THE EFFECT OF CREDIT RISK AND EFFICIENCY ON BANK PERFORMANCE IN INDONESIAN BANKING: WITH LIQUIDITY AS A MEDIATION VARIABLE

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ABSTRACT

Bank performance is important in the stability of a country. If a bank's financial performance is poor, it will have an impact on channeling funds to who need funds and will hinder the economy of a country. Therefore, this research was conducted to examine the factors that influence bank performance. This research has developed novelty that is of from research before with the use of an intermediary variable is Liquidity. This research uses secondary data in the form quarter time series from 2013 to 2019. The population and samples in this study are 41 conventional banks. The sampling technique used is exhaustive sampling method. The data analysis technique used is Path Analysis and Sobel Test to measure Intervening variables. The results of research on substructure I that partially Credit Risk and Efficiency have a negative and significant effect on Bank Performance, while the level of Liquidity has no effect on Bank Performance. In substructure II, Credit Risk and Efficiency do not affect the Liquidity Level. For the path analyze results in this research using the single test, it is found that the liquidity level does not interfere in the effect of credit and efficiency on bank performance.

Keywords: Credit Risk, Efficiency, Liquidity Level, and Bank Performance

1. INTRODUCTION

Banking is one of the sectors driving the country's economic system. In Indonesia, the banking sector developed very rapidly after the regulation in the financial, monetary and banking sectors in 1983. Banks make a major contribution to the economy of a country. As an intermediary institution, banks have a role as a channel for financing, storage, and borrowing so that in the end, the welfare of the community is made (Sorongan, 2016).

The bank acts as a monetary treater between parties who have funds (surplus units) and parties that require funds (deficit units) and as an establishment that functions to sleek the flow of payment (Katuuk et al.,

2018). In addition, banks that are known as financial or financial institutions also have the main objective of obtaining high profits or profitability. The profits earned are not only used to finance company operations, such as paying salaries and other costs, but also used for company expansion through various activities in the future (Lukitasari & Kartika, 2015).

The main goal of banking business is to achieve realize most profitability. Profitability is the right financial ratio to measure bank performance. Decreasing bank performance will affect public trust because in running its business, banks need trust from the public. Return On

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Assets (ROA) is vital for banks as a result of it's accustomed live the effectiveness of the corporate to make profits by utilizing its assets.

According to (Lukman, 2009), in (Halimah, 2016) the larger the come back On Assets (ROA) of a bank, the greater the extent of profit achieved by the bank and therefore the higher the position of the bank in terms of plus use. This means that the amount of profit must be achieved as expected. To measure the level of profit of a company, use the profit ratio or profitability ratio. Profitability could be a bank's ability to come up with / earn profits effectively and efficiently

Table 1
Development of ROA, NPL, BOPO dan LDR (in the last Three Years)

Years	Period	ROA	NPL	BOPO	LDR
2017	Q1	2,45 %	3,04 %	80,68 %	88,88 %
	Q2	2,47 %	2,90 %	79,00 %	89,31 %
	Q3	2,47 %	2,87 %	78,71 %	88,74 %
	Q4	2,45 %	2,50 %	78,64 %	90,04 %
2018	Q1	2,55 %	2,67 %	78,76 %	90,19 %
	Q2	2,43 %	2,63 %	79,46 %	92,76 %
	Q3	2,50 %	2,61 %	79,13 %	94,08 %
	Q4	2,55 %	2,33 %	77,86 %	94,78 %
2019	Q1	2,60 %	2,47 %	82,92 %	94,00%
	Q2	2,51 %	2,47 %	80,24 %	94,98 %
	Q3	2,48 %	2,63 %	80,50 %	94,34 %
	Q4	2,47 %	2,50 %	79,39 %	94,43 %

Source: Financial Reports issued by OJK

Table 1. above shows that the value of the Bank's performance Which is proxied by ROA at Bank General Conventional fluctuations, this tends to be problematic because the ratios that affect banking performance fluctuate. Non-performing Loans (NPL) also fluctuated, in 2018 Q-4 Conventional

Commercial Banks' NPLs increased from 2.33% to 2.47% in 2019 Q-1. But in fact, in the same period the profitability value of Conventional Commercial Banks also increased from 2.55% to 2.60%. This is additionally not in line with the idea that explains that the lower non-Performing loan price at the banks,

the higher the profitability value because there is no bad credit which will reduce the profitability value.

This is in line with research by (Boahene et al., 2012) which found that credit risk has a positive relationship with bank profitability or performance. These results indicate that with an increase in credit risk, banks can increase their profitability. In terms of Efficiency with Operational Costs and Operating Income (BOPO) as an indicator in table 1, it explains where the operational efficiency ratio or BOPO for the last 3 years has fluctuated in 2018 Q-4 BOPO Conventional Commercial Banks experienced an increase from 77.33% Q- 4 to 82.92%. But in fact, in the same period the profitability value of Conventional Commercial Banks also increased from 2.55% to 2.60%. This is not in line with the theory which explains that the higher the Operational efficiency ratio the less good the bank is in managing its management to make a profit. Conversely, the lower this ratio indicates the better the bank's management.
This is in accordance with the research conducted by (Sabir et al, 2012) which shows that the negative

BOPO does not have a significant effect on ROA. They say that the higher the bank's profit, the higher the salary costs. However, it is different from the research conducted by (Yanuardi et al., 2014) this shows that BOPO has had a negative and significant impact on the Banks Performance. This variable is a measure of the management's ability to control costs and is expected to be negatively correlated, research conducted by (Prasetyo & Darmayanti, 2015) also found negative and significant results between this ratio and profitability.

Table 1. year of 2019 Q-1 shows the worth of the loan-to-deposit ratio was recorded at 94.00%, down from the previous year which was 94.78% but in the same period the bank performance variable ratio was recorded at 2.60%, up from the previous year 2.55%. This contradicts the following theory: the higher the LDR, the higher the bank's profit (assuming that the bank can effectively guide its borrowing), and as the bank's profit increases, the bank's efficiency will be higher. The size of the bank's loan-to-deposit ratio affects the results of banking operations (Sudarmanta, 2016).

2. LITERATURE REVIEW

Banking activities are the results achieved by a banks in their business activities (Sudiyatno, 2013). According to Dendawijaya (2013: 120), "Return on assets is used to measure management's ability to

obtain overall profit (profit). The greater the Return On Assets (ROA), The higher the level of profit a bank receives, better company's performance.

Credit risk is the number one risk

faced by banks, and the success of your business depends on whether you measure and manage this risk more accurately than other risks (Gieseche, 2004) in (Sudiyatno, 2013). The level of efficiency will affect the strength and weakness of a financial institution from the internal sector. Any increase in operating costs will result in reduced profit before tax which in turn will reduce the profit or profitability (ROA) of financial institutions. The ratio used to measure the level of efficiency is the BOPO ratio, which according to Veithzal et al. (2007: 722) in Ariani (2015) the BOPO ratio is the ratio between operating expense and operating profit.

The liquidity ratio is used to measure the company's ability to fulfill its overdue obligations to the outside and inside parties of the company, which states that liquidity risk occurs because the company experiences difficulties or is unable to meet its short-term obligations (Kasmir, 2012: 129).

The financial ratio used to measure liquidity risk is the loan-to-deposit ratio. According to Nurhayati and Ika (2011), the LDR ratio shows an effectiveness of the banking intervening function. This ratio measures the ability of banks to repay depositors who rely on loans as a source of liquidity.

Non-Performing Loans (NPL) or what are often called bad credit can be defined as credit that experience repayment difficulties due to gaps or external factors beyond the control of the debtor. The ratio shows the ability of bank management to manage bank non-performing-loans. The higher the ratio, the worse the quality of bank loans, which leads to an increase in the number of non-performing-loans and the occurrence of losses, conversely, if the lower the NPL, the bank's profit or profitability will increase (Dewi et al., 2015)

According to Agustini, et al. (2017), Ambarawati (2018) declare that credit risk has a negative and significant impact on profitability. Based on the above description, the first hypothesis can be put forward.

H_1: It is suspected that the credit risk arising from non-performing loans represented by the non-performing loans ratio has a negative impact on bank performance.

The level of operational efficiency of a bank can be measured using the BOPO ratio. The ratio indicates whether the bank's management has effectively used all production factors. BOPO be measured by comparing total operating expense with total operating profit. It can be concluded that if the BOPO ratio of a bank is low, it indicates that the level of bank operational costs is less, so it will generate profits and will automatically increase profitability because the bank does not incur a lot of costs in its operations. According to (Chaerunisak et al., 2019), (Alamsyah, 2019) these operating expenses and operating income (BOPO) have a negative impact on the bank's income status. Based on the above description, the second hypothesis can be put forward.

H_2: It is suspected that there is a negative influence between Efficiency as proxied by OEOI on Bank Performance as proxied by ROA.

Liquidity ratio is the ability of

banks to repay depositors' refunds collected at the bank which can be retrieved at any time by controlling the amount of credit given. The higher the LDR ratio indicates that the higher the liquidity capacity of the bank concerned, therefore the higher the level of bank liquidity, the higher the income earned by the bank will automatically increase profitability. This result is also supported by research conducted by (Pardede & Pangestuti, 2016) which states that LDR has a positive and significant effect on profitability.

H_3: It is suspected that there is a positive influence between Liquidity as proxied by LDR on Bank Performance as proxied by ROA.

The impact of non-performing financing is not only decreasing profits in terms of financing but also can reduce the reputation of banks in the eyes of the public and business partners. One of the reputation assessments occurred because the public and business partners thought that the bank was not careful in assessing who was appropriate and unworthy or that the firm quality of control of bank financing management was weak. According to Agustini, et al. (2017), (Ramadhani & Indriani, 2016) stated that Credit Risk Has a major negative impact on liquidity. Based on the above description, a third hypothesis can be proposed.

H_4: It is assumed that the credit risk generated by non-performing loans will have a negative impact on the liquidity generated by long-term depository receipts (LDR).

One of the functions of bank liquidity in general is to explain daily business transactions. This function is related to the efficiency of banking operational costs. According to (Lukman, 2009) in Hakim (2016), The operating expense ratio is used to measure the bank's level of efficiency and ability to conduct business. Pinasti and Mustikawati (2018) BOPO has a significant negative impact on liquidity. Based on the above description, a fourth hypothesis can be proposed.

H_5: It is suspected that there is a negative effect between the Efficiency proxied by OEOI on the liquidity proxied by LDR.

The interest rate received by customers will greatly depend on the amount of funds channeled (LDR / FDR) and how good the quality of credit provided by the bank, because this will affect the profitability of the use of customer funds, this can be indicated by the level of Credit Risk as measured by NPL / NPF ratio (Imawan, 2014: 24). According to Mawardi (2005) in Imawan (2014: 24) the better the quality of credit / financing channeled by banks, the smaller the NPL level. Therefore, banks must pay attention to the NPL level. If the NPL of the bank is high enough, the ability of the bank to generate income will decrease and as a result the profit sharing given will be smaller.

H_6: There is a suspicion that there is a negative impact between credit risk which is proxied by NPL on Bank performance which is proxied by ROA through Liquidity which is proxied by LDR as an intervening variable.

Operating Expenses per Operating Income (BOPO) is an ratio to measure the efficiency and ability of a bank to conduct business.

According to (Chaerunisak et al., 2019) that operational costs and operating income (BOPO) have a negative effect on bank performance. From this description, it can be said that the lower the level of the ratio of BOPO, the better and better for conventional banks in carrying out their operational activities which will increase profits. It can be concluded that the level of the OEOI ratio is the opposite of the LDR level. Followed

research conducted by (Ariyanti et al., 2017) declare efficiency has a direct effect on profitability through liquidity.

H₇: It is suspected that there is a negative influence between Efficiency as proxied by OEOI on Bank Performance as proxied by ROA through Liquidity which is proxied by LDR as an intervening variable.

3. RESEARCH METHOD

Data Collection Techniques

This research was conducted on conventional banking which is included in the category of Conventional Commercial Banks in Indonesia which are registered with the Otoritas Jasa Keuangan (OJK). The research year used in this research is 2013-2019. The data is secondary data in the form of ratios obtained from conventional commercial bank financial reports in the form of financial ratios. This research is a quantitative study that seeks to find a connection between

the dependent and the independent variable. In this study, there are additional intervening variables that are used to determine the relationship, directly or indirectly, to the independent variable and the dependent variable. In this research, the dependent variable is Bank Performance (ROA), the independent variable is Credit Risk (NPL), and Operational Efficiency (BOPO). Meanwhile, the intervening variable is the Liquidity Level (LDR).

Operational Definitions of Variables

The dependent variable in this research is the Bank's Performance with the Ratio of Return on Assets (ROA) as an indicator. Return On Asset is a ratio to show the

effectiveness of a bank in obtaining overall profits through the operation of total assets owned by the bank (SE BI 13/30 / DPNP dated 16 December).

$$ROA = \frac{\textbf{Earnings Before Taxes}}{\textbf{Total Assets}} \textbf{x100}\%$$

Furthermore, the independent variable in this research is Credit Risk with non-performing-loans as an indicator. Non-performing-loans is a

ratio used to show of credit loan that has problems in paying off its obligations (Yuliana, 2014).

$$NPL = \frac{\textbf{Bad Debt}}{\textbf{Total Credit}} \textbf{x100}\%$$

The second independent variable in this study is Efficiency with Operational Expense per Operating Profit (BOPO) as an indicator. The ratio of Operating Expenses to Operating Profit (BOPO) indicates the efficiency of bank operations. The higher the ratio, the more efficient the bank's operating expenditures (Taswan, 2010: 167). The higher the BOPO, the higher the operational costs, and the lower the profit level.

$$BOPO = \frac{Operating\ Expense}{Operating\ Profit} x100\%$$

The intervening variable in this study is liquidity with the loan-to-deposit Ratio (LDR) as an indicator. LDR is a comparison between the total of all loans granted to customers compared to the total third party funds (Bubu, 2016).

$$LDR = \frac{Total\ Credit}{Total\ Third - Party\ Fund} x100\%$$

The process of this research uses quantitative data, namely by analyzing the data using existing statistical methods, then developing a hypothesis. Data analysis was performed using the Statistical Package for the Social Science program version 24 for windows (SPSS 24) to see how much influence between each of the variables studied.

Path analysis is a test used to examine patterns of relationships between variables. In this study the relation between the independent variable (Credit Risk and Efficiency) with the dependent variable (Bank Performance) and the intervening variable (Liquidity Level) can be described by the Path Analysis equation model as:
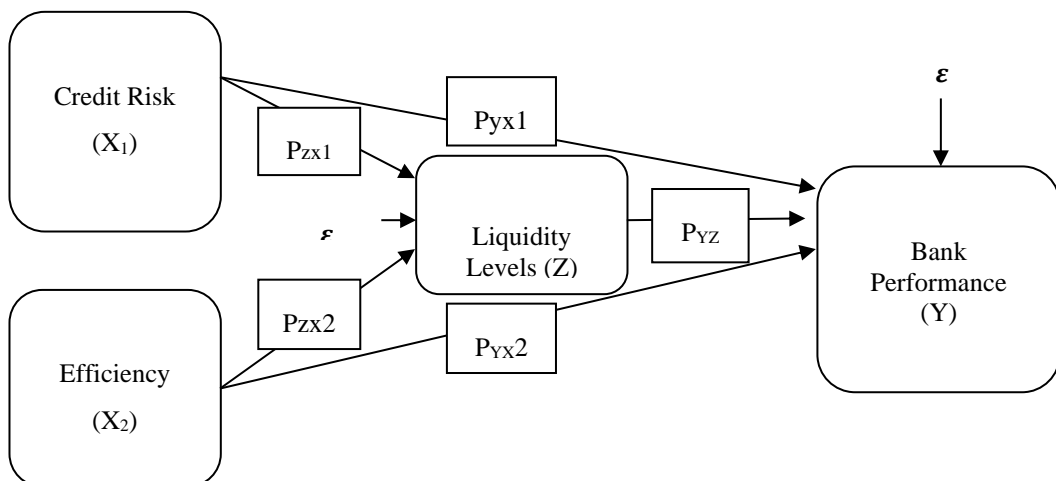

Image 1 Conceptual Framework

The following equation is used in the path diagram above :
$$Y = PYX_1 + PYX_2 + PYZ + \varepsilon_2$$
$$Z = PZX_1 + PZX_2 + \varepsilon_1$$

Description :
X_1 = Risk Credit,   Y = Bank Performance,
X_2 = Efficiency,   P = Regression Coefficient,
Z = Likuidity Level, ε = Error

Sample Collection Techniques

According to (Sugiyono, 2009) in (Valentika & Nursyirwan, 2020). The sampling technique in this research is purposive sampling, namely the sampling technique of data sources with certain considerations. Based on the criteria that have been determined with the population of conventional banking companies registered with the Financial Services Authority, a sample of 41 conventional commercial bank companies was obtained for seven years in the 2013-2019 period.

Table 2 Research Sample Data

No	Bank Umum Konvensional
1	PT. Bank Rakyat Indonesia Agroniaga Tbk (AGRO)
2	PT. Bank Agris Tbk (AGRS)
3	PT. Bank Artos Indonesia Tbk (ARTO)
4	PT. Bank MNC Internasional Tbk (BABP)
5	PT. Bank Capital Indonesia Tbk (BACA)
6	PT. Bank Central Asia Tbk (BBCA)
7	PT. Bank Harda International Tbk (BBHI)
8	PT. Bank Bukopin Tbk (BBKP)
9	PT. Bank Mestika Dharma Tbk (BBMD)
10	PT. Bank Negara Indonesia (Persero) Tbk (BBNI)
11	PT. Bank Rakyat Indonesia (Persero) Tbk (BBRI)
12	PT. Bank Tabungan Negara (Persero) Tbk (BBTB)
13	PT. Bank Yudha Bhakti Tbk (BBYB)
14	PT. Bank Jtrust Indonesia Tbk (BCIC)
15	PT. Bank Danamon Indonesia Tbk (BDMN)
16	PT. Bank Pembangunan Daerah Banten Tbk (BEKS)
17	PT. Bank Ganesha Tbk (BGTG)
18	PT. Bank Ina Perdana Tbk (BINA)
19	PT. Bank Pembangunan Daerah Jawa Barat Tbk (BJBR)
20	PT. Bank Pembangunan Daerah Jawa Timur Tbk (BJTM)
21	PT. Bank QNB Indonesia Tbk (BKSW)
22	PT. Bank Maspion Indonesia Tbk (BMAS)
23	PT. Bank Mandiri (Persero) Tbk (BMRI)
24	PT. Bank Bumi Arta Tbk (BNBA)
25	PT. Bank CIMB Niaga Tbk (BNGA)
26	PT. Bank Maybank Indonesia Tbk (BNII)
27	PT. Bank Permata Tbk (BNLI)
28	PT. Bank Sinarmas Tbk (BSIM)
29	PT. Bank of India Indonesia Tbk (BSWD)
30	PT. Bank BTPN Tbk (BTPN)
31	PT. Bank Victoria Internasional Tbk (BVIC)
32	PT. Bank Dinar Indonesia Tbk (DNAR)
33	PT. Bank Artha Graha Internasional Tbk (INPC)
34	PT. Bank Mayapada Internasional Tbk (MAYA)
35	PT. Bank China Construction Bank Indonesia Tbk (MCOR)

36	PT. Bank Mega Tbk (MEGA)
37	PT. Bank Mitraniaga Tbk (NAGA)
38	PT. Bank OCBC NISP Tbk (NISP)
39	PT. Bank National Nobu Tbk (NOBU)
40	PT. Bank Pan Indonesia Tbk (PNBN)
41	PT. Bank Wori Saudara Indonesia Tbk (SDRA)

Source: www.idx.go.id (Data processed by the author)

Data Analysis Techniques

This study uses data analysis techniques in the form of descriptive statistics, classical assumption test, coefficient of determination test, multiple linear regression test, hypothesis testing and path test/path analysis.

4. RESULTS AND DISCUSSION

Results

Tabel 3 is the descriptive result of each research variable, namely Bank Performance, Credit Risk, Efficiency, and Liquidity Level. The explanation is as follows:

Table 3 Descriptive Statisics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Bank Performance	28	2,23	3,08	2,6025	0,27461
Credit Risk	28	1,8	3,13	2,4604	0,37774
Efficiency	28	74,08	84,22	79,0675	2,81291
Likuidity Levels	28	84,93	94,98	90,5364	2,56792
Valid N (listwise)	28				

The highest Bank Performance value was 3.08% in the 4th quarter 2013 and the lowest ROA value was 2.23% in 2016 the 4th quarter. % - 3.08%, with a mean (average) value of 2.6025% and a Standard Deviation Value of 0.27461. The mean value of 2.6025% It can be concluded that from a statistical point of view, the ROA level of ordinary commercial banks in 2013-2019. Exceed the established standards by Bank Indonesia, namely 1.5%. This means that BUK belongs to a very healthy category and can be very profitable.

The highest Credit Risk value was 3.13% in the 3rd Quarter 2016 and the lowest NPL value was 1.80% in the 4th Quarter 2013.The amount of Credit Risk ranges from 1.80% - 3.13%, with the mean (average) 2.4604% and the Standard Deviation Value of 0.37774. The mean value of 2.4604% can be concluded that statistically the NPL level of Conventional Commercial Banks in 2013-2019 According to the standards set by Bank Indonesia, namely 5%. This shows that BUK has good management skills in managing

problem financing.

The highest Efficiency value was 84.22% in 2016 1st Quarter and the lowest BOPO value was 74.08% in 2013 4th Quarter. The amount of efficiency ranged from 74.08% - 84.22%, with a mean value (average) 79 , 0675% and the Standard Deviation Value of 2.81291%. The mean value of 79.0675% can be concluded that statistically the BOPO level of Conventional Commercial Banks in 2013-2019 is According to the standards set by Bank Indonesia, namely 90%. This shows that BUK has good management skills in managing bank operational costs.

The highest Likuidity Levels value was 94.98% in 2019 Q2 and the lowest LDR value was 84.93% in Q1 2013. The amount of liquidity ranged from 84.93% - 94.98%, with a mean

value (average) of 90 , 5364% and the Standard Deviation Value of 2.56792%. The mean value of 90.5364% can be concluded that statistically the LDR level of Conventional Commercial Banks in 2013-2019 is According to the standards set by Bank Indonesia, namely 100%. This indicates that the bank is in a very healthy position in managing its liquidity.

Path analysis is a test used to examine patterns of relationships between variables. In this study the connection between the independent variables (Credit Risk, and Efficiency) with the dependent variable (Performance Bank), and the intervening variables (Liquidity levels) can be explained the following table:

Table 3 Hypothesis Test

Variable	Coeffisien B	St. Error	t-count	Prob. Sig	Description
NPL ► ROA	-,351	0,080	-4,385	0,000	Received
BOPO ► ROA	-,047	0,011	-4,202	0,000	Received
LDR ► ROA	-,011	0,008	-1,372	0,183	Rejected
NPL ► LDR	-,864	2,069	-0,417	0,689	Rejected
BOPO ► LDR	,402	,278	1,446	0,161	Rejected

Source: Data processed by the Author (2021).

The conclusion of H_1 is the individual parameter significance test (t-statistical test) obtained a t-count value of -4,385 and a significance value for Non-Performing Loans of 0,000. Because the significance value is less than 0.05, the decision is to accept H_1 which means that credit risk has a negative and significant effect on Bank Performance. The results in this study are in line with the theory that indicates that there is a negative influence that indicates, it can be

concluded that the higher of the NPF ratio, the worse the bank's financing quality, which will ultimately affect the bank's profitability. With problematic financing, the bank can not generate profits, so that the profitability proxied by ROA will decrease because there is no profit from its business activities.

The conclusion of H_2 the individual parameter significance test (t statistical test) obtained a t-count value of -4,202 and a significance

value for BOPO of 0,000. Because the significance value is less than 0.05, the decision is to accept H_2 which means that Efficiency has a negative and significant effect on Bank Performance. The negative relation between BOPO and ROA means that the higher the BOPO level, the lower the ROA level of a bank. The results in this study are in line with the theory which states that there is a negative influence which indicates that the higher the BOPO ratio, it can be concluded that the management of a bank is bad, because the high level of BOPO indicates that the bank management's ability is not good in carrying out its duties and in fulfilling its duties. Operational costs that result in the bank not getting optimal profit.

The conclusion of H_3 the individual parameter significance test (t statistical test) obtained a t-count value of -1.372 and a significance value for LDR of 0.183. Because the significance value is more than 0.05, the decision is to accept H_0 which means that liquidity has no effect on Bank Performance (ROA). This means that a bank's higher LDR does not mean that the bank has succeeded in generating high profits. LDR with positive number will not always affect the return on investment. It can be concluded that the loan is not supported by quality of good credit. Poor credit quality increases risks, especially if loans are granted without applying prudential principles and uncontrolled lending so that the bank also bears higher risks.

The conclusion of H_4 the individual parameter significance test (t statistical test) obtained a t-count value of -0.417 and a significance value for credit risk of 0.680. Because the significance value is greater than 0.05, the decision is to accept H_0, which means that credit risk has no effect on liquidity (LDR). The results of this study state that the NPL does not have an effect on LDR, any increase in NPL is not necessarily followed by an increase in LDR. So it can be concluded that in fact the NPL value of Conventional Commercial Banks has been relatively more stable over the last few years and is still far from the limit set by Bank Indonesia of 5%. Meanwhile, the LDR value in the last few years has continued to experience a significant increase. This indicates that the quality of credit extended by conventional commercial banks is very good, so that the fluctuation in the value of credit risk does not affect liquidity growth.

The conclusion of H_5 the individual parameter significance test (t statistical test) obtained a t-count value of 1.446 and a significance value for BOPO of 0.161. Because the significance value is less than 0.05, the decision is to accept H_1 which means that Efficiency / Operating Expenses on Operating Income have no effect on Liquidity (LDR). The results of this study indicate that Operational Costs on Operational Income (BOPO) have a negative but insignificant effect on the Loan-to-Deposit Ratio (LDR). The results of this test can be concluded that the increase or decrease in OEOI during the study period does not affect LDR, this is because from the existing data, the BOPO value owned by a bank shows an increasing trend, but the LDR owned by the bank also has an increasing trend. This indicates that

135

the quality of management managed by Conventional Commercial Banks is considered to be not good, but because in the last few periods the ability of banks to channel loans has tended to increase so that the fluctuation in the value of Efficiency does not affect Liquidity growth. A high BOPO value indicates that bank management has not been efficient in carrying out its operations, thus increasing operational costs while decreasing operating income. In addition, banks that have high BOPO are due to banks that increase their reserves to anticipate the risk of non-performing loans that will be faced.

Furthermore, to test the intervening variables, in the study using the Sobel Test, according to Baron and Kenny (1986) in Ghozali (2011) describe a variable is called intervening if the variable impact the connection between the independent variable and the dependent variable.

The Sobel test is carried out by checking the indirect influence of X to Y on M. The indirect influence of X to Y and M is calculated by multiplying the path X-M(a) by the path M-Y(b) or the path ab, and then the coefficient ab = (c'-c), where c is X for the control without M The influence of Y, and c' is the influence coefficient of X on Y after the control M. The standard error of the coefficient a and b is written as Sa and Sb, and the value of the indirect standard error Sab is calculated by the formula:

$$S_{ab=\sqrt{b^2 sa^2 + a^2 sb^2 + sa^2 + sb^2}}$$

Description :
Sa = standard error coeffisien a
Sb = standard error of coeffisien b
B = coefficient of variables Intervening
a = coefficient of independent

For test significant indirect effect, then we need to calculate the value t of coefficients ab by the formula :

$$t = \frac{ab}{S_{ab}}$$

This is a summary of the test results Sobel for hypotheses 6 and 7:

Table 4 Calculation t-count Sobel Test

Variable	t-count Sobel test
Credit Risk (NPL)	,061182
Efficency (BOPO)	-1.5649262

Sources : data processed by the author (2021)

Based on table 4 above are the result of the Hypotheses 6 and 7, it can be seen that the t-count value of the Credit Risk and Efficiency variables is 0.061182 and -1.5649262 while the significance limit value is 1.96 so that the t-count ≤ Sig value (0.061182 ≤ 1, 96) and (-1.5649262 ≤ 1.96). Thus, it can be concluded that liquidity is not an intervening variable between credit risk and bank performance so that the sixth and seventh hypotheses stating that liquidity is an intervening variable

between credit risk and bank performance is not proven.

5. CONCLUSION AND SUGGESTION

The results of research that have been conducted indicate: (1) Credit Risk has a direct and negative effect on Bank Performance. With a significance value of 0.000, which means it is less than the significance value (0.000 <0.05); (2) Efficiency has a direct and negative effect on Bank Performance with a significance value of 0.000, which indicates a value smaller than the significance value (0.000 <0.05); (3) Liquidity has a negative but insignificant effect on Bank Performance as evidenced by a significance value of 0.183 which indicates a value greater than the significance value (0.183> 0.05); (4) Credit risk has a negative impact on the performance of banks, but the impact is not significant. With a significance value of 0.680, which indicates a value greater than the significance value (0.680> 0.05); (5) Efficiency has a positive but insignificant impact on Bank Performance. With a significance value of 0.161 which indicates a value greater than the significance value (0.161> 0.05); (6) Liquidity does not mediate Credit Risk on Bank

Performance. This is shown from the results of the Sobel test where t table is greater than t count (0.061182 ≤ 1.96); (7) Liquidity does not mediate Efficiency on Bank Performance. This is shown from the Sobel test results where the t table test results are greater than the t count (-1.564926 ≤ 1.96).

The results of the analysis and discussion as well as conclusions in this study, suggestions that can be given through the results of this study are as follows:
1) For banks, to achieve the goal of improving the Bank's performance, it is expected that banking management can implement the right policies and good analysis in their operations, such as keeping the NPL value in a safe position. Banks should maintain the quality and evaluate lending more carefully and more selectively with the precautionary principle in order to avoid an increase in NPL.
2) For future research, it is recommended to add financial ratio variables such as CAR, TPF, or other variables that have an influence on increasing bank performance. In this study, the object is only on Conventional Commercial Banks, and it is recommended for future research to add objects to Conventional Business Units or Rural Banks, in the hope of getting more accurate results

REFERENCES

Agustini, dkk. (2017). *Pengaruh Kecukupan Modal dan Risiko Kredit Terhadap Profitabilitas: Likuiditas Sebagai Peintervening Pada Bank Perkreditan Rakyat di Kabupaten Badung. Pengaruh Kecukupan Modal dan Risiko Kredit Terhadap Profitabilitas: Likuiditas Sebagai Peintervening. Pada Bank Perkreditan Rakyat di Kabupaten Badung.* Fakultas Ekonomi dan Bisnis Universitas

Udayana, Bali, ISSN : 2337-3067.

Alamsyah, L. (2019). Pengaruh Efisiensi, Kualitas aktiva, Likuiditas, Sensitivitas, dan Solvabilitas Terhadap ROA pada Bank Swasta Nasional Non Devisa. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *1*(2), 53–62.

Ambarawati, I.G.A.D., & Abundanti, N. (2018). *Pengaruh Capital Adequacy Ratio, Non Performing Loan, Loan To Deposit Ratio Terhadap Return On Asset*. Fakultas Ekonomi dan Bisnis Universitas Udayana. E- Jurnal Manajemen Unud, Vol. 7, No. 5. ISSN : 2302-8912.

Ariani, M. W., & Ardiana, P. A. (2015). Pengaruh Kecukupan Modal. Tingkat Efisiensi, Risiko Kredit, Dan Likuiditas Pada Profitabilitas LPD Kabupaten Bandung. E-Jurnal Akuntansi Universitas Udayana 13.1 (2015): 259-275

Ariyanti, I., Paramita, P. D., & Pranaditya, A. (2017). Pengaruh CAR, NPF, NIM, BOPO, dan DPK terhadap Profitabilitas dengan FDR Sebagai Variabel Intervening (Studi Kasus Perbankan Umum Syariah Tahun 2011-2014). *Journal Of Accounting*, *3*(3).

Baron, R. M., & Kenny, D. A. (1986). *The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations.* Journal of Personality and Social Psychology.

Boahene, S. H., Dasah, J., & Agyei, S. K. (2012). Credit risk and profitability of selected banks in Ghana. *Research Journal of Finance and Accounting*, *3*(7), 6–14.

Bubu, F. A. (2016). *PENGARUH NPL DAN LDR TERHADAP PROFITABILITAS DENGAN CAR SEBAGAI VARIABEL INTERVENING PADA PERUSAHAAN PERBANKAN YANG TERDAFTAR DI BURSA EFEK INDONESIA.* STIE PERBANAS SURABAYA.

Chaerunisak, U. H., Wardani, D. K., & Prihatiningrum, Z. T. (2019). Pengaruh Capital Adequacy Ratio (Car) Dan Biaya Operasional Pendapatan Operasional (Bopo) Terhadap Kinerja Bank Syariah. *Jurnal Sosial Ekonomi Dan Humaniora (JSEH) p-ISSN*, *2461*, 666.

Dewi, L. E., Herawati, N. T., AK, S. E., & Sulindawati, N. L. G. E. (2015). Analisis pengaruh NIM, BOPO, LDR, dan NPL terhadap profitabilitas (Studi kasus pada bank umum swasta nasional yang terdaftar pada Bursa Efek Indonesia periode 2009-2013). *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, *3*(1).

Ghozali, I. (2011). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang : Badan Penerbit Universitas Diponegoro

Gieseche, K. (2004). *Credit risk modelling and valuation: An introduction, Credit Risk. Models andManagement*, Vol. 2, Cornell University, London

Hakim, Ningsukma. 2016. Pengaruh Internal Capital Adequency Ratio (CAR), Financing To Deposit

Ratio (FDR), dan Biaya Operasional Per Pendapatan Operasional (BOPO) dalam Peningkatan Profitabilitas Industri Bank Syariah di Indonesia [Skripsi]. Fakultas Ekonomi dan Manajemen, Universitas Airlangga, Surabaya.

Halimah, D. N. (2016). *Analisis Pengaruh Risiko Kredit Dan Kecukupan Modal Terhadap Profitabilitas Di Bank Umum Syariah Nasional (BUSN) Devisa Dan Non Devisa Periode 2010-2014*. IAIN SALATIGA.

Hasbidin. (2017). *Pengaruh NPF & Biaya Operasiona Per-Pendapatan Operasional terhadap FDR dan Dampaknya pada Profitabilitas pada Perbankan Syariah*. Jurnal Ilmu Hukum & Ekonomi Syariah, Vol. 1, No.2.

Ika, S. R,. & Nurhayati, A. (2011). *A Comparative Study of Financial Performance of Islamic Bank and Conventional Bank in Indonesia. International Journal of Business and Social Science*, Vol. 2 No. 15.

Imawan, F. (2014). Faktor-faktor Yang Mempengaruhi Profit Distribution Management Pada Bank Syariah Di Indonesia Periode 2009-2012. Skripsi. Fakultas Ekonomi Dan Bisnis Universitas Lampung.

Kasmir. (2012). Analisis Laporan Keuangan. Jakarta : PT. Raja Grafindo Persada.

Katuuk, P. M., Kumaat, R. J., & Niode, A. O. (2018). Pengaruh Dana Pihak Ketiga, Loan to Deposit Ratio, Biaya Operasional Pendapatan Operasional terhadap Return on Asset Bank Umum di Indonesia periode 2010.1-2017.4. *Jurnal Berkala Ilmiah Efisiensi*, *18*(2).

Lukitasari, Y. P., & Kartika, A. (2015). Analisis Pengaruh Dana Pihak Ketiga, BOPO, CAR, LDR dan NPL terhadap Kinerja Keuangan Pada Sektor Perbankan yang terdaftar di Bursa Efek Indonesia. *INFOKAM*, *11*(4).

Lukman, D. (2009). Manajemen Perbankan. *Jakarta: Ghalia Indonesia*.

Lukman, D. (2013). Akuntansi Keuangan Menengah, Edisi 2, Yogyakarta : BPFE

Mawardi, W. (2005). Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Keuangan Bank Umum Di Indonesia (Studi Kasus Pada Bank Umum Dengan Total Asset Kurang Dari 1 Triliun). *Jurnal Bisnis Strategi* Vol. 14, No. 1, pp. 83-94.

Pinasti, W. F., & Mustikawati, R. I. (2018). *Pengaruh CAR, BOPO, NPL, NIM Dan LDR Terhadap Profitabilitas Bank Umum Periode 2011-2015*. Nominal: Barometer Riset Akuntansi dan Manajemen, 7(1), 126-142.

Pardede, D. N., & Pangestuti, I. R. D. (2016). Analisis Pengaruh Car, Dana Pihak Ketiga (DPK), NIM, dan LDR Terhadap Profitabilitas Perbankan Dengan LDR Sebagai Variabel Intervening. *Diponegoro Journal of Management*, *5*(3), 45–57.

Prasetyo, D. A., & Darmayanti, N. P. A. (2015). Pengaruh Risiko Kredit, Likuiditas, Kecukupan Modal, Dan Efisiensi Operasional

Terhadap Profitabilitas Pada PT BPD Bali. *E-Jurnal Manajemen Unud*, 4(9), 2590–2617.

Ramadhani, A. N., & Indriani, A. (2016). Analisis pengaruh size, capital adequacy ratio (CAR), return on assets (ROA), non performing loan (NPL), dan inflasi terhadap loan to deposit ratio (LDR). *Diponegoro Journal of Management*, 5(2), 392–406.

Sabir (2012). Pengaruh rasio kesehatan bank terhadap kinerja keuangan bank umum syariah dan bank konvensional di Indonesia. *Jurnal Analisis*, 1(1), 79–86.

Sorongan, F. A. (2016). *Factors affecting the return stock company in Indonesia Stock Exchange (IDX) LQ45 in years 2012-2015.*

Sudarmanta, I. K. (2016). Determinasi Profitabilitas Sektor Perbankan Di Bursa Efek Indonesia. *Jurnal Ekonomi & Bisnis JAGADITHA*, 3(2), 13–21.

Sudiyatno, B. (2013). Pengaruh risiko kredit dan efisiensi operasional terhadap kinerja bank (Studi Empirik pada bank yang terdaftar di Bursa Efek Indonesia). *Jurnal Organisasi Dan Manajemen*, 9(1), 73–86.

Sugiyono, M. P. P., & Kuantitatif, P. (2009). Kualitatif, dan R&D, Bandung: Alfabeta. *Cet. Vii*.

Taswan. (2010). *Manajemen Perbankan*. Yogyakarta: UPP STIM YKPN

Valentika, N., & Nursyirwan, V. I. (2020). PARTIAL LEAST SQUARE: EFFECT OF FLEXIBILITY ON SATISFACTION AND LOYALTY. *Econosains Jurnal Online Ekonomi Dan Pendidikan*, 18(1), 50–57.

Veithzal, R, Andria, P, V & Ferry N, I. 2007. *Bank and Financial Institution Mangement*. Jakarta : PT. Raja Grafindo Persada.

Website [online] Financial Services Authority (OJK) 2017 Quarter I – IV 2017 Banking Industry Profile Report

Website [online] Financial Services Authority (OJK) 2018 Quarter I – IV 2018 Banking Industry Profile Report

Website [online] Financial Services Authority (OJK) 2019 OJK Quarter I – IV Banking Industry Profile Report

Website [online] BI Circular No. 3/30 DPNP 2001

Website [online] BI Circular No. 15/41/DKMP

Yanuardi, A., Hadiwidjojo, D., & Sumiati, S. (2014). FAKTOR DETERMINAN ATAS PROFITABILITAS PERBANKAN YANG LISTING DI BURSA EFEK INDONESIA. *Jurnal Akuntansi Multiparadigma*, 5(2), 202–218.

Yuliana, A. (2014). Pengaruh LDR, CAR, ROA dan NPL Terhadap Penyaluran Kredit Pada Bank Umum Di Indonesia Periode 2008–2013. *Jurnal Dinamika Manajemen*, 2(3), 169-186.