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Analysis of Financial Performance of Bank Book III in Indonesia in Covid-19 Conditions for the Period September 2019 - September 2020

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Abstract:- This study test and analyze the fundamental factor to Return of Asset (ROA) with Net Interest Margin (NIM) as moderating variable in Book III banks registered in Financial Services Authority (Otoritas Jasa Keuangan (OJK)). The sampling method used was purposive sampling. Of the 110 plantation firms, 24 companies meet the needs of a sample. The method used in this research is multiple linear regression technique and moderate regression technique. The results showed that the Capital Adequacy Ratio (CAR) is significant and has apositive impact on the Net Interest Margin (NIM) and Return Of Assets (ROA). Loan to Deposit Ratio (LDR) and Operating Cost Operating Income (BOPO) is significant and has a negatifimpact on the Net Interest Margin (NIM) and Return Of Assets (ROA). Non-Performing Loans (NPL) is no significant impact on the Net Interest Margin (NIM) of shares and Return Of Assets (ROA). Net Interest Margin (NIM) is capable of moderating the effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Operating Cost Operating Income (BOPO), and Non-Performing Loan(NPL) with Capital AdequacyRatio (CAR).

Keywords:- *Return On Asset (ROA), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Operating Cost Operating Income(BOPO), And Non-PerformingiLoan (NPL).*

I. INTRODUCTION

The global economic recovery at the end of 2019 was due to the Coronavirus (Covid-19) outbreak. The Covid-19 outbreak first appeared in Wuhan (China)and has infected more than 200,000people in76 countries (19 March'20). About 86,000 people (43%) have recovered,but another 9,000 (4.5%) have died. In 2020, the global economy can not be measured only by the scope of the economy itself. The Coronavirus (Covid-19) is proof that the virus that interferes with health can cause economic instability in a country even on a global scale (Chairul Iksan Burhanuddin and Muhammad Nur Abdi, (2020). The following is the development of South-East Asia covid:

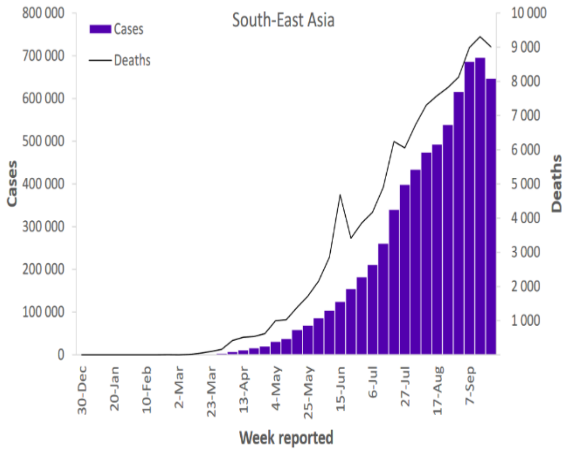

Fig. 1. Development of Covid South - East Asia

Source: Data by WHO from national authorities, as of 27 September 2020

Entering 2020, rating agencies' positive perception of the Indonesian economy maintained amidst global economic developments overshadowed by the risk of the spread of Covid-19 (CoronaVirus Disease 2019). Several rating agencies view that the Indonesian economy is still relatively stable and resilient, supported by well-maintained policy credibility. The assessment results of FitchRatings (Fitch), japan CreditRating Agency, Ltd. (JCR), and Moody's Investor Service (Moody's) on Indonesia's Sovereign Credit Rating (SCR), published in Q1-2020.

Therefore, it is always in the interest of any country's government and central bank to ensure the continued strength and stability of the country's banking and financial system for capital formation, innovation, and job creation. There are five critical elements in the economic climate of any economy, namely money; financial institutions; financial tools; and systems and rules (Karimand Alam,2013). Therefore, the efficiency of bank financial performance is the primary key in ensuring economic growth and development. Analysis and evaluation of bank performance can identify the inherent strengths and weaknesses of the bank's financial position. Bankperformance evaluation is essential for all direct and indirect stakeholders: bank managers, borrowers, depositors, investors, and regulators.

Kumbiraand Webb (2010) have underlined that banks are closely-related because of their similar functions and their interrelationships through the payment system. Therefore, the failure of one bank affects not only bank owners and investors but also all other banks and other businesses that are interconnected. It is said to be one of the fundamental reasons that led to the global financial crisis in the US in 2008 (Ongoreand Kusa, 2013).

Based on data from the Financial ServicesAuthority (OJK), the most profound credit decline occurred in the first semester of 2020, where BUKU III Banks experienced a 2.25 percent contraction compared to credit in the same period last year. BUKU III Bank has an asset range of Rp. 5 - 30 trillion. According to OJK data, as of May 2020, there are 25 banks in the BUKU III category. Meanwhile, the other three banks experienced growth, with BUKU IV banks growing 2.88 percent, BUKU I banks increasing 3.94 percent, and BUKU II banks rising 4.81 percent. Meanwhile, nationally, credit achievement only grew by 1.49 percent in June 2020. On the other hand, the ratio of non-performing loans in banks increased to 3.11 percent in June, which is higher than the achievement of bad loans in the previous month, 3.01 percent.

In September 2020, BUK's profitability was maintained even though the bank's ROAfell to 1.76% from 2.48% in the same period the previous year. It is partly due to profits contracted by -24.28% (YoY) from 6.99% (YoY) due to lower interest income due to credit slowdown. In general, the decline in ROA follows the downward trend in interest rates and NIM. NIM decreased to 4.41% from 4.90% in line with net interest income, which contracted by -3.05% (YoY) from 3.05% (YoY). The decrease in interest income was mainly due to the contraction in interest income from loans extended to non-bank third parties.

As well as the position in September 2020, the highest NIM is still held by BUKU IV banks at 4.84%, barely moving much from the previous three months. Then followed by NIM in BUKU II of 4.54% and BUKU I of 4.69%. According to OJK records, NIM BUKU III experienced the most decline, from 3.98% at the end of 2019 to 3.54% as of September 2020.

To see what factors are dominant or not, which affect the financial performance of banking book III. The following is a table of conventional commercial banks, and Islamic commercial banks book III.

Profitability analysis related to the bank's soundness, the aim is to find out the actual condition of the bank. The way to know the financial situation can be by looking at the ratios that can also use to compile bank ratings, predict bank bankruptcy, assess the soundness of banks, and determine banking performance. The following is a table regarding financial ratios in book III conventional commercial banks and book III Islamic commercial banks.

NIM is the ratio between Interest Income minus interest Expenses divided by Average Interest-Earning Assets. The standard set by Bank Indonesia for the Net Interest Margin (NIM) ratio is 6% and above. The greater this ratio, the higher interest income on productive assets managed by the banks, and the slighter possibility of a bank in a problematic condition. Based on table 1.2, conventional commercial banks book III has decreased every year. In table 1.3, in 2016, 2018, 2019, and September 2020, the NOM of Islamic commercial banks book III has increased, then in 2017, it has decreased.

CAR here is the capital adequacy ratio, and CAR is the ratio between RWA and the available capital to meet these obligations. It can be seen in Table 1.2 and Table 1.3 that the CAR of conventional bank book III fluctuates. While Islamic commercial banks book 3 CAR increased from 2016, 2017, 2108, and August 2020, and in 2019 decreased. A high CAR indicates that capital is inefficient, so existing assets become large. So it causes a decrease in ROA.

II. LITERATURE REVIEW

A. *Eficiency Theory*

Efficiency is the percentage of output with input. What is represented by input and the comparison figures will be obtained depending on the benchmark's goal. M. D.Huri and Indah Susilowati (2004) explain that efficiency can a defined as the ratio between the output (output) with the input or the quantity of the products produced from one raw material utilized.

The factors that affect the efficiency of a company there are four factors, namely: Permonoand Darmawan(2000) (in Adrian Sutawijayaand Etty PujiLestari, 2009):

- Efficiency due to economic arbitrage.
- Efficiency due to the accurate valuation of its asset base.
- Efficiency because bank financial institutions are able to anticipate risks that will arise.
- Efficiency because it is closely related to the payment mechanism carried out by a financial institution.

Economic theory has two types of efficiency; technical efficiency and economic efficiency. Economic efficiency has a macroeconomic picture, while technical efficiency has a macroeconomic picture. The measurement of engineering efficiency is only for engineering and functional relationships in using inputs into outputs. In measuring economic efficiency, prices can not be considered predetermined, but prices can be affected by macro policies, bachelor (1999) (in Ascarya, Diana Y. and GuruhS. R. 2008).

a) Bank Efficiency Concept

Efficiency in a company, especially banking, is one of the most famous work parameters to measure bank performance.Efficiency is the solution to figuring implementation steps, like technological efficiency, distribution, and absolute efficiency.

Ahmad Syakir Kurnia (2004) explains that can decompose overall banking efficiency into scale, scope, technical, and allocative. A bank is said "to achieve scale efficiency when the bank can operate on a constant return to scale. In contrast, coverage efficiency is achieved when the bank can manage in a diversified location." Achieving an allocation efficiency if the bank can determine the output that can maximize its profits, while technical efficiency is the relationship between inputs and results in a production. The production process is efficient if it uses specific inputs to produce many outputs. Another critical aspect of achieving banking efficiency is reducing costs in the production process. Efficiency in the banking world includes the assessment of business efficiency and cost-efficiency. Business efficiency assesses how the activities carried out by a bank can produce the target site be achieved. In contrast, cost-efficiency estimates how much expenses are used by a bank to carry out its business activities.

B. Agency Theory

Agency theory was first popular by Jensenand Meckling (1976). This theory states that agency relationships arise when one or more people(principals) hire another person (agent) to provide a service and then delegate decision-making authority to the agent. The shift in the business environment has resulted in a company that only one person once owned, namely the manager-owner (owner-manager), now becoming a company whose ownership is spread-out with shareholders owned by various groups. This transfer resulted in a separation between ownership and management where the request was in the hands of shareholders while management was in the management team's hands.

Michael C. Jensen and William H.Meckling (1976) developed agency theory. Agency theory is related to the connection in-between the investor and the manager. This agency theory makes a model of a contractual relationship between the agent and the principal delegates decision-making responsibility to the manager (agent) by the employment contract. The agent and principal's duties, authority, rights, and responsibilities are in a mutually agreed work contract.Agency theory selects the highly efficient arrangement that affects the lead and connection agent. Agency theory provides an updated view of GCG, namely that the company's founders can make a balanced agreement between shareholders and directors.

Eisenhardt (1989) states that agency theory uses three assumptions of human nature, namely:

- Humans are generally self-interested (self-interested).
- Humans have limited thinking power regarding futureperceptions (bounded rationality).
- Humans always avoid risk(risk-averse).

This results in irregularities in reporting to the principal due to the desire to fulfill personal goals such as maximizing their utility, which allows the agency to do the most useful for the lead, resulting in agent problems. Therefore, agency theory emphasizes determining the efficiency of control in the relationship between the owner and the agent. Thus, an efficient contract is needed, namely a clear contract for each party with rights and obligations, minimizing agency conflicts. This agency problem can be seen in earnings management activities due to asymmetric facts that appear in financial information. The between managers and owners can provide an opportunity for managers to carry out earnings management to mislead owners (shareholders) about the company's economic performance.

Eisenhardt in Bukhori (2012) notes that the agent approach uses three hypotheses, namely (1) assumptions about mortal nature (human beliefs).These assumptions are grouped into three: first, self-interest, namely human nature that prioritizes self-interest—second, bounded -rationality, namely human nature with limited rationality. Third, risk aversion, namely human nature, tends to avoid risk. (2) assumptions about organizational (organizational assumptions) are grouped into three: conflict as a goal between participants, efficiency as an effectiveness criterion, and information asymmetry between principal and agent. (3) assumptions about information (information assumptions).

“The primary principles of this theory states a working relationship between the party giving the authority, namely the investor, and the party receiving the power.Namely, the manager, and this means agency relationship is a contract where one or more people (principal) involve another person (agent) to perform some services on their behalf, which consists of some decision-making authority to the agent,” said Jensenand Meckling (1976) in Bukhori(2012).

C. Definition of Bank

According to Lawno. 10 of 1998 Amendmentto Lawno. 7 of 1992 concerning Banking, namely the Bank is a business entity that collects funds from the public in the form of savings and distributes them to the people in the form of credit and or other documents to improve the standard of living of the people at large.

According to Law Number 21 of 2008 concerning Islamic Banking, what is meant by a Bankis: "Bank is a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit and or other forms to improve the people's standard of living."

According to Bank Indonesia Regulation(PBI) No.13/9/PBI/2011 concerning amendments to Bank Indonesia Regulation No.10/18/PBI/2008 concerning Financing Restructuringfor Sharia Banksand Sharia BusinessUnits article 1, Banks are ShariaBanks and ShariaBusiness Units. Sharia Business. Some of the definitions can be concluded as follows: first, the notion of a bank has evolved according to Development Bank itself. Second, the function of the Bank, in general, is to accept deposits from the public, to provide credit, whether sourced from funds received from the public or based on its ability to create new purchasing power, provide payment traffic services, and money circulation.

According to Martono (2002:20), a bank is a financial institution business entity that aims to provide credit, either with its means of payment, with money it has obtained from other people, and or by circulating new means of charge in the form of demand deposits. Banks are business entities that collect funds from the public in the form of savings and distribute them to the public to improve the standard of living of the people at large (Law Number 7 of 1992 concerning Banking).

According to the Indonesian Banking Booklet, OJK (2014), banking is everything related to banks, including institutions, business activities, and methods and processes in carrying out their business activities. In carrying out their functions, Indonesian banks are based on economic democracy and use the principle of prudence. The primary role of Indonesian banking is as a collector and distributor of public funds. It aims to support the implementation of national development to increase equitable distribution of products and its results, economic growth, and national stability towards improving the standard of living of the people at large. Banking has a strategic position, namely as a supporter of the smooth running of the payment system, implementation of monetary

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policy, and achieving financial system stability, so transparent and accountable sound banking is needed.

a) Credit

The phrase credit comes from the Greek "credere," which represents trust; thus, trust is the basis of credit. A person or all business entities that extend credit (creditors) believe that future credit recipients (debtors) will fulfill all that promised; can be in the form of goods, money, or services.

Financial Services Authority Regulation No. 42/POJK/03/2017, credit is the provision of money or equivalent claims, based on an agreement or loan agreement between the Bank and other parties, which requires the borrower to repay the debt after a certain period with interests referred to in the law. Law Number 7 of 1992 concerning banking as amended by Law Number 10 of 1998 concerning amendments to law Number 7 of 1992 concerning banking. Financing is the provision of funds or equivalent claims in the form of:

- Profit sharing transactions in the form of mudharabah and musharaka;
- Lease transaction in the form of ijarah or lease purchase in the form of ijarah vomiting bittamlik;
- Sale and purchase transactions in the form of murabahah salam, and istishna' receivables;
- Lending and borrowing transactions in the form of qardh receivables and
- Service lease transactions in the form of ijarah for multi-service transactions,

Based on the agreement or agreement between the Sharia Bank or Sharia Business Unit (UUS) and other parties that require the party being financed or given a fund facility to return the funds after a certain period in exchange for ujrah, without compensation, or profit-sharing as referred to in Law Number 21 of 2008 concerning ShariaBanking.

The Bank'scredit or financing policy as referred to in Article 2 of POJK No. 42/POJK.03/2017 at least contains and regulates the main points as stipulated in the Guidelines for the Preparation of Bank Credit or Financing Policies as follows:

- The principle of prudence in Credit or financing;
- Organization and management of Credit or financing;
- Credit or Financing approval policy;
- Documentation and administration of Credit or Financing;
- Credit or Financing Supervision; and
- Settlement of non-performing loans or financing.

Financial Services Authority Regulation No. 32/POJK.03/2018, Credit is the provision of money or an equivalent claim, based on an agreement or loan agreement between the Bank and other parties which requires the borrower to repay the debt after a certain period with interest, including:

- Overdraft, which is a negative balance in the customer's checking account that can not pay in full at the end of the day;
- Takeover of invoices for factoring activities; and
- takeover or purchase of Credit from other parties.

Credit collectibility determines credit quality so that banks can anticipate credit risk early because credit risk can affect the Bank's business continuity. In addition, the determination of credit collectibility is used to determine the level of reserves for potential losses due to non-performing loans. Determination of credit quality refers to Bank Indonesia regulations, namely PBI No.14/15/PBI/2012 concerning Asset Quality Assessmentfor CommercialBanks and SEBI No.7/3/DPN dated January 31, 2005, regarding Asset Quality Assessment for Commercial Banks. BI said “can determine Credit quality based on the following three parameters:

b) Business prospect

Assessment of business prospects includes evaluation of the next parts:

- Possibility for company development;
- Demand needs and the part of the debtor in round;
- Management rate and labor problems;
- Help from companies or affiliates;
- Actions made by the debtor in the context of preserving the environment.

c) Debtor Performance

Assessment of the debtor's performance includes an assessment of the next parts:

- Earnings of gain;
- Assets structure;
- Cash flow;
- Sensitiveness to market risk.

d) Ability to Pay

The assessment of the ability to pay includes an assessment of the next parts:

- Accuracy of lead and interest payments;
- Availability and precision of debtor's economic facts;
- Completeness of credit documentation;
- Compliance with credit agreements;
- Appropriate use of funds;
- The fairness of the source of payment of obligations."

Based on these parameters, credit quality is determined to be Current, Under Special Mention, Substandard, Doubtful, and Loss. Determination of credit quality is carried out by considering the materiality and significance of the assessment factors of the components and the relevance of these assessment factors and features to the characteristics of the debtor concerned. For micro, small, and medium loans with a certain amount, the judgment of credit grade can only repose on the following payout accuracy:

1. Smooth

   Can tell the criteria or size of credit to be smooth if:
   - principal and or interest installments are paid on time
   - account mutation always active
2. In Special Attention

   Credit can be said to receive special attention if it falls into the following categories:
   - be found arrears in payment (of principal and/or interest) installments that have not overtaken 90 days.
   - Somewhile there is an overdraft
   - Funded by new loans
3. Less Smooth

   credit is not smooth if there are criteria :

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- be found arrears in payment (of principal and/or interest) installments that have overtaken 90 days.
- indication in financial problems

4. Doubtful
   if the credit is in doubt meets the following criteria:
   - be found arrears in payment (of principal and/or interest) installments that have overtaken 180 days.
   - Credit agreements and binding collateral are legally weak.
5. Bad Credit
   Credit quality is said to be bad if it meets the following criteria, among others:
   - be found arrears in payment (of principal and/or interest) installments that have overtaken 270 days.
   - new loans to cover operational losses

D. Non-performing Loan

The definition of non-performing loans (NPL), according to Kasmir (2013:155), is terrible loans are loans that have problems caused by two elements, namely from the banking side in analyzing and from customers who intentionally or unintentionally do not make payments.

According to Herman Darmawi (2011:16), the definition of Non-Performing Loan (NPL) is one of the bank's business risk ratio measurements, which shows the magnitude of the risk of non-performing loans that exist in a bank. Non-performing loans are caused by non-current payments of loan principal and interest, which can directly reduce bank performance and make banks inefficient.

From the statement above, the definition of Non-Performing Loan (NPL) is a ratio to measure the risk of non-performing loans in a bank caused by non-performing customers in making payments.

Non-Performing Loan (NPL) is a ratio that shows the ratio of non-performing loans to total loans. The calculation of the Non-Performing Loan (NPL) ratio according to the Financial Services Authority is as follows:

$$\text{NPL Gross} = \frac{\text{Kredit Bermasalah}}{\text{Total Kredit}}$$

$$\text{NPL Net} = \frac{(\text{Kredit Bermasalah - CKPN})}{\text{Total Kredit}}$$

E. Capital Adequacy Ratio

According to Taswan (2010), a bank's survival is highly dependent on the level of capital adequacy that can drive bank operations. Capital Adequacy Ratio (CAR) is a ratio that shows how far bank assets that contain risks and are also financed from the bank's capital funds, in addition to obtaining funds from sources outside the bank, such as public funds, loans (debt), and others.

The Financial Services Authority Regulation is contained in the Financial Services Authority Regulation Number 21/POJK.03/2014 concerning Minimum Capital Adequacy Requirements for Sharia Commercial Banks, the minimum capital adequacy is set as follows:

- 8% (eight percent) of Risk-Weighted Assets (RWA) for Banks with a risk profile of 1 (one);
- 9% (nine percent) to less than10% (ten percent) of RWA for Banks with a risk profile rating of 2 (two);
- 10% (ten percent) to lessthan 11% (11 percent) of RWA for Banks with a riskprofile rating of 3 (three); or
- 11% (11 percent) to14% (fourteen percent) of RWA for Banks with a riskprofile of rating 4 (four) or rating 5 (five).

The minimum amount of Capital Adequacy Ratio (CAR) of at least 8% is determined by Banking for International Settlement (BIS). The minimum CAR requirement of 8% was adopted by Bank Indonesia, which stipulates the Minimum Capital Adequacy Requirement (CAR) for banks. In Bank Indonesia Regulation Number 14/18/PBI/2012 concerning the Minimum Capital Adequacy Requirement for Commercial Banks, then adjusted to PBI Number 15/12/PBI/ 2013 in the latest PBI regulated the KPMM more detail.

The higher the CAR, the better the state of the bank; if the CAR value is high, the bank can finance its operations, considering that the bank makes a significant contribution to profitability.

F. Loan to Deposit Ratio

The wealth or asset structure is the asset accounts of a bank that is very closely related to the structure of bank funds. By looking at this relationship, you will get a lot of pictures of a bank's financial condition. One of these relationships provides an overview of bank liquidity, namely a description of the bank's ability to meet its obligations at any time. The amount of payment instruments owned by the bank owed in the bank's asset account is the power to pay behind the existing financial obligations. The liquid assets include cash, demand deposits at other banks, savings at other banks, time deposits at other banks, loans at other banks, and the like.

According to Bank Indonesia Regulation Number 15/15/PBI/2013 concerning bank's minimum statutory reserves in rupiah and foreign currency for conventional commercial banks. It states that the Loan to Deposit Ratio (LDR) is a ratio to measure the composition of the amount of credit granted compared to the number of public funds and own capital is used. Loan to Deposit Ratio (LDR) is a ratio that measures a bank's ability to meet financial obligations that must meet. Loan to Deposit Ratio (LDR) is one of the ratios used to measure bank liquidity. Loan to Deposit Ratio (LDR) is the ratio between the total amount of credit provided by the bank and the funds received by the bank (Dendawijaya, 2009:116).

Meanwhile, according to Pandia (2012:128) Loan to Deposit Ratio (LDR) is a ratio that states how far the bank has used the depositor's money to provide loans to its customers. In other words, the amount of money used to give loans comes from the deposit of the depositors.

Some banking practitioners agree that the best standard of a bank's LDRis around 80%. However, according to Bank Indonesian regulations, the tolerance limit ranges from 78% to 92%. The more increased the ratio indicates the descending the liquidity capability of the bank affected. An excellent LDR is if the LDR value is always within limitations set by Bank Indonesia (BI), and LDR is too high or low will not suit the bank.

According to Sudirman (2013:159), in terms of Loan to Deposit Ratio (LDR), efforts to improve bank health can be achieved by:

- Reducing the amount of credit extended by the bank with the funds received by the bank in a certain amount.
- With a certain amount of credit, the amount of funds the bank receives increases, and efforts are made to improve it from core capital and loans.
- The reduction or addition of credit is more than the bank's reduction or addition of funds.

G. Hypothesis

Based on the research framework model above, the following hypothesis is formulated:

a) The Influence of CAR on NIM in Bank Book III

CAR reflects the company's capital. The higher the CAR means, the higher the own capital used to cover risk-weighted assets. With a high CAR, can interpret that banks have a more significant opportunity to get a large NIM (Mayes and Stremmel, 2012)

Research conducted by Nasserinia (2015) and Pamuji (2014) concludes that the Capital Adequacy Ratio has a positive and significant effect on Net Interest Margin. Khanh (2015) also obtained the same study results, who concluded that the Capital Adequacy Ratio had a positive and significant influence on the Net Interest Margin. Banks with high CAR ratios tend to have higher NIMs as well.

H1: CAR has a positive effect on NIM in Bank Book III.

b) The Effect of LDR on NIM in Book III Banks.

LDR reflects the bank's ability to channel third-party funds into credit or similar types of credit to generate income or profit changes. If can not channel third-party funds, idle money will result in lost opportunities to earn interest, low income, and low NIM. Banks that can channel their funds properly (LDR) will have a chance to get a high level of profit (NIM); the higher the LDR, the higher the NIM. The influence of LDR on NIM can support by the theory of interest, where a large LDR bank can increase income from bank interest to increase NIM. LDR has a positive effect on NIM (Nassar, et al., 2014; Raharjo, et al, 2014; Tribnugroho, et al, 2013; Dumicic and Ridzak, 2012; Brock and Suarez, 2000). DPK collected by the bank. This condition will cause NIM growth because income growth is more significant when compared to the change in bank interest costs (Raharjo, 2014).

It is inversely proportional to research from Esat et al. (2014), which shows that the Loan to Deposit Ratio (LDR) has a negative and significant effect on Net Interest Margin (NIM). The research by Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) shows that LDR has a significant negative effect on NIM. the means that banks with high LDR ratios tend to have lower NIMs. The higher the management of bank lending in Indonesia, the lower the NIM because the economic scope in credit management is getting bigger.

H2 : LDR has a negative effect on NIM in Book III Banks.

c) The Effect of BOPO on NIM in Book III Banks

The effect of BOPO on NIM a supported by the theory of interest, where BOPO can reduce NIM because bank interest income has fallen due to inefficient banks. Berrospide and Edge (2010) state that if the BOPO decreases income, if there is a more significant increase in BOPO, then the NIM will decrease.

The results of research from Farah, Letty (2017), Pamuji (2014), Eralp (2014), Hamadi & Awdeh (2012), and Hidayat et al. (2012) show that BOPO has a negative effect on NIM. Research conducted by Gladis Anindiansyah reinforces this Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) that BOPO has a significant negative impact on NIM. its means that banks with high BOPO ratios tend to have lower NIMs.

H3 : BOPOhas a negativeeffect onNIM in Book III Banks.

d) The Effect of NPL on NIM in Bank Book III.

A non-performing loan is a financial ratio that describes peril risk. Peril risk stems from the loss of the debtor or counterparty to complete their commitments (Idroes, 2012: 56). A low NPL will result in a higher NIM because of low non-performing loans so that the interest and principal will be higher. A low NPL value indicates that the funds owned by the bank will be more significant so that the funds can be used for bank operations to gain profits.

The results of research conducted by Hoang (2015), Hassan (2012), Jane (2011) show that NPL has a negative and significant effect on NIM. its means that a high NPL ratio tends to have a low NIM.

H4 : NPL has a negative effect on NIM at Bank Book III.

e) The Effect of CAR on ROA in Bank Book III.

CAR shows bank capital, the less risky bank capital is, the more excellent the opportunity to increase profitability. The effect of CAR on ROA is supported by mark-up theory, where banks set a more significant markup to protect the targeted profit. This is done so that the bank can continue to operate and run the business and obtain optimal profits through a significant increase in CAR (Buyuksalvarci and Abdioglu, 2006).

The results of research from Astohar and Mirna Dyah Praptitorini (2019) which states that CAR has a positive effect on ROA. It is reinforced by research conducted by Pincur Lamiduk Purba, Nyoman Triaryati (2020) that CAR positively affects ROA. The higher the capital adequacy ratio, the stronger the bank's ability to bear the risk of any risky credit/productive assets. The bank can finance the bank's operations to make a significant contribution to profitability.

H5: CARhas a positiveeffect onROA at BankBook III.

f) The Effect of LDR on ROA in Bank Book III.

LDR reflects the bank's ability to channel third-party funds on loans/credits or similar loans to generate income or profit changes. If cannot be third-party channel funds, idle money will result in lost opportunities to get interested, low income, and low-profit changes (Muljono, 2011).

Buyuksalvarci and Abdioglu (2006) stated that the LDR ratio could assess a bank's liquidity by dividing the amount of credit extended by the bank to third-party funds. So the higher this ratio, the better the bank's performance. LDR is a measure of liquidity that measures the number of funds placed in the form of credit originating from funds collected by banks (especially the public). If the measurement results are far above the target and limit, it means that the bank may experience liquidity difficulties, which will cause pressure on bank income (Angbazo, 1997).

The effect of LDR on ROA can support the bank to loan rate markup theory, where the bank sets a more significant markup to protect the targeted profit with good bank liquidity able to increase ROA.

Research by Sasin, Pornchai, Chaiyuth (2019), Khoirun Nisa (2019), Hirindu, Kushani (2017) found that LDR is significant and has anegatif impact on the ROA. However, this contrasts with M. Iqbal Arsyad's (2019) research, which states that LDR has a significant positive impact on ROA. Research conducted by Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) states that LDR has a negative and significant effect against ROA. Means banks with high LDR ratios tend to have lower ROA, so that the higher the LDR ratio, the more illiquid the bank will be.

H6: LDRhas a negativeeffect on ROA at Bank Book III.

g) The Effect of BOPO on ROA at Bank Book III.

BOPO is an operational cost ratio operated to estimate efficiency and proficiency in its processes (Dendawijaya, 2014). The more elevated the BOPO, the NIM ratio will drop because banks are wastefully streamlined in managing. Conversely, the lower the BOPO ratio, the higher the NIM ratio. The lower the BOPO ratio means the better the bank's management performance and the more efficient use of existing resources. This performance improvement will increase the number of funds that can channel to the public to increase bank interest income (Riyadi, 2006: 159).

Research by Bambang Sudiyatno and Asih Fatmawati (2013) and Didik P and Bambang Sudiyatno (2017) which states that BOPO is significantly negative on ROA. However, it is different from research by Widhian, Bogy & Sartika (2016), which states that BOPO has a significant positive effect on ROA. Studies by Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) state that BOPO has a negative and significant effect on ROA. That means that banks with high BOPO ratios tend to have lower ROA. that represents the level of efficiency of the bank in carrying out its operations affects the level of income generated by the bank. The high BOPO ratio indicates that the bank has not managed its resources to run its business activities efficiently.

H7: BOPO hasa negativeeffect on ROAat BankBook III.

h) Effect of NPL on ROA at Bank Book III.

Non-PerformingLoan is a comparison between non-performing loans and total loans given to debtors. Banks risk non-performing loans, namely when a customer cannot pay their obligations. NPL shows how the bank manages its credit distribution. The increase in NPL will undoubtedly decrease ROA because high non-performing loans indicate that debtors cannot pay their obligations, thereby reducing bank profitability.

The results of Sabir et al. (2012) research Dewi et al. (2015), and Tan Sau Eng (2013) showed that NPL had a negative effect on ROA. this reinforced by research conducted by Yolanda and Sumarni (2018) finding that NPL has a significant negative impact on ROA.

H8 : NPL has anegative effecton ROA atBank Book III.

i) The Influence of NIM on ROA in Bank Book III.

NIM is a ratio that shows bank management's ability to manage its productive assets to generate net interest income. Net interest income is derived from interest income minus interest expense. Interest income is obtained from providing credit or loans, while the bank has an interest expense obligation to depositors. The effect of NIM on ROA is supported by the theory of bank loan rate markup, where the bank sets a more significant markup to protect the targeted profit, with increasing bank income being able to increase ROA. The greater this ratio, the higher the interest income on productive assets managed by the bank so that the possibility of a bank in a problematic condition is getting smaller. The increase in interest income can contribute to profits to the bank.

Research by Nouran & Ahmed (2018), Didik P and Bambang Sudiyatno (2017), and Posma Kennedy (2016) states that the effect of NIM on ROA is positive and significant. However, it is different from research from Aji Yudha et al. (2017), which examined foreign banks with the results that NIM had a significant negative effect on ROA. Other research from Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) explains that Net Interest Margin (NIM) has a positive and significant influence on ROA. Means banks with high NIM ratios tend to have high ROA so that every increase in net interest income at the bank increases ROA.

H9: NIM has a positiveeffect on ROA at BankBook III.

j) NIM can moderate the CAR variable on ROA.

CAR shows the extent to which the decline in Bank Assets can still be covered by available bank equity. The higher the CAR, the better the condition of a bank. The effect of CAR on ROA, which is moderated through NIM, is supported by the theory of bank loan rate mark up. The bank sets a more significant markup to protect the targeted profit through a large CAR to increase ROA if the bank's interest income (NIM) is significant.

Research conducted by Gusti Ayu Yuliani Purnamasari and Dodik Ariyanto (2016) shows that CAR and NIM positively affect ROA.

H10 : NIM can moderate the CAR variable on ROA.

k) NIM can moderate the LDR variable on ROA.

Loan to Deposit Ratio is an analysis conducted on a bank's ability to meet its short-term obligations or obligations that are past due. Some of the liquidity ratios used in banking are cash ratio, reserve requirement, Loan to Deposit Ratio, loan

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to asset ratio, and money net liability ratio. Bank liquidity is assessed by the balance between loans given to funds stored from third parties (Loan to Deposit Ratio) (Dendawijaya, 2005).

The Loan to Deposit Ratio is a unique ratio, and this is because this ratio is a comparison between the loans given and the third-party funds received (Hasibuan, 2006). The higher the loan to deposit balance (above 100%) indicates that the bank provides more credit. Conversely, the lower the loan to deposit ratio (below 100%), the bank receives more third-party funds. According to Bank Indonesia, the LDR ratio is healthy, between 80 and 110% (SE Bank Indonesia, 2001).

Previous research conducted by Elen Puspitasari supports this, Bambang Sudiyatno, Witjaksono Eko Hartoto, Listyorini Wahyu Widati, (2021) that NIM as a moderator of these variables can influence the effect of LDR on ROA. From the research results, it is proven that LDR will increase ROA in banks, resulting in a high NIM. Inversely proportional to Astohar's (2012) research, net interest margin cannot strengthen the influence of the loan to deposit ratio on changes in profits in foreign exchange banks.

H11: NIM can moderate the LDR variable on ROA.

l) NIM can moderate the BOPO variable on ROA.

The BOPO ratio shows the bank's efficiency in carrying out its main business (Muljono, 1999). The effect of operating costs and operating income (BOPO) is the comparison ratio between operating expenses and operating income (Dendawijaya, 2005). can use operational costs to measure the bank's efficiency and ability in carrying out its operational activities. While operating income is the primary income of a bank, interest income is from the placement of funds in credit and other operating income (Rochman and Wijajanti, 2013).

Research conducted by Aini (2013) shows that BOPO has a negative and significant effect on earnings changes. The lower the BOPO ratio, which indicates efficiency in bank operations, will increase the bank's operating income, resulting in more significant profit changes. Aini (2013), and according to research by Luluk Supriyanti and Astohar (2015), shows the Net Interest Margin (NIM) is not moderating variable on the effect of operating costs and operating income (BOPO) on changes in profit. The NIM or interest income ratio does not strengthen the impact of LDR and BOPO on changes.

H12 : NIM can moderate the BOPO variable on ROA.

m) NIM can moderate the NPL variable on ROA.

Credit distribution activities carried out by banks contain risks. The greater the credit extended by the bank, the greater the credit risk that the bank will face. Creditrisk is a risk faced by banks because they channel their funds in loans to the community. The trouble is in non-performing credit payments or non-performing loans, known as the Non-Performing Loan (NPL) ratio in banking terms. NPL is the number of non-performing loans in a bank compared to the total credit (State, 2013). The emergence of non-performing loans will result in losses for the bank because the funds disbursed by the bank in the form of credit are not returned or cannot receive interest income.

A high NPL will increase costs to cause bank losses so that interest income will decrease. The higher this ratio, the worse the quality of bank loans which causes the number of non-performing loans to more excellent. Therefore banks must bear losses in their operational activities to affect the decrease in profit (ROA) obtained by banks (Kasmir, 2004). Supported by research by Muhammad Yusuf Wibisono (2017) that NIM can moderate the effect of CAR, NPL, BOPO, and LDR on ROA.

H13 : NIM can moderate the NPL variable on ROA.

III. RESEARCH METHODOLOGY

A. Types of Research

This study uses quantitative data, with causality, namely, to determine the effect of the independent variables used in this study. Independent variables are Capital Adequacy Ratio, Loan to Deposit Ratio, Operating Costs Operating Income, Non-Performing Loan (NPL), and Net Interest Margin. The dependent variable is Return On Assets, and Net Interest Margin as moderating variable.

This research also used secondary data, namely a summary of banking performance obtained from each of the annual reports of the Bank and the Financial Services Authority (OJK). This research also used historical data, where the data used was one year, namely September 2019 to September 2020, and more than one company. The data used by the researcher was annual data obtained from each of the Bank's annual reports.

B. Operational Definition and Measurement of Variables

Conducted the research was to determine the effect of the variables Capital Adequacy Ratio, Loan to Deposit Ratio, Operating Costs of Operational Income, Non Performing Loans, and Net Interest Margin on Return on Assets. Net Interest Margin as Moderation Variables for Banking Book III in Indonesia.

September 2019 to September 2020. The variables are independent, moderating, and dependent operated in this analysis are:

- Dependent variable: Return On Asset
- Moderation Variable: Net Interest Margin
- Independent Variable: Capital Adequacy Ratio, Loan to Deposit Ratio, Non-Performing Loan, Operating Costs, Operating Income, and Net Interest Margin.

Operational Returnon Assets (ROA) as the dependent variable and Capital Adequacy Ratio, Loan to Deposit Ratio, Operational Cost of Operating Income, Non Performing Loans and Net Interest Margin independent variables, and Net Interest Margin as a moderating variable using a ratio scale. Ghozali (2013) states that the ratio scale is an interval scale with a fundamental value that can not change. All variables used by the researcher were are calculated in a monthly period.

C. Population and Sample

The definition of purposive sampling is a technique of determining samples with specific considerations. The reason for selecting the samples using purposive sampling is because not all samples have criteria according to what the author has determined. Therefore, deliberately determined the chosen sample was based on the author's specific criteria to get a representative sample.

The population of this research was banking companies registered and registered with the Financial Services Authority (OJK). That 110 banking companies had registered with the OJK. Then the researcher took a sample using purposive sampling, namely by setting specific criteria that should meet in selecting the sample. Namely, the Book 3 banking company, which was the sample, should include been documented by the OJK from 2019 - 2020 andavailable financial statements.

D. Data Collection Method

This researcher used literature study and documentation in data collection.

a) Literature Study
   In this research, the researcher examined theories obtained from literature, articles, journals, and previous studies' results to understand the literature related to the examination concerned.
b) Documentation
   In this research, the researcher collected annual data from September 2019 to September 2020 through bank financial reports published by the Indonesian Banking Director.

IV. RESULT AND DISCUSSION

A. Overview of Research Objects

This research aimed to analyze the financial performance of Book III Banks in Indonesia in the Covid-19 Conditions for the September 2019 – September 2020 period. The following is a brief explanation of the banking industry in Indonesia. Book is an abbreviation of Commercial Bank for Business Activities and is one of the categorizations of banking companies based on the amount of their core capital.

Core capital is legal in establishing banking business activities because this capital is can used to support the operational activities of the bank. Both commercial and Islamic banks must have a certain amount of core capital before starting their operational activities. This core capital will also continue to add to the profits obtained from the bank after deducting taxes and other operating costs. Its function is as a guarantor for the bank's operational activities to continue and the circulation of money that occurs in the form of deposits and outgoing loans.

Banks included in Book 3 can open branches throughout Indonesia and abroad, even though they are limited to the Asian region. However, in distributing its network, Bank Indonesia regulates BUKU 3 banks to open a network in Zone 1 or Zone 2 in a certain amount. They also should open a network in Zone 5 or Zone 6 in a certain amount, except for banks whose majority shares are owned by the Regional Government in Zone 1 or Zone 2.

Therefore, Book 3 Banks must provide sufficient core capital for opening branches by Bank Indonesia requirements. If it is not enough, the bank can still consider opening an office network if it disburses credit or MSME financing of at least 20% or a minimum MSE of 10% of the total existing credit.

A. Result

- **Descriptive Statistical Analysis**

Descriptive statistics are general descriptions of the data that are the research variables. Descriptive statistical analysis will produce information consisting of the research data's average (mean), median, maximum and minimum values.Thefollowing are the results of the descriptive statistical analysis of the study.

Statistics

		ROA	NIM	CAR	LDR	NPL	BOPO
N	Valid	120	120	120	120	120	120
	Missing	0	0	0	0	0	0
Mean		1,9386	4,0198	24,7077	100,4633	2,7963	80,0984
Median		1,7100	4,1250	21,5300	89,9950	2,5900	83,7900
Std. Deviation		1,52382	1,59566	13,39033	45,33488	1,65421	20,67120
Minimum		-,28	-,95	,27	1,22	,01	,65
Maximum		7,96	7,43	89,76	268,94	7,83	119,43

Table 1: Descriptive Statistics of Research Variables

Origin: SPSS 25 Result, Processed Data

Based on Table 4.2, the number of observation data was 120 (24 companies for the period September 2019 - September 2020), and there was no missing data (all data has been a successful process). In the measurement of Return on Assets (ROA), the average value generated was 1.93. Showed that BOOK III Bank could still generate profits from managing its assets during September 2019 - September 2020. PT. Bank DBS Indonesia achieved the lowest value of -0.28 in December 2019 because the Bank posted a net loss of Rp 207 billion in 2019 compared to a net profit of Rp 31.23 billion in 2018. At the same time, PT. Bank BNP Paribas Indonesia achieved the highest value of 7.96 in March 2020 because the Bank recorded revenue of Rp1,357 billion (+46.4% YoY) and the highest Net Profit After Tax Rp612 billion (+120% YoY).

In the Net Interest Margin (NIM) variable, the average value is 4.01. Showed that BOOK III Banks still had interest income on earning assets and were healthy because the NIM value is still above 2%. The lowest value of -0.95 was achieved by PT. Bank Mayapada International, Tbk in March 2020 because the company's NIM experienced a significant decline compared to March 2019 of 3.27%. While PT. Bank Sinarmas Tbk achieved the highest score of 7.43 in September 2019 because the Bank gained the marks set out in the Bank's Business Plan, interest earnings, and revenue operational 91.49% and 117.13%, respectively.

In the CAR variable, the average value is 24.70. That BOOK III Banks had good conditions because the CAR value was above 8%. PT. Bank Mizuho Indonesia achieved the lowest value of 0.27 in March 2020 because the Bank in March 2020 provided a loan to a PT Sarana Menara Nusantara Tbk (TOWR), namely PT Professional Telekomunikasi Indonesia (Protelindo), amounting to 500 billion to finance capital expenditures and refinancing. While PT achieved the highest score of 89.76. The Bangkok Bank Comp. Ltd in September 2020 because the Bank had successfully acquired PT Bank Permata Tbk, so PT.The Bangkok Bank Comp. Ltd had better capital.

In the LDR variable, the average value stood at 100.46. BOOK III Banks had a larger composition of total credit than stored funds, so the liquidity capacity of BOOK III Banks needed to be a concern. PT. Bank ANZ Indonesia achieved the lowest value of 1.22 in December 2019. While PT achieved the highest score of 268.94. The Bangkok Bank Comp. Ltd in December 2019 due to the Bank's decision to acquire Bank Permata and become the controlling shareholder of 89.12%

In the Non-Performing Loan (NPL) variable, the average value was 2.79. That BOOK III Banks had low non-performing loans. PT. Bank ANZ Indonesia achieved the lowest value of 0.01 in December 2019. The Bank received an AAA (IDN) credit rating from the Fitch Ratings rating agency, showing a shallow default risk. While PT. Bank Sinarmas Tbk achieved the highest score of 7.83 in December 2019 due to the decline in the quality of corporate loans, so the Board of Commissioners spent more awareness to monitoring NPL progress.

In the Variable Cost of Operational Income (BOPO), the average value was 80.09. That BOOK III Bank had a good level of efficiency. PT. Bank Mizuho Indonesia achieved the lowest value of 0.65 in March 2020 showed that the Bank has a proportion of costs that did not far exceed its operating income. While PT. Bank Sinarmas Tbk achieved the highest score of 119.43 in December 2019 showed that the Bank had expenses that far exceeded its revenues.

B. Discussion

- **Effect of CAR on NIM in BOOK III Banks**

The analysis results showed that CAR had a positive and significant effect on NIM. The better the CAR in BOOK III Banks, the higher the NIM of the Bank.

CAR reflected the company's capital; the higher the CAR meant, the higher the own capital to cover risk-weighted assets. With a high CAR, it could interpret that banks had a more significant opportunity to get a large NIM. This research was in line with previous research conducted by Purba & Triaryati (2018) that CAR had a positive and significant effect on NIM.

- **Effect of LDR on NIM in BOOK III Banks**

The analysis results showed that LDR had a negative and significant effect on NIM, which meant that banks with high LDR ratios tended to have lower NIMs. The higher the management of bank lending in Indonesia, the lower the NIM because the economic scope in credit management was getting bigger. Previous research conducted by Anindiansyah supported the results of this research, et al. (2020) and Esat et al. (2014) that LDR had a negative and significant effect on NIM.

- **The Effect of BOPO on NIM in BOOK III Banks**

The analysis results showed that Operating Income (BOPO) had a negative and significant effect on NIM. a bank with a high BOPO ratio caused the bank's NIM to be lower.

The effect of BOPO on NIM is supported by the theory of interest, where BOPO was able to reduce NIM due to lower bank interest income due to inefficient banks. The results of this research were in line with previous research conducted by Farah, Letty (2017), Pamuji (2014), Eralp (2014), Hamadi & Awdeh (2012), and Hidayat et al. (2012) that BOPO had a significant negative effect on NIM.

- **The Influence of NPL on NIM in BOOK III Banks**

The analysis results showed that Non-Performing Loans (NPL) had no significant effect on NIM, and this showed that the movement of NPL was not able to affect the NIM of BOOK III Banks.

The small average NPL ratio of 2.79 below the maximum limit determined by Bank Indonesia, which was 5%, indicated that the bank had low non-performing loans. Thus, it did not affect the decrease or increase in NIM. The results of this research were in line with previous research conducted by Anindiansyah et al. (2020) that Non-Performing Loans did not influence NIM.

- **The Effect of CAR on ROA in BOOK III Banks**

The analysis results showed that the Capital Adequacy Ratio (CAR) had a positive and significant effect on ROA. The better the Bank's CAR, the company's ROA will increase. CAR showed bank capital; the less risky bank capital is, the more excellent the opportunity to increase profitability. CAR's effect on ROA is based on bank loan rate markups, where banks set a more significant markup to protect the targeted profit. Did this, so the bank could continue to run its business and obtain optimal profit through a significant increase in CAR.

The results of this research were in line with previous research conducted by Astohar and Praptitorini (2019) and Purba and Triaryati (2020), which stated that CAR had a positive effect on ROA.

- **Effect of LDR on ROA in BOOK III Banks**

The analysis results showed that the Loan to Deposit Ratio (LDR) had a negative and significant effect on ROA. The larger the LDR of a bank, the lower the ROA generated.

This research showed that banks with high LDR ratios tended to have lower ROA, so the higher the LDR ratio, the more illiquid the bank was. An increase in LDR indicated that banks were less able to fulfill their obligations to pay funds to customers/depositors for loans disbursed; an increase in LDR also demonstrated a high lending rate. But it was not accompanied by a high rate of return or bad credit, so instead of earning a profit, the bank experienced a loss or decrease in profitability.

The results were in line with previous research conducted by Anindiansyah et al. (2020) that the Loan to Deposit Ratio (LDR) had a negative and significant effect on ROA.

- **The Effect of NPL on ROA in BOOK III Banks**

The analysis results showed that Non-Performing Loans(NPL) did not affect ROA. Showed that non-performing loans at BOOK III Banks did not sufficiently affect the Bank's profitability. The NPL did not affect ROA at BOOK III Banks because the NPL value was still low below 5%, so it could not reduce the Bank's profitability. The results were in line with previous research conducted by Harun (2016) that Non-Performing Loans (NPLs) did not affect ROA.

- **The Effect of BOPO on ROA in BOOK III Banks**

The analysis results showed that Operating Income (BOPO) had a negative and significant effect on ROA. Showed that the increase in BOPO affected the decline in the profitability of BOOK III Banks. The smaller this ratio meant, the more efficient the operational costs incurred by the bank concerned, so the possibility of a bank in troubled conditions was getting smaller (Sudarmanti and Pramono, 2017). Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020) stated that BOPO had a negative and significant effect on ROA. That banks with high BOPO ratios tended to have lower ROA.

- **The Influence of NIM on ROA in BOOK III Banks**

The analysis results showed that the Net Interest Margin (NIM) had a positive and significant effect on ROA. The company's NIM's better led to an increase in ROA of BOOK III Banks. Thus, every increase in net interest income at the bank increases ROA.

Thus, the greater the NIM (Net Interest Margin) will indicate the more influential the bank is in place the company's assets in the form of credit, which impacts increasing ROA. Thus, supervising the NIM (Net Interest Margin) will also help banks maintain banking financial performance because NIM (Net Interest Margin) affects ROA. The results of this research were in line with previous research conducted by Nouran & Ahmed (2018), Didik P and Bambang Sudiyatno (2017), and Posma Kennedy (2016), which stated that the effect of NIM on ROA was positive and significant.

- **NIM can Moderate CAR Variable on ROA**

The results showed that NIM could moderate the effect of CAR on ROA of BUKU III Banks. One of the banking activities that contribute significantly to banking profitability is credit. Credit without sufficient capital will also not run as expected, so capital adequacy will also significantly affect the distribution of credit to customers by banks. With credit, banks receive interest, but the funds channeled through credit do not all come from internal banking parties but also from external parties whose interest must also be paid. Net Interest Margin is the difference between interest income and the amount of interest that must charge. Can interpret that the NIM is part of the bank's operating profit, which will significantly affect the banking profit. The results of this study are in line with previous research conducted by Gusti Ayu Yuliani Purnamasari, Dodik Ariyanto (2016), which showed that NIM could moderate the effect of CAR on ROA.

- **NIM can Moderate LDR Variables on ROA**

The results showed that NIM could mediate the impact of LDR on ROA. NIM can strengthen the LDR relationship to bank profitability. NIM can have an impact on LDR in influencing profitability. Banks are not only trying to disburse large loans, but banks will also take into account the cost of funds and the price of loans disbursed. The price of funds and the price of credit are essential considerations for banks. If the credit price is too high, one will make banks uncompetitive in the credit market, so that banks find it difficult to extend credit. Likewise, with the cost of funds, banks will not set interest on deposits that are too high to attract people to save their funds. Banks with high deposit interest rates will find it challenging to channel credit and obtain a large NIM.

The results of this study are in a string with a previous study taught by “Haryanto et al. (2021)” NIM may moderate the effect of LDR on ROA.

- **NIM can Moderate NPL Variable on ROA**

The results showed that NIM could mediate the impact of NPL on ROA. NIM can strengthen the relationship between NPL and profitability. The bank's NPL will connect to the bank's NIM about profitability. Banks that set the NIM too high, on the one hand, will be capable of boosting profitability. Still, on the different hand, those with a high NIM can result in an increased NPL. a high NIM can do banks by assigning high credit to high-risk sectors, and high loan interest can lead to non-performing loans. The results of this study are in a string with a previous study taught by "Haryanto et al. (2021)" NIM may moderate the effect of NPL on ROA.

- **NIM can Moderate BOPO Variable on ROA**

BOPO can reduce ROA with NIM moderation. The impact of BOPO on ROA moderated through NIM is reinforced by the idea of bank loan rate mark-up. Where the bank sets a more significant mark-up to protect the targeted profit, the presence of BOPO can reduce ROA if the bank's interest income (NIM) is low. Supported by previous research by “Gladis Anindiansyah, Bambang Sudiyatno, Elen Puspitasari, Yeye Susilawati (2020)”, the results indicate a significant indirect impact of BOPO on ROA, so that there influence of NIM in moderating the relationship between BOPO and ROA.

V. CONCLUSION

Based on the results of the study, the following are the conclusions obtained in this study.

- CAR is significant and has apositive impact on the NIMof BOOK III Banks
- LDR is significant and has a negativeimpact on theNIM of BOOKIII Banks
- BOPO is significant and has a negativeimpact on the NIM of BOOKIII Banks
- NPL is no significant impact on the NIMof BOOK III Bank
- CAR is significant and has apositive impact on the ROA of BOOK III Banks
- LDR is significant and has anegative impact on the ROA of BOOK III Banks
- NPL is no significant impact on the ROA of BOOK III Bank
- BOPO is significant and has anegative impact on the ROA of BOOK III Banks
- NIM is significant and has apositive impact on the ROAon ROA of BOOK III Banks
- NIM is capable of moderating the effect of CAR on ROA of BOOK III Banks
- NIM is capable of moderating the effect of LDR on ROA of BOOK III Banks
- NIM is capable of moderating the effect of NPL on ROA of BOOK III Banks

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- NIM is capable of moderating the effect of BOPO on ROA of BOOK III Banks

VI. SUGGESTION

Based on the results of the research, the following are suggestions put forward in this research.

A. For BOOK III Banks

- It is recommended that the management of BUKU III Banks can increase their capital adequacy through the CAR ratio so that they can continue to increase the company's profitability. In addition, management can pay attention to the composition of loans so as not to exceed the available funds, thereby reducing banking liquidity.
- It is recommended that the Management of BUKU III Bank has reliable human resources and good management, so as to minimize the risks that often occur which result in changes in ROA.

B. For Investors

It is recommended that investors study the company's signals through the movement of the bank's financial performance such as CAR, LDR and BOPO so that they are able to analyze the profitability of the company that is the investment destination.

C. For Further Research

Furthermore, it suggested that research use different moderating variables to be tested against ROA. This is because NIM is able to moderate CAR, LDR, BOPO, and NPL on the Bank's ROA. In addition, it is suggested that further research can provide a comprehensive comparison of the determinants of profitability in banking companies.

REFERENCES

[1.] Abdullah, M. Faisal. (2005). Dasar-dasar Manajemen Keuangan, Edisi Kedua, Cetakkan Kelima. Malang : Penerbitan Universitas Muhammadiyah.

[2.] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68-73.Achmad, Tarmidzi dan Kusumo. 2003. Analisis Rasio-Rasio Keuangan sebagai ndikator dalam Memprediksi Potensi Kebangkrutan Perbankan diIndonesia.Media Ekonomi dan Bisnis,Vol 15.No.1.

[3.] I.S. Jacobs and C.P. Bean, “Fine particles, thin films and exchange anisotropy,” in Magnetism, vol. III, G.T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271-350.Agus D. Hardjito, Martono. 2002.Manajemen Keuangan,Edisi Pertama,Ekonisia, Yogyakarta.

[4.] K. Elissa, “Title of paper if known,” unpublished.Al Karim, R. & Alam, T. (2013), An Evaluation of Financial Performance of Private Commercial Banks in Bangladesh: Ratio Analysis, Bangladesh : East Delta University.

[5.] R. Nicole, “Title of paper with only first word capitalized,” J. Name Stand. Abbrev., in press.Almilia, 2005,Almilia, Luciana Spica, dan Winny Herdiningtyas, 2005.“Analisa Rasio Camel terhadap Prediksi Kondisi Bermasalah padaLembaga Perbankan Periode 2000-2002”.Jurnal Akuntansi danKeuangan. Volume 7 Nomor 2, STIE Perbanas, Surabaya, hal 12.

[6.] Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, “Electron spectroscopy studies on magneto-optical media and plastic substrate interface,” IEEE Transl. J. Magn. Japan, vol. 2, pp. 740-741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].Amrie Firmansyah, Pardomuan Sihombing, dan Sri Yani Kusumastuti, 2020. “The Determinants Of Idiosyncratic Volatility In Indonesia Banking Industries” Jurnal Keuangan dan Perbankan, 24(2) : No.175-188

[7.] Ascarya dan Yumanita, Diana.2005.Bank Syariah : Gambaran Umum. Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia. Jakarta.

[8.] Burhanudin, Chairul Iksan dan Muhammad Nur Abdi. 2020. Ancaman Krisis Ekonomi Global Dari Dampak Penyebaran Virus Corona (Covid-19). JurnalAkuntansi. Jurusan Akuntasi. Universitas Muhammadiyah Makasar.Brigham, Eugene F dan Houston. 2006. Fundamental of FinancialManagement: Dasar-Dasar Manajemen Keuangan.Edisi 10.Jakarta: Salemba Empat..

[9.] Brigham, F dan Houston, J. 2001. Dasar-Dasar Manajemen Keuangan. Edisi 8, Buku 2. Jakarta: Salemba Empat.

[10.] Darmawi, Herman. 2011. Manajemen Perbankan. Jakarta: Bumi Aksara

[11.] Darmawi, Herman. 2012.Manajemen Perbankan. Bumi Aksara: Jakarta

[12.] David G Mayes & Hanno Stremmel. 2012. The Effectiveness Of Capital Adequacy Measures In Predicting Bank Distress. Journal Deutsche Bundesbank and University of Auckland.

[13.] Dendawijaya, Lukman. (2009). ManajemenPerbankan. Jakarta: Ghalia Indonesia.

[14.] Eisenhardt, Kathleen M. 1989. Agency Theory:An Assessment and Review.The Academy of Management Review. Journal. Vol.14,No.1,Pp.57-74

[15.] Farrell. M.J., 1957, “The Measurement of Productive Efficiency”, Jurnal Royal Statistical Society, Vol. 120, no.3., hal 253-290

[16.] Ghozali, Imam. 2011. “Aplikasi Analisis Multivariate Dengan Program SPSS”. Semarang: Badan Penerbit Universitas Diponegoro.

[17.] Horne V. James dan John M Wachowicz. 2005. Prinsip-prinsip Manajemen Keuangan (Fundamental of Financial Management). Edisi 12. Diterjemahkan oleh Dewi Fitriasari. Jakarta: Salemba Empat.

[18.] Jensen, M., C., dan W. Meckling, 1976. “Theory of the firm: Managerial behavior, agency cost and ownership structure”, Journal of Finance Economic.

[19.] Kasmir, 2011, “Analisis Laporan Keuangan”, RajaGrafindo Persada: Jakarta.

[20.] Kasmir. 2013. “Analisis Laporan Keuangan”. Edisi 1. Cetakan ke-6. Jakarta: Rajawali Pers.Kumbirai, M; dan Webb R. (2010). A Financial Ratio Analysis of Commercial Bank Perfomance in South Africa. African Review of Economics and Finance, 2, pp:30-53.

[21.] Kumbhakar, S. C., and C. A. K. Lovell. 2000. Stochastic Frontier Analysis. Cambridge University Press

[22.] Koutsoyiannis, A. 1979.Modern Microeconomics. 2ndEdition. The MacmillanPress Ltd. London.

ISSN No:-2456-2165

[23.] Koch, Scott,T.2000. Bank Management, Harcourt Inc, Orlando.
[24.] Mahardian, Pandu 2008. "Analisis Pengaruh Rasio CAR,BOPO, NPL, NIM dan LDR terhadap kinerja keuangan perbankan". Progam magister manajemen. Universitas DiponegoroSemarangMawardi, Wisnu. 2005. "Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Keuangan Bank Umum Di Indonesia (Studi Kasus Pada Bank Umum Dengan Total Assset Kurang Dari 1 Triliun)". Jurnal Bisnis Strategi,Vol. 14, No. 1, Hal: 83-93, Juli 2005.
[25.] Ongore V.O.& KusaG.B.2013.Determinants of Financial Performance Of Comercial Banks in Kenya.International Journal of Economics and Financial Issues, 3, 237-252
[26.] Pandia, Frianto. 2012. Manajemen Dana dan Kesehatan Bank. Jakarta: Penerbit Rineka Cipta
[27.] Rose dan Hudgins. 2002. Bank Management & Financial Services 8 Edition. New York : Mc Graw-Hill
[28.] Sihombing, Pardomuan. 2018. Corporate Financial Management. PT. Penerbit IPB Pres: Bogor
[29.] Sudirman, I Wayan. (2013). Manajemen Perbankan. Jakarta: Kencana
[30.] Taswan. 2010. Manajemen Perbankan, Konsep, Teknik, dan Aplikasi. Edisi Kedua. Yogyakarta : UPP STIM YKPN
[31.] Wild, Subramanyam, dan Halsey. (2005). Analisis Laporan Keuangan.Edisi Kedelapan.Diterjemahkan oleh: Yanivi S. Bachtiar dan S. Nurwahyu Harahap.Salemba Empat.Jakarta.