds in an economy. Banks are divided into conventional and sharia banks based on their operational activities. Conventional banks are banks whose operational systems use interest rates and general agreements based on national regulations. Meanwhile, Islamic banks

are banks whose operational system uses profit sharing or nisbah. The benefits given to customers depend on the profits received by the bank. Most banks list their shares on the IDX to carry out a public offering or Initial Public Offering (IPO) or what is usually called Go Public. The purpose of the listing is so that the bank's shares can be traded from one investor to another. The banking sector is one of the sectors of interest to the Indonesian people, so many issuers are working to offer their shares.

### **Liquidity**

Liquidity is an activity for managing funding sources, starting from planning funding needs, needs followed by implementing the disbursement of funding sources and controlling and supervising existing funding sources (Hanafi Batubara and National Development Veterans Jakarta 2020). Liquidity in accounting is the ease with which an asset can be cashed in and the level of a company's ability to pay short-term debt as it falls due. Liquidity can also be used as a benchmark by investors to assess a company's ability to pay its short-term debt.

Generally, the bank's liquidity ratio is calculated by calculating the amount of money given to the public in the form of credit plus the amount of public funds and capital used. The liquidity ratio is a measure that assesses how good a company's financial condition is by looking at how well the company can pay off its short-term obligations. Several liquidity ratio calculations exist, including the loan-to-deposit ratio (LDR). Loan Deposit Ratio compares the amount of credit provided and third-party funds from the public, consisting of current accounts, savings, and term savings (deposits). LDR is a traditional measurement that shows time deposits, current accounts, savings, etc., used to fulfill customers' loan requests (Kustina et al., 2022). The higher the LDR level, the more illiquid a bank is because it is more challenging to meet short-term obligations such as sudden withdrawals of their deposits by customers. Conversely, a bank is more liquid if its LDR level is lower.

### **Credit Restructuring**

Resolving problematic credit can be achieved in two ways, namely by credit rescue and credit settlement. Credit rescue is a step in resolving problematic credit through renegotiation between the bank (creditor) and the customer (debtor). Credit settlement is a step in resolving problematic credit through legal institutions (Septriawan et al., 2021). According to OJK, credit restructuring is an improvement effort carried out in credit activities for debtors with the potential to experience difficulties fulfilling their obligations. Restructuring is an effort made by banks in credit business activities so that debtors can fulfill their obligations through reducing interest rates, reducing credit interest arrears, extending credit terms, adding credit facilities, taking over debtor assets by applicable regulations, and converting credit into temporary capital participation (Arsy & Cahyaningtyas, 2022). Credit restructuring policies include reducing credit interest rates, extending credit terms, reducing credit principal arrears, increasing credit facilities, or even converting credit into temporary capital participation (Financial Services

Authority, 2020). There are several requirements for applying for credit restructuring to a bank, including that the debtor is having difficulty paying the principal and/or interest on the credit, has good business prospects, and is considered capable of fulfilling obligations after the credit is restructured.

### Hypothesis

Credit restructuring is one of the improvement efforts carried out in credit activities for debtors who have the potential to experience difficulties fulfilling their obligations. Credit restructuring aims to maintain a bank's level of liquidity. During the COVID-19 pandemic, the economy became unstable, giving rise to problem loans. Credit restructuring can reduce the value of problem loans at a bank. So that banks can carry out financing that is useful for increasing their liquidity.

Research conducted by (Puspita et al., 2020) shows that, on average, banking companies can still fulfill their obligations during the COVID-19 pandemic. Then, research conducted by (Ayu et al., 2022) shows that in the period before and after the implementation of the credit restructuring policy, there was one liquidity ratio variable that experienced a significant change in average, namely the variable cash Ratio, while other variables, namely Loan to Asset Ratio did not experience significant changes in average. From this description, the following research hypothesis can be formulated:

Ha: There are differences in liquidity ratios from the influence of credit restructuring before and after the COVID-19 pandemic.

### Conceptual Framework

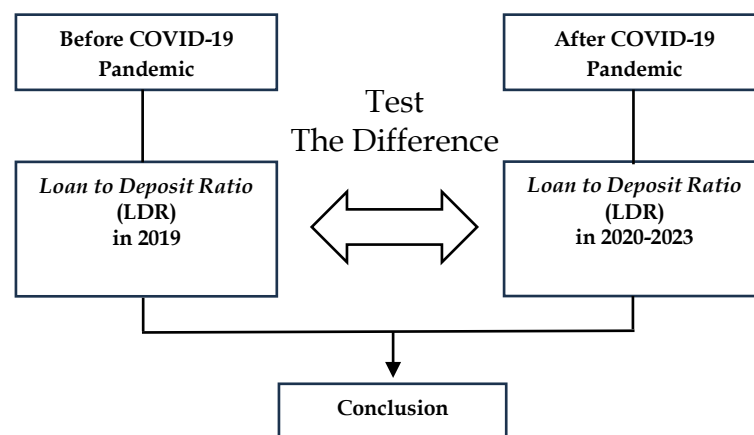


Figure 1. Conceptual Framework

### METHODOLOGY

The type of research used in this research is comparative research with a quantitative approach. This research uses secondary data in financial reports from banks registered on the IDX covering 30 companies. The sample used is the financial report for each semester, from the first semester of 2019 to the first semester of 2023, for each banking company.

No	Company Names
1	Bank ANZ Indonesia
2	Bank Artha Graha Internasional Tbk
3	Bank Capital Indonesia Tbk
4	Bank Central Asia Tbk
5	Bank CIMB Niaga Tbk
6	Bank Danamon Indonesia Tbk
7	Bank DBS Indonesia
8	Bank HSBC Indonesia
9	Bank INA Perdana Tbk
10	Bank Jtrust Indonesia Tbk
11	Bank Mandiri (Persero) Tbk
12	Bank Mayapada Internasional Tbk
13	Bank Maybank Indonesia Tbk
14	Bank Mega Tbk
15	Bank Mestika Dharma Tbk
16	Bank MNC Internasional Tbk
17	Bank Negara Indonesia (Persero) Tbk
18	Bank OCBC NISP Tbk
19	Bank PAN Indonesia Tbk
20	Bank Panin Dubai Syariah Tbk
21	Bank Permata Tbk
22	Bank QNB Indonesia Tbk
23	Bank Rakyat Indonesia (Persero) Tbk
24	Bank Raya Indonesia Tbk
25	Bank Syariah Indonesia Tbk
26	Bank Tabungan Negara (Persero) Tbk
27	Bank Tabungan Pensiunan Nasional Tbk
28	Bank Tabungan Pensiunan Nasional Syariah Tbk
29	Bank UOB Indonesia Tbk
30	Bank Victoria International Tbk

Table 1. Company Names

The data collection technique in this research is documentation. The documentation method is by recording existing or available data. Then, look for the liquidity ratio, namely Current Ratio or Current Ratio, through the financial reports of each banking company that have been collected. The data analysis procedure in this research is descriptive analysis. The normality test uses a test Sample, Shapiro Wilk, then tests the difference using an independent Sample T-Test if the data is normally distributed and uses Mann Whitney if the data is not normally distributed.

**RESEARCH RESULT**  
**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Before Covid 19	30	.44	1.62	.9033	.23298
After Covid 19	30	.30	1.42	.7610	.21548
Valid N (listwise)	30				

Sumber: SPSS Data Processing Results (2023)

Table 2. Descriptive Statistics Test Results

Based on the results of Table 2, before COVID-19 or in 2019, the average deposit ratio was 0.9033. Meanwhile, after Covid or in 2020-2023, the average Loan to Deposit Ratio was 0.7610. This shows a decrease in the average Loan to Deposit Ratio, which is significant from before the occurrence of COVID-19 to after the occurrence of COVID-19, namely 0.1423. The smallest value (minimum) before Covid was 0.44, and the most significant value (maximum) was 1.62. While the smallest value (minimum) after Covid of 0.30 and the most significant value (maximum) after Covid of 1.42.

**Normality Test**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Before Covid 19	.204	30	.003	.902	30	.010
After Covid 19	.159	30	.050	.927	30	.041

a. Lilliefors Significance Correction

Sumber: SPSS Data Processing Results (2023)

Table 3. Normality Test Results

Based on Table 3, test results in the One-Sample Kolmogorov Smirnov test to value the Deposit Ratio before Covid it was 0.010, and before Covid, it was 0.041, which means  $<0.05$ . It can be concluded that the data is not normally distributed or not normal. So it can be concluded that hypothesis testing will be carried out using tests Mann-Whitney.

**Hyphotesis Test**

	LDR Results
Mann-Whitney U	245.500
Wilcoxon W	710.500
Z	-3.025
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Indeks

Sumber: SPSS Data Processing Results (2023)

Table 4. Hypothesis Test Results

Based on the results of the Mann-Whitney test on the value-to-deposit ratio (LDR) as in Table 4, it is known that the value  $Asymp - Sig. (2-tailed)$  is 0.002. Because the significance value is 0.002, which means  $<0.05$ , the research hypothesis is accepted. In other words, there is a difference in the averages Loan to Deposit Ratio before and after the COVID-19 pandemic.

## DISCUSSION

The research results show that, on average, there are differences in liquidity levels before the COVID-19 pandemic and after the COVID-19 pandemic. The results of the test significance prove this value Mann-Whitney Test of 0.002, which means  $<0.05$ . On average, it shows that the level of liquidity has decreased by 0.1423. According to test results of the Mann-Whitney Test, there are differences in the Deposit Ratio. The results of this research are in contrast to research conducted by (Puspita et al., 2020) from 10 samples of data obtained from financial reports by calculating liquidity ratios, showing that, on average, banking companies still can fulfill their obligations during the COVID-19 pandemic.

Average Loan-to-Deposit Ratio banking companies before the COVID-19 pandemic, out of 30 data samples, 14 banking companies had an average Loan-to-Deposit Ratio of  $>92\%$ , and seven companies had an average of  $<72\%$ . Meanwhile, after the COVID-19 pandemic, from 30 data samples, four companies had an average value of  $>92\%$ , and 14 companies had a value of  $<78\%$ . Based on BI Regulation No. 15/7/PBI/2013, the minimum target LDR limit is 78%, and the maximum LDR limit is 92%. If the LDR value at a bank is less than the minimum limit or more than the maximum target LDR limit, it is categorized as a bank that is not healthy or cannot fulfill its obligations.

Decline Loan to Deposit Ratio This is because the economy has not yet fully recovered due to the impact of the COVID-19 pandemic. Research conducted by (Kholiq & Rahmawati, 2020) states that physical distancing exists, causing the business sector not to run, so the business sector with bank loans experiences repayment difficulties. If this is left unchecked, it will affect the level of credit collectibility. Meanwhile, the level of bank health is greatly influenced by the value of a bank's bad loans. Apart from that, interest rates can also affect the health of banks, where the higher the interest rate given, the higher the bad credit that will occur because debtors are unable to pay their obligations.

## CONCLUSIONS AND RECOMMENDATIONS

This research aims to determine the effect of credit restructuring on liquidity levels through the Loan to Deposit Ratio before the COVID-19 pandemic and after the COVID-19 pandemic. Based on different test results from Mann-Whitney, it can be concluded that there is a difference in the deposit ratio before the COVID-19 pandemic in 2019 and after the COVID-19 pandemic in 2020-2022. Judging from the descriptive statistics of the average difference (mean) mark Loan Deposit Ratio before the COVID-19 pandemic, it was higher at 0.9033 compared to the average(mean) loan-to-deposit ratio after the COVID-19 pandemic, it was 0.7610. Based on the results of descriptive statistics, the most significant value (maximum) Loan to Deposit Ratio after the COVID-19 pandemic was more significant with a value of 1.62, while before the

COVID-19 pandemic, it had a value of 1.42. So, the Loan to Deposit Ratio experienced a decrease as evidenced by the results of descriptive statistical research, which showed the average difference (Loan to Deposit Ratio decreased by 0.1423).

Based on the results of the discussion and conclusions above, the author's first suggestion for the government is to maximize the policies made in the financial sector to maintain economic stability between financial institutions and society in the recovery conditions due to the COVID-19 pandemic. Second, the community should pay more attention to and support the policies issued by the government to maintain the country's economy. Lastly, for further research, it is hoped that we can calculate the level of liquidity using different ratios in order to obtain varied research results, as well as developing data samples and event observation periods from this research, so it is hoped that the research results will be much more accurate and objective.

### **ADVANCED RESEARCH**

Based on the author's experience in this research process, there are several limitations experienced and several factors that can be considered by further research because this research has shortcomings that need to be corrected. The first limitation of this research is the small number of data samples, which makes the research results less accurate. The second is that the research object only focuses on banks listed on the Indonesian Stock Exchange, so the research is not varied. Lastly, in calculating the level of liquidity, only calculate using one ratio, namely to Deposit Ratio, so that the research results become less objective.

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