



# RISET

JURNAL APLIKASI EKONOMI AKUNTANSI DAN BISNIS

## DETERMINING THE PERFORMANCE OF SHARIA COMMERCIAL BANKS WITH MODERATION OF NON PERFORMING FINANCING RATIO IN INDONESIA

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### ABSTRACT

The research objectives to be achieved are: (1) To analyze and reveal empirically whether the Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), Net Operating Margin (NOM) affects the performance of Islamic Commercial Banks as measured by the ratio ROA). (2) To determine and analyze whether the non-performing loan ratio (NPF) moderates the effect of Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM) on the performance of Islamic Commercial Banks (Return On Assets). This type of research is quantitative research. The population used in this study is Islamic commercial banks registered with the Financial Services Authority consisting of 14 BUS from 2015-2019. The data used is secondary data and uses the saturated sampling method. Researchers used this sampling technique because the total population of 14 Islamic commercial banks companies in Indonesia is registered with the Financial Services Authority (OJK). Analysis of research data using Moderating Regression Analysis. Simultaneously, CAR, OE, FDR, and NOM positively affect BUS performance as measured by ROA for the 2015-2019 period. However, the partial results are the only CAR that positively affects ROA while OE, FDR, and NOM harm ROA. It happens because The capital adequacy held in the current lending period is decreasing compared to the previous period. It has an impact on reducing income and profit for the next period. Simultaneously, NPF moderates CAR, OE, FDR, and NOM positively affect BUS performance for the 2015-2019 period as measured by ROA. In contrast, the partial results are only NPF, which reduces the effect of CAR on ROA, while other variables when NPF moderate the relationship with ROA move towards improvement. The capital adequacy ratio is currently used in handling the current lousy credit ratio due to loans extended in the previous period so that the current capital. It should be used to generate profits in the next period through an increase in the volume of credit from the last period is reduced, which impacts the decline in Islamic commercial banks profitability in the next period. What makes the difference in this study is the moderation of NPF on the effect of CAR, BOPO, FDR, and NOM on ROA.

**Keywords:** Performance, Non-Performing Financing Ratio.

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### INTRODUCTION

Banks are one of the financial institutions that have a strategic role in balancing various factors in the development of a country's economic sector because the function

of a bank is as a financial intermediary to collect funds from parties that have the following forms of funds.: Save and allocate funds to all parties who need funds ineffective and efficient credit allocations. (Wilardjo, 2005).

Banks that cannot maintain their performance will gradually leave their industrial environment and experience bankruptcy and Islamic banking. Therefore, to predict the various risks that may occur, it is necessary to immediately measure the condition and health of the Islamic banking industry itself. Several analytical models are often used in early warning systems to predict financial difficulties that lead to bankruptcy. (Ihsan & Kartika, 2015).

The bankruptcy probability assessment aims to assess the success of banks in the Indonesian economy and the banking industry itself, measure the health of the bank intermediary function itself, and provide early warning when facing changes in exchange rates. Market. Changes in the banking environment itself or the country's economy. Assessment of the soundness level of Islamic commercial banks can use the RGEC analysis model based on Financial Services Administration Regulation No. 8 / POJK.03 / 2014 concerning the health rating of Islamic retail banks.

In Indonesia, many Islamic bank profit phenomena reflect the company's performance. Among other things, BRI Syariah experienced an increase in net profit, mainly from operating income, judging from the capital adequacy ratio in 2017. From the perspective of operating costs as a percentage of operating revenue, Islam is more efficient. Meanwhile, the proportion of non-performing loans was 4.92%, and the net NPF was 4.10%. This ratio is still lower than the upper limit set by the regulator and should not exceed 5% of the loan amount. It is because BRI's Islamic teachings continue to innovate to expand the potential of the field of work and lead to the digital financing process.

In addition, Bank BTN revealed that the company's credit growth did not develop much in the second half of 2019, which was one of the causes of its profitability. As a result of slowing credit growth in the third quarter of 2019, several banks admitted that although profit margins were still in line with bank estimates, profitability (also known as return on assets) also fell. However, this is not the only reason for the decline in BTN's ROA.

Alamsyah (2019), Chairman of the Supervisory Board of the Deposit Insurance Corporation (LPS), said Islamic banking performance is still slow. This slowdown has made the condition of the Islamic banking industry a topic of discussion, especially the issue of strengthening capital, liquidity, and efficiency. In addition, the requirements of each bank are different; some are good, some are worrying, and some are. Therefore, capital needs to be strengthened to increase liquidity and efficiency. According to the Sharia Banking Statistics (SPS) data provided by the Financial Services Authority (OJK), the condition of non-performing financing (NPF) is indeed much higher than usual. The ratio of non-performing loans as of March 2019 was 3.44%, while the percentage of non-performing loans was 2.5%.

However, the compliance of Bank Syariah Mandiri said that the growth of Bank Syariah Mandiri financing last year reached 11.5% (year-on-year) thanks to the financing sector in the education, health, and infrastructure sectors. The excellent performance of Bank Syariah Mandiri's intermediation business also increased net profit. Last year, it achieved a net profit of Rs 1.27 trillion, rising 11.1% yearly. This year, PT Bank Mandiri Tbk (BMRI) subsidiary also hopes that the credit department will support the 10-11% financing target. The Sharia Law Business Unit (UUS) of PT Bank CIMB Niaga Tbk (BNGA) has also shown good performance. Pandji Djajanegara, as Director of Sharia Business of CIMB Niaga, said that CIMB Niaga's UUS financing

reaches 20%, mainly from the consumer sector, particularly housing finance (CIMB Niaga, 2021).

The main challenge faced by Islamic banks today is how to build the trust of stakeholders in the intense competition between Islamic banks and traditional banks in banking and financial services (Falikhatusun & Assegaf, 2012). It is important to remember the role of Islamic banks in Indonesia, so their performance needs to be improved so that banks with Islamic principles remain healthy and efficient. Profitability is the most suitable indicator for measuring bank performance (Suryani, 2011). With a good bank performance, public trust in the bank will increase. Conversely, if the bank's performance decreases, public confidence in the bank will also decline.

Sharia Bank is a type of banking in Indonesia that is still considered new compared to Conventional Banks; however, Sharia Bank can develop quite rapidly because most people in Indonesia are Muslim. Meaning banks that use systems and operations other than based on the provisions of laws and regulations but also based on Islamic sharia principles are more in demand. The legal basis for sharia banking is divided into two parts, namely the normative legal basis and the formal legal basis. Both have a legal impact on the implementation of the Islamic banking business in Indonesia. The foundation of normative law comes from Islamic law, and Islamic law comes from the Koran, Hajj, and Ittihad. With the existence of Law Number 21 of 2008 concerning Sharia Banking which was promulgated on July 16, 2008, as formal law, the development of Islamic banking has a more transparent legal basis; once there is a legal umbrella, the development of Islamic banking will be encouraged (Antonio, 2014).

The Islamic banking industry can take strategic steps to increase public confidence in Islamic banks; intuitively, a healthy bank will find it easier to get support, trust, and general trust and generate maximum profits. (Sukarno & Syaichu, 2006).

The sharia banking industry that implements sharia can improve its financial situation without causing concern or even bankruptcy (Taflis) in its financial system. Thus, the sharia banking industry will have a positive image for all people, especially in the business world, because Islam is in addition to paying attention to the interests of shareholders, the banking industry also pays attention to the interests of stakeholders and the whole society (Falikhatusun & Assegaf, 2012).

The Islamic banking business in Indonesia is growing very well every year. Islamic banks can prove their existence as financial institutions and promote sharia through a profit-sharing system. Therefore, apart from the traditional banks that we have known so far, the Indonesian banking system can also conduct commercial activities based on sharia. (Afrizal, 2017: 190).

The success of Sharia Banks in facing the monetary crisis has increased its level of existence because people increasingly trust Islamic Banks. Then other Sharia Banks were established in Indonesia; as evidenced by the last data published by Ototitas Financial Services in July 2019, 14 Islamic commercial banks have been found in Indonesia. 20 Islamic stock units and 164 Islamic BPRs.

The emergence of new Islamic banks has led to healthy competition in improving services and performance. As one of the institutions that play an essential role in the country's economy, banking regulators need to monitor performance in a controlled and comprehensive manner to improve the performance of Islamic banking so that the banking industry remains healthy and efficient.

To maintain and develop their business, banks must always maintain a sound financial level to attract trust and increase customer confidence. The soundness level of a bank can be assessed from several indicators and variables. One of the leading indicators of evaluation is the bank's financial statements. Based on these financial statements, several financial ratios will be calculated, which will be used as the basis for

assessing the soundness level of the bank. The financial statement analysis results will help explain vital relationships that can provide a basis for considering a company's potential future success (Syakhrun, Amin, & Anwar, 2019).

In Indonesia, the banking industry is implemented within a dual banking system within the Indonesian Banking System (API) framework to provide a more comprehensive alternative banking service for the Indonesian people. In short, the Islamic banking system and the traditional banking system coordinate to support the mobilization of public funds to increase the financing capacity of various sectors of the national economy.

Islamic banking has become an interesting phenomenon in the national economy. It has brought encouraging benefits not only because of its high resistance to crises but also because of its vast market potential. Many countries compete to establish Islamic banks or finance industries, while some traditional industries form subsidiaries based on sharia law. The Islamic banking industry continues to develop slowly and follow the tastes of the public or the market. Allegedly, Muslims live according to Islamic teachings; therefore, they are obliged to fulfill the demand for banking services following Sharia law. Thus, to capture the needy market, many Islamic banks were established. It is evidenced by the increasing number of Islamic Commercial Banks; by the end of 2019, there were 14 Islamic Commercial Banks (BUS) and 22 Sharia Business Units.

The characteristics of the sharia banking system based on profit sharing provide an alternative banking system that is mutually beneficial for the community and banking while prioritizing transaction justice, investment ethics, and prioritizing unity and brotherhood in value production—speculation in financial transactions. By providing various banking products and services with a more diversified financial plan, Islamic banking has become one of the reliable alternative banking systems. All Indonesians can enjoy this service without exception. ([www.bi.go.id](http://www.bi.go.id)). Hence, Islamic banking develops every year. In the last ten years, the national sharia banking business has continued to show quite encouraging positive growth, as reflected in business volume, growth in investment funds and community trust funds, as well as an increase in financing allocations. This development is expected to make a significant contribution to Indonesia's economic activities, particularly in encouraging the provision of funds to the public to increase production and people's purchasing power.

Indonesia's economic slowdown in 2020 has further exacerbated this situation. This slowdown needs to be considered and what factors influence it so that it is expected to support the smooth performance of the sharia banking business, which is experiencing a slowdown and improvement. Good performance is effective performance. Efficiency is an important indicator to measure the overall performance of a bank. According to Law Number 10 of 1998, banks must remain healthy. The health of the bank reflects the condition and performance of the bank. In addition, the bank's health is in the interest of all parties involved, including owners, managers, and the public who use banking services.

## LITERATURE REVIEW

The bank health assessment indicator uses multiple ratios that can be used as a benchmark for assessing the financial performance of banking companies such as Islamic commercial banks and ordinary commercial banks. The bank health ratio is used to evaluate the status or performance by assessing capital, asset quality, management, profitability, and liquidity and considering the impact of other factors (such as banking and national economic conditions). Financial performance is an analysis that aims to see

how a company carries out business activities that benefit the company and uses correct and correct financial rules in its implementation process. When evaluating the financial performance of a company (especially a banking company), benchmarking focuses on its profitability (Kasmir, 2015).

Bank profitability is a bank's ability or ability to generate profits. It can be seen from the calculation of the level of productivity. If the financing paid is unstable, then the profitability will be small. In calculating profitability, several ratios are used as indicators to evaluate financial performance. Profit margin is a ratio that describes a bank's ability to increase profits through all available functions and resources to measure the efficiency and profitability of the bank's business (Muhamad, 2015).

Bank performance can be checked through the financial reports produced in each period. In this case, Islamic bank financial statements analysis is carried out using the Islamic Performance Index. The Islamic Performance Index is a method of measuring Sharia performance through an index. The IPI method can only be used to measure the performance of Islamic commercial banks, which is different from traditional commercial banks. Evaluation of the current implementation of Islamic banking often prioritizes profit, and sometimes Islamic banks forget their obligations to carry out their social functions. Traditional and Islamic banks' performance evaluation can only measure financial performance using the CAMELS ratio (Capital, Asset, Management, Earning, Liquidity, Sensitivity of Market Risk). And EVA (Economic Value Added), Shariah Conformity and Profitability (SCnP) Model, and Maqashid Sharia Index (MSI). (Antonio, 2014). A measuring tool to predict company performance (a Sharia Commercial Bank) will use the return on assets and profit-sharing (ROA).

Return on assets is a ratio that describes a company's ability to benefit from existing resources in healthy banking industry, can provide income, and thus contribute to the improvement of the national economy. If the existing banking system is healthy and can provide benefits, it will help improve the country's economy.

After seven years, the regulations concerning CAMELS were enacted, Bank Indonesia, through Bank Indonesia Regulation No. 13/1 / PBI / 2011, implemented a new policy regarding the assessment of the soundness of commercial banks. Bank Indonesia changed the CAMELS rating system to a Risk-Based Bank Rating, which was more risk-oriented and implemented good corporate governance. Still, it ignored the other two factors, profitability, and capital adequacy, effectively implemented since January 1, 2012. Background Bank Indonesia issued regulations. It is due to changes in business complexity and risk profile, implementation of consolidated supervision, and changes in the approach to assessing bank conditions that are applied internationally, which have influenced the method to evaluate the soundness of a bank.

For Islamic banks, this is a problem because the profitability of financial institutions has not yet reached the established healthy standards. Management must overcome these problems to maintain a balance between obligations to achieve maximum profit. Apart from managing existing assets for profit, banks must also maintain their health to remain strong. The indicators calculated using the bank's health ratio include the capital adequacy ratio, financing problems, operational costs, and third-party funds.

In this study, the assessment of the health of Islamic banking using the ratio of CAR, OE, FDR, NPF, and NOM to the performance of Islamic commercial banks is proxied by ROA and PSR. Table 1 lists the changes in Islamic banking financial ratios from December 2014 to December 2019, as shown below:

Table 1. Sharia Banking Financial Ratio Data  
For the Period December 2014 - December 2019

Indicator	2014	2015	2016	2017	2018	2019
CAR (%)	15,74	15,02	16,63	17,91	19,82	20,11
OE (%)	96,97	97,01	96,22	94,91	90,1	86,27
FDR (%)	86,66	88,03	85,99	79,61	78,88	79,54
NOM (%)	0,52	0,52	0,68	0,67	1,34	1,78
NPF (%)	4,95	4,84	4,42	4,76	4,28	3,42
ROA (%)	0,41	0,49	0,63	0,63	1,18	1,58

Table 1 above empirically explains that financial ratios seem to change every year. In addition, the theory deviates from the theory of the relationship between several indicators and financial performance. FDR in 2017 and 2018 decreased by 6.38% and 1.08%, respectively. However, the ROA ratio in 2017 stagnated as in the previous year and increased by 0.65% in 2018. Therefore, FDR has left a negative impression on society and has no impact on ROA. At the same time, theoretically, FDR has a positive effect on ROA. Based on the table above, ROA in 2017 was relatively stagnant. It contradicts the theory that CAR, OE, FDR, and NPF affect Islamic banks' profitability (ROA).

In addition, based on the gap in previous research, the value of several studies conducted by Mahmudah & Harjanti (2016) is that the capital adequacy ratio (CAR) shows that the capital adequacy ratio can have a positive impact on company performance. In line with Yusuf's (2017) Konsisten research results, Munir's (2018) research shows that CAR does not affect company performance. Meanwhile, Indyarwati & Handayani (2017) believe that the capital adequacy ratio harms company performance.

Operating costs account for the second variable of operating income, which represents operating efficiency. According to Yusuf (2017), the OE variable positively affects company performance in his research. At the same time, the study of Syakhrun et al. (2019). Obtained the value of the negative impact of OE on company performance which is in line with the research results of Rohmiati et al. (2019).

The deposit ratio (FDR) is the third variable representing the intermediation function or liquidity of a bank. Indyarwati & Handayani's (2017) research partially shows that the FDR results negatively affect company performance, not in line with Syakhrun et al. (2019) research. FDR has a positive impact on company performance. Meanwhile, Munir's (2018) research shows that the FDR variable does not influence ROA.

Research by Rofiqo & Afrianti (2019) shows that some NPF financing problems harm profitability; this is in line with the study of Indyarwati & Handayani (2017) and Afrizal (2017, p. 207). Negative impact on company performance. Unlike Munir's (2018) research, these results indicate that NPF positively affects company performance. However, in Syakhrun et al. (2019) study, NPF does not significantly impact company performance.

Due to the mismatch between the research results and the phenomenon of Islamic banking, it is necessary to study further the effect of the characteristics of the health assessment of Islamic banks represented by CAR, OE, and FDR on the performance of Islamic commercial banks. The impact of NPF and NOM on company performance is because they are still considered decisive.

Based on the description, two research questions were determined to be analyzed by empirically disclosing (1) The effect of Capital Adequacy Ratio, OE, Financing to

Deposit Ratio, Net Operating Margin on the performance (ROA) of Islamic Commercial Banks in Indonesia for the period 2015-2019, (2) The effect of Capital Adequacy Ratio, OE, Financing to Deposit Ratio, and Net Operating Margin on the performance (ROA) of Islamic Commercial Banks in Indonesia for the 2015-2019 period moderated by Non-Performing Financing.

### **The effect of CAR on the performance (ROA) of Islamic Commercial Banks**

The capital adequacy ratio (CAR) is essential in developing a business and assuming the risk of loss. The higher the capital adequacy ratio, the stronger the bank's ability to withstand threats from each credit risk/asset return type. According to BI regulations, the bank can fund operations if the capital adequacy ratio is high (8%). This favorable situation will significantly increase profitability (Yusuf, 2017). It is in line with Mahmudah & Harjanti (2016) and Yusuf (2017), which show that CAR has a significant positive effect on profitability. As for research conducted by Indyarwati & Handayani (2017) and Syakhrun et al. (2019), Quan et al. (2019), Almazari (2014), Duraj & Moci (2015), Mohamad, Sulaiman, Hamimah, & Muslim (2019), Anwar Salem Musibah & Wan Sulaiman Bin Wan Yusoff Alfattani (2017), Al Zaidanin (2020), and Hazzi & Kilani (2013) shows that CAR is beneficial for profitability (ROA) has a negative effect Research conducted by Rofiqo & Afrianti (2019) shows that CAR does not have a significant effect on profitability (ROA). With the following assumptions: **H1:** Capital Adequacy Ratio (CAR) has a positive impact on the performance of Islamic commercial banks.

### **The effect of OE on the performance (ROA) of Islamic Commercial Banks**

OE is the ratio between operating costs and operating income. The lower the OE ratio, the better the performance of bank management because it can use existing resources more effectively. The OE ratio that Bank Indonesia can tolerate is 93.52%, which is in line with Bank Indonesia (Duraj & Moci, 2015; Syakhrun et al., 2019). Research by Syakhrun et al. (2019) shows that according to a study conducted by Indyarwati & Handayani (2017), OE has a significant negative effect on profitability (ROA). Assuming the following: **H2:** OE harms the performance (ROA) of Islamic Commercial Banks

### **The Effect of FDR on the performance (ROA) of Islamic Commercial Banks**

According to Indyarwati & Handayani (2017), the financing to deposit ratio (FDR) measures liquidity in Islamic banking. FDR states the bank's ability to repay depositors' withdrawals by relying on credit provided as a source of liquidity. FDR is the same as LDR for traditional banks; the difference is that Islamic banks do not have loans, only financing. The higher the FDR ratio, the more financing paid; conversely, the smaller the FDR value, the less financing the bank will provide. Based on Bank Indonesia Circular Letter No.3 / 30 / DPNP, the direct deposit amount depends on developments in the Indonesian economy. Since the end of 2001, if the amount of direct deposits is between 80% and 110%, the bank is considered healthy. Research Abdillah et al. (2016), Indyarwati & Handayani (2017), Yusuf (2017), Quan et al. (2019), Almazari (2014), Duraj & Moci (2015), and Al-Jafari & Alchami (2014) believe that FDR has a clear positive impact on profitability (ROA). With the following assumptions: **H3:** Financing to Deposit Ratio (FDR) has a positive effect on the performance (ROA) of Islamic Commercial Banks

### **The effect of NOM on the performance (ROA) of Islamic Commercial Banks**

Net operating margin (NOM) is the ratio used to measure the ability of bank management to manage its productive assets to generate income. Profit distribution

income is obtained by subtracting the profit distribution fund from operating income minus operating costs. The higher the NOM, the higher the ROA, which will increase the profit sharing from productive assets managed by the bank, thereby increasing financial performance. From the ratio size, it can be seen that the best way for banks to manage production assets is to see how big the distribution of profits is. Therefore, the higher the company's net operating margin (NOM), its return on assets (ROA) improves its financial performance. Vice versa, the lower the NOM of the company, the lower the ROA, which will reduce or worsen bank performance. The standard NOM ratio set by Bank Indonesia is 6% or higher. Based on the empirical results of Mahardian (2008) and Widianata (2012), Raza et al. (2019), Duraj & Moci (2015), and Al Zaidanin (2020), this shows that the NOM ratio has a significant positive effect (ROA) on financial performance. The following assumptions: **H4: Net Operating Margin (NOM) positively impacts Islamic Commercial Banks' performance (ROA).**

#### **Effect of CAR on performance (ROA) with Non-Performing Financing (NPF) as a Moderation Variable**

The capital adequacy ratio is the capital adequacy ratio representing the bank's ability to maintain adequate capital and the power of bank management to identify, measure, monitor, and control risks that can affect the amount of money in the bank (Sukarno & Syaichu, 2006). The higher the ratio, the stronger the bank's ability to bear the risk of each risky credit / productive asset and provide financing for bank operations to increase profitability (Suhardjono & Kuncoro, 2002) greatly. Therefore, the scale of bank capital will affect the number of productive assets so that the higher the level of asset utilization, the capital must increase. Consequently, it can be concluded that the higher the capital adequacy ratio, the higher the rate of return on assets, and the better the performance of the banking industry in this regard. The research results by Sudiyatno & Suroso (2010) support this; their research shows that the capital adequacy ratio variable positively affects return on assets. And according to the study of Yusuf & Surjaatmadja (2018) and Kurniawan (2019), it is stated that non-performing financing (NPF) can lighten the relationship between the capital adequacy ratio and bank performance. With the following assumptions: **H5: Capital Adequacy Ratio (CAR) affects the performance (ROA) of Islamic Commercial Banks with Non-Performing Financing (NPF) as a moderating variable.**

#### **Effect of OE on Performance (ROA) with Non-Performing Financing (NPF) as Moderation Variable**

This ratio is measured by comparing operating costs with operating income. This ratio is used as a tool to evaluate efficiency and proficiency in running business activities. If the bank can minimize this ratio, it can operate efficiently to increase revenue, thereby affecting profitability. (Prasanjaya & Ramantha, 2013). In addition to determining the scale of income earned, the financing quality also determines the scale of costs incurred by the bank. Poor quality of financing indicates inadequate financing. Due to the increase in the price of reserves for productive assets or other expenses, the high value of non-performing loans will cause cost inflation, and only increasing the value of bad loans will damage bank performance (Ponco, 2008). An increase in non-performing loans will increase costs, thereby reducing banks' funds to obtain profits, decreasing bank profitability. This statement is supported by research conducted by Yanuardi et al. (2014), which shows that non-performing loans positively affect operational costs. It is in line with the study of Yusuf & Surjaatmadja (2018) and Kurniawan (2019), which state that non-performing loans (NPF) can facilitate the relationship between OEOI and bank performance. With the following assumptions:

**H6:** OE has a positive effect on Islamic Commercial Banks' performance (ROA) with Non-Performing Financing (NPF) as a moderating variable.

### **Effect of FDR on performance (ROA) with Non-Performing Financing (NPF) as a Moderation Variable**

Like the traditional bank loan to deposit ratio, the loan to deposit ratio (FDR) compares financing provided by banks and third-party funds collected by the bank (Lemiyana & Litriani, 2016). The lower the FDR indicates that the bank is less effective in directing credit. The greater the financing, the more the income earned will increase because the income will automatically increase, and the profits will increase. The return on assets (ROA) rate will increase because profits are part of the return on assets (ROA) rate. Widowati & Suryono's (2015) study results prove this, concluding that the loan to deposit ratio positively affects return on investments.

Financing is a method used by Islamic banks to transfer funds that the bank has collected. However, the achievement of this financing is not the final stage of the financing process. After realizing Islamic bank financing, it is necessary to supervise and supervise financing because various obstacles will cause no financing problems during the financing period. Therefore, Islamic banks must analyze the causes of financing problems so that the quality of their financing can be reactivated. The more funds provided, the greater the risk that must be borne by the bank concerned.

Poor quality of financing, in this case, financing problems, will result in reduced income. When there is non-performing financing or many bad loans, banks are reluctant to increase the funding allocation. Because banks have to set high write-off reserves, the shared income that should be shared is reduced. Lack of funds available to allocate financing has resulted in a decrease in revenue and hence lower return on assets. Dewi & Budiasih (2016) research resulted in the value of non-performing loans weakening the relationship between the loan deposit ratio and return on investments.

NPF (Non-Performance Financing) is a ratio used to measure the risk of credit spending by comparing lousy credit lines and expanding credit lines. The bigger the NPF, the smaller the change in profit. The income received by the bank will decrease, and the cost of writing off accounts receivable will also increase, resulting in reduced profits or increased losses (Kasmir, 2015). It follows the research of Yusuf & Surjaatmadja (2018) and Kurniawan (2019), who believe that non-performing loans (NPF) can lighten the relationship between FDR and bank performance. With the following assumptions: **H7:** Financing to Deposit Ratio (FDR) has a positive effect on performance (Return on Assets and Profit Sharing Ratio) Islamic Commercial Banks with Non-Performing Financing (NPF) as a moderating variable.

### **Effect of NOM on Performance (ROA) with Non-Performing Financing (NPF) as Moderation Variable**

Non-performing loans (NPF) indicate that banks can manage bank non-performing loans, so that the greater the ratio, the worse the quality of bank financing, which will lead to an increase in the number of problem financing and more. The bank is likely to be in trouble. The smaller the credit risk taken. In line with Yusuf & Surjaatmadja (2018) and Kurniawan (2019), the latter states that non-performing financing (NPF) can affect the relationship between the capital adequacy ratio and bank performance. Assuming the following:

**H8:** Net Operating Margin (NOM) has a positive effect on the performance (ROA) of Islamic Commercial Banks with Non-Performing Financing (NPF) as a moderating variable.

The research models tested are as follows:

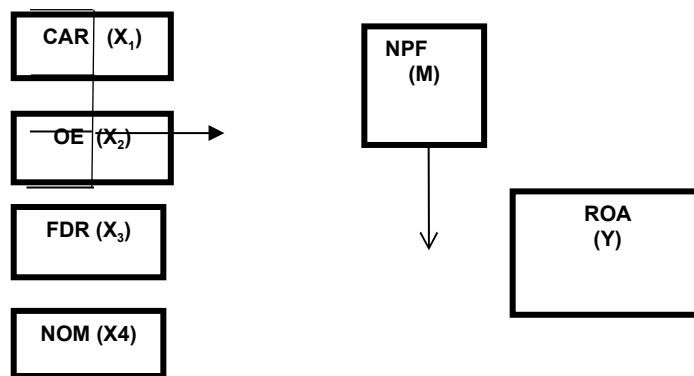


Figure 1. Frame Work

## RESEARCH METHOD

To describe phenomena or field research data, only descriptions. Quantitative research is a method of testing a specific theory by examining the relationship between variables.

The population used in this study is Islamic commercial banks registered with the Financial Services Authority, including 14 Islamic commercial banks. Islamic commercial banks in Indonesia registered with the Financial Services Authority (OJK) or on the official websites of each of these Islamic commercial banks during the 2015-2019 period.

In this study, secondary data sources were obtained from the annual reports of each related Islamic commercial bank website and the Financial Services Authority (OJK) website, which provides Islamic capital adequacy data in the form of Banking Statistics (CAR), operating costs. Operating income, financing to deposit ratio, non-performing financing, NOM, and return on assets are available through the following website during 2015-2019. Data collection techniques are several methods to obtain data and information needed for research with the Documentation Method.

By entering all the independent variables into the model simultaneously, using Microsoft Excel 2007 and Eviews 10.0 to analyze or interpret the research data results. This study combines multiple and moderate regression analysis to determine the relationship between the independent, dependent, and moderator variables. Modified regression analysis or interaction testing is a unique application of multiple linear regression, where the regression equation contains elements of interaction.

## RESULTS AND DISCUSSIONS

Based on the results of research data processing, the following results were obtained:

Table 2. Results-Analysis-Regression-CAR, OE and NOM Against ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.42946	2.752131	5.606369	0.0000
CAR	0.072273	0.011920	6.063229	0.0000
OE	-0.149416	0.016976	-8.801512	0.0000
FDR	-0.017161	0.026364	-0.650923	0.5183
NOM	-0.095691	0.084782	-1.128669	0.2648
Effects Specification				

Cross-section fixed (dummy variables)

R-squared	0.969181	Mean dependent var	0.873000
Adjusted R-squared	0.954756	S.D. dependent var	4.757604
S.E. of regression	1.011976	Akaike info criterion	3.120483
Sum squared resid	48.13252	Schwarz criterion	3.859274
Log-likelihood	-86.21689	Hannan-Quinn criter.	3.413940
F-statistic	67.18422	Durbin-Watson stat	2.112184
Prob(F-statistic)	0.000000		

Based on table 2 above, it is known that the derivation coefficient value of 0.955 explains that CAR, OE, FDR, and NOM have a contribution of 95.5% to ROA and the remaining 4.5% is influenced by other factors not examined. The results partially produce different effects on each variable that affect ROA with the following details: **(1)** A constant of 15,429 states that if the average CAR, OE, FDR, and NOM variables are stable. Then the intermediate ROA level will increase by 15,429 units, the CAR coefficient value of 0.072 states that each increase in the CAR ratio of one will increase ROA 0.072, the probability with a value of 0.000000 < 0.05 means that CAR affects ROA, so H0 which states that there is no effect of CAR on ROA is rejected and H1 which states that there is an effect of CAR on ROA is accepted. **(2)** The coefficient of -0.149 states that each increase in OE by one will decrease ROA by 0.149. At the same time, the probability value of 0.0000 < 0.05 indicates that OE harms ROA, and H0, which states that OE does not affect ROA, is rejected, and H2, which states that BOPO harms ROA, is accepted. **(3)** The FDR coefficient of -0.017 states that each increase in FDR by one will reduce ROA by 0.017. A probability value of 0.518 > 0.05 indicates that FDR has no effect on ROA with an antagonistic relationship direction. Then H3, which states that FDR has a positive impact on ROA, is rejected, and H0, which states that FDR harms ROA, is accepted. **(4)** The NOM coefficient of -0.096 states that each increase in NOM by one will decrease ROA by 0.096. The probability value of 0.265 > 0.05 indicates that NOM has no effect on ROA with a negative relationship direction. Then H4, which states that NOM has a positive impact on ROA, is rejected, and H0, which states that NOM harms ROA, is accepted.

Table 3. Results-Analysis-Regression  
CAR, OE, and NOM Against ROA NPF moderated

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.35671	3.044264	4.059015	0.0001
CAR	0.055259	0.009019	6.126994	0.0000
OE	-0.116812	0.014974	-7.800977	0.0000
FDR	-0.013165	0.032172	-0.409200	0.6839
NOM	0.163722	0.047880	3.419455	0.0011
NPF	-1.427088	1.065427	-1.339452	0.1855
CAR*NPF	-0.031640	0.010097	-3.133484	0.0027
OE*NPF	0.004276	0.003141	1.361505	0.1784
FDR*NPF	0.015403	0.011412	1.349680	0.1822
NOM*NPF	0.005492	0.006708	0.818761	0.4162
R-squared	0.884601	Mean dependent var	0.873000	
Adjusted R-squared	0.867291	S.D. dependent var	4.757604	
S.E. of regression	1.733158	Akaike info criterion	4.069331	
Sum squared resid	180.2302	Schwarz criterion	4.390545	
Log-likelihood	-132.4266	Hannan-Quinn criter.	4.196921	
F-statistic	51.10391	Durbin-Watson stat	0.696364	
Prob(F-statistic)	0.000000			

The results of the analysis in table 3 prove that the effect of CAR, OE, and NOM on ROA moderated by NPM has a determination coefficient of 0.867, which means that the influence of CAR, BOPO, and NOM moderated by NPM in generating ROA has a contribution of 86.7%. In comparison, the remaining 13,5% is influenced by other factors not examined. The results partially produce different effects on each variable that affects ROA moderated by NPF with the following details: **(1)** CAR is moderated by NPF with a coefficient of -0.032 which means that when the CAR moderated by the NPF is increased by one, it will reduce the ROA by 0.032 units, and the probability of  $0.0001 < 0.05$  indicates that CAR moderated by NPF has an effect on ROA, then H0 which states that CAR being moderated by NPF has no impact on ROA is rejected, and H5 which states that NPF moderates CAR affects ROA is accepted. **(2)** OE is moderated by NPF, which has a coefficient of 0.004 which means that if NPF moderates OE is increased by one, it will increase ROA by 0.004, the probability value of  $0.179 > 0.05$  indicates that OE moderated by NPF does not affect ROA even though it has a positive direction. Then H0, which states that there is no effect of OE moderated by NPF, affects ROA accepted, and H6, which states that NPF moderates OE affect ROA, is rejected. **(3)** FDR moderated by NPF has a coefficient value of 0.015 which means that if NPF moderates FDR, it is increased by one, it will increase ROA by 0.015, a probability value of  $0.182 > 0.05$  means that FDR moderated by NPF does not affect ROA even though it has a direction of relationship positive. Then H0 states that NPF moderates FDR does not affect received ROA, and H7 states that NPF moderates FDR affects accepted ROA. **(4)** NOM moderated by NPF has a coefficient value of 0.005 which means that when the NOM moderated by NPF is increased by one, the NOM moderated by NPF will increase by 0.005, the probability value of  $0.416 > 0.05$  means that the NOM moderated by NPF does not affect ROA even though has a positive relationship direction. Then H0, which states that Nom is moderated NPF has no effect on ROA, is accepted, and H8, which states that NPF moderates NOM affects ROA, is rejected.

## Discussion

Based on the results obtained from the above research, several discussions are presented as follows: In the analysis of the effect of CAR on performance as measured by ROA, it is known that CAR has a positive effect on ROA, this shows the capital adequacy of 14 samples of Islamic commercial banks for the 2015-2019 period in carrying out their business operations because the average CAR value is known to be 70 BUS for the 2015 - 2019 period had an average CAR of 27.88%, while based on the size set by the OJK, a bank is said to be healthy if it has a  $CAR > 8\%$ , with this ratio indicating that the 14 samples of this study have sufficient capital to run their business in lending so that it can generate profits in the form of profitability which is expressed by the ROA ratio, in the percentage owned by the 14 Islamic commercial banks of the capital adequacy ratio, it means that the BUS is in the healthy category with the amount of capital it has to run its business operations. The results of this study are in line with research from Mahmudah & Harjanti (2016) and Yusuf (2017), which show that CAR has a positive effect on ROA; this happens because of the similarity in the state of the financial ratio of the research object under study. The analysis results show that OE harms ROA. It shows that the excess working capital is not proportional to the volume of credit that should have been distributed by BUS in the 2015 - 2019 period so that the amount of profit that should have been obtained in the next period actually had an impact on the decrease in ROA from the previous period. This means that even though the BUS has capital adequacy as determined by CAR, the working capital is not in accordance with the profit that the BUS should get through the credit distribution

business because the reduced volume of credit should be higher than the previous period, this can happen if the capital adequacy is used not only for distribution credit but in other businesses such as handling non-performing loans so that the efficiency of working capital is disrupted by the level of non-performing loans. The results of this study corroborate the results of research from Indyarwati & Handayani (2017), which states that OEOI harms ROA because of the similarity in the state of the financial ratio of the research object under study. The results of the study show that the FDR ratio reduces the financial performance of Islamic commercial banks, which is determined based on ROA in the 2015-2019 period; this occurs because management handling of capital turnover, inventory turnover, and accounts receivable turnover experienced obstacles caused by the NPF ratio as non-performing loans indicated by the FDR Islamic commercial banks ratio in that period in an unhealthy state because it has a value of more than 75% according to the standards determined by the OJK. Capital turnover experienced problems because the amount of cash and inventory owned by BUS decreased when accounts receivable management experienced obstacles, which resulted in a decrease in business capital. It is used to increase credit volume from the previous period so that the amount of profit that should have been achieved in the next period was smaller than the previous period. This impact occurs due to the influence of the inability of financial management to handle disrupted working capital turnover due to the ratio of current bad debts to loans extended in the previous period. These results differ from the results of previous studies conducted by Abdillah et al. (2016), Indyarwati & Handayani (2017), Yusuf (2017), Quan et al. (2019), Almazari (2014), Duraj & Moci (2015), and Al-Jafari & Alchami (2014) due to differences in financial ratios of the object under study. The results showed that NOM harmed ROA. The current ratio of bad loans to loans disbursed in the previous period impacts the decrease in working capital owned by Islamic commercial banks in the current period. So that the volume of credit disbursed is smaller than the volume of credit in the previous period. For the next period, the net profit from operations will decrease because of the problem that occurred. It will impact the company's ability to generate profits in the next period to decrease and make its profitability as measured by a smaller ratio than in the previous period because the volume of credit extended is smaller than the previous period. This result contradicts Mahardian (2008) and Widianata (2012), Raza et al. (2019), Duraj & Moci (2015), and Al Zaidanin (2020); this shows that the NOM ratio has a significant positive effect (ROA) on finances. Performance due to differences in data and the state of the financial ratios of the object under study. The results showed that NPF has the impact of reducing ROA with the Islamic commercial bank's capital adequacy level for 2015 – 2019. It illustrates that the adequacy of capital owned by Islamic commercial banks in that period reduces the ability of BUS to channel the volume of credit that should have been channeled greater than the volume in the previous period. Because part of the cash held by BUS in that period was concentrated on reducing the ratio of non-performing loans in the current period, the current volume of credit that had to be channeled into getting profit in the next period decreased in volume. The results of this study contradict Yusuf & Surjaatmadja (2018) and Kurniawan (2019) that non-performing financing (NPF) can lighten the relationship between the capital adequacy ratio and bank performance, this is due to differences in the state of the financial ratios of the research object under study. The results show that the NPF has an impact towards increasing ROA in moderating OE, this shows that the amount of capital currently owned is used to handle the non-performing loan ratio so that bad credit in the current period can be resolved as evidenced by the addition of cash on collectible receivables distributed in the previous period. with the current profits obtained on receivables in the previous period, there is an effective use of capital to generate Islamic commercial banks profits even though basically the profits are obtained from receivables invested in

the previous period and even though in the next period the profits that will be obtained by Islamic commercial banks are smaller than the current period. due to a decrease in the volume of loans in the current period compared to the volume of loans in the previous period. It illustrates that Islamic commercial banks are currently in good health with the current BOPO ratio that can produce collectible receivables at this time. In the current period, the resulting profit is greater than the operating costs used, although in the next period profitability will decrease, due to operational costs. used for handling non-performing credit, thereby reducing the current credit volume to generate profitability in the next period. The results of this study are in line with the research of Yusuf & Surjaatmadja (2018) and Kurniawan (2019) who state that non-performing loans (NPF) can facilitate the relationship between OE and bank performance, because the condition of the financial ratios of the object under study experiences the same situation as this study. The results of the analysis show that the NPF ratio has an impact on increasing ROA when moderating FDR, this illustrates that the capital adequacy of the Islamic commercial banks in the 2015-2019 period is used for handling bad debts, so that the capital adequacy on the bus can reduce the bad credit ratio which will have an impact. increase in Islamic commercial banks cash, although basically the volume of credit is reduced which should be disbursed to increase operating profit in the next period, even though the profitability in the next period decreases, non-performing loans that occur due to credit distribution in the previous period have bad credit problems can be resolved by using sufficient capital owned by Islamic commercial banks. These results support the research of Yusuf & Surjaatmadja (2018) and Kurniawan (2019) who believe that non-performing loans (NPF) can lighten the relationship between FDR and bank performance. This is because there is an equal state of the financial ratios of the object under study in this study. The analysis results show that NPF has an impact on increasing ROA which is influenced by NOM. These results illustrate that the operating profit in the previous period was used by the BUS to handle the bad credit ratio experienced by the current Islamic commercial banks, so that profits that were hampered by bad credit in the previous period could re-fill the current BUS cash to run its operations, even though basically with Adequacy of capital owned by BUS in the current period has an impact on the decline in ROA for the next period due to the reduced volume of credit currently channeled to generate profits in the next period. The results of this study are in line with the research of Yusuf & Surjaatmadja (2018) and Kurniawan (2019), the latter of which states that non-performing financing (NPF) can affect the relationship between capital adequacy ratios and bank performance, this occurs because of feelings of financial ratios. on the research object under study. (9) Based on the results of the determination analysis, it is known that without moderation, NPF CAR, OE, FDR and NOM contribute more than moderated by NPF, which means that the current state of capital adequacy can be used by BUS in carrying out its business operations to channel credit to customers with an allocation of operational costs sufficient so as to enable Islamic commercial banks to manage its capital turnover properly and generate profits from operating profits and achieving high profitability through the business. Meanwhile, when there is bad credit, of course some of the funds are used by Islamic commercial banks in financing the handling of bad credit which results in a decrease in the volume of credit at this time compared to the previous period, so that profitability in the next period will decrease compared to the present.

## CONCLUSIONS

From the overall analysis of the results and analysis, several conclusions are found that answer the questions in the formulation of the problem: Simultaneously, CAR, OE, FDR, and NOM have a positive effect on BUS performance for the 2015-

2019 period as measured by ROA. Still, only partial results are CAR that has a positive impact on ROA, while OE, FDR, and NOM harm ROA. It occurs because the capital adequacy owned in the current lending period decreases compared to the previous period. It impacts a decrease in profit income for the next period. This problem means that the capital presently used will not be proportional to the operating profit results in the next period because of the ratio of non-performing loans in the previous period. This condition affects the capital turnover ratio and decreases net profit in the next period. Simultaneously, NPF moderates CAR, OE, FDR, and NOM have a positive effect on BUS performance for the 2015-2019 period as measured by ROA, while the partial results are only NPF which has an impact on reducing the effect of CAR on ROA, while other variables when NPF moderate the relationship with ROA is moving towards improvement. The capital adequacy ratio is currently used in handling the current lousy credit ratio as a result of loans extended in the previous period so that the current capital that should be used to generate profits in the next period through an increase in the volume of credit at this time from the previous period is reduced and impact the decline in BUS profitability in the next period.

Meanwhile, with the current capital adequacy, this capital is used to handle the ratio of current bad loans and non-performing receivables, which can increase the current profitability of BUS. However, the profitability is lower for the next period because the volume of credit is reduced from the previous period. Profitability will be created greater if at that time the ratio of lousy credit experienced by BUS has a safe level or below 5%, so that the concentration in increasing credit volume is greater to generate profitability in the next period, compared to using the available capital adequacy to handle the ratio of bad loans at this time so that the volume of loans disbursed is smaller than in the next period which results in a decrease in profitability in the next period compared to the present.

This study still has limitations that can relate to the variables used and the sample used. This study only examines the effect of Non-Performing Financing (NPF) on moderating the impact of Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM) on performance (Return On Assets) in Commercial Banks. Sharia does not make comparisons with conventional banks. The research was only conducted from 2015 to 2019. To get more convincing results, it was possible to extend the research period. For future research, conduct in-depth interviews with related parties to obtain more accurate information from the empirical evidence acquired.

Based on the limitations of the research, several suggestions can be summarized for the progress of further research as follows: **(1)** It is recommended that further research conduct research with other moderating variables to improve the results of this study and conduct a comparative analysis on the effect of Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM) on performance (Return On Assets) moderated by Non-Performing Financing (NPF) in Islamic Commercial Banks compared to conventional banks, so it is known whether Islamic banks and traditional banks research the influence of Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM) on performance (Return On Assets) will produce similar results and also know if moderated by Non-Performing Financing (NPF) then will strengthen or weaken performance. **(2)** This research was conducted only to analyze data for 2015-2019, so it is recommended for further research to use data in the years before the Covid-19 pandemic until the Covid-19 pandemic so that it will be apparent that the comparison of the performance conditions of Islamic commercial banks and commercial banks will be seen. before the pandemic and during the pandemic. **(3)** It is recommended for further research not only to analyze financial data available on the IDX, but to conduct in-depth

observations and interviews with companies that are the object of research so that it is known in depth what happened to bank performance based on the Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM), and if moderated by Non-Performing Financing (NPF) whether to strengthen or weaken the influence of Capital Adequacy Ratio (CAR), OE, Financing to Deposit Ratio (FDR), and Net Operating Margin (NOM) on banking performance.

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