

# THE EFFECT BETWEEN CAPITAL, LIQUIDITY RISK, CORPORATE GOVERNANCE ON FINANCIAL PERFORMANCE MEDIATED BY CREDIT GROWTH (STUDIES ON CONVENTIONAL COMMERCIAL BANKS LISTED ON THE INDONESIA STOCK EXCHANGE)

Suwarda<sup>1</sup>, Moeljadi<sup>2</sup>, Siti Aisjah<sup>3</sup>, Achmad Helmy Djawahir<sup>4</sup>

<sup>1</sup>Faculty of Economics and Business, Universitas Brawijaya, Malang, Indonesia

<sup>2</sup>Professor of Management Department, Faculty of Economics and Business, Universitas Brawijaya, Malang, Indonesia

<sup>3</sup>Doctor of Management Department, Faculty of Economics and Business, Universitas Brawijaya, Malang, Indonesia

<sup>4</sup>Doctor of Management Department, Faculty of Economics and Business, Universitas Brawijaya, Malang, Indonesia

Email: <sup>1</sup>suwarda@jmtlawhouse.com, <sup>2</sup>moeljadi@ub.ac.id, <sup>3</sup>aisjah@ub.ac.id, <sup>4</sup>helmydjawahir62@gmail.com  
Corresponding Author: suwarda@jmtlawhouse.com

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## ABSTRACT

**Purposes** - This research was conducted after examining the condition of financial performance at banks in Indonesia, there are many banks have financial performance below the industry average. Research on the factors that affect financial performance is motivated by the phenomenon and uniqueness of the aspects of capital, liquidity risk, and corporate governance. The phenomenon of relatively high capital in banks in Indonesia where the level of capital is at the highest level in Asia and the third highest in the world is the reason for research on capital. The phenomenon of the large number of banks violating the limits of liquidity risk as well as the uniqueness of the method of assessing corporate governance at banks in Indonesia also encourages research on liquidity risk factors and corporate governance in relation to the financial performance of the Bank.

**Design / methodology / approach** - This research was conducted at conventional commercial banks listed on the Indonesia Stock Exchange with an observation period of 2015-2019. The analysis method uses panel data regression analysis and path analysis.

**Findings** - The results were founded that capital and good corporate governance were able to support the financial performance of the bank, while liquidity risk did not support the financial performance of the bank. The amount of capital held is not able to boost credit growth, but liquidity risk encourages credit growth. Credit growth is not able to mediate the effect of capital and liquidity risk on the financial performance of the Bank. The results show that violations of liquidity risk limits in lending were a serious problem for banks in Indonesia.

**Originality / value** - Research on the financial performance of conventional banks in Indonesia by mediating credit growth.

**Keywords** - Capital, Liquidity Risk, Good Corporate Governance, Credit Growth, Financial Performance

**Paper Type** - Research Paper

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## INTRODUCTION

The banking system as an intermediary system was carried out by helping to match deposit and credit positions and providing liquidity for an economy (Berger, Molyneux, and Wilson 2010). The intermediary

process can run well if the bank can produce good performance. Achievements in the financial performance of banks in Indonesia are still not encouraging because many are still below the industry average.

The Bank's financial performance achievement is a combination of various factors that can affect the achievement of financial performance including capital, credit growth, liquidity, and governance. Bank capital in Indonesia uses the Capital Adequacy Ratio (CAR) at 23.31% in 2019 which occupies the highest level compared to the banking average in Asia and the third highest in the world after Moldovan banking at 25.9% and Serbia at 23.6%. A high capital ratio is a positive sign that a bank has capital in a good and prudent condition and can absorb greater risk so as to improve the financial performance of the Bank, however a capital ratio that exceeds capital requirements causes the Bank to be inefficient in managing capital and is a signal that expansion business is not going well.

Previous research on the effect between capital and financial performance has a research gap. Bitar, Pukthuanthong, and Walker (2018) founded that risk-based and non-risk capital ratios increase bank efficiency and profitability, but risk-based capital ratios fail to reduce bank risk, and imposing higher capital ratios has a negative effect on bank efficiency and profitability. According to Lee and Hsieh (2013), assumed that bank capital has a significant positive effect on profit. Saona's research (2016) founded by a nonlinear U-shaped relationship between bank capital ratios and profitability. Research by de Bandt et al. (2018) shown that voluntary capital, namely capital held by banks in France, positively affects to financial performance. Çetin's (2018) research which conducted research on capital and financial performance of banks in the UK using the capital adequacy ratio indicator and Return on Assets shown that capital has a significant negative impact on financial performance.

Apart from capital, a bank's financial performance is influenced by the management's ability to manage liquidity risk. Liquidity risk anomaly occurs in Indonesian banks. Liquidity risk as measured by the Loan to Deposit Ratio (LDR) is actually high when the average bank experiences a slowdown in credit growth (investor.id, 2019) and many banks violate the liquidity risk limit set by the Banking Authority. A high average LDR level that exceeds the maximum limit makes the Bank face liquidity problems, which under certain conditions the bank may lack of liquid assets so that it is unable to extend credit or cannot return Third Party Funds.

Previous research on the effect of liquidity risk on financial performance has a research gap. Research by Chen et al., (2018) shown that liquidity risk is negatively related to bank financial performance in a market-based financial system, but has no effect on bank financial performance in a bank-based financial system. According to Parvin et al., (2019) said that a liquidity risk and bank size do not significantly affect bank profitability. Chowdhury and Zaman (2018) which discussed that liquidity risk has a negative relationship with the financial performance of the Bank and research by Madhuwanthi and Morawakage (2019) assumed that liquidity risk negatively and significantly affects net income, Return On Average Assets, and Return on Average Equity. Wekesa's research (2016) concluded that liquidity risk has a significant effect on the financial performance of commercial banks in Kenya.

Apart from capital and liquidity risk, corporate governance is an important variable related to the financial performance of the Bank. The implementation of good corporate governance will enable the Bank to survive in the midst of fierce competition in the banking industry, be able to achieve good financial performance and develop in a sustainable growth in the future. The uniqueness in the assessment of corporate governance at the Bank, namely the Bank is required to carry out a self-assessment of the implementation of corporate governance by producing a governance rating score according which is represented as a governance rating value of 5 ranking score by rank. According to Sami, Wang, and Zhou (2011) discussed that the overall quality of corporate governance has a significant positive relationship with financial performance. According to research by Zagorchev and Gao (2015) commended that a corporate governance has a positive effect on the financial performance of US financial institutions.

The bank's financial performance was also supported by good credit growth. Several previous studies that conducted research on the effect of credit growth on bank financial performance, there was still a Research gap. According to research conducted by Vithessonthi (2016) said that it confirms with bank credit growth does not show a significant relationship with bank financial performance. Ha (2020) research shown that credit growth and profitability have a relationship with each other in opposite trends. Research conducted by Gaber H (2018) shown that credit is positively correlated with return on assets and return on equity. Credit growth is closely related to the level of capital and liquidity risk held by the Bank.

In addition to examine the impact between variables including capital, liquidity risk, and corporate governance and financial performance mediated by credit growth. It is also necessary to conduct operations research and to examine the level of capital and liquidity. It can result with optimal financial bank performance in order to provide more comprehensive benefits.

## 2. LITERATURE REVIEW

### Agency Theory

Performance is closely related to agency theory. Agency theory defines an agency relationship as a contract in which one or more people (principals) engage other people (agents) to carry out some policies on behalf of those who delegate decision-making authority to agents (Jensen & H. Meckling, 1976), such agency conflicts are prone to occur. (agency conflict). In relation to efforts to minimize agency conflict in Agency Theory, the Bank implements Good Corporate Governance (GCG) which can provided with effective protection for Shareholders and creditors to obtain optimal utility and ensure for management as an agent acts as best as possible to interests of the company. The implementation of Good Corporate Governance (GCG) will be able to support the Bank's performance.

### Performance of The Firm Theory

Company performance is a measure to the company's success in managing its resources. Company performance and performance measurement are closely related to Agency Theory and Signaling Theory. In general, the traditional analysis of company performance measurement focuses on the analysis of Profitability, Liquidity, Solvency, Financial Efficiency, Repayment Capacity (Brief and Lawson, 1992 in Fiori et al., 2007). According to Weston and Brigham (1981), company performance appraisal can be determined by calculating the financial ratios of the reports presented by the company. These ratios are grouped into liquidity ratios, leverage ratios, activity ratios, profitability ratios, growth ratios and valuation ratios. Horne and Wachowicz (2005) explained that Return On Assets (ROA) measures the effectiveness of a company in generating profits through available assets, which also includes resources from invested capital.

### Asset and Liability Management (ALMA)

The definition of Asset and Liability Management (ALMA) according to (Sinkey 1989) is spread management. The broader definition of ALMA includes management activities including spread management, liquidity management, cost control, capital management, tax management and management of off-balance-sheet activities. According to the ALMA, bank management is increasingly aware of the importance of a bank managing liquidity properly, especially to minimize liquidity risk caused by a lack of funds. So, banks often have to seek loans with an interest rate that is higher than the prevailing interest rate in the market which results in decline in the Bank's financial performance. If the liquidity shortage continues, it can cause the Bank to go bankrupt.

### Capital

In the banking industry, capital is very important and signals a bank's ability to absorb risk and act as a buffer for possible losses and in the event of a financial and economic crisis that can disrupt financial system stability (The Financial Services Authority, 2016). Assessment of Bank capital varies from time to time. In the late 1970s and early 1980s, the Basle Committee determined that the assessment of capital used the Capital Adequacy Ratio (CAR) by taking into account how much all the Bank's assets at risk were also financed from the Bank's capital in addition to third party funds and other loans.

This ratio takes into account risks that require an adequate amount of capital to be anticipated. Therefore, banking authorities are very concerned with CAR as a capital ratio, by setting the CAR amount for Banks with a rating of 1 at least 8%.

**Liquidity Risk**

Liquidity Risk is the Risk due to the inability of the Bank to meet maturing liabilities from cash flow funding sources, and / or from high quality pledged liquid assets, without disturbing the activities and financial condition of the Bank. This risk is also known as funding liquidity risk. Bank Indonesia in Bank Indonesia Regulation Number 17/11 / PBI / 2015 regulates liquidity risk by determining the Loan to Deposit Ratio (LDR) which describes the portion of third party funds channeled to customer loans. Furthermore, Bank Indonesia set a minimum LDR limit of 78% with a maximum limit of 92%.

A high average LDR level signals that the Bank's management is capable of expanding lending at a higher rate, but on the other hand, an average LDR level that exceeds the maximum limit is a signal of an increasing liquidity risk profile which can impact on financial performance decline.

**Good Corporate Governance**

According to Cadbury (1992), corporate governance is a system in which companies are directed and controlled. The board of directors is responsible for the governance of their company. The application of corporate governance cannot be separated from the agency theory (Jensen & H. Meckling, 1976) where it can be a conflict of interest between management and shareholders.

A uniqueness in like assessment of corporate governance at the Bank, such the Bank was required to carry out a self-assessment of the implementation for corporate governance by producing a governance rating score, which is represented as a governance rating value of 5 ranking score by rank. The implementation of corporate governance at the Bank is expected to be able to endeavor to minimize agency conflict and other stakeholders which in turn can have a positive impact to financial performance.

### 3. METHODOLOGY

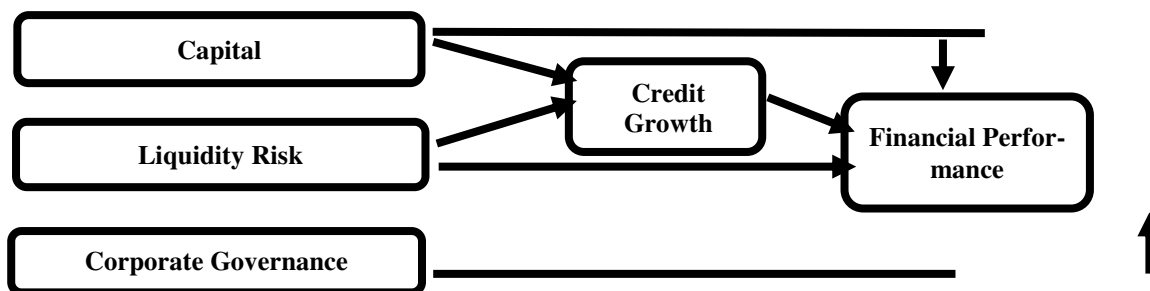
#### 3.1 Research Hypothesis

Based on the descriptions above, the following hypothesis can be formulated:

- H1: Capital has a positive effect on financial performance.
- H2: Liquidity risk has a negative effect on financial performance.
- H3: Corporate governance has a positive direct effect on financial performance.
- H4: Capital has a positive effect on credit growth.
- H5: Liquidity risk has a positive effect on credit growth.
- H6: Credit growth mediates the effect of capital on financial performance.
- H7: Credit growth mediates the effect of liquidity risk on financial performance.

#### 3.2 Research models

Based on the background, literature review, and hypotheses formulated, the research conceptual framework is as follows:



#### 3.3. Analytical framework

In accordance with the research topic that the writer took, this research is an explanatory research. The population of this research is 33 conventional commercial banks listed on the Indonesia Stock Exchange with the study period 2015 s.d. 2019. To determine the relationship between the variables used in research and problem formulation, this study uses panel data regression analysis and path analysis. Time series data in this study are financial ratios and scores in the form of: CAR, LDR, GCG Score, Credit Growth Ratio and ROA. While, the cross section data in this study were 33 conventional banks that met the requirements of the research sample.

#### 3.4. Variable Measurement Techniques

In accordance with the Variable Operational Definition, this study uses variables with the following ratios:

- Capital is measured using the Capital Adequacy Ratio (CAR)
- Liquidity risk is measured using the Loan to Deposit Ratio (LDR)
- Corporate governance is measured by Good Corporate Governance Score
- Credit growth is measured using the credit growth ratio
- Financial performance is measured using the Return On Asset Ratio (ROA)

#### 3.5. Data collection

Data collection techniques in this research study used by documentation techniques by collecting annual banking reports, financial reports on Indonesian banking reports and stock histories issued by the Financial Services Authority. Research data was obtained by accessing relevant reports on the sites [www.ojk.go.id](http://www.ojk.go.id), [www.bi.go.id](http://www.bi.go.id) and [www.idx.co.id](http://www.idx.co.id) and for reports that have not been obtained on these sites, are obtained publication reports on each Bank.

### 3.6. Path Analysis

In accordance with the research concept framework, the combination of research models tested are as follows:

- The sub-structure research model  $Z_n = \alpha + \rho_{Znx1}.X1 + \rho_{Znx2}.X2 + \varepsilon_1$ , namely the influence of the variable Capital and Liquidity Risk on the Credit Growth variable with the credit growth ratio indicator.
- The sub-structure research model  $Y = \alpha + \rho_{yx1}.X1 + \rho_{yx2}.X2 + \rho_{yx3}.X3 + \rho_{yZn}.Z_n + \varepsilon_2$ , namely the influence of the variables Capital, Liquidity Risk, Credit Growth and Corporate Governance on Financial Performance variables with ROA indicators.

## 4. RESULT

### 4.1. Summary statistics

Descriptive statistics of research variables are as follows:

**Table 1. Descriptive Statistics**

N	Variables	Sam- ple	Mean	Std. Dev	Min	Max
1	Capital Adequacy	165	21.14	7.38	8.02	66.43
2	Ratio	165	86.19	15.60	48.77	171.32
3	Loan to Deposit Ratio	165	3.95	0.49	2.00	5.00
4	Corporate Governance	165	9.74	16.59	-39.12	118.14
5	Credit Growth Return on Asset	165	1.60	1.06	0.01	4.19

Source: Processed Data

### 4.2. Hypothesis Testing

Testing in this study uses direct effect testing and indirect effect testing. Testing the direct effect in this study using the GLS estimator and testing the indirect effect using the Sobel test.

Testing the direct effect using GLS obtained the following test results:

Sub structure research model 1:

$$Z_n = \alpha + \rho_{Znx1}.X1 + \rho_{Znx2}.X2 + \varepsilon_1$$

**Table 2. Output Sub Structure Research Model 1**

Log likelihood		=-687.5407		Wald chi2 (2) Prob >chi2		=20.34 = 0.0000
Credit	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CAR	0.175730	0.1662967	1.06	0.291	-0.1502048	0.5016663
LDR	7	0.0786391	4.48	0.000	0.1978791	0.5061387
Cons	0.352008	8.076841	-3.01	0.003	-40.13668	-8.47605
	9 -24.30637					



Source: GLS Results

The test results shown that Capital Adequacy Ratio (CAR) does not have a significant effect on credit growth at a significance level of 5% and LDR has a significant effect on Credit Growth at a significance level of 5%.

Sub-structure research model 2:

$$Y = \alpha + \text{pyx1}.X1 + \text{pyx2}.X2 + \text{pyx3}.X3 + \text{pyZn}.Zn + \varepsilon$$

**Table 3. Ouput Sub Structure Research Model 2**

Log likelihood = - 202.7947				Wald chi2 (4) =39.25 Prob >chi2 = 0.0000		
ROA	Coef.	Std. Err.	Z	P> z	[95% Conf. Inter- val]	
CAR	0.025522	0.0110574	2.31	0.021	0.003849	0.0471941
LDR	0.0083573	0.0051321	1.63	0.103	-	0.0184161
GCG	1.115588	0.1966493	5.67	0.005	0.001701	1.501014
Credit	-0.0020298	0.0053067	-0.38	0.702	0.730162	0.0083712
_Cons	-4.154133	0.934196	-4.45	0.000	0.012430	-
					5.985124	2.323142

Source: GLS Results

The test results shown that Capital Adequacy Ratio (CAR) has a significant positive effect, LDR has no significant effect, and governance has a significant effect on financial performance at the 5% significance level.

Testing the indirect effect using the Sobel Test in the study of the mediator variable Credit growth in this study can be described as follows:

1. Testing the role of Credit Growth in mediating such indirect impacts between capital and financial performance have the absolute value of z-value is  $0.26869038 < 1.96$  and p-value  $0.394 > 0.05$ , which means it can be concluded that credit growth is not able to mediate the indirect effect of capital on financial performance at the 5% significance level.
2. Testing the role of Credit Growth in mediating the indirect effect of liquidity risk on financial performance have the absolute value of z-value is  $0.37200445 < 1.96$  and p-value  $0.355 > 0.05$ , it means that it

can be concluded that credit growth is not able to mediate the indirect effect between liquidity risk and financial performance at the 5% significance level.

**Table 4. Research Hypothesis**

No	Hypothesis	Prob- z	Coeffi- cient	Results
1	CAR $\rightarrow$ ROA	0,021	0.025522	Positive Signifi- cant
2	LDR $\rightarrow$ ROA	0,103		Not significant
3	GCG Score $\rightarrow$ ROA	0,000	1.115,58 8	Positive signifi- cant
4	CAR $\rightarrow$ Credit Growth Ratio	0,291		Not significant
5	LDR $\rightarrow$ Credit Growth Ratio	0,000	0.352019	Positive signifi- cant
6	CAR $\rightarrow$ ROA $\Rightarrow$ Credit Growth Ratio	0.394		Not significant
7	LDR $\rightarrow$ ROA $\Rightarrow$ Credit Growth Ratio	0.355		Not significant

## 5. DISCUSSION

### The Impact Between Capital and Financial Performance

Capital is very important and serves as a signal for a bank's ability to absorb risk and act as a buffer in the event of a financial and economic crisis that can disrupt financial system stability. In banking theory, Bank capital may not be disbursed into credit, however Bank capital plays an important role in the distribution of Bank credit which has an impact on achieving loan interest income, which is the core business of the banking industry. So, it will be increase in the level of the capital ratio will support the improvement of the Bank's financial performance.

The results were indicated that capital has a significant positive effect on the financial performance of the Bank. So, the higher level of capital owned by Conventional Commercial Banks will have an impact on the higher financial performance. The results of this study are in accordance with banking theory and supported by previous research conducted by Fidanoski et al., (2016), Jara-Bertin et al., (2014), Lee and Hsieh (2013), Kanga et al., (2020), Ogboi and Unuafé (2013) and Udom and Eze (2018).

Therefore, it can be concluded that the level of capital ratios owned by banks in Indonesia, although it is the highest in Asia and the third highest in the world, which is still efficient in producing good financial performance. Banks have a capital ratio far below the average capital ratio of the Bank as a whole such as Bank Bukopin, Tbk. So, they have financial performance achievements below the average financial performance for the bank as a whole, which are advised to strengthen their capital by reducing the dividend pay-out ratio, stock rights issue or secure assets from risk by insuring assets with high risk potential and investing in credit portfolios. There has an investment grade rating to support optimal financial performance.



### **The Impact Between Liquidity Risk and Financial Performance**

Liquidity Risk shown that a risk due to inability of the Bank to meet it is maturing liabilities from cash flow funding sources, and / or from high quality collateralized liquid assets, without disrupting the activities and financial condition of the Bank.

The test results shown that liquidity risk does not have a significant direct effect on financial performance. The results of this study are in line with the results of research conducted by Chen et al. (2018) on a bank-based financial system and Parvin et al., (2019). However, the results of this study are not in accordance with the theory of liquidity risk, where liquidity risk will affect to financial bank performance and are different from the results of research conducted by Chowdhury and Zaman (2018), Madhuwanthi and Morawakage (2019), Wekesa (2016).

Some indication of the problem on a level of liquidity risk in conventional commercial banks. There is allegedly due to the fact that many banks have violated the limit on the level of liquidity risk. The results of the study founded that there were 27 banks out of 33 banks that had violated the limits on the level of liquidity risk set by the banking authority in Bank Indonesia Regulation Number 17/11 / PBI / 2015, such as the normal range of 78% to 92% and only 6 banks who are able to comply with the provisions on the amount of liquidity risk. The number of banks that have violated the liquidity risk limit is indicated to be a problem that causes liquidity risk to not affect to the financial bank performance. Thus, the results are provided a theoretical contribution with violation of the level of liquidity risk in lending causes liquidity risk to have no effect on the financial performance of the Bank.

The results as an early warning system for the Bank's stakeholders, especially the management of the Bank and banking authorities, under the condition that Conventional Commercial Banks in Indonesia are not seen in a "good" condition because of the many violations of the implementation of the safe limit for the level of liquidity risk. The economic crisis in 1998 with the collapse of 20 banks due to liquidity shortages became an important lesson that breaches of safe limits for the level of liquidity risk were very dangerous. Therefore, the Financial Services Authority must tighten supervision of Indonesian banks to comply with the stipulated safe limits for liquidity risks.

### **The Impact Between Corporate Governance and Financial Performance**

The implementation of Good Corporate Governance at the Bank was expected to be able to endeavor and to minimize conflicts between management and owners (agency conflict) and other stakeholders and be able to avoid risks or minimize fraud. The implementation of Good Corporate Governance does not merely fulfill the provisions of the authorities or applicable laws and regulations, but is more driven by the awareness that good governance is an important key to improve performance and a sustainable competitive advantage.

There is a positive and significant effect between corporate governance and financial performance. The results of this study support the theory of Corporate Governance, which has been coined by (Cadbury 1992), and is in line with previous studies conducted by (Sami et al. 2011), (Zagorchev and Gao 2015), (Pillai and Al-Malkawi 2018) ), (Bhagat and Bolton 2008).

The results were showed that a good corporate governance at Conventional Commercial Banks will have an impact on the higher levels of financial performance. The implementation of good governance in banking in Indonesia means that the Bank is able to regulate rights and responsibilities as well as the relationship between shareholders, managers, creditors, government, employees, and other stakeholders. The implementation of good governance will be able to resolve conflict with some interest problems, be able to realize the Bank's business plan in a professional manner so as to be able to minimize Bank risk and be able to elimi-

nate fraud in the management of Banks in Indonesia. Thus, improvements to bad corporate governance into good corporate governance are expected to be able to improve the financial performance of the Bank.

### **The Impact Between Capital on Credit Growth**

Capital likely an important aspect in the banking industry, which was a bigger the capital, the stronger the bank. Bank capital was not intended to be channeled as credit to debtors but is intended to absorb risks that occur in the banking business. In the banking business, lending is funded by third party funds from savings customers. However, third party fundraising must follow the applicable regulatory corridors, such as by considering the capital ratio owned by the Bank. A bigger capital ratio means that Banks are allowed to collect larger Third Party Funds and can subsequently fund larger lending. Therefore, high capitalization can encourage credit growth.

This study is unable to prove that capital has a significant positive effect on credit growth at Conventional Commercial Banks. The results are not in accordance with banking theory and do not support most of the results of previous studies. A small proportion of research results are in line with the results of this study, including research conducted by Carlson et al., (2013) in the period before the financial crisis of 2008 to 2010 where capital did not have a clear relationship with credit growth.

The results were indicated that there are problems in the relationship between capital and credit growth at Conventional Commercial Banks in Indonesia. Research conducted by Kim and Sohn (2017) founded that bank capital has a significant positive effect on loan credit at United States banks only after large banks maintain sufficient liquid assets so that they have a level of risk within safe limits. The results were also founded that 27 out of 33 banks had violated the limit of the level of liquidity risk set by the banking authority in Bank Indonesia Regulation Number 17/11 / PBI / 2015, including the normal range of 78% to. 92% and only 6 banks were able to comply with the provisions on the amount of liquidity risk.

Based on the research results, a problem of the relationship between capital and credit growth occurs because many banks do not maintain the level of liquidity risk according to the regulations, even the level of liquidity risk they have, even have a liquidity risk level above 100%. Most banks in Indonesia, in channeling credit, often do not consider Third Party Funds, the amount of which is influenced by the capital ratio.

Credit expansion using a portion of owned capital is a dangerous business action for banks because if there is bad credit, the remaining capital held will not be able to cover this risk. This condition causes the bank to experience liquidity difficulties to return Third Party Funds and Bank operations. Therefore, the Bank is advised to manage credit growth by achieving the maximum level of lending but within the limit of not using funds from the portion of capital owned and maintaining the level of liquidity risk not violating the limits set by the banking Authority.

Thus, the results are a contribution to the theory that capital is not able to support credit growth in a condition where there is a violation of the level of liquidity risk in lending.

### **The Impact Between Liquidity Risk and Credit Growth**

Liquidity Risk shown that a risk due to the inability of the Bank to meet the obligations due from cash flow funding sources, and / or from high quality liquid assets that can be pledged without disrupting the activities and financial condition of the Bank.

The level of liquidity risk held by conventional commercial banks has a normal average, however, the liquidity risk management found that the liquidity risk disparity is very wide. There are 27 banks out of 33 banks that have violated the limit on the level of liquidity risk in accordance with Bank Indonesia Regulation Number 17/11 / PBI / 2015, namely 78% s.d. 92% and only 6 banks are able to comply with this provision.

There is a positive and significant effect between liquidity risk on credit growth in conventional commercial bank companies. The results are indicated that violation of the maximum level of liquidity risk does not lead to a decrease in the rate of credit growth, but instead increases the rate of credit growth, but the resulting credit growth with a violation of the liquidity risk limit is not able to support performance. This condition must be addressed wisely by the Bank's management so that in preparing the Bank's Business Plan and in its realization, the Bank's management does not prioritize the achievement of credit growth targets alone, but credit growth must be accompanied by compliance with the provisions for liquidity risk limits set by the Financial Services Authority.

### **Credit Growth Is Not Able To Mediate The Effect Between Capital On Financial Performance**

Credit growth has an important role in banking operations because it is the main support for bank income, so a good credit growth supports the achievement of good performance. Credit growth is closely related to the condition of the Bank's capital. Bank capital is not intended to be channeled as credit to borrowing customers but is intended to absorb risks that occur in the banking business. Lending is funded by Third Party Funds from deposit customers, where there is a close relationship between the capital ratio and credit growth because the capital ratio will affect the amount of Third Party Funds collected, which are then used to fund lending.

The results were not able to prove that credit growth mediates the effect between capital and financial performance. The test results have been conducted with capital, which has a significant positive effect directly impact to financial performance at conventional commercial banks, but capital does not have an indirect effect on financial performance through credit growth. Credit growth cannot act as a mediating variable in the relationship between capital and financial performance at conventional commercial banks. The results are indicated with credit growth held by banks in Indonesia.

As described in the previous sub-chapter, the inability of credit growth mediates the effect of capital on financial performance because many banks, in channeling credit, often do not consider the capital ratio. This condition indicates that the lending carried out by the Bank is not entirely funded by Third Party Funds in accordance with banking theory and the provisions of the banking authority, but uses other funds such as lending facilities, interbank loans and a portion of the capital owned by the Bank.

Credit expansion using the portion of capital owned is a dangerous business action for banks because if there is bad credit, the remaining capital will not be able to cover this risk and the Bank will experience difficulties obtaining financing facilities from Bank Indonesia or other banks due to the condition of the capital that becomes weak because eroded for credit distribution. This condition causes the bank to experience liquidity difficulties to return Third Party Funds and Bank operations. Therefore, the Bank is advised to manage credit growth by achieving the maximum level of lending but within the limit of not using funds from the portion of capital owned and maintaining the level of liquidity risk not violating the limits set by the banking Authority.

Thus, the results were provide a theoretical contribution that violations of the level of liquidity risk in lending cause credit growth to be unable to mediate the effect of capital on the financial performance of the Bank.

### **Credit Growth Mediates the Effect Between Liquidity Risk and Financial Performance**

Credit growth has an important role in banking operations because it is the main support for bank income, so that good credit growth supports the achievement of good performance. Credit growth is closely related to the amount of liquidity risk the Bank has. The high liquidity risk held by the Bank indicates that the Bank is implementing a strict liquidity policy so that the Bank continues to expand its credit. The credit growth achieved by the Bank will increase interest income and improve the Bank's financial performance. Thus, credit growth can mediate the effect of liquidity risk on the financial performance of the Bank.

The results of this study are unable to prove that credit growth mediates the indirect effect of liquidity risk on financial performance. The test results show that liquidity risk, either directly or indirectly through credit growth, has no effect on financial performance at conventional commercial banks. The inability of credit growth to mediate the effect of liquidity risk on the financial performance of the Bank indicates that there are problems with credit growth held by banks in Indonesia.

Based on the research results, credit growth problems occur because many banks do not maintain the level of liquidity risk according to the regulations, even the level of liquidity risk they have above 100%. This condition shown that the lending carried out by the Bank is not entirely funded by Third Party Funds in accordance with banking theory and provisions on the banking Authority, but uses lending facilities, inter-bank loans, and a portion of the capital owned by the Bank. Credit expansion by violating liquidity risk limits and using a portion of owned capital is a dangerous business action for banks because if there is bad credit, the bank will experience liquidity problems to return Third Party Funds and Bank operations. Therefore, it is advisable for Banks to manage credit growth by reaching the maximum level of lending, but within the limit not violating the liquidity risk level limit set by the banking Authority.

Thus, the results also provided by a theoretical contribution such violations of the level of liquidity risk in lending cause credit growth to be unable to mediate the effect between liquidity risk on the financial performance of the Bank.

The results also function as an early warning system for the Bank's stakeholders, especially the management of the Bank and banking authorities, under the condition that Conventional Commercial Banks in Indonesia are not seen in a "good" condition because of the many violations of the implementation of the safe limit for the level of liquidity risk. The economic crisis in 1998 with the collapse of 20 banks due to liquidity shortages became an important lesson that breaches of safe limits for the level of liquidity risk were very dangerous. Therefore, the Financial Services Authority must tighten supervision and supervision of Indonesian banks to comply with the stipulated safe limits for liquidity risks.

### Capital Level and Liquidity Risk Which Have the Most Optimal Effect on Financial Performance

In addition to examining the effect between independent variable on the overall dependent variable, this study also analyzes further to determine the level of capital and liquidity risk that has the most optimal effect on financial performance.

**Table 5. Analysis with Operation Research**

No	Variable	Criteria	CAR Level	LDR Level
1	Financial Performance	ROA "Very Good"	23.34%	86.87%
2	Capital	CAR "Good"	22.73%	89.75%
3	Liquidity Risk	LDR "Average"	20,22%	86.79%
4	Optimal Range		20.22% to 23.34%	86.79% to 89.75%

The conclusion of the optimal level with operation research completes statistical testing and can help proved that adherence to the limits on the level of liquidity risk can produce an optimal level for financial performance.

~~Capital and good corporate governance support financial performance, however liquidity risk does not affect to the financial bank performance. Liquidity risk has a significant positive effect on credit growth while capital has no effect on credit growth. Credit growth is not able to mediate the effect of capital and liquidity risk on the financial bank performance.~~

Based on the research results, it is also concluded that capital and the implementation of good governance can improve financial performance. Lending that violates a normal limit of the level of liquidity risk causes liquidity risk did not have impact on performance and causes credit growth. It is to be unable to play a role in mediating the indirect effect between capital and liquidity risk on financial performance at Conventional Commercial Banks in Indonesia. This research study founded that the optimal level of capital is 20.22% to 23.34% and liquidity risk is in the range of 86.79%-89.75%. The finding of this optimal level also strengthens the finding that violations of the limit on the level of liquidity risk in lending make liquidity risk not affecting to the financial performance of the Bank and credit growth is unable to mediate the indirect effect between capital and liquidity risk on the financial performance of conventional commercial banks.

## 7. SUGGESTIONS

Bank management is advised to maintain the level of capital in the optimal range in this research study. In addition to lending, Bank management may not only focus on maximizing lending to achieve credit growth targets, but must also pay attention to safe liquidity limits in accordance with banking regulations.

Shareholders must support the Bank's management to set a capital level target within the optimal range, support management to comply with the normal limits of liquidity risk and fully support the implementation of corporate governance by supervising and supervising the Bank's board of commissioners.

Banking authorities must carry out supervision by advising Banks to be able to have capital ratios within the optimal range. Banking authorities can conduct studies and refine regulations on capital adequacy, liquidity risk, corporate governance and financial performance assessments, including tightening monitoring of violations of normal limits on liquidity risk levels.

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