# Liquidity Risk Of Conventional Banking In Indonesia

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***Abstract-*** *This article aims to analyze whether operational efficiency, capital, credit risk, growth of third party funds, and profitability are determinants of liquidity risk. This study uses a quantitative approach with the population used is conventional banking in Indonesia, the sample used is 9 conventional banks in Indonesia which have a bank asset ratio value above 2%. The analytical method used in this study is the EViews panel data regression method. The results of the analysis in this study conclude that the variables of operational efficiency, capital, and growth of third party funds are partially determinants of liquidity risk. Partial credit risk and profitability are not determinants of liquidity risk.*

***Keywords:*** *Conventional Banking, Liquidity Risk, Conventional Banking*

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## I.    INTRODUCTION

Banking is a financial institution that has an important role in the economic growth of a country.   The bank as an intermedia institution is tasked with collecting funds from the surplus and deficit parties. In addition, the trust of sources of funds in banks can make the circulation of money in the bank more stable. According to POJK No. 18/POJK.03/2016, Liquidity Risk is the risk resulting from the Bank's inability to meet maturing obligations from cash flow funding sources and/or from high-quality liquid assets that can be collateralized, without disrupting the Bank's activities and financial condition. Banking liquidity risk can be determined by finding the ratio of Liquid asset to Total Asset from the desired bank. The LTA ratio is used to calculate the amount of liquid assets owned by banks from the total assets owned in accordance with Bank Indonesia Regulation No.13/24/DPNP/2011. A high LTA ratio illustrates that the amount of assets available to be exchanged into cash is also high, indicating that the bank's liquidity condition is in good condition.
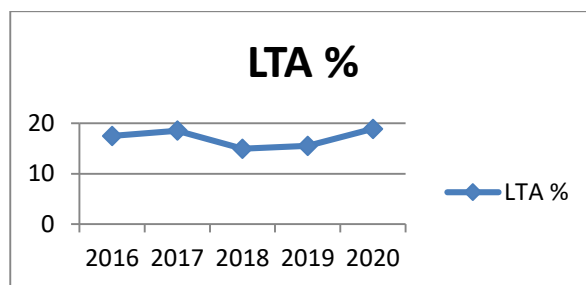


**Figure 1. LTA Ratio  Convensional Banking**
**Source: www.ojk.go.id (data processed)**

Figure 1.1 shows that the LTA ratio fluctuated In 2016 the LTA ratio was 17.50%, and in 2017 the LTA ratio was 18.56%, in 2018 the LTA ratio of banks decreased by 3.6% to 14.96%. In 2019-2020, LTA in banking experienced an increase where in 2019 the LTA ratio was 15.51% and in 2020 it was 18.91%. Liquidity risk does not only occur in small-scale banking companies but can occur in banking companies with Too Big To Fail status. Banks with Too Big To Fail status are large banks that have systemic global influence with a very large risk for the government to let these banks go bankrupt, so the government must provide liquidity assistance to TBTF status banks that experience liquidity problems. Too Big To Fail is an idea put forward by Stewart Mc Kinney in 1984. Sobarsyah (2017) stated that banks with TBTF predicate are indeed very prone to triggering systemic risks, especially if the bank is in monitoring liquidity risk. If one of these banks falls, it will create a domino effect on the other banks.

There are several determinants of bank liquidity risk, these determinants are operational efficiency, capital, credit risk, growth of third party funds, and profitability.

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Research on the determinants of liquidity risk has been conducted by several researchers and found different results. Jefri at al. (2018) which states that operating costs on operating income have a significant negative effect on liquidity risk. Research by Lasty at al. (2020) states that operational efficiency has a significant positive effect on liquidity risk. Research by Arfiyanti at al. (2020) proves that the Capital Adequacy Ratio (CAR) has no effect on liquidity risk. Faruque (2021) proves that the Capital Adequacy Ratio (CAR) has a positive insignificant effect on liquidity risk. Research by Alwan and Harjun (2017) which states that Non-Performing Loans (NPL) do not affect liquidity risk. research Lasty at al. (2020) NPL has a significant positive effect on liquidity risk. . Achmad's research (2019) proves that third-party funds have a significant negative effect on liquidity risk. Research by Faisusza and Rizal (2015) states that Return On Asset (ROA) has no effect on liquidity risk. Khoutem and Hichem's (2015) research proves that Return On Asset (ROA) has a significant positive effect on liquidity risk.

The purpose of this study is to analyze whether operational efficiency, capital, credit risk, third-party fund growth, and profitability are determinants of liquidity risk

## II.     METHOD

This research is a quantitative research with the type of explanatory research. This study examines the relationship between independent variables in the form of operational efficiency, capital, credit risk, growth of third party funds, and profitability with dependent variables in the form of liquidity risk.

The population data used in this study is conventional banking in Indonesia. The sample used in this study is nine conventional banks in Indonesia that have an asset ratio value of more than 2% of total national banking assets. The sampling technique in this study uses the purposive sampling method, which is a sampling method using certain criteria. The technique was chosen based on the objectives of this study.

The type of data used in this study is secondary data. While the source of data comes from the financial statements of each bank. Research data is obtained by accessing the annual report, the Financial Services Authority through the www.ojk.go.id website and the website of each bank. The data used in the study is panel data or pooled data, panel data is the combined data of cross section and time series.

The variables used in the study include dependent variables in the form of liquidity risk (LTA), and independent variables in the form of operational efficiency (BOPO), capital (CAR), credit risk (NPL), growth of third party funds (PDPK), profitability (ROA).

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$$LTA_{it} = \beta_0 + \beta_1\,BOPO_{it} + \beta_2\,CAR_{it} + \beta_3\,NPL_{it} + \beta_4$$
$$PDPK_{it} + \beta_5\,ROA_{it} + e_i$$

LTA explains liquidity risk, BOPO explains operational efficiency, CAR explains capital, NPL explains credit risk, PDPK explains the growth of third-party funds, ROA explains profitability.

The regression data panel has three estimation models to choose from, namely the common effects, fixed effect, random effects model. The chow test is used to choose between an accurate common effects or fixed effect model. The hausman test is used to choose between accurate random effects or fixed effect models.

RESULTS AND DISCUSSION

The results of the chow test explain that Cross-section Chi-square and and Cross-section F by 0.0000 are smaller than the level of significance, so an accurate model for panel data regression is fixed effect.

**Table 1 Uji Chow**

| Effects Test | Signifikansi |
|---|---|
| Cross-section F | 0.0000 |
| Cross-section Chi-square | 0.0000 |

Source: data processing results

The results of the hausman test explain that random cross-section amounts to 0.0009 are smaller than the level of significance. So we get an accurate model for panel data regression is fixed effect.

**Table 2 Uji Hasusman**

| Effects Test | Signifikansi |
|---|---|
| Cross-section random | 0.0009 |

The result of *fixed effect* model is:

**Table 3 Hasil Regresi Data Panel *Fixed Effects Model***

| Variabel | Koefisien | t-Statistik |
|----------|-----------|-------------|
| C | -1.031 | -0.151 |
| BOPO | 0.220 | 4.373** |
| CAR | 0.588 | 2.851** |
| NPL | -0.995 | -0.915 |
| PDPK | 0.195 | 2.218** |
| ROA | -0.764 | -1.249 |

The R-Square value obtained from the fixed effect model is 82%. Proving that the average variation of the dependent variable in the form of liquidity risk (LTA) can be explained by the average variation of the independent variable in the form of Operating Expenses Operating Income (BOPO), Capital Adequacy Ratio (CAR), Growth of Third Party Funds (PDPK).

The results of the study prove that BOPO is partially significant with a positive regression coefficient, meaning that operational efficiency is a determinant of Liquidity Risk. A high BOPO level indicates that the bank in managing operational costs is increasingly inefficient. The more inefficient a bank is because of the high operational costs will make the funds issued by the bank even greater. The high level of BOPO makes banks in generating profits decrease, the decreasing level of profit will make the funds allocated to meet liquidity also decrease, causing the liquidity risk faced by a bank to be higher.

The results showed that the Capital Adequacy Ratio (CAR) is partially significant with a positive regression coefficient, meaning that capital is a determinant of Liquidity Risk. The high CAR ratio indicates that risky assets funded by banks' own capital are high, this causes banks to provide more funds to prepare in case of losses.

The results prove that Non-Performing Loans (NPL) are partially insignificant, meaning that Credit Risk is not a determinant of Liquidity Risk. The high and low credit risk of a bank does not affect the level of liquidity risk of a bank. This is because credit distribution does not always use funds from liquid assets but comes from third-party deposits.

The results show that the growth of third-party funds is partially significant with a positive regression coefficient, meaning that the growth of third-party funds is a determinant of risk. The increasing growth of third party funds will make the liquidity of a bank higher, if the liquidity of the bank is higher but not followed by the distribution of funds to high creditors will make funds in banking liabilities settle.

The results prove that Return On Asset (ROA) is partially insignificant, meaning that Profitability is not a determinant of Liquidity Risk. High and low profitability does not affect the liquidity risk of a bank, this is because conventional banks do not always use their profits to meet their obligations. Currently, banks are more focused on obtaining bank positability from other service activities owned by banks rather than fulfilling their obligations.

## III.    CONCLUSION

The results of panel data regression analysis with fixed effect model show that variables that are determinants of conventional banking liquidity risk in Indonesia are variables of operational efficiency, capital, and growth of third party funds.

Advice that can be given to academics based on the results of research on variables of credit risk and profitability is not a determinant of liquidity risk, so that in future studies it is expected to replace the variables of credit risk and profitability with other variables. Increase years of research so that the research carried out is more accurate. For banking companies, it is recommended to further improve management capabilities in managing capital

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