Implementation of Risk Management and Capital Structure on Financial Performance: A Study of Islamic Banking in Indonesia

Ida Nihayah¹ and Y. Anni Aryani²

¹²Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia

Corresponding Author: Ida Nihayah, E-mail: ida.nihay@gmail.com

ABSTRACT
This study examines the influence between risk management and capital structure on the financial performance of Islamic Commercial Banks (BUS) in Indonesia with 3 measurement proxies, namely ROA, ROE, and zakat. ROA's financial performance will be used as a key proxy in this study. Meanwhile, ROE and zakat will be used as additional proxies to see the difference in results between the three of them. Risk management is measured by parameters of credit/financing risk management (NPF), liquidity risk (FDR), and operational risk (BOPO). Meanwhile, capital structure is measured using the ratio of CAR and DER. This study also added five control variables: company size, income stability, asset growth, third-party funds, and financing. This study used panel data and purposive sampling techniques to determine the sample. Data obtained is on published financial statements of Islamic commercial banks for 2008-2019. The data analysis technique used is a multiple regression analysis technique using EViews 9 program. The results showed that BOPO and CAR variables affected financial performance (ROA), while NPF, FDR, and DER have no effect on financial performance (ROA), and there were inconsistencies in results with ROE and Zakat proxies.

KEYWORDS
Risk Management, Capital Structure, NPF, FDR, BOPO, CAR, DER, ROA, ROE, Zakat

ARTICLE INFORMATION
ACCEPTED: 19 July 2022 PUBLISHED: 23 July 2021 DOI: 10.32996/jbms.2022.4.3.5

1. Introduction
Overall performance of the bank is a picture of achievements achieved by the bank in its operations, both regarding aspects of finance, marketing, raising and disbursement of funds, technology, and human resources (Sukaraja & Azwa, 2014). Profitability is an important aspect because profitability can reflect the bank's achievements in carrying out its operations in one period (Damanhur et al., 2018). Profitability is used to measure the effectiveness of management based on the results of returns generated from loans and investments (Armereo, 2015). Profitability is also considered important because it is a measure of successful performance in accounting (Muchtar et al., 2018).

One of the uniqueness that makes Islamic banks different from conventional banks is the social function attached to Islamic banks. The social role is one of the roles commonly carried out by Islamic banks in addition to carrying out their business activities with sharia-compliant principles (Rhamadhani, 2016). Zakat is an effective mechanism to achieve sustainable development by reducing social problems and increasing economic activity (Nurhayati & Rustiningrum, 2021). Integration of commercial and social functions in Islamic banks makes it possible to be able to contribute to economic growth through bank business activities in the form of financing distribution to the real sector and, at the same time, able to have a social impact (OJK, 2020). With the achievement of zakat, the vision and mission of Islamic banks are in line with the ultimate goal of establishing Islamic banks, namely to achieve falah (success in the world and the hereafter) (Ibrahim et al., 2022). The contribution of Islamic banks in improving the welfare of the community has an important role because the higher the income received, the higher the zakat issued by Islamic banks (Satibi et al., 2018). Improvement of Islamic banking in terms of social and environmental responsibility will create an image of the bank in the eyes of stakeholders and a view of social and environmental Islam (Niswah & Falikhatun, 2018).

Copyright: © 2022 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.
According to Darmawi (2011), several risks are often faced by banks, including credit risk with NPL (NonPerforming Loan) indicator, whereas in Islamic banks, it is called NPF (NonPerforming Financing), liquidity risk with LDR (Loan to Deposit Ratio) indicator where in Islamic banks it is called FDR (Financing Financing) to Deposit Ratio) and operational risk with BOPO (Operating Expenses to Operating Income) indicator. Sufficient bank capital is also an important thing that must be considered; with sufficient capital, financial difficulties will be avoided and allow the bank to operate properly. The weak capital structure of banking is one of the causes of banks not being able to defend themselves from risks and losses arising (Anthonie et al., 2018). Capital structure can be measured from the ratio of CAR and DER, where this ratio can affect the performance of Islamic banking companies (Yusuf & Surjaatmadja, 2018).

One of the benchmarks for the health of a bank can be judged by the smoothness or not of the return on financing or investment disbursed. The parameters for measuring non-performing financing can be seen from the NonPerforming Financing (NPF) ratio for Islamic banks. Research on NonPerforming Financing (NPF) in Islamic banking was conducted by Almunawwaroh & Marliana (2018), Sriyana (2015), Akhtar & Ali (2011), Anwar (2016), Wibisono (2017), and Dodi et al. (2018), Rahman & Santoso, (2019), Handayani et al., 2021 which shows results that NonPerforming Financing (NPF) had a negative significant effect on banking financial performance (profitability). While Muchtar et al. (2021), Sutrisno (2020), Tristiningtyas & Mutaher (2020), Kusumastuti & Alam (2019), Wibowo & Syaichu (2013), Wardana & Widyaarti (2015), Halim et al., (2021), Ichsan et al. (2021), Nahar & Prawoto (2017) proved that NPF does not contribute significantly to the increase in bank profitability. This means that NonPerforming Financing (NPF) has a positive influence on profitability. This is contrary to the existing theory that low NPF means a lower risk of financing guaranteed by the bank. Banks with an NPF that is higher will get greater costs even in the reserves of productive assets or other costs. (Sriyana, 2015; Rahma & Santoso, 2019).

The bank’s business continuity is highly dependent on liquidity management. Liquidity can affect the confidence of customers and shareholders. FDR’s low rate suggests the idle funds in the bank are large enough to affect profitability. Research on Islamic banking related to liquidity risk with proxy Financing to Deposit Ratio (FDR) has been conducted by Nugraheni & Alam (2014, Sriyana (2015), Almunawwaroh & Marliana (2018), Yusuf & Surjaatmadja (2018), Ichsan et al., (2021), Handayani et al. (2021) which states that FDR has a positive effect on financial performance, this is different from the research of Tristiningtyas & Mutaher (2020), Armereo (2015), Halim et al. (2021), Nahar & Prawoto (2017), and Lidyah et al. (2019) which is inconsistent with the existing theory that if FDR increases then ROA also increases. FDR is the bank’s ability to mobilize depositor funds, so it is expected that this variable will have a positive effect on the profitability ratio because higher financing will generate more profits (Sriyana, 2015). Research by Tristiningtyas & Mutaher (2020) shows results that the higher FDR, the lower ROA. FDR’s indignity to ROA (financial performance) was because, during the research period, FDR showed low data distribution/variability.

The efficiency ratio is a ratio used to determine the level of a bank’s ability to carry out its company’s activities efficiently to measure the level of management’s ability to control the operation of bank funds. Research on the influence of BOPO on Islamic financial performance has been conducted by Akhtar &Ali (2011), Sriyana (2015), Muchtar et al. (2021), Kusumastuti & Alam (2019), Nahar & Prawoto (2017), Sutrisno (2018), Yusuf & Surjaatmadja (2018), Halim et al. (2021) Ichsan et al. (2021), Handayani et al. (2021) that BOPO negatively affects the financial performance of Islamic banks. Meanwhile, Aziz (2016), in his research, showed the results that BOPO does not affect profit. This is very lame with other research results. The theory states that larger BOPO, smaller ROA of Islamic banks because the profit obtained by the bank is smaller (Kusumastuti & Alam, 2019). The risk of operational activities if they do not run smoothly will result in losses, system failures, human errors, control, and procedures that are lacking (Hanafi, 2014). With well-developed internal control procedures, Islamic banks can efficiently process financing to generate more profits (Rosman & Abdul Rahman, 2015).

Several studies on the capital structure on financial performance have been researched and produced empirical evidence, including Wibowo & Syaichu (2013), Yusuf & Surjaatmadja (2018), Ichsan et al. (2021), (Handayani et al., 2021), which states that CAR variable has a positive effect on profitability. This contradicts the research of Sriyana (2015), (Muchtar et al., 2021), Sutrisno (2016), Akhtar et al. (2011), Syafril (2012), Nahar & Prawoto (2017), and Ismailina & Zulfadhi (2016) which found that CAR harmed bank performance. This is contrary to the existing theory that the capital adequacy ratio is a bank’s performance ratio to assess the ability of capital to cover potential losses in the provision of financing activities. A higher CAR level makes the bank’s ability to cope with risks that are also higher (e.g., risky financing or risky productive assets), and the higher CAR demonstrates the bank’s ability to fund its operations. This means that banks can make a large contribution to bank profitability (Kuncoro & Suwardjono, 2002). One of the possible reasons why CAR has a negative correlation with ROA can be explained by the risk management perspective. If Islamic bank risk is measured by capital, banks with high levels of non-traditional activity have larger capital ratios, allowing greater capacity to absorb asset losses from such activities. Finally, the increase in capital ratio tends to reduce the profitability ratio (Sriyana, 2015).

Research on Islamic banking related to Debt to Equity Ratio (DER) conducted by Sukarno & Syaichu (2016) and Sutrisno (2018) gave the result that DER was not proven to have an effect on Return on Assets (ROA). Meanwhile, the research of Lorenza & Anwar
Implementation of Risk Management and Capital Structure on Financial Performance: A Study of Islamic Banking in Indonesia

(2021) showed negative but insignificant influential results. The high ratio of DER indicates that the company will have real problems in the long run, one of which is the possibility of bankruptcy. The greater the debt, the greater the risk borne (Sukarno & Syaichu, 2016). The profitability performance of Islamic banks responded positively to the increase in equity (capital). These results follow the signaling theory, which predicts that banks are expected to perform better by sending information through higher capital (Duasa et al., 2014).

This study examines the influence of risk management (NPF, FDR, BOPO) and capital structure (CAR, DER) on the financial performance of Islamic banking with 3 measuring proxies, namely ROA, ROE, and zakat. ROA will be used as the main proxy in this study. Meanwhile, ROE and zakat will be used as additional proxies to see the difference in results between the three. This study also added five control variables: company size, income stability, asset increase, third-party funds, and financing. The sample in this study is all Islamic commercial banks in Indonesia with an observation time of 12 years from 2008 to 2019.

2. Literature Review & Hypothesis Development

2.1 Financial Performance

Signal Theory was first put forward by Spence (1973), who defined signals as an attempt by the informer to accurately describe the problem to the other party so that the other party was willing to invest even under uncertainty. Broadly speaking, Signaling Theory (Signaling Theory) is closely related to the availability of information, one of which is financial statements. Financial statements are the most important part of the fundamental analysis of the company. High profitability will be a good signal or good news for investors to plant their shares in the company so that the value of their investment will rise (Sahbandi, 2019). In practice, some of the major Islamic banks in Indonesia have implemented zakat as one of their business values. Apart from being a form of fulfilling obligations from a religious perspective, paying zakat is also a way for Islamic banks to maintain their corporate image to create a good reputation among stakeholders (Sidik & Reskino, 2016). According to signaling theory, zakat that is obtained and managed properly can provide reputation and sympathy from the community where it is a positive signal.

According to Jumingan (2014), bank financial performance is a picture of the bank’s financial condition in a certain period, both regarding aspects of fundraising and disbursement of funds which are usually measured by indicators of capital adequacy and liquidity, and bank profitability. Profitability is the bank’s ability to generate profits effectively and efficiently (Yusuf & Surjaatmadja, 2018). The profitability generated by Islamic banks not only affects the profit-sharing rate for shareholders but also affects the profit-sharing rate received by depositors. Therefore, Islamic banks must continue to increase profitability (Ikhshan et al., 2018). The size of a bank’s profitability can be seen from various ratios, such as Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), and Operating Cost Ratio (Dendawijaya, 2003). The performance of Islamic banking will determine sustainability, provide certainty to investors and provide returns for shareholders. Profitability is important information for investors and managers. Profitability describes the stability and performance of banks (Zarrouk et al., 2016 Dodi et al., 2018).

ROA is a form of profitability ratio; by using various costs of capital and total assets owned by banks, this can see the ability of a company to be able to make a profit. This is because Return on Assets is a measuring tool used in the company’s ability and assesses the effectiveness of obtaining profits (Ichsan et al., 2021). The application of ROA is useful because it is important to assess the effectiveness of the resulting profit earned by the company using the company’s assets (Rahman & Santoso, 2019). Wibowo & Syaichu (2013) stated that Return on Assets (ROA) could be used to measure the ability of bank management to obtain overall profit. The higher the Return on Assets (ROA) of a bank, the greater the level of profit achieved by the bank and the better the bank’s position in terms of asset use.

ROE is a ratio that shows the ability of bank management to manage the capital available for profit. ROE is calculated by comparing profit after tax with core capital (Attar et al., 2014). This ratio is also affected by the Debt of large and small-scale enterprises. If the larger the debt, the Greater the Return on Equity. ROE growth indicates higher profit potential and better corporate prospects. This will be a great signal for investors, increase confidence in the company, and therefore allow management to increase the equity capital of the company. On the other hand, when demand increases the company’s shares in the market, it will increase its equilibrium price (Machdar, 2018). Both ROA and ROE are proxies used to measure the profitability of Islamic banks. Flamini, Mc Donald, & Schumacher (2009) note that ROA is a better key proxy than ROE because ROE analysis ignores financial leverage.

In a state of stable economic conditions where enterprises periodically make a profit, the zakat of entities plays an important role in the improvement of welfare (Andriani & Mairjiani, 2019). Corporate zakat is zakat that is paid by the company and received from other parties to be distributed back to the rightful party under sharia law. In the context of Islamic banking, corporate zakat is zakat paid by banks 2.5% of their annual profit. Some of the sources of zakat utilized by Islamic banks are corporate zakat (internal zakat), zakat of parent employees, and zakat from outside bank employees such as customers (Sidik & Reskino, 2016). Zakat is one
of the company’s commitments to the community, so the amount of the company’s commitment depends also on the size of the company’s capacity (Sri Olive, 2001 in Wahyudi, 2019)).

2.2 Risk Management

Risk management, according to Brigham & Daves (2007), is to identify events that can have adverse financial consequences and then take action to prevent and/or minimize the damage caused by these events. There are 10 (ten) risks that must be managed by banks in implementing Risk Management for Sharia Commercial Banks and Sharia Business Units. Bank Indonesia Regulation No. 13/23/PBI/2011 concerning the Implementation of Risk Management for Sharia Commercial Banks and Sharia Business Units regulates the ten risks, namely credit/financing risk, market risk, liquidity risk, operational risk, legal risk, reputation risk, strategic risk, compliance risk, return risk and investment risk.

Credit/financing risk is a risk faced by banks because they channel their funds in the form of financing to customers. An increase in the amount of financing will increase the amount of credit/financing risk (Basheer et al., 2019). NonPerforming Financing (NPF) is a financial ratio that shows the financing risks obtained by banks caused by the investment/financing of bank funds in different portfolios. Nahar & Prawoto (2017) explained that NPF is a ratio that measures financing risk. Financing risk is the risk due to the customer’s inability to return the loan per a predetermined period.

Liquidity is a very important issue for banks to maintain the continuity of their business. The inability to obtain funding to meet maturing obligations will affect the credibility of banks because it lowers the level of public trust (Attar et al., 2014). Financing to Deposit Ratio (FDR) is a ratio that compares financing with third-party funds or deposits. If the ratio is higher, it gives an indication of the lower liquidity capability of the bank concerned. Reduced liquidity levels can have an impact on rising profitability (Almunawwaroh & Marliana, 2018).

Operational risk is a risk caused by the malfunctioning of the bank’s internal processes, human error, technological system failure, or due to external problems. For operational risk, the indicator used is BOPO (Operating Expenses to Operating Income). BOPO demonstrates the ability of bank management to control operating costs against operating income (Attar et al., 2014). Kusumastuti & Alam (2019) stated that a lower BOPO ratio means better performance of bank management because it is more efficient in using existing resources in the company. BOPO ratio shows the bank’s efficiency in running its main business, especially in the field of financing.

2.3 Capital Structure

Capital owned by the company or bank must be sufficient to face all the risks of its business activities, such as losses to the bank (Ichsan et al., 2021). Capital is a very important factor in the development and progress of Islamic financial institutions while maintaining public trust (Nursyamsu, 2016). This is reinforced by the statement of Duasa et al. (2014). For Islamic Banks to compete, the management of Islamic banks must carefully decide on the mixture between debt and equity appropriately and carefully decide on capital structure appropriately to maximize the value of the bank.

Capital structure is measured by the comparison of the total capital owned by the bank with risk-weighted assets (ATMR). Every operating bank is obliged to maintain a Capital Adequacy Ratio (CAR), which is one of the benchmarks for the health of the banking business (Riyadi, 2006). Capital Adequacy Ratio (CAR) is a ratio used to measure the ability of capital to cover potential losses in the provision of financing activities.

In addition to CAR, the company’s capital structure can be measured by a comparison between total debt and the total own capital owned by the bank. The higher the debt-equity ratio, the greater the amount of borrowed capital used in generating profits for the company (Puspita & Kusumaningtias, 2010). Debt to Equity Ratio (DER) is used to measure the level of leverage (debt use) against the total shareholder’s equity owned by the company. The larger Debt to Equity Ratio reflects that the capital structure utilizes more debt than its capital. The more debt, the more risk is borne by shareholders and also reduces the expected return rate (Sutrisno, 2018).

2.4 Risk Management Factors, namely financing risk (NPF), affect the financial performance of Islamic banks.

Sriyana (2015) states that NPF is negatively correlated with ROA. This means that the higher NPF, the lower the financial performance, and the lower NPF, the higher the financial performance. Risks in the form of difficulty in returning financing by customers with large enough amounts can affect the bank’s performance. The existence of problematic financing causes many of the financing disbursed to not provide results. The high NPF also resulted in the emergence of larger reserves, so that in the end, the bank’s capital became reduced (Almunawwaroh & Marliana, 2018). The amount of NPF is one obstacle to the distribution of banking financing. This increase in non-performing financing has resulted in the formation of non-performing financing reserves or the Allowance for the Elimination of Productive Assets (PPAP) to be greater. Financing losses are costs that mean lowering
Implementation of Risk Management and Capital Structure on Financial Performance: A Study of Islamic Banking in Indonesia

profits. The high value of NPF can have an impact on the health of the bank. The greater NPF, the greater the loss experienced by the bank, which then reduction will result in bank profits. (Kusumastuti & Nature, 2019).

When NPF rises, there will be a decrease in ROA due to reduced third-party refunds; it is the third party funds that will then be channeled back to the public in the form of financing. So if these third-party refunds decrease, ROA also falls. Third-party funds falling can be caused because the customer cannot return his obligations to the bank in accordance with the specified time (Wardana & Widyarti, 2015). The worse the financial performance of Islamic banking will reduce compliance in paying corporate zakat and vice versa. Utami’s research (2018) shows that NPF, which has a fairly high average percentage, can reduce the compliance of Islamic banks in paying zakat.

Based on this description, the first hypothesis of this study is as follows:

H1: Financing risk (NPF) has a negative effect on the financial performance of Islamic banks.

2.5 Risk Management Factors, namely liquidity risk (FDR), affect the financial performance of Islamic banking banks.

The magnitude of FDR will affect profitability. FDR shows the effectiveness of banks in disbursing financing; if FDR shows too high a percentage, then the bank’s liquidity conditions are increasingly risky; on the contrary, if it is too low, the bank is considered ineffective in collecting and disbursing funds obtained from customers, thus affecting the profits obtained. The higher FDR, the higher the bank profit (Wardana & Widyarti, 2015)

The positive influence of FDR (Financing Deposit Ratio) on zakat is allegedly due to Islamic banks re-channeling funds collected from the public into the form of financing. This means that all funds raised from the community are distributed back to the community. Thus, the profit received by Islamic banks from the principle of buying and selling (murabahah) comes from markups, fees from the principle of jariah, and income profit-sharing principles (musyarakah, mudharabah) and other types of financing will affect the zakat of Islamic banking (Wahyudi, 2015). The larger FDR ratio indicates the level of adequacy of the bank’s capital from third-party funds that are fully used for financing, so it will affect the turnover of the bank’s capital for profit, while the profit has implications for the compliance of zakat issued by the bank (Utami, 2018). Based on this description, the hypothesis of these two studies is as follows

H2: Liquidity risk (FDR) has a positive effect on the financial performance of Islamic banks.

2.6 Risk Management Factors, namely operational risk (BOPO), affect the financial performance of Islamic banking banks.

The ratio of operational costs is used to measure the level of efficiency and ability of the bank to carry out operational activities. The smaller this ratio means, the more efficient the operational costs incurred by the bank concerned so that the probability of a bank in a problematic condition is smaller. The smaller this ratio, the better the bank’s performance. Thus, the operational efficiency of a bank proxied by the BOPO ratio will affect the bank’s performance (Kusumastuti & Alam, 2019). If the bank’s operating expenses increase, it will reduce the profits obtained. Therefore, bank management must be very careful in managing the bank so that operational costs are not too high. Banks must be able to maintain cost efficiency by reducing unnecessary costs (Ismaulina & Zulfadhli, 2016).

The success of Islamic banking is highly dependent on the acquisition of income, one of which is through the efficiency of costs used to obtain funds from the public and other costs. Islamic banking is required to be efficient in managing activities so that costs can be reduced, which ultimately has an impact on increasing profits and benefits of the ummah (Wahyudi, 2015). Based on this description, the hypothesis of the three studies is as follows:

H3: Operational risk (BOPO) has a negative effect on the financial performance of Islamic banks.

2.7 Capital Structure (CAR) affects the financial performance of Islamic banks.

Capital Adequacy Ratio (CAR) is a capital ratio that explains the bank’s ability to prepare funds for business development purposes and anticipate the risk of losing funds due to bank operations (Ali, 2004 Sutrisno, (2020)). The higher CAR level makes the bank’s ability to cope with risks that are also higher (e.g., risky financing or risky productive assets), and the higher CAR demonstrates the bank’s ability to fund its operations. This means that banks can make a large contribution to bank profitability (Kuncoro & Suhardjono, 2002). Some research results show that the higher CAR, ROA will also increase. With high capital, the bank can flexibly place its funds into profitable investments to increase customer confidence due to the possibility of the bank getting high profits.

If the bank’s capital is met, it is expected that the losses suffered can be covered by the capital owned by the bank. So that with the closure of losses, the bank’s operational activities will not experience significant fluctuations. (Yusuf & Surjaatmadja, 2018). By
optimizing CAR, Islamic banks can increase the financing disbursed, which in turn will increase bank profits and increase the source of zakat funds for Islamic banks. Based on this description, the hypotheses of these four studies are as follows:

H4: Capital structure, namely capital adequacy ratio (CAR), has a positive effect on the financial performance of Islamic banks.

2.8 Capital structure (DER) affects the financial performance of Islamic banking

One of the other indicators of capital structure is Debt To Equity Ratio (DER). DER ratio is a fundamental measure in the company’s finances, which is fundamental in the company’s finances, which can show the financial strength of the company. This ratio is the ratio between equity and debt, where debt here includes long-term, short-term, and current liabilities (Sukarno & Syaichu, 2016). A large amount of debt will increase the costs incurred by Islamic banks, which in turn reduces profits and reduces the source of zakat funds. Based on this description, the fifth hypothesis of this study is as follows:

H5: Capital structure, namely Debt to Equity Ratio (DER), has a negative effect on the financial performance of Islamic banks.

3. Methodology

This research is a quantitative study by collecting data in the form of secondary data in the form of numbers. This study uses secondary data in the form of documentation data or reports data that is already available, namely Sharia Commercial Banks registered with the OJK until 2019, namely 14 banks with an observation period of 12 years (2008 to 2019). This study used cross-section data or panel data. The collected data were then analyzed using a tool in the form of the E-views 9 application.

3.1 Operational Definition and Variable Measurement

This study used 3 (three) dependent variables, 5 (five) independent variables and 5 (five) control variables.

3.2 Dependent Variables

This research is a quantitative study by collecting data in the form of secondary data in the form of numbers. This study uses secondary data in the form of documentation data or reports data that is already available, namely Sharia Commercial Banks registered with the OJK until 2019, namely 14 banks with an observation period of 12 years (2008 to 2019). This study used cross-section data or panel data. The collected data were then analyzed using a tool in the form of the E-views 9 application.

The dependent variables in this study are financial performance. In this study, financial performance used three measurement proxies, namely Return on Asset (ROA), Return on Equity (ROE), and zakat. Where ROA will be used as the main proxy in this study, meanwhile, ROE and zakat will be used as additional proxies as robust to test the consistency of their research results and to test whether there are differences in results between the two.

Return on Asset (ROA) is a measure of a bank's financial performance in obtaining profit before tax, which is generated from the total assets (total assets) of the bank concerned. The formula for obtaining ROA based on SE BI 13/30/DPNP/16 December 2011 can be formulated as follows:

\[
ROA = \frac{\text{Profit Before Tax}}{\text{Total Assets}} \times 100 \%
\]

Return on Equity (ROE) is a ratio that shows the ability of bank management to manage the capital available for profit (Attar et al., 2014). It can be formulated as follows:

\[
ROE = \frac{\text{Profit Before Tax}}{\text{Total Equity}} \times 100 \%
\]

Data Analysis Technique is carried out by analyzing the report on the source and use of zakat funds in the form of collecting zakat funds; this is because the report on the source and use of zakat funds only lists the initial balance, the value of collecting zakat funds (Internal and External), the value of the use of zakat funds (Distribution) and the final balance of zakat funds (Setiyowati, 2021).
3.3 Independent Variables

Independent variables in this study are risk management factors and capital structure. Financing Risk Management Factors are proxied with a NonPerforming Financing (NPF) ratio. NonPerforming Financing (NPF) is a ratio that can provide an overview of a bank’s ability or not to manage non-performing financing for the distribution of financing carried out. NonPerforming Financing (NPF) is a financial ratio that shows the financing risks obtained by banks caused by the investment/financing of bank funds in different portfolios. It can be said that the lower NPF, the lower the financing risk borne by the bank. Similarly, if the bank has a high NPF, it indicates that the bank cannot be professional in managing its funds (Ichsan et al., 2021). To get NPF value, a formula can be used, namely:

\[
\text{NPF} = \frac{\text{NonPerforming Financing Substandard doubtful and loss}}{\text{Total Total Financing}} \times 100\% 
\]

Liquidity risk management is proxied with the Financing to Deposit Ratio (FDR) ratio; the amount of FDR will affect profitability. The value of FDR indicates the effectiveness of the bank in disbursing financing; if the value of FDR shows a percentage that is too high, then the liquidity condition of the bank is increasingly risky; on the contrary, if it is too low, the bank is considered ineffective in collecting and disbursing the funds obtained from customers so as to affect the profit obtained. The higher FDR, the higher the bank profit (Wardana & Widyarti, 2015). To get the value of FDR can be used the formula, namely:

\[
\text{FDR} = \frac{\text{Total Financing}}{\text{Total Third Party Fund}} \times 100\% 
\]

Operational risk management is proxied by the BOPO ratio; the efficiency ratio is a ratio used to determine the level of a bank’s ability to carry out its company’s activities efficiently. The efficiency ratio is used as BOPO to measure the level of ability in terms of management to be able to control bank operational funds. As operating funds increase, the costs incurred have an impact on the lack of profit before tax, and in the end, there can be a decrease in bank profits (Ichsan et al., 2021). To get the BOPO value, a formula can be used, namely:

\[
\text{BOPO} = \frac{\text{Total Operating expense}}{\text{Total Operating Income}} \times 100\% 
\]

Capital structure is a comparison between own capital and Risk-Weighted Average Assets (ATMR). Every operating bank is obliged to maintain a Capital Adequacy Ratio (CAR), which is one of the benchmarks for the health of the banking business. Capital Adequacy Ratio (CAR) is a ratio that shows how far all bank assets that contain risks (credit, participation, securities, bills at other banks) are financed from the bank’s own capital funds, in addition to obtaining funds from sources outside the bank, such as public funds, loans (debt), and others (Sutrisno, 2018). To get the CAR value, a formula can be used, namely:

\[
\text{CAR} = \frac{\text{Bank Capital}}{\text{Risk Weighted Average Assets (ATMR)}} \times 100\% 
\]

Capital Structure, which is proxied by the ratio DER, Debt to equity ratio (DER) is a ratio used to measure the level of leverage (debt use) to the total shareholders’ equity owned by the company. This factor reflects the company’s ability to fulfill all its obligations, indicated by some part of its own capital used to repay debts. The larger this ratio indicates, the greater the obligation and the lower ratio indicates, the higher the company’s ability to fulfill its obligations (Sutrisno, 2018). This means that the lower DER, the better for the company. To get the DER value can be used formula, namely:

\[
\text{DER} = \frac{\text{Total Amount of Debt}}{\text{Total Equity}} \times 100\% 
\]
3.4 Control Variables
This study used 5 (five) control variables, namely: company size, income stability, asset growth, third party funds, and financing. Here's an explanation of each control variable:

Company Size (SIZE) is proxied from the total value of assets. This variable is measured by the natural logarithm of the total assets of Islamic Commercial Banks.

\[
\text{SIZE} = \ln (\text{TOTAL AKTIVA})
\]

Income stability (INCOME): This study uses income stability proxied by an increase in net income. This variable is measured by means of net income of the year subtracted from net income of the previous year divided by net income of the previous year at Islamic commercial banks.

\[
\text{INCOME} = \frac{\text{Net Income}_t - \text{Net Income}_{t-1}}{\text{Net Income}_{t-1}} \times 100\%
\]

Asset Growth (GROWTH): This study uses an increase in assets that is proxied by an increase in assets. This variable is measured by means of the total assets of the year by subtracting the total assets of the previous year divided by the total assets of the previous year in Islamic commercial banks.

\[
\text{GROWTH} = \frac{\text{Total Assets}_t - \text{Total Assets}_{t-1}}{\text{Total Assets}_{t-1}} \times 100\%
\]

Third Party Funds (DPK): This study uses third-party funds proxied from the total value of DPK. This variable is measured by the natural logarithm of the total Third Party Funds of Islamic Commercial Banks.

\[
\text{DPK} = \ln (\text{DPK})
\]

Financing: This study uses financing proxied from the total value of the outstanding position of the financing. This variable is measured by the natural logarithm of the total financing of Islamic Commercial Banks.

\[
\text{Financing} = \ln (\text{Financing})
\]

The analysis used in this study is multiple regression analysis with panel data; this analysis is used to examine the relationship and influence of the independent variable on the dependent variable, along with other variables used in this study, such as moderating variables and control variables using E-Views 9. The regression equation used in this study is as follows:

ROA as the main proxy

\[
Y\text{ROA}_it = \alpha + \beta_1\text{NPF}_it + \beta_2\text{FDR}_it + \beta_3\text{BOPO}_it + \beta_4\text{CAR}_it + \beta_5\text{DER}_it + \beta_6\text{SIZE}_it + \beta_7\text{INCOME}_it + \beta_8\text{GROWTH}_it + \beta_9\text{DPK}_it + \beta_{10}\text{FINANCING}_it + \epsilon_it
\]

ROE as an additional proxy

\[
Y\text{ROE}_it = \alpha + \beta_1\text{NPF}_it + \beta_2\text{FDR}_it + \beta_3\text{BOPO}_it + \beta_4\text{CAR}_it + \beta_5\text{DER}_it + \beta_6\text{SIZE}_it + \beta_7\text{INCOME}_it + \beta_8\text{GROWTH}_it + \beta_9\text{DPK}_it + \beta_{10}\text{FINANCING}_it + \epsilon_it
\]

Zakat as an additional proxy

\[
Y\text{ZAKAT}_it = \alpha + \beta_1\text{NPF}_it + \beta_2\text{FDR}_it + \beta_3\text{BOPO}_it + \beta_4\text{CAR}_it + \beta_5\text{DER}_it + \beta_6\text{SIZE}_it + \beta_7\text{INCOME}_it + \beta_8\text{GROWTH}_it + \beta_9\text{DPK}_it + \beta_{10}\text{FINANCING}_it + \epsilon_it
\]
Implementation of Risk Management and Capital Structure on Financial Performance: A Study of Islamic Banking in Indonesia

\[ \alpha: \text{Constant} \]
\[ \beta: \text{Regression Coefisien} \]
\[ X_{1}\text{NPF}: \text{Credit Risk/ Financing Risk (NPF)} \]
\[ X_{2}\text{FDR}: \text{Liquidity Risk (FDR)} \]
\[ X_{3}\text{BOPO}: \text{Operational Risk (BOPO)} \]
\[ C_{2}\text{INCOME}: \text{Income stability} \]
\[ C_{3}\text{GROWTH}: \text{Asset Growth} \]
\[ C_{4}\text{DPK}: \text{Dana Third Party Funds} \]
\[ C_{5}\text{FINANCING}: \text{Financing} \]
\[ e: \text{Error} \]

4. Results and Discussion

This research was conducted using secondary data in the form of documentation data or report data of Sharia Commercial Banks registered with the OJK until 2019, namely as many as 14 banks. The Islamic banks that will be used in this study are as follows: (1) BCA Syariah; (2) BRI Syariah; (3) Bank Mega Syariah; (4) Bank Syariah Mandiri; (5) Panin Dubai Sharia Bank; (6) Bank Muamalat Indonesia; (7) Bank Maybank Syariah Indonesia; (8) Bank Aceh Syariah; (9) BPD West Nusa Tenggara Syariah; (10) Bank Victoria Syariah (11) Bank Jabar Banten Syariah (12) Bank Syariah Bukopin; (13) BNI Syariah(14) Bank Mega Syariah.

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std Devisi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NPF</td>
<td>3.666299</td>
<td>2.855000</td>
<td>43.99000</td>
<td>0.000000</td>
<td>5.097536</td>
</tr>
<tr>
<td>2</td>
<td>FDR</td>
<td>89.72481</td>
<td>89.61000</td>
<td>309.8500</td>
<td>0.000000</td>
<td>38.33865</td>
</tr>
<tr>
<td>3</td>
<td>BOPO</td>
<td>88.71987</td>
<td>89.09500</td>
<td>217.4000</td>
<td>0.000000</td>
<td>31.96740</td>
</tr>
<tr>
<td>4</td>
<td>CAR</td>
<td>27.01442</td>
<td>19.10500</td>
<td>241.8000</td>
<td>0.000000</td>
<td>28.77513</td>
</tr>
<tr>
<td>5</td>
<td>DER</td>
<td>7.219286</td>
<td>7.030000</td>
<td>30.49000</td>
<td>0.000000</td>
<td>4.803730</td>
</tr>
<tr>
<td>6</td>
<td>SIZE</td>
<td>8.540000</td>
<td>8.660000</td>
<td>11.63000</td>
<td>0.000000</td>
<td>2.176571</td>
</tr>
<tr>
<td>7</td>
<td>INCOME</td>
<td>3.325325</td>
<td>0.130000</td>
<td>439.5300</td>
<td>-0.94</td>
<td>35.43088</td>
</tr>
<tr>
<td>8</td>
<td>GROWTH</td>
<td>0.312727</td>
<td>0.160000</td>
<td>11.60000</td>
<td>-0.48</td>
<td>1.046546</td>
</tr>
<tr>
<td>9</td>
<td>DPK</td>
<td>8.102143</td>
<td>8.540000</td>
<td>11.43000</td>
<td>0.000000</td>
<td>2.262492</td>
</tr>
<tr>
<td>10</td>
<td>FINANCING</td>
<td>8.027857</td>
<td>8.510000</td>
<td>11.20000</td>
<td>0.000000</td>
<td>2.417457</td>
</tr>
<tr>
<td>11</td>
<td>ROA</td>
<td>1.330779</td>
<td>0.990000</td>
<td>13.60000</td>
<td>-9.51</td>
<td>2.794304</td>
</tr>
<tr>
<td>12</td>
<td>ROE</td>
<td>7.626948</td>
<td>5.405000</td>
<td>57.98000</td>
<td>-94.01</td>
<td>16.04869</td>
</tr>
<tr>
<td>13</td>
<td>ZAKAT</td>
<td>10659.49</td>
<td>1028.500</td>
<td>233597.0</td>
<td>0.000000</td>
<td>24542.04</td>
</tr>
</tbody>
</table>

The Chow test was performed to determine a better panel data regression model between the common ordinary least square (OLS) model and the fixed effect model (FEM). Chow testing showed that the results of the F Redundant Test were significant. This can be seen from Prob. Cross section F of 0.000 (< 0.05). So based on the results of the Chow Test, a more precise estimation model is the Fixed Effect. Because the chosen one is Fixed Effect, the Hausman test is then carried out.

The Hausmann test was performed to determine a better panel data regression model between the random effect model (REM) and the fixed effect model (FEM). The test results show a Prob Cross-Section Random value of 0.000 so that the right regression model is Fixed Effect.

The classical assumption test is performed so that the regression model meets the BLUE (Best Linear Unbiased Estimated) assumption or an unbiased model. To detect the presence of normality problems in this study, the Jarque-Flawo test was used. This study used a \( \alpha \) of 5\% (\( \alpha = 5\% \)). Hasil, the Value of Jarque-Bera is above the significance level of 5\%. Therefore in this model, there is no problem with normality. The results of the multicollinearity test show that all variables have a Variance Inflation Factor (VIF) value of less than 10, so it can be stated that there is no multicollinearity problem. Autocorrelation can be known through the Durbin Watson test. According to Durbin Watson, the overall statistic is above 10, and thus it can be stated that there is no autocorrelation in the regression model. A prerequisite that must be met in the regression model is the absence of symptoms of heteroskedasticity. From the results of the heteroskedasticity test using the Breusch-Pagan-Godfrey method, the probability value is greater than 0.05, so it can be concluded that there are no symptoms of heteroskedasticity in the research model.

The results of the regression test using the fixed-effect model obtained data on the financial performance of ROA as the main variables, namely as follows:
4.1 Effect of independent variables (NPF, FDR, BOPO, CAR, and DER) on financial performance (ROA)

If an independent variable has a p-value below the significance level of 0.05, then the variable will be assessed as having a significant effect on the dependent variable. Based on the results of data processing obtained p-value sig of 0.3798 more than 0.05, the NPF variable has no effect on financial performance (ROA) at the level of =5%. So hypothesis 1, which states that financing risk (NPF) has a negative significant effect on the financial performance of Islamic banking, is not proven true. Based on the results of data processing p-value sig of 0.0006 less than 0.05, the FDR variable has a negative and significant effect on financial performance (ROA) at the level of =5%. So hypothesis 2, which states that liquidity risk (FDR) has a positive effect on the financial performance of Islamic banking, is not proven true. Based on the results of data processing obtained p-value sig of 0.0000 less than 0.05, the BOPO variable has a negative and significant effect on financial performance (ROA) at the level of =5%. So hypothesis 3, which states that operational risk (BOPO) has a negative effect on the financial performance of Islamic banking, is proven true. Based on the results of data processing obtained p-value sig of 0.0198 less than 0.05, the CAR variable has a positive and significant effect on financial performance (ROA) at the level of =5%. So hypothesis 4 states that capital structure, namely capital adequacy ratio (CAR), has a positive effect on the financial performance of Islamic banking, which is proven to be true. Based on the results of data processing obtained p-value sig of 0.2781 more than 0.05, the DER variable has no significant effect on financial performance (ROA) at the level of =5%. So hypothesis 5, which states that capital structure, namely the Debt to Equity Ratio (DER), has a negative effect on the financial performance of Islamic banking, is not proven.

4.2 Effect of Control Variables (SIZE, INCOME, GROWTH, DPK, and FINANCING) on financial performance (ROA)

Based on the results of data processing obtained p-value sig of 0.6003 more than 0.05, the SIZE variable has no significant effect on financial performance (ROA) at the level of =5%. P-value sig of 0.6123 is more than 0.05; then, the INCOME variable has no significant effect on financial performance (ROA) at the level of =5%. P-value sig of 0.1708 is more than 0.05; then, the GROWTH variable has no significant effect on financial performance (ROA) at the level of =5%. P-value sig of 0.0483 less than 0.05, the TPF variable has a positive and significant effect on financial performance (ROA) at the level of =5%. P-value sig of 0.0902 more than 0.05, the variable FINANCING has a negative and insignificant effect on financial performance (ROA) at the level of =5%.

4.3 Additional Testing

Additional test results for financial performance with ROE and Zakat proxies are as follows:

### Table 2 Regression Models with Fixed Effect Model and t-Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefisien</th>
<th>Std Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPF</td>
<td>-0.039545</td>
<td>0.044875</td>
<td>-0.881212</td>
<td>0.3798</td>
</tr>
<tr>
<td>FDR</td>
<td>-0.022464</td>
<td>0.006376</td>
<td>-3.523068</td>
<td>0.0006</td>
</tr>
<tr>
<td>BOPO</td>
<td>-0.043439</td>
<td>0.007461</td>
<td>-5.821932</td>
<td>0.0000</td>
</tr>
<tr>
<td>CAR</td>
<td>0.019339</td>
<td>0.008194</td>
<td>2.360136</td>
<td>0.0198</td>
</tr>
<tr>
<td>DER</td>
<td>0.052323</td>
<td>0.048042</td>
<td>1.089095</td>
<td>0.2781</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.250539</td>
<td>0.476987</td>
<td>0.525253</td>
<td>0.6003</td>
</tr>
<tr>
<td>INCOME</td>
<td>-0.004726</td>
<td>0.009304</td>
<td>-0.507991</td>
<td>0.6123</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.443691</td>
<td>0.322121</td>
<td>1.377406</td>
<td>0.1708</td>
</tr>
<tr>
<td>DPK</td>
<td>0.734085</td>
<td>0.368300</td>
<td>1.993175</td>
<td>0.0483</td>
</tr>
<tr>
<td>FINANCING</td>
<td>-0.364058</td>
<td>0.213299</td>
<td>-1.706792</td>
<td>0.0902</td>
</tr>
</tbody>
</table>

The adjusted R-squared value in the model in this study was 0.641147. This value indicates that the research model can explain the ROA variable of 64.11%. The remaining 35.89% is explained by other factors beyond the variables studied. The probability value of F-statistics is less than the value of α = 0.05, so the independent variables are proven to jointly (simultaneously) affect the dependent variables. Prob (F-statistic) has a value of 0.0000, so it is smaller than 0.05. Therefore, it can be concluded that together or simultaneously, the research variables have a significant effect on financial performance (ROA).
The adjusted $R^2$ value on the model in this financial performance analysis (ROE) is 0.5524. This value indicates that the research model can explain the ROE variable of 55.24%. The remaining 44.76% is explained by other factors beyond the variables studied. The adjusted $R^2$ value in the model in this ZAKAT analysis is 0.2818. This value shows that the research model can explain the ZAKAT variable by 28.18%. The remaining 71.82% is explained by other factors beyond the variables studied. The prob (F-statistic) on the ROE variable has a value of 0.0000, so it is smaller than 0.05. Therefore, it can be concluded that together or simultaneously, all research variables have a significant effect on financial performance (ROE). The prob (F-statistic) on the ZAKAT variable has a value of 0.0002, so it is smaller than 0.05. Therefore, it can be concluded that together or simultaneously, the research variables have a significant effect on ZAKAT.

### Table 4: Additional Test of Financial Performance of ROE and ZAKAT

<table>
<thead>
<tr>
<th>Variable (t-statistic / prob)</th>
<th>ROA</th>
<th>ROE</th>
<th>ZAKAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPF</td>
<td>-0.8812</td>
<td>-1.6981</td>
<td>-0.4897</td>
</tr>
<tr>
<td></td>
<td>(0.3798)</td>
<td>(0.0919)</td>
<td>(0.6251)</td>
</tr>
<tr>
<td>FDR</td>
<td>-3.5230</td>
<td>-1.3332</td>
<td>0.7211</td>
</tr>
<tr>
<td></td>
<td>(0.0060)</td>
<td>(0.1849)</td>
<td>(0.4721)</td>
</tr>
<tr>
<td>BOPO</td>
<td>-5.8219</td>
<td>-5.0674</td>
<td>2.1820</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0309)</td>
</tr>
<tr>
<td>CAR</td>
<td>2.3601</td>
<td>0.3512</td>
<td>-0.8336</td>
</tr>
<tr>
<td></td>
<td>(0.0198)</td>
<td>(0.7259)</td>
<td>(0.4060)</td>
</tr>
<tr>
<td>DER</td>
<td>1.0890</td>
<td>-1.5634</td>
<td>-0.1781</td>
</tr>
<tr>
<td></td>
<td>(0.2781)</td>
<td>(1.204)</td>
<td>(0.8589)</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.5252</td>
<td>0.8086</td>
<td>-1.2482</td>
</tr>
<tr>
<td></td>
<td>(0.6003)</td>
<td>(4.202)</td>
<td>(0.2142)</td>
</tr>
<tr>
<td>INCOME</td>
<td>-0.5079</td>
<td>-3.3614</td>
<td>2.8318</td>
</tr>
<tr>
<td></td>
<td>(0.6123)</td>
<td>(0.0010)</td>
<td>(0.0054)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>1.3774</td>
<td>4.0786</td>
<td>-2.4816</td>
</tr>
<tr>
<td></td>
<td>(0.1708)</td>
<td>(0.0001)</td>
<td>(0.0144)</td>
</tr>
<tr>
<td>DPK</td>
<td>1.9931</td>
<td>0.3676</td>
<td>0.9842</td>
</tr>
<tr>
<td></td>
<td>(0.0483)</td>
<td>(0.7137)</td>
<td>(0.3268)</td>
</tr>
<tr>
<td>FINANCING</td>
<td>-1.7067</td>
<td>-0.1567</td>
<td>0.5493</td>
</tr>
<tr>
<td></td>
<td>(0.0902)</td>
<td>(0.8757)</td>
<td>(0.5837)</td>
</tr>
<tr>
<td>F-Test</td>
<td>12.88516</td>
<td>9.2106</td>
<td>3.610769</td>
</tr>
<tr>
<td>Prob</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.000002</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.641147</td>
<td>0.5524</td>
<td>0.281851</td>
</tr>
<tr>
<td>Observation (N)</td>
<td>154</td>
<td>154</td>
<td>154</td>
</tr>
</tbody>
</table>

The adjusted $R^2$-squared value on the model in this financial performance analysis (ROE) is 0.5524. This value indicates that the research model can explain the ROE variable of 55.24%. The remaining 44.76% is explained by other factors beyond the variables studied. The adjusted $R^2$-squared value in the model in this ZAKAT analysis is 0.2818. This value shows that the research model can explain the ZAKAT variable by 28.18%. The remaining 71.82% is explained by other factors beyond the variables studied. The prob (F-statistic) on the ROE variable has a value of 0.0000, so it is smaller than 0.05. Therefore, it can be concluded that together or simultaneously, all research variables have a significant effect on financial performance (ROE). The prob (F-statistic) on the ZAKAT variable has a value of 0.0002, so it is smaller than 0.05. Therefore, it can be concluded that together or simultaneously, the research variables have a significant effect on ZAKAT.

### Table 5: Comparison of Results with Financial Performance of ROA, ROE, and ZAKAT

<table>
<thead>
<tr>
<th>Variable</th>
<th>ROA</th>
<th>ROE</th>
<th>ZAKAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPF</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
</tr>
<tr>
<td>FDR</td>
<td>Hypothesis rejected (but negative &amp; significant effect)</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
</tr>
<tr>
<td>BOPO</td>
<td>Hypothesis accepted</td>
<td>Hypothesis accepted</td>
<td>Hypothesis rejected (but positive &amp; significant effect)</td>
</tr>
<tr>
<td>CAR</td>
<td>Hypothesis accepted</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
</tr>
<tr>
<td>DER</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
<td>Hypothesis rejected</td>
</tr>
<tr>
<td>SIZE</td>
<td>No significant effect</td>
<td>No significant effect</td>
<td>No significant effect</td>
</tr>
<tr>
<td>INCOME</td>
<td>No significant effect</td>
<td>Negative &amp; significant effect</td>
<td>Positive &amp; significant effect</td>
</tr>
<tr>
<td>GROWTH</td>
<td>No significant effect</td>
<td>Positive &amp; significant effect</td>
<td>Negative &amp; significant effect</td>
</tr>
</tbody>
</table>
5. Discussion

5.1 The influence of risk management factors, namely financing risk (NPF), on Financial Performance

Based on the results of data processing, it was obtained that the NPF variable did not have a significant effect on financial performance either with ROA, ROE, or zakat proxies. The results of this study are in accordance with the research of Sutrisno (2020), Tristiningtyas & Mutaher (2020), Kusumastuti & Alam (2019), Wibowo & Syaichu (2013), Wardana & Widarti (2015), Halim et al. (2021), Nahar & Prawoto (2017) proved that NPF does not contribute significantly to the increase in bank profitability. This means that NonPerforming Financing (NPF) has a positive influence on profitability. This is contrary to the existing theory that states that low NPF means high profitability (Rahma & Santosoto, 2019). Its low NPF should indicate the lower risk of financing guaranteed by the bank. Banks with high NPF will get greater costs even in the reserves of productive assets or other costs. Therefore, it has a low potential for financial performance (Sriyana, 2015). As a shahibul mal or mudharib, Islamic banking carries out public funds by channeling them entirely into productive assets that generate profits. However, these profit expectations are side by side with the risks faced in financing distribution (Wahyudi, 2012).

NPF does not have a significant direct influence on ROA. Indicates that the condition of a larger NPF in one period does not directly give a decrease in profits in the same period. This is corroborated by research by Wardana & Widarti (2015) and Muchtar et al. (2021), stating that the lower NPF value of an Islamic bank cannot be a benchmark for increasing bank profitability. This is because the amount of problematic financing to Islamic banks in Indonesia is small. In terms of financial performance with Zakat performance proxies, the results of this study are consistent with the research of Wahyudi (2012) and Utami (2018) that NPF (NonPerforming Financing) has no significant effect on Zakat. The absence of the influence shown by NPF (NonPerforming Financing) on zakat is thought to be due to a high level of NPF (NonPerforming Financing) followed by a high level of FDR (Financing to Deposit Ratio) (Wahyudi, 2012). In addition, a high NPF but no effect on zakat proves that the variable is not a determinant of a business entity obeying its obligations in paying zakat, even in a condition of profit where the NPF ratio is low and causes an increase in bank profits, but the situation that occurs is not all banks that make a profit will comply with issuing company zakat. The increase in NPF, but still accompanied by an increase in the profits of Islamic banks, can be caused by banks obtaining fee-based income which is not only obtained from financing distribution but also other income outside the bank’s main income.

5.2 The influence of risk management factors, namely liquidity risk (FDR), on financial performance

Based on the results of data processing, it was obtained that the FDR variable had a negative and significant effect on financial performance (ROA) at the level of = 5%. It means that the Hypothesis is rejected. The results of this study were supported by Tristiningtyas & Mutaher (2020), Armereo (2015) and Halim et al. (2021), Nahar & Prawoto (2017), Lidyah et al. (2019) that there is an FDR does not affect roa. These results are consistent for both ROA, ROE, and zakat proxies. In theory, if FDR increases, then ROA also increases. Higher financing will result in more profits (Sriyana, 2015). In the banking world, a balance is needed between the funds raised and the funds distributed so that there are no idle funds, and the funds used must be productive (Armereo, 2015).

Research by Tristiningtyas & Mutaher (2020) shows results that the higher FDR, the lower ROA. FDR’s insignivity to ROA (financial performance) was because, during the research period, FDR showed low data distribution/variability. FDR’s decline, but still accompanied by an increase in the profits of Islamic banks, can be caused by banks obtaining other income besides financing, namely from fee-based income such as income from other transaction services of banks outside of financing distribution. And FDR’s decline, based on this study, is not a benchmark that the amount of zakat issued by Islamic banks will decrease.

5.3 The influence of risk management factors, namely operational risk (BOPO), on financial performance

Based on the results of data processing, data was obtained that the BOPO variable had a negative and significant effect on financial performance (ROA) at the level of = 5%. These results are consistent with the results of research on ROE proxies but not on Zakat proxies. The results of this research are in accordance with the research of Akhtar &Ali (2011), Sriyana (2015), Kusumastuti & Alam (2019), Nahar & Prawoto (2017), Sutrisno (2018), Yusuf & Surjaatmadja (2018), Handayani et al. (2021) that BOPO has a significant influence on ROA in a negative direction. The increase in operating costs that is greater than the increase in operating income results in a decrease in the company’s profitability. This is in line with the statement (Yusuf & Surjaatmadja, 2018), which proves that only banks that can operate efficiently can increase operating income greater than operating costs. In line with previous
findings, (Kusumastuti & Alam, 2019) also proves that an increase in operating costs results in a decrease in profit before tax, thus affecting the decrease in return on assets.

The opposite research results are viewed from the zakat proxy, that high BOPO actually has a positive and significant effect on zakat. This shows that although the position of BOPO is high, Islamic banks still want to raise more zakat funds; Islamic banks consider zakat as an obligation for them because zakat is an obligation regulated by state law and religious law.

5.4 The effect of capital structure (CAR) on financial performance
Based on the results of data processing, the results were obtained that the CAR variable had a positive and significant effect on financial performance (ROA) at the level of 5%. The research results are in line with the research of Wibowo & Syaichu (2013), Yusuf & Surjaatmadja (2018), Ichsan et al. (2021), Handayani et al. (2021), Dodi et al. (2018), and (Damanhur et al., 2018) which stated that CAR variable had a positive effect on profitability. Rasio capital adequacy is the bank’s performance ratio to assess the ability of capital to cover potential losses in the provision of financing activities. The higher CAR level makes the bank’s ability to cope with risks that are also higher (e.g., risky financing or risky productive assets), and the higher CAR demonstrates the bank’s ability to fund its operations. (Kuncoro & Suhardjono, 2002). Banks that have a high CAR have high flexibility to choose profitable investments, thereby increasing customer confidence in the bank because it can obtain high profits. The higher the CAR ratio of a bank, the greater the bank’s opportunity to make a profit and the smaller the risk of the bank’s failure to utilize its capital (Kusumastuti & Alam, 2019). The formation and improvement of the role of bank assets as profit-makers must pay attention to the interests of third parties as suppliers of bank capital. Thus, the bank must provide a minimum sufficient capital to guarantee the interests of third parties (Wibowo & Syaichu, 2013).

The results of the study on ROA proxies are not the same as ROE and zakat proxies; that is, the hypothesis results are rejected, meaning that CAR does not affect the performance of ROE and zakat. Different results on ROE can be caused given that the high CAR also results in high Equity. So ROE value is falling. In reality, the capital adequacy ratio is not directly related to bank zakat payments. The capital adequacy ratio relates to capital and assets weighted according to risk, in this case, financing (receivables). It’s just that the higher the problematic financing, it will affect the profits obtained by Islamic banks so that the bank zakat to be paid will also be lower (Widiastuty, 2019). Islamic banks should pay more attention to capital needs in every financing expansion and strive for each of these risky assets to generate income so that there is no need to suppress capital (Akbar & Hendrawati, 2020). Based on the results of data processing, the results were obtained that the CAR variable had a positive and significant effect on financial performance (ROA) at the level of 5%. The research results are in line with the research of Wibowo & Syaichu (2013), Yusuf & Surjaatmadja (2018), Ichsan et al. (2021), Handayani et al. (2021), Dodi et al. (2018), and (Damanhur et al., 2018) which stated that CAR variable had a positive effect on profitability. Rasio capital adequacy is the bank’s performance ratio to assess the ability of capital to cover potential losses in the provision of financing activities. The higher CAR level makes the bank’s ability to cope with risks that are also higher (e.g., risky financing or risky productive assets), and the higher CAR demonstrates the bank’s ability to fund its operations. (Kuncoro & Suhardjono, 2002). Banks that have a high CAR have high flexibility to choose profitable investments, thereby increasing customer confidence in the bank because it can obtain high profits. The higher the CAR ratio of a bank, the greater the bank’s opportunity to make a profit and the smaller the risk of the bank’s failure to utilize its capital (Kusumastuti & Alam, 2019).

5.5 The effect of capital structure (DER) on financial performance
Based on the results of data processing, the results were obtained that the DER variable did not have a significant effect on financial performance (ROA). This is consistent with ROE and zakat proxies. Research on Islamic banking conducted by Sukarno & Syaichu (2016) and Sutrisno (2018) gave the result that DER was not proven to have an effect on Return on Assets (ROA). The high ratio of DER indicates that the company will have real problems in the long run, one of which is the possibility of bankruptcy. The greater the debt, the greater the risk is borne. The profitability performance of Islamic banks responded positively to the increase in equity (capital). Debt to Equity Ratio (DER) is used to measure the level of leverage on debt used against the total shareholder’s equity owned by the company. The increase in capital from funds derived from debts has the consequence that the bank must have its own capital reserves in larger amounts in order to cover the debt. This consequence will have an impact on the limitations to expanding the business that can increase bank income, so it is possible to reduce the bank’s profit generation, which can be seen in a decrease in ROA ratio (Sukarno & Syaichu, 2016).

6. Conclusion
Based on the results of the research analysis, it can be concluded that: the NPF variable has no significant effect on financial performance (ROA) in Islamic Banking. These results show that the Hypothesis is rejected, where the results are consistent with the three financial performance proxies with both ROA, ROE, and zakat proxies. FDR variable has a negative and significant effect on financial performance (ROA) in Islamic Banking; this is not in accordance with the existing hypothesis, so FDR has no effect on
financial performance, where this result is consistent for both ROA ROE, and zakat proxies. BOPO variable has a negative and significant effect on financial performance (ROA) in Islamic Banking, so the hypothesis is accepted. These results are consistent with the results of research on ROE proxies but not on Zakat proxies. CAR variable has a positive and significant effect on financial performance (ROA) in Islamic Banking. But the results of the study on ROA proxies are not the same as ROE and zakat proxies; that is, the hypothetical results are rejected, meaning that CAR has no effect on the performance of ROE and zakat. DER variable has no significant effect on financial performance (ROA) in Islamic Banking. This is consistent with ROE and zakat proxies, so the hypothesis of this study is rejected.

6.1 Limitations & Suggestions
This research has several limitations: Islamic banking in Indonesia does not report the source and use of zakat funds as a whole. Only a few Islamic banks collect and report their zakat funds, so the results of this study can be biased. In addition, there are two opinions related to corporate zakat in Islamic banks; some argue that Islamic commercial banks as financial institutions engaged in Islamic financial services are required to issue company zakat, namely in the sense of being obliged to pay zakat. Companies that already have zakat capabilities are required to pay it following applicable sharia law. Corporate zakat is analogous by contemporary scholars to trade zakat because, viewed from legal and economic aspects, the activities of a company are essentially based on trading or trading activities. Meanwhile, another opinion of zakat obligations for companies that are seen as syakhshiah hukmiyah still contains a bit of khilafiyah among contemporary scholars. This dissent is since legal entity institutions such as companies do not have formal rules in classical jurisprudence. In addition, data used in subsequent research For further research is expected to increase the number of samples, not only limited to Sharia Commercial Banks but to expand the population by including Sharia Business Units (UUS) and Sharia People’s Credit Banks (BPRS) considering that they are in the same industry so that the results can be generalized and possibly have different results.

Funding: This research received no external funding.
Conflicts of Interest: The authors declare no conflict of interest.
ORCID iD: Y Anni Aryani https://orcid.org/0000-0001-6217-8902
Publisher’s Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References
Implementation of Risk Management and Capital Structure on Financial Performance: A Study of Islamic Banking in Indonesia


