

## Factors Affecting Bank Profitability of *BUKU 1* and *BUKU 2*

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### Abstract

The research aims to know and analyze the effect of bank health ratios in terms of capital aspects (CAR and CCRA), rentabilities aspects (ROA, OEOL, and NIM), and liquidity aspects (LDR and LAR) on Profitability in BUKU 1 and BUKU 2 group banks. This study used secondary data obtained from monthly financial statements on banks category BUKU 1 and BUKU 2 period January 2015-December 2019 while analyzing data using the multiple linear regression analysis approaches. The results found that 1) aspects of bank capital as measured by capital Adequacy Ratio and Core Capital Ratio to ATMR consistently had no significant effect on profitability in the BUKU 1 and BUKU 2 group banks; 2) Aspects of Rentability as measured by ROA and NIM proved to have a negative and significant effect on bank profitability in the BUKU 1 and BUKU 2 groups, While for Operating Expenses or Operating Income proved to have a significant negative effect on bank profitability and 3) Aspects of liquidity as measured by LDR and LAR proved to have a positive and significant effect on profitability in banks in the BUKU 1 and BUKU 2 groups, and 4) Among bank health ratios, it was found that LDR was the dominant variable on the profitability on banks in the BUKU 1 and BUKU 2 groups.

**Keywords:** Bank Health Ratio; Profitability; BUKU 1; BUKU 2; Bank

**JEL:** G21, G23, G53

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### 1. INTRODUCTION

Banking is one of the supporting national development because the bank is a business entity that provides capital for debtors. Banks that have a role as financial intermediation, one of the roles of banks is for investors is to mobilize and allocate deposits, so that banks have an essential role in economic financing. (Öhman and Yazdanfar 2018) This is in accordance with the statement on the UU. No. 10 of 1998 reads, "Banks are business entities that collect funds from the community in the form of deposits (such as current deposits and

savings) and distribute to the community in the form of credit and other forms to improve the standard of living; of many people."Based on the decree(POJK No. 6/POJK.03/2016), regulates business activities that can be carried out by banks and office networks based on the bank's business activities in each BUKU (Commercial Bank based on Business Activities). Business activities carried out by conventional commercial banks include "raising funds, disbursement of funds, trade finance, treasury activities, activities in foreign exchange, agency activities, and cooperation, payment system activities and electronic banking, capital participation activities, temporary capital participation activities in the framework of credit rescue, other services and other activities that are commonly carried out by the Bank as long as it doesn't conflict with the laws and regulations."

Recently, the Bank category BUKU 1 and BUKU2, which includes small banks, decreased its competitiveness. The public will prioritize its choice in the bank's categories BUKU 3 and BUKU 4, which fall under the criteria of medium and large banks in carrying out activities to store their fund in the bank or those doing financing credits. They assume that the medium and large banks have a better reputation, so they feel safe and able to offer cheaper credit interest (Lestari & Abdullah, 2020). The banking business is more concentrated in medium and large-sized banks, categorized based on Commercial Banks Business Groups or BUKU 3 and BUKU 4. According to PJOK (2016), banks in the category BUKU 3 have core capital between 5 trillion rupiahs to 30 trillion rupiahs, while BUKU 4 is a bank with a core capital of more than 30 trillion rupiah. Based on data, there are 71 banks with criteria BUKU 1 and BUKU 2, namely banks that have core capital of less than 1 trillion rupiah and banks with core capital between 1 to 5 trillion rupiahs (PJOK, 2016).

Different business activities will certainly also affect the bank to raise public funds and channel funds in the form of a credit to impact bank profitability. This is because most banks in Indonesia still rely on deep credit as the bank's main source of income through interest expense. According to (Law No. 10, 1998) on banking, one of the business activities of commercial banks is the provision of credit. Credit distribution is the main activity. Therefore the bank is the main income of this activity. The amount of credit provided will determine the bank's profits. Credit given to the community has significance for the community as well as to banks that need funds immediately find funds for business capital, can bank interest rates and the economy as a whole, will encourage the economy (Kasmir 2014)

One of the reasons banks are concentrated in lending is because banks play an important role in the financial intermediation process. The banking sector is a sector that mediates the transfer of funds in converting savings into investments through payment systems and with various financial instruments in a system. The bank is not only a conduit for monetary control but also an effective institution in restructuring the economy and ensuring macroeconomic stability in the long term that is sustainable (Ayaydin and Karakaya 2014)

Banks are also an industry in which business activities are involved; it depends on public confidence that the level of health of banks should be maintained. To maintain this function, the bank must maintain operational activities by generating profits so that profits continue to increase. Profitability or profitability is a ratio to measure the effectiveness of a company's profit, or in other words, profit as a ratio indicating the company's ability to generate profits. Profits are essential for a bank to keep its stability elevated to meet shareholders' obligations, attract investors to invest, and increase its confidence to deposit

large funds in the bank. For this reason, Banks are required to maintain the level of soundness in order to continue to gain the trust of stakeholders.

In accordance with the Regulation of Bank Indonesia written in the circular (PBI No. 13/1/PBI/2011) to assess the Health Level(PBI No. 13/1/PBI/2011) Commercial Banks, including affirming that the bank shall do the Bank's Health Level assessment through risk-based bank rating (RBBR) both individually or consolidated, which includes assessments such as Risk Profile, Good Corporate Governance (GCG), Rentability (earnings); and capital to produce the Bank's Health Composite Rating. In this study, the bank's health ratio includes the Capital Adequacy Ratio, and the Core Capital Ratio to ATMR as a ratio in capital aspects, Return on Assets Ratio, and Net Interest Margin Ratio as a ratio of in terms of earnings, Operating Expenses represents efficiency risks, and the Loan to Deposits Ratio and Liquid Assets Ratio represent liquidity risk.

Several studies have proven that bank health ratios proved to have an effect on bank profitability, including Menicucci & Paolucci (2016), which found NIM and loan ratios to affect ROA, Öhman & Yazdanfar (2018) found the influence of CAR on Profitability. Other research such as Batten & Xuun Vinh (2017), which uses ROA, ROE, and NIM as dependent variables, found that CAR and BOPO ratios significantly affect profitability. Similar results in the Almaqtari et al. (2019) and Fidanoski et al. (2018) study found that CAR and operational efficiency had an effect on profitability. While studies in Indonesia such as Ningsih et al. (2017) using FDR, NPF, BOPO, and CAR found that Rentability negatively affects Profitability, Effendi (2020) found NPF could not mediate the relationship of inflation and profitability. Furthermore, The phenomenon of profit growth in banking with the criteria BUKU 1 and BUKU 2 can be shown in Figure 1.

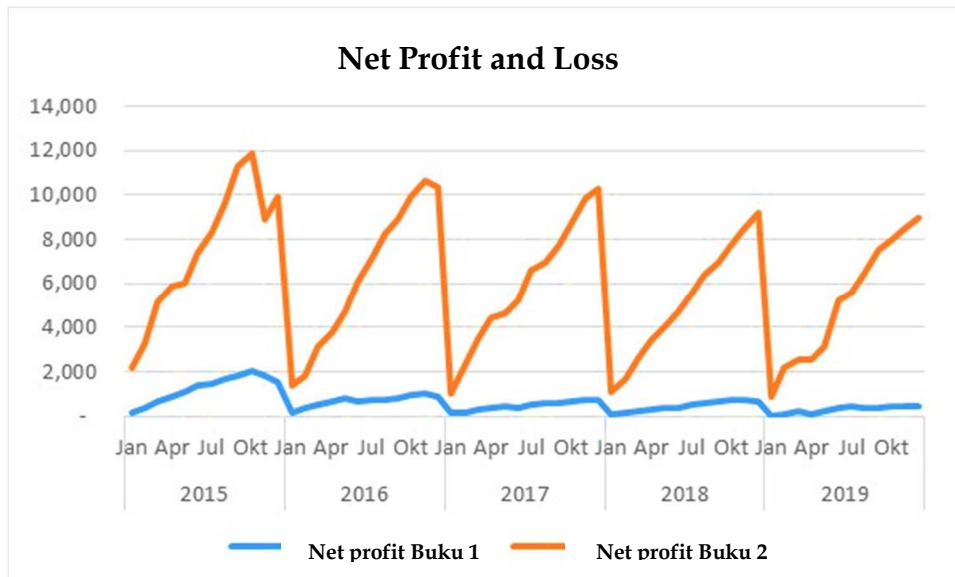


Figure 1. Development of Banking Profitability BUKU 1 and BUKU 2  
 Source: Secondary Data Processed, 2021

In the development of net profit results in incoming banks, BUKU 1 and BUKU 2 from 2015 to 2019 experienced fluctuating growth with almost the same pattern. Bank profits can mostly only be booked at the end of the annual report period seen with the chart increasing at the end of the year and declining again at the beginning of the year. This same

pattern occurs in both BUKU1 and BUKU2; it's just that BUKU 2 has a slightly higher net profit. This is because the difference in the model owned by the bank is also different.

Based on this phenomenon, this study raises the issue of whether the health ratio of banks affects profitability and which health ratios are dominant in the profitability of banks that are dominant. Grouped in BUKU 1 and BUKU 2, therefore, can be used as a reference in determining the interest rate on credit in the future.

## **2. HYPOTHESIS DEVELOPMENT**

### **Bank Health Theory**

All stakeholders, whether bank management, bank owners, customers, or the public and regulators represented by the government, have emphasized the importance of bank health. The health of the bank has been in the interests of all parties stakeholders. It is a benchmark of bank management, whether they run the bank's business in accordance with applicable regulations so that there are no problems in the past. According to ([PBI] 2011), "The Bank Health level is the result of an assessment of the Bank's condition conducted on the risks and performance of the Bank." Meanwhile, according to (Lestari and Abdullah 2020), "The level of health of the bank is the result of qualitative assessment of various aspects that affect the condition or performance of a bank. Through quantitative assessment and qualitative assessment of capital factors, asset quality, management, Rentability, liquidity, and sensitivity to market risks.

Bank conditions are qualitative assessments covering several aspects that can affect the condition or performance of banks through an assessment on aspects of capital, asset quality, management, profitability, liquidity, and market risk sensitivity. After considering the assessment factor based on physical and the importance of assessment factors as well as the impact of other factors such as the state of the banking industry and the national economy.

Based on PBI regulation No. 13/1/PBI/2011, it is stated that banks can evaluate the health of banks using new techniques in accordance with article 2, stated that "banks should check the level of health of banks using risks (Risk-Based Bank Rating) approaches individually or together" The regulation is a revision of the previous regulation, the CAMELS method which focuses more on assessing Capital, Asset, Management, Earnings, Liquidity and Sensitivity to market risk. The RBBR method is a more precise method by putting forward four aspects of assessment, namely risk profile, corporate governance, profit, and capital (Surat Edaran BI No 13/24/DPNP/2011).

### **Profitability Theory**

Profitability ratio (Profitability) is the ability of a company to profit through business operations using asset funds owned by the company. According to (Sartono 2015), profitability is a company's ability to earn profits related to sales, total assets, and equity. Net income is a measure of a company's performance success. In addition, net income is also often used as one of the indicators that investors have seen before investing funds because profits reflect a company's ability to meet its obligations to shareholders. For a company, profit is essential because profit is one of the factors that affect a company's capital structure so that it runs the company's operational activities.

The profitability ratio is used to determine the company's ability to earn profits in a certain period. According to (Hapsari & Saputra, 2018), profit can be one factor that determines the success or absence of a company in running its business. An increased profitability ratio will indicate the excellent quality of the company's ability to earn high profits. Nurmasari (2018) states that when the company can achieve profit, it means having good profitability.

### **Hypotheses Development**

#### **The Effect of Capital on Profitability**

Capital is an important source to meet the bank's funding needs, but also the capital position will be affected by taking management decisions to make a profit and can be a risk. For example, if the capital is huge, it will affect the size of the bank's profits, while too little capital other than limiting the bank's expansion capacity will also affect the value of the bank's shareholders. In other words, the size of the bank's capital will affect the level of public confidence in the bank's financial capabilities.

In theory, the capital aspect relates directly to the profitability of the bank. When the capital of a large bank is, then the bank will be able to channel greater credit compared to banks that have small capital, and vice versa. When the bank's capital is limited, the bank will have the ability to channel credit so that it will decrease its profitability. Based on this theory, the relationship between Capital Adequacy Ratio (CAR) and Core Capital Ratio to ATMR with Profitability is positive. This is in accordance with research conducted by (Setiawati et al., 2017); (Sabir, Ali, and Habbe, 2012); (Fidanoski et al. 2018); (Almaqtari et al. 2019); and (Batten & Xuun Vinh, 2017) consistently found that CAR positively affects bank profitability. Based on these findings, the hypothesis of this study:

**H<sub>1</sub>**. Capital Adequacy Ratio positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**H<sub>2</sub>**. Core Capital Ratio to ATMR positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

#### **Effect of Earnings on Profitability**

Earning is one of the bank's health assessments in terms of Rentability. The indicators of rentability assessment are Return on Assets (ROA), Net Interest Margin (NIM) and Operating Expenses to Operating Income (BOPO), the real profit component for the budget, and the projected capability of the profit component in raising capital. Make a profit, thus increasing your profitable and future prospects. If the bank's profits increase, so will the bank's capital increase will impact profitability.

In research (Widana, I.W.D., et al., 2021) found that NIM and NOM positively affect bank profitability. While Almaqtari et al., 2019) found the ratio of efficiency positively affects bank profitability. In research (Fidanoski et al., 2018) found that the ratio of efficiency negatively affects profitability. It is also supported by research (Ningsih et al., 2017); (Widana, I.W.D., et al., 2021) and (Setiawati et al., 2017), who found that BOPO has a negative and significant effect on profitability. Based on this explanation, the hypothesis of this study is:

**H<sub>3</sub>**. Return on Assets positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**H4.** Operating Expenses on Operating Income negatively affect the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**H5.** Net Interest Margin Ratio positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**Effect of Liquidity Risk on Profitability**

In the banking industry, the risk is defined as the potential losses that may occur in business activities. There is a risk because it is uncertain what happened that could cause its loss. Basically, losses caused by this risk can reduce bank revenues, thus lowering profitability. In this study, liquidity risk is measured by the Loan to deposit ratio and liquid asset ratio. LDR and LAR demonstrate the bank's ability to make repayments to depositors who make withdrawals after some of their funds are disbursed in credit to debtors as the source of its liquidity. Banks are declared to have high liquidity if they have a high LDR and LAR ratio, so the bank is likely able to generate greater profits (YK Chen et al., 2018), Conversely, LDR and LAR are getting smaller accordingly, the bank is not effective in channeling credit so that the chance of obtaining profits will be smaller.

The study results (Suryaningsih, N. P. R, et., al, 2020) found the liquidity ratio negatively affects bank profitability. Research (Menicucci &Paolucci, 2016) found that LR has a significant positive influence on NIM. The study results were supported by research (Trujillo-Ponce, 2013) which found loan/Total Assets had a significant positive effect on ROA and ROE. The study results (Fidanoski et al., 2018) also found that liquidity positively affects ROA and NIM. So is research (Azmy, 2018) and (Sabir et al., 2012); Setiawati et al., 2017) and Ratnasari &Budiyanto, 2016) found that LDR had a positive and significant effect on bank profitability. Based on these findings, the hypothesis of this study is:

**H6.** Loan to Deposit Ratio positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**H7.** Liquid Assets Ratio positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2

**Concept**

Based on the study of theory and previous research studies, this research framework is as follows a Figure 2:

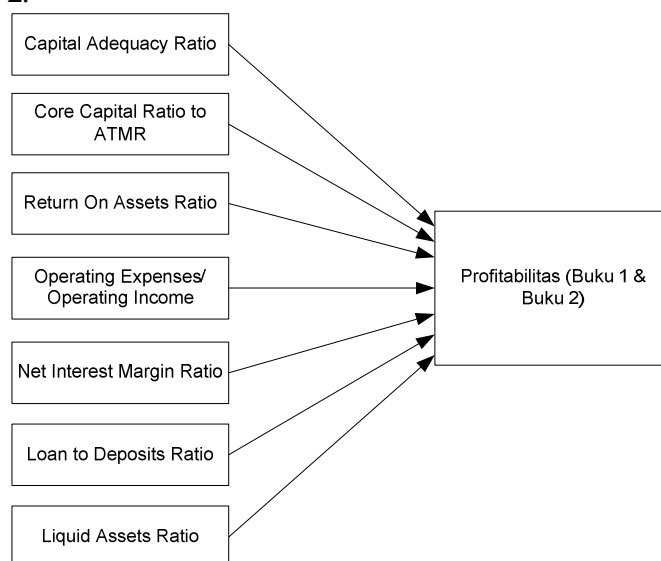


Figure 2. Framework of Thought

### 3. METHOD, DATA, AND ANALYSIS

#### Research Methods

The population used in this study is banking companies in Indonesia that fall into the category OF BUKU 1 and BUKU 2 research period January 2015 to December 2019. The data source in this study is the main reference of the Financial Services Authority through Banking Statistics in Indonesia. Furthermore, the data is processed with the SPSS program in accordance with the problems and purposes of this research.

#### Classic Assumption Test

This Classical Assumption Test is intended to find out whether the observation of a linear regression model in analyzing has met the calcite assumption. Linear models will be more appropriate when they meet assumptions of normality, multicollinearity, and heteroskedasticity.

#### Linear Regression Analysis

In this study, independent variables, i.e., bank health ratios, as many as seven variables, selected multiple linear regression methods. This analysis describes the effect of both simultaneously and partially independent variables on dependent variables. The equation model built into this study can be written as following equation 1.

$$It\ profit = a + \beta_1 CAR_{i,t} + \beta_2 CCAR_{i,t} + \beta_3 ROA_{i,t} + \beta_4 BOPO_{i,t} + \beta_5 NIM_{i,t} + \beta_6 LDR_{i,t} + \beta_7 LAR_{i,t} + e \quad (1)$$

CAR	= Capital Adequacy Ratio of bank <i>i</i> in <i>t</i> month
CCAR	= Core Capital Ratio to ATMR bank <i>i</i> in 2015
ROA	= Return on Assets bank <i>i</i> in <i>t</i> month
BOPO	= Operating Expenses on Operating income of bank <i>i</i> in <i>t</i> month
NIM	= Net Interest Margin Ratio of bank <i>i</i> in <i>t</i> month
LDR	= Loan to Deposits Ratio of bank <i>i</i> in <i>t</i> month
LAR	= Liquid Assets Ratio of bank <i>i</i> in <i>t</i> month
<i>e</i>	= error

Hypothesis testing used the F test, t-test, and coefficient of determination. If the probability value (sig) < 0.05, then the independent variable is shown to have a significant effect on the dependent variable.

Based on the results of descriptive analysis throughout it can be reported that the amount of data (N) as much as 120 data with the financial ratio value of CAR, CCRA, ROA, OEOI, NIM, LDR, and LAR has a lower standard deviation compared to with the average value. This shows that the entire health ratio of banks has tiny data fluctuations, so it tends to have normally distributed data. As for net income, the standard deviation value is slightly higher than the average value. However, the difference is quite small, indicating that this net income data tends to be normally distributed.

#### 4. RESULTS AND DISCUSSION

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Capital Adequacy Ratio (%)	120	19.67	30.75	22.9948	2.35483
Core Capital Ratio to ATMR (%)	120	17.60	29.84	21.4002	2.40472
Return on Assets Ratio (%)	120	.71	3.21	1.6558	.32697
Operating Expenses/Operating Income (%)	120	81.00	93.67	85.9471	2.35974
Net Interest Margin Ratio (%)	120	3.41	6.43	5.2497	.55138
Loan to Deposits Ratio (%)	120	68.66	99.50	84.1260	6.56843
Liquid Assets Ratio (%)	120	14.54	27.50	20.7507	2.36041
Net income (Billions)	120	31.00	11868.00	3321.7167	3443.43950

Source: SPSS data results

Based on Table 1, the picture of the health ratio in BANK BUKU 1 and BUKU 2 where the average bank has very high capital adequacy with an average of 22.99% and has a fairly large core capital ratio that is 21.4%. The bank also generated a positive pre-tax profit with an average of 1.65%, with an interest income of 5.24% and bank efficiency of 85.94%. Judging from the bank's liquidity, the bank's ability to maintain liquidity is quite good, which is 84%, with a total credit of 20.75% of its total assets. While the banks' profitability level, the average bank group BUKU 1 and BUKU 2 were able to generate an average net profit of 33.217.167 billion rupiahs.

Before analyzing multiple linear regressions, the data is first tested classical assumptions so that regression conclusions don't produce biased values. The results of the assumption test found that the data had distributed normally, not heteroskedasticity, but multicollinearity to treat multicollinearity, it is done by removing one of the variables that multicollinearity occurs, and the full results are shown in Table 2.

Table 2. Classic Assumption Test

No.	Test	Indicators	Result	Information
1	Normality	Asymp. Sig. (2-tailed)	0.101	Normal distribution
2	Multicollinearity	VIF	VIF > 10	There is multicollinearity between CAR and CCRA.
3	Multukolinierity improvement without variable Core Capital Ratio to ATMR	VIF	VIF < 10	There is no multicollinearity.
4	Heteroskedasticity Test	Scatter Plot	Scattered data	There is no heteroskedasticity.



**Table 3.** Regression Results Influence of Banking Health Ratio to Profitability

No.	Hypothesis	t	Sig.t	Information
1	H1. <i>Capital Adequacy Ratio</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	-0.502	0.617	H1 rejected
2	H2. <i>Core Capital Ratio to ATMR</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	Not getting away with the exposure		H2 rejected
3	H3. <i>Return on Assets</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	-5.593	0.000	H3 rejected
4	H4. <i>Operating Expenses / Operating Income</i> negatively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	-4.621	0.000	<b>H4 accepted</b>
5	H5. <i>Net Interest Margin Ratio</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	-3.267	0.001	H5 rejected
6	H6. <i>Loan to Deposit Ratio</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	6.351	0.000	<b>H6 accepted</b>
7	H7. <i>Liquid Assets Ratio</i> positively affects the Profitability of Banks that fall into the category of BUKU 1 and BUKU 2	4.873	0.000	<b>H7 accepted</b>

Regression equations can be written as following equation 2.

$$Profit = 69356,705 - 64,364 CAR - 9782,596 ROA - 1051,496 OEI - 1880.97 NIM + 423.45 LDR + 783,919 LAR \quad (2)$$

Test result F of 21,634, with a p-value of 0.000<0.05, can be interpreted that together with the variable Capital Adequacy Ratio (CAR), Return On Assets Ratio (ROA), Operating Expenses or Operating Income (OEI or BOPO), Net Interest Margin Ratio (NIM), Loan to Deposit Ratio (LDR), and Liquid Assets Ratio (LAR) has a significant effect on profitability in banks. That falls into the BUKU 1 and BUKU 2 groups, while the coefficient of determination adjusted R<sup>2</sup> by 0.510 or 51%. This result can be explained by variations of the six independent variables: CAR, ROA, OEI, NIM, LDR, and LAR. In contrast, the remaining 49% (100% - 51%) of bank profitability can be explained by other factors.

#### **The Effect of Capital aspects on Profitability**

The study results found that the CAR ratio did not affect bank profitability (Net Income). The study results were also supported by the ratio in other capital aspects, namely Core Capital Ratio to ATMR, which was also unable to prove as a variable that significantly affects Profitability in BUKU 1 and BUKU 2 banks. Thus the H1 and H2 hypotheses in this study have been consistently rejected. Therefore, the capital aspects of banks in the BUKU 1 and BUKU 2 groups have not affected bank profitability.

The existence of results that contradict this study with existing theories and the results of previous research, based on research analysis, is due to increased bank profitability (Net Income), not due to an increase in CAR. The magnitude of CAR in banks is more due to the management's policy in maintaining a minimum CAR ratio of 8%, so there are still many untapped bank models for credit distribution. In addition, the

mobilization of the CAR ratio to core capital ratio to ATMR in the BUKU1 and BUKU 2 group banks did not show conformity with existing theories.

In theory, CAR is a bank's capital adequacy ratio, and this ratio is considered one of the fundamental ratios to capital strength. It is expected that the higher this ratio, the lower the external funding needs. This demonstrates the bank's ability to absorb losses and handle risk exposure with shareholders is getting better. This capital adequacy ratio is expected to positively correlate with the performance that well-capitalized banks face bankruptcy due to lower operating costs that reduce funding costs and risk (Alpera & Anbar, 2011). This attitude of prudence causes banks to lack in the number of funds channeled in the form of credit, so it has not been able to increase its profitability.

In addition, based on the data collected, it is known that the average CAR ratio in conventional banking is quite high, reaching 22.99%, supported by the Core Capital Ratio to ATMR of 21.40%. Therefore, it can be ascertained that the amount of capital used to assume the risk of loss is considered large, and idle funds are not channeled into corporate bank financing (Net Income). Most of the profits obtained by small banks, such as banks in BUKU1 and BUKU 2, came from the interest on loans disbursed. Most of the profits obtained by small banks, such as banks in the BUKU1 and BUKU 2 groups, came from the interest on loans disbursed.

The results of this study support research conducted by (Rathore A. 2018), which found that CAR had no significant effect on the profitability of commercial banks in Turkey. The results also support research (Ningsih et al., 2017) which found that CAR had no significant impact on profitability at the Islamic People's Financing Bank (BPRS) in Indonesia. Accordingly, Bank Indonesia regulations, every bank to keep CAR at least 8% to create a bank to maintain bank capital adequacy. Therefore, banks tend to invest their funds carefully, and it is not easy to spend bank funds for funds because they can provide significant risk. The bank emphasizes the bank's sustainability so that CAR does not affect the profitability of the bank. Likewise, the study (Azmy, 2018) found that CAR also did not significantly affect banks' profitability as measured by ROA and ROE in Islamic People's Financing Banks.

#### **Effect of Rentability Aspectstas on Profitability**

The study results found that Return on Assets and Net Interest Margin had a significant negative influence on bank profitability (Net Income). This result strongly contradicts the theory that increased ROA and NIM will increase the bank's net profit. Thus the H3 and H5 studies were rejected.

ROA is the ratio of profits measured from the ratio of the amount of pre-tax bank profit to the total assets held by the bank. The greater the ROA, the greater the effectiveness of the bank in managing assets. Greater ROA valuation, then the company's performance is greater because the returns generated by the company become greater. In comparison, NIM is the ability of banks to effectively obtain income from bank interest on the management of all bank income. Net interest is one of the components (profits) because profit is a component that generates profitability, then indirectly; if interest rate income increases, the bank's profit also generated increases. Therefore, it will increase the financial profitability of a good bank.

The existence of results contrary to the theory stated above, likely due to the high ROA in the BUKU 1 and BUKU 2 group banks, is not caused because this small bank does not gain great trust by the public, especially to store funds in the bank. The use of banking services for the community is more widely used for the benefit of credit services. Although the interest rate is higher than large banks, the public prefers this bank because of the ease factor in applying for credit that is not a complicated procedure. As a result, there is an imbalance between credit and third-party funds. Low third-party funds that banks can accommodate will undoubtedly lead to more insufficient assets compared to banks with larger DPK. At the same amount of pre-tax profit, lower investments will increase the bank's ROA. This is what causes when the bank's ROA increases precisely, the amount of net income is even lower due to the significant asset difference between banks for the BUKU 1 and BUKU 2 groups.

While NIM also contradicts the theory results, it is likely because interest policy is a significant problem for small banks to compete with large banks such as the BUKU3 and BUKU 4 group banks. This is because banks must dare to spend a significant interest burden on deposits from the community (savings, deposits, and other deposits) so that the public is willing to keep their funds in small banks. By offering large bank interest, it is expected that the public will save more funds in small banks. The impact of the interest burden becomes greater. In order to balance with bank profits, the loan interest rate policy also becomes large. This is what causes large interest income or large net income not comparable to large NIM on banks.

The study results are in line with a study (Rahmat et al., 2014) which found that "NIM partially affects profitability, with negative direction, and negative relationships mean that any addition of NIM value will have implications for lower profitability." Research in accordance with the case of small banks conducted found that "Variable NIM has a negative and significant effect on ROA it can be concluded that people's credit banks during the research period in channeling credit apply high credit rates, this causes credit rates not to compete in the market."

Test results on the rentability aspects of the three variable *Operating Expenses and Operating Income* (BOPO) negatively affect the bank's profitability (Net Income). Thus the fourth hypothesis (H4) of research can be supported. The negative relationship between BOPO and Profitability means that the lower the BOPO, the profitability of the bank increases. Conversely, the greater the BOPO, the worse the bank's efficiency. Net income achieved at BUKU 1 and BUKU 2 banks decreased. This is because the bank's efficiency means the bank is able to reduce operating costs better so that it will increase the bank's net profit. In addition, BOPO is large because it is not balanced between operating income and operating costs. Based on this explanation, BOPO has a negative relationship to the profitability of proven banks.

These findings support the results of a study (Kusumastuti, W. I., & Alam, A. 2019) which found that BOPO partially negatively affects profitability; the negative BOPO regression coefficient value shows that the smaller BOPO. The more efficient the bank is in carrying out its activities in increasing profitability, the small BOPO indicates that the bank's operating costs are smaller than its operating income; thus, it shows that the bank's management is better. It is efficient in carrying out its operational activities." The results also support research (Fidanoski et al., 2018) which found that efficiency ratios negatively affect profitability in banks in Croatia. Bank BOPO is the only ratio that has a significant

effect on BPRS profitability with negative influence direction such as in research (Ningsih et al., 2017), (Sabir et al., 2012) and analysis (Setiawati et al., 2017).

#### **The Effect of Liquidity aspects on profitability**

The results of testing on variable Loan to deposit ratio found a significant positive effect on bank profitability (Net Income). The results of this study are also supported by testing on variable Liquid Assets Ratio, which proved to also positively affect Profitability in BUKU 1 and BUKU 2 group banks. Thus these findings support the H6 and H7 hypotheses.

Low bank liquidity will show the bank in channeling credit to be ineffective. LDR and LAR getting smaller means that banks are not optimal in managing deposits from the community to be channeled in the form of credit. According to (Kuncoro & Suhardjono, 2002) stated that "LDR which is below its target and limit, it will be said that the bank maintains excessive liquid tools and this will cause pressure on bank income in the form of high costs of maintenance of idle cash. So it can be said that the bank does not carry out its function as intermediation properly. The higher the LDR, the profit earned by the bank will increase (assuming that the bank is able to channel its credit effectively so that it is expected that the amount of bad Loans is low). Even the study results found that LDR is the dominant variable that affects the profitability of banks.

Thus, the higher the value of the LDR and LAR ratios shows the better the liquidity capability of the bank concerned, so that the possibility of the bank being able to generate greater profits (Adyani, 2011), the lower the LDR and LAR shows the lack of effectiveness of the bank in channeling credit so that the loss of the bank's opportunity to earn profits. The results of the study (Ayaydin & Karakaya, 2014) found the liquidity ratio negatively affects bank profitability. Research (Menicucci & Paolucci, 2016) found that LR has a significant positive influence on NIM. The study results were supported by research (Trujillo-Ponce, 2013) which found loan / Total Assets had a significant positive effect on ROA and ROE. The study results (Fidanoski et al., 2018) also found that liquidity positively affects ROA and NIM. So is research (Azmy, 2018) ; (Setiawati et al., 2017) and Ratnasari & Budiyanto, 2016) found that LDR has a positive and significant effect on bank profitability.

## **5. DISCUSSION**

The results found 1) aspects of bank capital as measured by Capital Adequacy Ratio and Core Capital Ratio to *ATMR* consistently had no significant effect on Profitability in BUKU1 and BUKU 2 group banks; 2) Aspects of Rentability as measured by ROA and NIM proved to have a negative and significant effect on bank profitability in the BUKU 1 and BUKU 2 groups, While for *Operating Expenses and Operating Income* (BOPO) proved to have a significant adverse effect on bank profitability and 3) Aspects of liquidity as measured by LDR and LAR proved to have a positive and significant effect on profitability in banks in the BUKU 1 and BUKU 2 groups, and 4) Among bank health ratios, it was found that LDR was the dominant variable on the profitability on banks in the BUKU 1 and BUKU 2 groups.

## 6. CONCLUSION, LIMITATIONS, AND SUGGESTIONS

For the management of bank groups, BUKU 1 and BUKU 2 to increase bank profitability (Net Income) in the future, should pay attention to the efficiency aspects of the bank (BOPO) and liquidity aspects (LDR and LAR). Banks should manage operational costs more effectively by eliminating non-essential cost posts, such as reconsidering products and Wasteful banking services costs. When the situation of confusion is more economically stable, the bank immediately maximizes the distribution of credit because this condition has a low risk, but the profit can be optimized. Therefore, the bank's net income is expected to increase but still supported by a good governance system through control and supervision of bad credit risk.

In similar research, it is necessary to carry out a more in-depth analysis using different samples, for example, in BUKU 3 and BUKU 4. as well as adding other variables that have not been included in this research model, such as aspects of GCG (H. Darwis, 2012), and (Handayani, 2012). 2017), which can be measured through self-assessment in bank financial statements.

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