

## Does Diversification and Restructuring Reduce Non-Performing Financing?

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### ABSTRACT

**Research Aims:** This research aims to identify the influence of MSMEs and non-MSMEs financing diversification, as well as financing restructuring, on non-performing financing (NPF).

**Methodology:** This study utilizes a quantitative research method with secondary data, including Asset Quality Reports and Financial Ratio Reports accessed through the Financial Services Authority (OJK) from 2018 to 2022 for 10 Islamic commercial banks in Indonesia on a quarterly basis. Non-Probability Sampling was used as the sampling technique, and data analysis was conducted using panel regression with the Fixed Effect Model through Eviews 12 software.

**Research Findings:** The empirical results indicate that both MSMEs and non-MSMEs credit diversification do not have a significant impact on reducing credit risk in Islamic banks in Indonesia. However, restructuring has an impact on non-performing financing in Islamic banks in Indonesia.

**Theoretical Contribution:** This study contributes to the literature by examining the relationship between diversification of MSME and non-MSME financing and financing restructuring. With this research, it is hoped that Islamic banks will pay more attention to minimizing problematic financing to maintain the stability of their financial performance.

**Research limitation and implication:** In practical terms, these findings suggest that policymakers may consider implementing a concentration strategy for financing in specific sectors. If diversification is to be continued, further policy adjustments may be necessary.

**Keywords:** *Diversification, Financing, Restructuring, NPF*

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## INTRODUCTION

The development of Islamic banking in Indonesia, from the first Islamic bank in 1992 to the present day, has been steadily increasing, demonstrating rapid growth. During the economic crises of 1998 and 2008, Islamic banks, in fact, continued to perform relatively well (Shandy Utama, 2020). Similar to conventional banks, Islamic banks are heavily involved in customer financing activities. Financing remains the primary source of income for banks in Indonesia, where the bank's profits are determined by the amount of financing provided (Syahid, 2016).

Effective financing is expected to enhance the income of Islamic banks, and failure to channel financing appropriately can lead to losses for these banks (Masruroh, 2018). Therefore, Islamic banks continuously develop financing management to maximize their income and minimize the risk of non-performing financing (Syahid, 2016). Delayed repayment of financing from customers can lead to a halt in the financing cycle, which can impact both the bank and other customers. Timely repayment of financing allows the bank to redistribute funds to other customers (Widjaja et al., 2018).

Financing diversification is one strategy Islamic banks employ to minimize financing failure risks and increase profitability by allocating financing to various sectors or instruments (Ahyar, 2021). Portfolio theory suggests that diversification can provide risk reduction benefits, motivating bank managers to diversify their activities beyond a single sector (Anggraeni et al., 2020). Many researchers argue that financing diversification can help banks mitigate default risks and improve profitability (Nguyen, 2018; Wahyudi et al., 2013; Yang et al., 2020).

Diversification strategies can reduce financing risks influenced by various factors, such as differences in total banking assets, liquidity levels, regulatory compliance, and many other factors. Diversification may be suitable in specific situations but may have adverse effects in others, potentially reducing profitability. Various factors, such as agency problems between insiders and small shareholders (Laeven & Levine, 2019), dilution of the bank management's comparative advantage by operating outside their expertise, increased income and profit volatility (Berger et al., 2020), and, in an increasingly competitive market, can increase costs and consequences for banks that fail to enter new sectors.

This study focuses on diversification in the areas of MSMEs (Micro Small and Medium-sized Enterprises) and non-MSMEs. Based on data from the Financial Report accessed from the Financial Services Authority, the majority of Islamic banks in Indonesia allocate their financing to non-MSMEs. However, MSMEs play a significant role in Indonesia's GDP, contributing 55.56% of the total GDP. Furthermore, there are 51.3 million registered MSMEs, accounting for 99.9% of total business units (Anita, 2022). Therefore, it is crucial to support MSMEs in financing since one of the main obstacles to their growth is financing constraints.

Apart from diversification, non-performing financing can be managed through financing restructuring. Financing restructuring is the effort made by Islamic banks to address problematic financing faced by debtors who still have viable business prospects but struggle to make principal repayments and other obligations. Generally, Islamic banks apply restructuring to debtors facing payment issues according to the terms and conditions agreed upon by the bank (Siregar et al., 2023).

Currently, the NPF (Non-Performing Financing) in Islamic banks in Indonesia experiences fluctuations. It is necessary to enhance supervision of financing allocation efforts to reduce the ratio of problematic financing. Therefore, this research aims to prove that diversification and financing restructuring strategies can control financing risks and prevent bank failures. This study contributes to the literature by examining the relationship between diversification of MSME and non-MSME financing and financing restructuring. With this research, it is hoped that Islamic banks will pay more attention to minimizing problematic financing to maintain the stability of their financial performance.

## **LITERATURE REVIEW**

### ***Financing Diversification***

Financing diversification is considered a solution to mitigate risks (Masruroh, 2018). Diversification is also seen as a safeguard for banks against liquidity risks associated with withdrawals, default risks, estimated financial difficulty costs, and bankruptcy risks. Greater diversification can lead to more stable, secure, and valuable financial institutions (Seho et al., 2021). However, if the costs of diversification outweigh the benefits, it can introduce more risks and reduce bank stability (AlKhouri & Arouri, 2019).

### ***Financing Restructuring***

Restructuring is one of the methods employed by Islamic banks to address problematic financing faced by debtors who have viable business prospects but struggle with primary repayments and/or other obligations, allowing them to meet their obligations again. Typically, Islamic banks apply restructuring to debtors facing payment difficulties according to terms and conditions agreed upon by the bank (Siregar et al., 2023).

### ***Financing Risk***

Financing risk or financing is the risk with the most significant potential impact and potential occurrence. Therefore, financing risk in banking receives special attention among other types of risks. This risk can have a cascading effect on other risks, and a bank's successful management of financing risk can positively impact its survival. Financing risk arises when a bank cannot recover the principal and/or interest payments from the loans it has provided or the investments it has made. The primary cause of financing risk is the ease with which banks provide loans or make investments due to pressure to utilize excess liquidity, resulting in less careful assessment of the risks associated with the businesses they finance (Ilyas, 2019). Financing risk can be measured using the Non-Performing Financing (NPF) ratio, which reflects the bank's ability to manage problematic financing it has provided. The higher the NPF, the poorer the quality of the bank's financing. Financing risk accepted by the bank is due to uncertainty regarding the repayment of the financing provided (Pravasanti, 2018).

The factors causing the emergence of NPF (Non-Performing Financing) are default payments (payment failures) made by financing recipients to fund providers (debtors). Problematic financing is defined as a risk associated with the likelihood of clients failing to meet their obligations or the risk where debtors are unable to repay their debts. The NPF

ratio criteria, analogous to NPL (Non-Performing Loans), in accordance with Bank Indonesia Regulation No. 17/11/PBI/2015, should be below 5% (Rahman & Safitrie, 2018).

### **Portfolio Theory**

The Markowitz theory is now known as modern portfolio theory. Modern portfolio theory is an investment theory that seeks to maximize the expected return of a portfolio for a given level of portfolio risk or, equivalently, minimize the risk for a desired level of return by carefully selecting proportions of various assets (Koumou, 2020).

### **Hypothesis Development**

#### ***Diversification of MSMEs and Non-MSMEs Financing on Non-Performing Financing (NPF)***

Shim (2019) states that an increase in diversification strategies for financing can affect a bank's financial strength. This aligns with the theory developed by Prastiwi & Anik, (2020), which suggests that diversification of financing allocation is more suitable than concentration because different economic sectors have varying characteristics, which can increase the risks faced by banks. Supported by research conducted by Aiyubbi et al., (2022), which explains that financing diversification can influence default risk (NPF). In this study, diversification is considered in terms of MSMEs and Non-MSMEs financing. With the passage of time, the income of the Indonesian population has been increasing, both in the MSMEs and Non-MSMEs sectors. Therefore, the following hypotheses can be formulated:

*H1: Diversification of MSMEs financing has a positive impact on Non-Performing Financing (NPF).*

*H2: Diversification of Non-MSMEs financing has a positive impact on Non-Performing Financing (NPF).*

#### ***Financing Restructuring on Non-Performing Financing (NPF)***

Financing restructuring can have an impact on non-performing financing. If financing restructuring is carried out effectively, a bank can reduce the risk of non-performing financing. Credit restructuring can assist debtors facing payment issues by providing flexibility according to agreed terms, thereby reducing the risk of non-performing financing in Islamic banks. By obtaining flexibility from the Islamic bank, customers have a greater chance of making their financing payments. Therefore, restructuring can influence non-performing financing. This is supported by Siregar et al., (2023), Iqbal Fasa et al., (2021), and Wahyudi & Arbay, (2021) who explain that restructuring can impact non-performing financing. Hence, the following hypothesis can be formulated:

*H3: Financing restructuring has a positive impact on Non-Performing Financing (NPF).*

### **RESEARCH METHOD**

This research employs a quantitative research method using secondary data, including Productive Asset Quality Reports, Other Information, and Financial Ratio Reports for each quarter, accessed through the official website of the Financial Services Authority (OJK) for the period from 2018 to 2022. In addition to accessing financial reports, this research also utilizes a literature review as an additional data source. The population in this

study consists of Islamic commercial banks in Indonesia. The sampling technique used in this research is Non-Purposive Sampling, and 10 Islamic commercial banks in Indonesia are selected.

The independent variables in this study include financing diversification based on economic sectors, specifically MSME, Non-MSME, and restructuring, while the dependent variable is measured using Non-Performing Financing (NPF). Data analysis is conducted using panel regression with the Fixed Effect Model through Eviews 12 software.

**Table 1. Sample of 10 Islamic Commercial Banks**

No.	Name of Sharia Commercial Bank
1	PT Bank Aceh
2	PT Bank NTB Syariah
3	PT Bank Muamalat Indonesia
4	PT Bank Victoria Syariah
5	PT Bank Jabar Banten Syariah
6	PT Bank Mega Syariah
7	PT Bank KB Bukopin Syariah
8	PT Bank BCA Syariah
9	PT Bank BTPN Syariah Tbk
10.	PT bank Panin Dubai Syariah Tbk

## RESULTS AND DISCUSSIONS

### *Descriptive statistics*

**Table 2. Descriptive statistics**

	MSMEs	Non-MSMEs	Restructurisation	NPF
Mean	195.179	565.091	131.163	1.729
Median	97.207	421.446	373.500	1.250
Maximum	108.683	275.941	116.348	4.980
Minimum	4.486	11.000	0.000	0.000
Std.Dev	160.735	531.164	240.435	1.604
Observations	200	200	200	200

**Source: Data Processed 2023**

In Table 2, it can be seen that the average value of MSMEs is 195.179. Furthermore, the average value of Non MSMEs is 565.091, the average value of Restructuring is 131.163, and the average value of NPF is 1.729.

### *Model Test*

In performing regression analysis to determine the most appropriate model, a model comparison needs to be conducted among the fixed effect model (FEM), random effect model (REM), and common effect model (CEM). To ascertain this, the following test is carried out:

### *Chow Test*

The Chow test is conducted with the aim of selecting the model between the random effect model (REM) and the fixed effect model (FEM). If the test result indicates a probability  $> 0.05$ , then the selected model is the random effect model, and if the probability

< 0.05, then the selected model is the fixed effect model. The table below shows the results of the Chow test:

**Table 3. Presents the results of the Chow test in this study**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section F	22.237	(9.187)	0.000
Cross-Section Chi-Square	145.534	9	0.000

Source: Data Processed 2023

Based on the chow test results, as shown in Table 3, it can be observed that the probability value of Cross-section fixed effects is 0.00, which is less than 0,05. Therefore, the selected model for regression analysis is the fixed effect model (FEM).

### Classic Assumption Test

#### Multicollinearity Test

The multicollinearity test is conducted to examine whether there is a correlation among independent variables (X). Multicollinearity occurs if the value is > 0.80. Table 4.3 presents the results of the multicollinearity test in this study:

**Table 4. Multicollinearity Test Results**

	MSMEs	Non-MSMEs	Restructurisation
MSMEs	1.000	-0.018	0.364
Non MSMEs	-0.018	1.000	0.621
Restructurisation	0.364	0.621	1.000

Source: Data Processed 2023

Based on the results of the multicollinearity test in Table 4, the conclusions can be seen in the following Table 5:

**Table 5. Multicollinearity Test Conclusions**

Variable	Correlation Value	Description
MSMEs & Non MSMEs	-0.018	No Multicollinearity
MSMEs & Restructurisation	0.364	No Multicollinearity
Non MSMEs & Restructurisation	0.621	No Multicollinearity

#### Heteroscedasticity Test

Heteroskedasticity is a condition in which the variables used do not have the same variance (Mardiatmoko, 2020). Heteroskedasticity occurs if the significance value is < 0,05. Table 6 presents the results of the heteroskedasticity test in this study:

**Table 6. Heteroskedasticity Test Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.207	0.156	7.696	0.000
MSMEs	-2.940	5.550	-0.529	0.597
Non-MSMEs	-3.940	2.510	-1.570	0.118
Restructurisation	1.520	3.880	0.392	0.695

Source: Data Processed 2023

Based on the results of the heteroskedasticity test, the conclusions that can be drawn can be seen in the following Table 7:

**Table 7. Heteroskedasticity Test Conclusions**

Variable	Prob,	Description
MSMEs	0.597	No Heteroskedasticity
Non-MSMEs	0.118	No Heteroskedasticity
Restructurisation	0.695	No Heteroskedasticity

Source: Data Processed 2023

### **Hypothesis Testing**

Hypothesis testing is used to determine whether independent factors can explain and influence the dependent variable (Winarno, 2017). Independent variables can be considered significant if their probability value is  $< 0.05$ .

**Table 8. Hypothesis Test Result**

Dependent: NPF	Coefficient	Std.Error	t-Statistic	Prob.	Description
MSMEs	-5.700	9.390	-0.607	0.544	Rejected
Non-MSMEs	-8.750	0.265	-0.205	0.837	Rejected
Restructurisation	2.800	6.570	4.255	0.000	Accepted

Source: Data Processed 2023

The results of the hypothesis test indicate that the relationship between the independent variables, namely Restructurisation, has a significant impact on NPF, but MSMEs and Non-MSMEs does not affect NPF.

### **Discussion**

The main focus of this study is to examine how financing diversification and restructuring affect non-performing financing in Islamic banks in Indonesia. Some studies have shown that financing diversification can reduce the risk of bankruptcy and provide benefits to banks (Liang et al., 2020). However, the results of this research indicate that financing diversification for MSMEs actually has no significant impact on non-performing financing (NPF) in Islamic banks. This means that the more diversified the financing, the higher the risk of non-performing financing, which can be linked to systematic risk.

The disbursement of credit by Islamic banks tends to be spread and diversified across various economic sectors such as MSMEs and non-MSMEs, ultimately leading to an increase in credit risk. Therefore, this study supports the idea of concentrating financing to reduce the risk of non-performing financing because different economic sectors have diverse characteristics. This study aligns with Christianti (2011), Tabak et al. (2011), Belguith & Bellouma (2018), Simpasa & Pla (2017), and Singh (2014), who have stated that a credit diversification strategy is not the right approach as it has a negative impact on bank profitability and increases risk.

This study indicates that restructuring has a positive and significant impact on non-performing financing in Islamic banks. Supported by previous research showing that the restructuring approach implemented by banks has been successful in managing credit risk and preventing financing from turning into non-performing (Irwan et al., 2022; Omer, 2022).

Thus, Islamic banks can mitigate potential losses and maintain their financial stability in accordance with Sharia principles that prohibit usury and speculation. Restructuring becomes an effective step in managing credit risk for customers facing payment difficulties.

## CONCLUSION AND RECOMMENDATION

This study aims to examine the impact of credit diversification and restructuring on non-performing financing in Islamic banks in Indonesia. The first result of this research is that credit diversification, both for MSMEs and non-MSMEs, does not have an impact on reducing credit risk in Islamic banks in Indonesia. This does not support the traditional theory that credit diversification would successfully maximize banking performance by reducing various risks. The second result of the study is that restructuring has an impact on non-performing financing in Islamic banks. Therefore, restructuring is an appropriate strategy to be applied in Islamic banking to maintain financial stability in managing credit risk.

The findings of this study are intended to make a theoretical contribution to the relatively underexplored field of Islamic banking, particularly in terms of credit diversification across various economic sectors such as MSMEs and non-MSMEs. Furthermore, this research attempts to compare the impact of credit diversification and restructuring on non-performing financing in Islamic banks. In practical terms, these findings are relevant for policymakers, as they can consider implementing a concentration strategy in specific sectors to reduce the risk of Islamic bank failures, given that different economic sectors have varying characteristics, and diversification may amplify the risks faced. Lastly, if diversification is to be continued, further policies need to be implemented to optimize the implementation of credit diversification, such as conducting credit analysis, monitoring, and evaluation to mitigate credit risk.

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