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# The Impact of Risk Management on Islamic Bank Performance in Indonesia

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#### Abstract

Risk management received significant prominence in Islamic banking. This study aims to investigate the impact of risk management on the performance of Islamic banks in Indonesia. The risks used are financing risk, market risk, operational risk, liquidity risk, and rate of return risk (ROR). Using the data panel regression, where the method is the best method for data consisting of time series and cross sections. The data sample was devoted to Islamic banks in Indonesia from 2014-2023. with the research population that is all Islamic commercial banks. Meanwhile, the sampling technique used is the purposive sampling technique. The data was obtained directly from the financial services authority (OJK) report and the quarterly financial statements of each Islamic commercial bank. The result demonstrate that Financing risk, market risk, liquidity risk, and rate of return risk have a significant effect on Islamic bank performance. Overall, financing risk is the most influential risk toward the performance of Islamic banks in Indonesia. The results of this study have important implications for practitioners and regulators. Therefore, Islamic banks require to improve the standards of risk management practices, especially financing risk management.

Keywords: Financing, Liquidity, Rate of Return Risk, Operational Risk, Bank Performance

## **INTRODUCTION**

One of the illustrious cases in bank is the fall of Barings Bank. As the most prestigious bank in the world, baring bank has neglected risk management with the result bankruptcy for the bank. Infact, barings bank must be sold for only 3 years to the ing bank (netherlands) for one poundsterling per share (arif, 2018). This case improves the awareness that reputable bank will collapse in a short time if it neglects bank risk management (Abdinova, 2023).

Effective risk management practices are required to avoid the global financial crisis and problems with banks. This aims to enable banks to assess risks and resolve risks effectively so that banks can survive to solve the crises (Damayanti, 2023). The main causes of serious problems in banking are financing standards and insufficient attention to changes in the economy and other conditions. This problem directly causes setbacks for the bank. (Gadzo et al., 2019). .

Risk plays an important role in banking institutions (Ana, 2023). Banks face risks in services and financing activities. These risks include: operational risk, financing risk and liquidity risk. All of these risks will occuraffect bank financial

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performance. Several studies show that The most important risk faced by Islamic and conventional banks is risk operational, financing risk and liquidity risk.

As an illustration, the practicality of poor risk management matters in Jordanian banks are appearantly visible in Housing Bank. The bank faced huge losses exceeding 70 million dinars in 2012. In addition, the empirical results for research conducted in Jordan confirms that most banks Jordan is inefficient in managing their inputs (financial resources), thus indicating high risk. Jordan is inefficient in managing their inputs (financial resources), thus indicating high risk. Islamic banks face many risks but these risks have different influences on bank financial performance (Ghenimi, 2017).

A number of studies on the relationship between various types of risk and financial performance has been researched in superpower countries, but limited research in developing countries such as Indonesia. Existing research less focuses on Southeast Asia. Therefore, there is a need to conduct research on the financial performance of the banking sector in Southeast Asia particularly in Indonesia because of the strong economy of a country is based on a banking system. This research uses Return of Assets (ROA) as an indicator financial performance of sharia banks. Many previous studies used profitability ratios to examine the condition of the company's financial performance.

Different from previous research, this research uses financing (financing) risk, liquidity risk, operational risk, and complement This research with market risk, and return risk to observe its impact on the financial performance of Islamic banks in Indonesia. Financing risk is the risk most often faced by banks and is the main cause of bank failure (Hassan et al., 2019; Gadzo et al., 2019). Many studies have measured financing risk with the non-provision ratio performing financing (NPF) and observing its effect on performance bank finance (Al-sharif, 2018; Amin, 2017; Ayu, 2019; Gadzo et al., 2019; Nwude, 2018).

Another risk that is a major concern for Islamic banks is risk operational. This risk often results in losses for the bank. bank loss of financial performance due to unexpected costs (expense) This risk is motivated by internal management less qualified people or IT systems used by the bank This includes external events that disrupt operations banks. Operational risk is measured by BOPO shows insignificant relationship to bank financial performance. Liquidity risk is another important type of risk for Islamic banks. not only damage reputation, this risk also cause bankruptcy in banks (Shair et al., 2019).

Some studies use liquidity ratio to observe its effect on bank financial performance. The results show that liquidity risk has a significant positive effect on the financial performance of Islamic banks (Hosseini, 2019; Faluq Shair, 2019; Saiful 2019; Abdellahi, 2017; Badawi, 2017). Research result others show that liquidity risk has a significant negative effect on the financial performance of sharia banks (Bagh

et.al, 2017; Shibiru et., al 2017; Abdelaziz, 2020) Apart from the risks mentioned above, one risk is the focus for Islamic banks is return risk (Bukopin Syariah, 2018).

This research tries to extend the results of previous research about risks and their impact on the financial performance of sharia banks in Indonesia. To perify the strength of the results, this study conducted a test robustness by adding a control variable, namely bank size. There is several interesting reasons why researchers chose Indonesia as an object study. First, there is quite high growth in the sharia banking sector and government commitment (MEKSI, 2019-2024). Second, Islamic banks have existed more for 20 years and Indonesia has the largest Muslim population in the world. The most impressive thing is that Indonesia succeeded achieved the best position in the global Islamic financial market (IFCI, 2019).

This research has significant contributions and implications for researchers, investors, and regulators. First, the results of this research are important for researchers other. It is useful because of its contribution to specialized knowledge on the relationship between risk and bank financial performance. This research will be useful for future researchers who are interested in conducting that type of research the same in the field of risk studies. Additionally, this study provides evidence of a relationship between financing risk, operational risk, liquidity risk, market risk and risk returns on the financial performance of sharia banks in Indonesia.

Finally, the results are important to practitioners because it demonstrate factors that influence the financial performance of sharia banks providing opportunities for them to improve risk management practices. Furthermore, the methodology proposed in this research is panel data used by previous research such as kassi (2019), Ayu (2019) and Shair (2019) in investigate risk variables and bank financial performance.

### LITERATURE REVIEW

### **Bank Performance**

The Financial performance of Islamic banks in Indonesiais an intriguing topic to explore. One method for measuring the financial performance of Islamic banks is by using financial ratios. Accounting principles such as accounting and reporting guidelines established by the fina ncial services authority are also used by Islamic banks in presenting Islamic bank financial reports to the public. Many studies use financial ratios, in this case Return of Assets (ROA) to examine the financial performance conditions of bank finance ((Al-sharif, 2018; Ayu, 2019; Gadzo et al., 2019; Hosseini, 2019; Nwude & Okeke, 2018). The use of the return on assets variable as a dependent variable is based on many previous studies

## Financing Risk

Financing risk is the most common risk faced by banks (Hassan et al., 2019). Financing Risk Often Occurs and directly affects liquidity positions such as cash flow

and profits. Financing reductions and financing increases hamper bank financial performance (Arthur, 2017). Therefore, the financing risk of the entire portfolio must be managed effectively by the bank. Financing risk relates to losses that the bank may face as a result of the customer's inability to repay the financing provided by the bank.

The Non-Performing Financing Ratio (NPF) is a ratio that is often used to measure the value of financing risk in Islamic banks. This ratio implies the bank's problem financing management capability. Banks that can manage low NPFs reflect their ability to manage risk effectively. The higher the NPF ratio, the higher the financing risk that the bank is ready to accept.

#### **Market Risk**

Market risk according to the Financial Services Authority Circular Letter Number 35/SEOJK.03/2015 concerning Calculation of Risk-Weighted Assets for Market Risk Using Standard Methods for Sharia Commercial Banks. Market risk in KPMM calculations includes benchmark interest rate risk, exchange rate risk, risk equity, and/or commodity risk. Market risk is reflected in the on balance sheet and off balance sheet positions due to changes in bank instruments which include interest rate sensitivity of debt securities, equity, foreign exchange rates and prices. commodities. Furthermore, in providing financing, Islamic banks must also pay attention to assessing market risk sensitivity, to assess financial capabilities in anticipating changes in market risk caused by exchange rate movements.

#### **Operational Risk**

Operational risk is a risk caused by inadequacies and/or non-functioning of internal processes, human error, system failure, or external problems that affect bank operations. Operational risk is in line with every bank's functional activities, such as financing, treasury and investment activities, operations and services, trade financing, funding and debt instruments, information system technology and management information systems and human resource management.

Operational risk can use BOPO (Operating Expenses to Operating Income) as a research indicator. BOPO shows the ability of bank management to control operational costs towards operational income. The smaller this ratio, the better the bank's financial performance. Thus, the operational efficiency of a bank as proxied by the BOPO ratio will affect the bank's financial performance.

Islamic banks need to determine their liquidity at the right size. The liquidity of bank is the ability of the bank concerned to fulfill its short-term obligations. All other risks will culminate in a liquidity crisis, which will ultimately drag the bank to the brink of collapse. The ratio to measures liquidity risk is the Financing to deposit ratio (Megeid, 2017; Shair, 2019; Ayu, 2019). The FDR ratio is a ratio used to measure the level of bank liquidity risk. So the higher a bank's FDR number, the more it is

described as a less liquid bank compared to banks that have a smaller ratio. The FDR value permitted by Bank Indonesia is in the range of 78% to 100%.

Rate of return risk (ROR) is considered one of the main risks that need serious attention by Islamic banks. Researchers conducted a risk management survey on 17 Islamic financial institutions in ten countries. The survey results show that the most critical risk faced by Islamic banks is the mark-up risk or RORR. Bank need to manages rate of return risk to avoid potential harm caused by loss of capital (Chatta et al., 2018). Proxies that can be used to assess the risk of returns are profit sharing for owners of investment funds (Al-Arif, 2018).

# Hyphotesis

Many previous studies have measured financing risk with NPF on banking performance (Tassew, 2019; Yong Tan, 2017; Shair et al., 2019). Gadzo (2019) examines the impact of financing risks and operational risks on bank Performance. The study used return on assets (ROA) as an indicator. Using the non-performing loan (NPL) ratio as a proxy for financing risk using the PLS SEM method, the results showed that financing risk has a significant negative influence on ROA.

The same results also show that financing risk negatively affects bank Performance (Al-Sharif, 2018; Amen, 2017; Ayu, 2019; Tassew, 2019; Abdel Aziz, 2020; Shair et al., 2019). Meanwhile, the results of other studies prove that financing risk has a positive effect on bank Performance (Saiful, 2019). According to the circular letter of bank Indonesia proxy that can be used to examine financing risk is the Non performing financing (NPF) ratio.

H1: financing risk has negative effect to bank performance.

Market risk is the important risk faced by bank. Ahmad Badawi (2017) examined market risk, financing risk and liquidity risk to bank Performance in Indonesia. The study used NIM as an indicator of market risk using the causal method. Meanwhile, the findings prove that market risk has a significant positive effect on bank Performance. The results of this study contra to research that shows market risk has a significant negative influence on bank Performance (Hosseini, 2019). Meanwhile, other findings prove that market risk has a significant positive influence on the Performance of banks in Turkey.

H2: Market risk has negative effect to bank performance.

Al-tarawneh (2018) examines the risk and Performance of banks in jordan. The risks used are operational risk, financing risk and liquidity risk. The variable operating risk used is operating costs to operating income, while bank Performance is measured by ROA. Using panel data, the results showed that operational risk had a significant negative impact on the Performance of banks in Jordan. The results of this study were reinforced by Murithi, 2017, Shair et al., (2019) which showed that

operational risks had a significant negative impact on bank Performance. The findings of this study are different from Saiful & Ayu (2019) which states that operational risks have a positive impact on bank Performance.

H3: Operational risk has negative effect to bank performance.

Banks face liquidity risk when they not manage the liquidity of their assets at the right size. Abdelaziz examines the impact of financing risk and liquidity risk on bank Performance in Indonesia. LDR is the ratio used to measure oliquidity risk and ROA is the risk used to measure a bank's Performance. Using panel data, the findings show that liquidity risk negatively affects the Performance of banks in the country. The results of the study were supported by Bagh et.al, (2017) and Shibiru and Mebratu (2017); Altarawneh, (2018); which shows that liquidity risk has a significant negative effect on bank Performance. The results of this study counteract the results of research from Hosseini (2019), Faluq Shair (2019) Saiful (2019) which explained that liquidity risk has a significant positive effect on bank Performance

H4: Liquidity risk has negative effect to bank performance.

The concept of rate of return risk (RORR) is also called as return risk, benchmark risk or mark-up risk. RORR is considered one of the main risks that requires serious attention by Islamic banks. Islamic banks must care about RORR, the rate of return and capital value of sharia banks are not guaranteed. RORR has an impact on bank financial performance. This impact arises from the account holder's unrestricted investment (IAH) of funds invested in fixed assets such as murabahah. In carrying out its functions, Islamic banks must manage their portfolio of assets and liabilities as well as their capital. Thus, each asset, portfolio and intermediary as a whole are subject to various types of risks. A proxy to assess return risk is profit sharing for investment fund owners (Al-Arif, 2018)

H5: Rate of return risk has positive effect to bank performance.

#### **RESEARCH METHODS**

This study uses the data panel regression method where this method is the best method for data consisting of time series and cross sections (Shair, 2019). The data panel has 3 main features that make this method suitable for use: the ability to solve constant problems, the ability to observe the unobserved and the heterogeneity characteristic of all banks. This study used quartal data based on previous research conducted by Zainol & Kassim and Hasanah & Ascarya.

The data sample was devoted to Islamic banks in Indonesia from 2014-2023. The research population all Islamic commercial banks. Meanwhile, the sampling technique used is the purposive sampling technique. The data was obtained directly from the financial services authority (OJK) report and the quarterly financial statements of each Islamic commercial bank.

Things that are considered in determining the research sample are Islamic commercial banks registered with the financial services authority. Islamic commercial banks that have transparency and data availability from 2014-2023. the sampling criteria above, 8 islamic commercial banks were selected with the number of data observations obtained as many as 312 observations.

This study uses Return of Asset (ROA) as an indicator of Performance of islamic banks. Many previous studies have used Performance ratios to examine the condition of a company's financial Performance. Olson and Zoubi (state accounting-based research on bank Performance often uses return on assets (ROA) or profit. Furthermore, Altarawneh (2018) examined the impact of globalization on the Performance of banks in China. They use ROA to measure bank Performance. Much of the literature measures bank Performance using Return of Assets (Sharif, 2018; Mimouni, 2019; Faluq Shair, 2019; Saiful, 2019; Gadzo, 2019; Saiful, 2019).

## **RESULTS AND DISCUSSION**

This study aims to investigate the impact of risk management on the financial Performance of Islamic banks in Indonesia. This section discusses the analysis of research results and interesting facts that appear in the study.

#### Redundant Fixed Effect - Likelihood Ratio

Redundant Fixed Effect - Likelihood Ratio testing aims to get the most appropriate model between the two models, namely the Common Effect model and the Fixed Effect model

Effects Test	Statistic	d.f.	Prob.
Cross-section F Cross-section Chi-square	15.570576	(10,341)	0.0000
	134.273180	10	0.0000

Table 1. Chow Test (Redundant Fixed Effect - Likelihood Ratio)

When the results of this test are significant (<0.05) then the best model is the fixed effect model. Conversely, if the test results are not significant (<0.05) then the best model is the common effect model. The results of the Redundant Fixed Effect - Likelihood Ratio test in this study show significant results so that the best model between the two is the fixed effect model.

Correlated Fixed Effect – Hausman Test aims to get the best model between the Random Effect model and the Fixed Effect model. If the results of this test are significant ( $\alpha = <0.05$ ) then Ho is accepted so the best model is the fixed effect model.

On the other hand, if the test results are not significant ( $\alpha$ = <0.05) then Ho is rejected so the best model is the random effect model. Correlated Fixed test results Effect - Hausman Test in this study shows significant results, which means that Ho is accepted so that the best model between the two is the fixed effect model

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.248142	5	0.0041

The Hausman test table above shows that the random cross-section probability value is 0.0041 and is significant at a confidence level of five percent (smaller than  $\alpha$  = 0.05). These results show that the best model between the fixed effect model and the random effect model is the fixed effect model. Thus, the results used for analysis in this research are fixed effect models

# Lagrange Multiplier (LM) Test

This test aims to obtain the most appropriate model between the common effect model and the random effect model. If there are consistent results from the Redundant Fixed Effect test and the Hausman test, then the Lagrange Multiplier (LM) test does not need to be carried out. The test results between the Redundant Fixed Effect and the Hausman test in this research show consistent results so that the Lagrange Multiplier test does not need to be carried out.

Based on model specification tests that have been carried out on the basis of the Hausman test, the best model is used to estimate the influence of financing risk, market risk, operational risk, customer turnover risk, return risk and bank size on the financial performance of Islamic banks in Indonesia is a fixed effect model. Table 3 below shows a statistical description of a sample of Indonesian Islamic banks. From all the tests, we obtain the fix effect model as the best model in the study.

**Table 3.** The Impact of Risk Management on Islamic bank performance in Indonesia

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
NPF	-0.628341	0.076951	-8.165436	0.0000
NIM	0.324115	0.110363	2.936795	0.0035
BOPO	-0.363705	0.118823	-3.060899	0.0024
FDR	-0.147323	0.064167	-2.295917	0.0223
ROR	-0.005728	0.039192	-0.146153	0.8839
C	4.516635	1.328845	-3.398917	0.0008
R2			0.459789	

F 17.82051 Prob. 0.000000

## Impact of Financing Risk on Islamic Banks Performance

The negative influence in financing risk indicates that bank lost the assets and profits so that the financial performance of Islamic banks dropped drastically (Gadzo et al., 2019). The bank provides assets in the form of financing to customers, but the customer's inability to returne the financing. When bank exposed to financing risk, it may directly affects the financial performance of Islamic banks. The higher financing risk level (NPF) implies that the financing provided by bank, only returns in a small amount of assets. The consequences of risk financing is a loss of profit.

Whenever the bank faces with a high NPF, financing risk exposure will increase, which will lead to to low financial performance. The bad thing in The non-performing financing ratio is the highest occurrence risk in banks during the period 1999 and 2009 (Gadzo et al., 2019) On the other hand, Islamic banks that experience high financing risk will encounter difficulties in improving financial performance (Panin Dubai Sharia, 2018).

Apart from losing the assets and profits he, Islamic banks also lack financing capital. This has an impact on obstruction of wider financing to the community. Even banks accept customer guarantees as a form of mutual commitment, but the bank remains losses thereby eroding the financial performance of sharia banks. Overall, Financing risk is the most influence risk on financial performance sharia banks in Indonesia (Panin Dubai Syariah, 2018).

There are several ways to solve financing risk problems. the principle of honesty is required so it can be mutually resolved trust between all parties (Indonesian Bankers Association, 2018). Based on verse above, if there is a financing risk, Islamic banks can provide relief by providing a time delay until the customer is available sustenance. Islamic banks need to improve risk management standards in particular financing risk in order to prevent risks (Bank Muamalat, 2018).

To increase the performance, Islamic banks will improve standard operating procedures (SOP) so that they remain healthy and strong (Bank Mega Syariah, 2019). Financing risk will be used as one priority by means of massive recovery of funding problem (Bank Muamalat, 2018; Bank Panin Dubai, 2018). Improvements to the collection process and billing system are one formula used by Islamic banks to handle problematic financing (Bank Muamalat, 2018).

Results of this research indicates that Islamic banks must improve management standards financing before providing financing to customers. Improvement of financing risk management standards namely by improving the range, parameters and weights and applying stress financing risk test and development of Financing Risk Premium.

The findings of this study are consistent with previous research findings which shows a negative relationship between financing risk and performance bank finance (Ayu, 2019; Gadzo et al., 2019; Hosseini, 2019; Al-Tarawneh, 2018: Tassew, 2019; Abdul Aziz, 2020; Shair et al., 2019). Although financing risk is identified with a decline in financial performance, findings of Ayu (2019) shows a positive relationship between financing risk and performance bank. The results of this study accept the stated research hypothesis that financing risk has a significant negative effect on performance Islamic banking finance in Indonesia.

# Impact of Market Risk on Islamic bank Performance

Market risk is the risk that influences bank financial performance in the world has a significant negative influence on bank financial performance. This significant negative influence indicates that there is a decline on asset values, income and profits in order to reducing financial performance Islamic banking finance. A mismatch that occurs between principal and margin profits due on bank assets (e.g. financing and advances) and liabilities (eg deposits and financing) cause losses for the bank. Whenever foreign exchange values change, revaluation of assets, liabilities, income, expenses, profits and losses are denominated in foreign currency into the reporting currency resulting in foreign exchange gains and losses.

Because all banks in the world are very vulnerable to market risk, then Islamic banks must be good at evaluating market conditions and judge intelligently decisions taken to gain profits from market risks that occur while being able to avoid and minimize potential losses caused due to changes in market conditions. God firmly says to always increase piety and evaluate the decisions taken effectively. This can be done by referring to historical movement data market variables in order to get an overview of market conditions (Arif, 2018). Thus banks must always monitor price movements in the market and respond to every market change with effective management.

To assess potential losses caused by Islamic bank market risks using value at risk and periodically Islamic banks carry out evaluations, Determination and review of market risk limits in order to manage and controlling market risk effectively (Bank Mega Syariah, 2019). In addition, Islamic banks carry out stress tests to measure market risk (Bank Mega Syariah, 2019)

This research supports the results of previous research which shows that market risk has a significant negative influence on bank financial performance (Hosseini, 2019;). Results This research contradicts the results of previous research shows that market risk has a positive impact on financial performance Islamic banking finance. (Badawi, 2017).

# Impact of Operational Risk on Islamic Banks Performance

Operational risk as measured by efficiency costs shows an insignificant negative relationship to the bank's Performance. This risk is caused by losses caused by inadequate internal processes, internal process failures, human errors, system failures, and/or external events that affect the Bank's operations. Banks may pay a lot of obligations resulting in inefficiencies. As it is said (Gadzo et al., 2019) that banks cover expensive operating costs by selling their assets. The more obligations that must be paid by the bank, the less the bank's inflows will negatively affect Performance. This risk causes lose Performance due to unexpected expenses.

Banks need to manage operational costs effectively to avoid operational risks that can reduce bank Performance. This research shows that operational risks have an insignificant negative influence on the Performance of Islamic banks. These findings are consistent with studies conducted that show an insignificant relationship between operational risk and bank Performance. However, contra with the results of other studies that show that there is a significant relationship between operational risk and Performance of Islamic banks (Aganoke, 2018; Ayu, 2019; Gadzo et al., 2019; Muriithi, 2017; Shair et al., 2019).

## Impact of Liquidity Risk on Islamic Bank Performance

Liquidity risk has a significant negative influence on performance bank finance. This shows that the higher the liquidity risk, the lower the performance. The explanation for this is that banks are having difficulty in finding depositors. With significant liquidity gaps, banks Sharia may have to borrow from money markets at even higher levels of funding costs.

Enhancement Funding costs will ultimately erode the bank's financial performance. Besides that, Liquidity risk causes banks to experience difficulties in fulfilling their obligations as sharia banks must fulfill the promises they have made to customers to return funds entrusted according to promises which has been agreed upon. Islamic banks need to regulate liquidity needs to be able to pay obligations that are due. This indicates that Islamic banks need to determine the liquidity of their assets the right size. With less liquidity instruments on the market, this condition increase the liquidity risk of sharia bank funding.

The negative thing about liquidity risk is that all other risks will culminate in the short term. the bank may sell many of the assets it owns to meet market liquidity (Megeid, 2017). Allah SWT commands humans to fulfill the promises they have made made including transactions/contracts at sharia banks. The bank is obliged to provide funds to customers based on agreements that have been made because customers have the right to withdraw funds that have been entrusted to the bank sharia. Therefore, banks are obliged to provide the required funds as responsibility for agreed promises/contracts. in a liquidity crisis, which will ultimately drag the bank into the abyss destruction.

Islamic banks can use maturity profiles to find out gaps liquidity that occurs in Islamic banks in order to obtain adequate liquidity decisions wiser (Bank Mega Syari'ah, 2019). Islamic banks may be able to use benchmark rate and industry standards for measuring maturity gaps (Alamdar Ali Shah et al., 2020). Apart from that, Islamic banks prepare liquidity risk limits and implement them liquidity stress test every month to make detection easier possible liquidity risk events (Bank BNI Syari'ah, 2018). Islamic Bank has liquidity risk limits including minimum statutory reserves, cash reserves, safety the level of liquidity reserves and the largest depositors.

The ability of Islamic banks to measure asset liquidity appropriately preserve banks from high costs, dependence on other banks and provide the bank with the ability to fulfill its obligations or other installments that are due. The results of this study are consistent with previous research conducted by Bagh et.al, (2017) and Shibiru and Mebratu (2017); Abdelaziz, (2020) who found that Liquidity risk has a significant negative relationship with financial performance bank.

When liquidity risks occur, costs diminish financial performance of bank finance. The results of this study are not consistent with previous research found that liquidity risk has a positive relationship with performance bank finance (Hosseini, 2019; Faluq Shair, 2019; Saiful 2019; Abdellahi, 2017; Badawi, 2017).

# Impact of Rate of Return Risk on Islamic Bank Performance

Return risk has a significant negative influence on financial performance of Islamic banks in Indonesia. This result is counter to the hypothesis research where there is a significant positive relationship between risk and return results with the financial performance of Islamic banks. This explains that the bank released most of it benefits to customers so that their financial performance becomes weaker. According to Bacha, the risk of returns increases constant changes can cause problems for banks such as increasing costs funds, which banks have to pay higher yields to withdraw customers to avoid outflow. Increased risk of returns may also increase the competition between banks which can trigger displaced commercial risk.

Sharia banks strive to attract customers to use bank services by providing greater benefits to customers but sharia banks must be willing to get a small portion of profits in order customers do not transfer their funds to other banks. Rather than not have sources of funds that can result in higher costs for banks, Islamic banks prefer to set aside part of their income to be given to customers to become more loyal.

This is possible significantly affect financial performance and increase vulnerability them to external shocks. The courage to take risks from increasing returns will provide profits or losses, so Islamic banks need to manage

benchmarkrate as best as possible to avoid potential dangers loss of income and capital (Chattha & Alhabshi, 2018).

There are several formulas that Islamic banks use to manage risk returns, namely benchmarking the level of profit sharing, carrying out stress tests, getting to know character of non-core deposit customers, monitoring interest rate movements and preparing PER (Bank Bukopin Syariah, 2018). Sharia banks prepare Profit Equal Reserve (PER) to anticipate DCR (Bank Bukopin Syariah, 2018). By always providing a certain amount of funds taken from the assets section or the bank's profit from retaining customers, the bank's financial performance will experienced a significant.

The evaluation results of Islamic banks show that financial performance Sharia bank finances are low due to human resources who are not yet experts or lack experience (Panin Dubai Syariah, 2018). Sharia banks are obliged to improve the quality of their human resources sustainably. In this case, To improve consistent quality of human resources, sharia banks provide risk management training and certification (Bank Syariah Mandiri, 2019)

#### **Robustness Test**

The robustness test in this study use a control variable, namely size in order to obtain the durability of the results of this research. This research also chooses between fixed effects and random effects models. The results show that the best mode used in research is the fixed effect model (FEM). Model This is consistent with the main model in this research. Financing risk, risk liquidity, return risk shows a significant negative relationship to ROA. Overall the robustness test results support the main findings in this research.

**Table 4 Robustness Test** 

NO	VARIABEL	FIX EFFECT MODEL
1	Financing risk	-0.329140***
	Probability	(0.0000)
2	Market risk	-3.09E-05
	Probability	(0.1735)
3	Operational risk	0.000656
	Probability	(0.7900)
4	Liquidity risk	-0.063421***
	Probability	(0.0001)
6	Rate of return risk	-7.76E-08 *
	Probability	(0.0187)
7	Size	-1.49E-09
	Probability	(0.4222)
8	R-squared	0.596494
9	Adjusted R-squared	0.577505
10	F	31.41340

	Probability	0.000000
11	Durbin-Watson stat	0.819986

Indications \*,\*\*,\*\*\* are significant coefficients at 5%, 1%, and 0.1%

#### **CONCLUSION**

Based The purpose of this study is to investigate the impact of risk management on the Performance of Islamic banks in Indonesia. The results showed that financing risk has a significant negative effect on the Performance of Islamic banks. This shows that the bank lose its assets and profits so that the performance of sharia banks decrease drastically. Market risk has a significant positive influence on the Performance of Islamic banks. While liquidity risk and Rate of return risk has a significant negative effect on the Performance of Islamic banks. Overall, financing risk is the risk that most affects the Performance of Islamic banks in Indonesia.

This research has several important implications to improve risk management of Islamic banks in Indonesia. First, Islamic banks must improve risk management standards, especially financing (financing) risk management standards in order to improve the financial performance of Islamic banks in Indonesia.

Second, In supporting the progress of Islamic banks in Indonesia, the Government needs to pay special attention both in the short and long term to be able to improve the quality of bank regulations, particularly in regulations regarding Sharia bank risk management practices and governance.

This research has several limitations, including that this research only focuses on 5 risks that affect the financial performance of Islamic banks in Indonesia. Further research can use investment risk, legal risk, sharia risk to determine the impact on the financial performance of sharia banks. Moreover, Further research is expected to compare the risks on the financial performance of Islamic banks in a national or international scale.

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