



## THE EFFECT OF FINANCING ON CREDIT RISK: EMPIRICALLY ON INDONESIAN ISLAMIC BANKING

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### ABSTRACT

*Islamic banking has an important role in the economy, especially in moving the real sector. Islamic banking provides funding to the public in the form of financing. The financing provided cannot be separated from various risks that can threaten the health of the bank, one of which is financing risk. For that, the purpose of this study is to analyze the effect of financing on financing risk in Islamic banks for the period 2015 to 2020. The method used in this study is quantitative with multiple linear regression analysis techniques. This study uses time-series data and the variables in this study are mudharabah, musyarakah, murabahah, ijarah financing, and total assets as independent variables and NPF as a dependent variable. The results of the study concluded that total assets had a negative and significant effect on NPF and murabahah financing had a positive and significant effect on NPF. Meanwhile, mudharabah, musyarakah, and ijarah financing has no significant effect on NPF.*

**Keywords:** *Mudharabah, Musyarakah, Murabahah, Ijarah, Credit Risk.*

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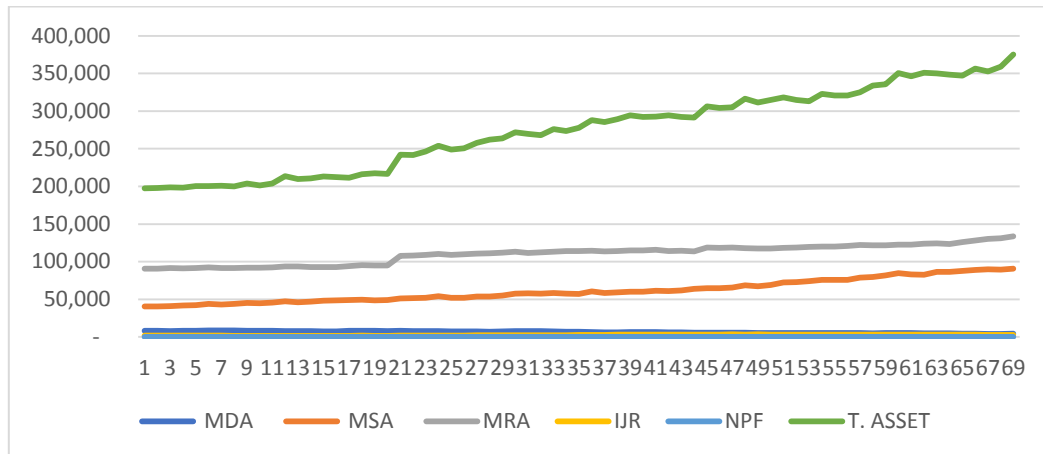
## **INTRODUCTION**

Islamic banking as part of the national financial institution has an important role in the economy. The role of Islamic banking in Indonesia's economic activities is not much different from conventional banking. The fundamental difference between them lies in the principle of financial transactions. As an intermediary institution, Islamic banking is tasked with raising funds from the public and allocating funds in the form of credit/financing. There are several products used in Islamic bank financing in its distribution, such as easy-to-use financing, musharakah, murabahah, ijarah, etc.

Every financing provided is inseparable from various risks that can threaten the bank's health, one of which is credit risk. Previous research İncekara & Çetinkaya (2019), Misman et al. (2015) has measured credit risk using non-performing loans (NPL) ratio. Non-Performing Loan (NPL) is used as a parameter to measure the risk and soundness of the bank. Banks are considered to have potential risks that endanger their business continuity if the net non-performing loans ratio is more than 5% of total loans (PBI15/2/PBI/2013). If it exceeds 5%, it will affect the assessment of the soundness of the bank. The NPL is an important factor for financial stability and resources in developed and developing countries (Alandejani & Asutay, 2017). NPL is also an essential projection for understanding the general course of the economy and as an indicator of the current state of the banking sector. (İncekara & Çetinkaya, 2019).

In Islamic banking, the ratio related to credit risk is called the Non-Performing Financing (NPF) ratio. This ratio is the same as non-performing loans (NPLs) in conventional banks because, in Islamic banks, the use of credit or loans uses the term financing. Non-Performing Financing (NPF) is a ratio between total NPF and total financing provided to debtors. Non-Performing Financing (NPF) can be caused by many things, one of which is through the distribution of financing provided to banks (Misman et al., 2015).

Financing is an effort by financial institutions to mobilize the real sector to receive great attention from Islamic banking. In the distribution of financing, there are various types of contracts used, namely: mudharabah, musyarakah, murabahah, salam, istihna, ijarah, and qardh. In this study, it only focuses on mudharabah, musyarakah, murabahah and ijarah financing. The distribution of financing until the end of September 2020 consisted of 1.82% mudharabah, 37.66% musyarakah, 55.63% murabahah, 1.13% ijarah, and 3.76% other financing modes (see Figure 1). From these data, musyarakah and murabahah financing still dominates Islamic banking in Indonesia.



Source: Data processed (2021)

Figure 1  
Financing Graph and NPF Ratio

In previous studies, most of them only linked the two variables of mudharabah financing and musyarakah financing. This research was conducted to get a more comprehensive understanding of the effect of financing on financing risk, so this research adds several types of financing, especially mudharabah, musyarakah, murabahah and ijarah financing. The purpose of this study is to analyze the effect of financing on financing risk. This research is structured as follows: first introduction, second literature review and research framework, third research methodology, fourth research results and at the end will provide some closing notes.

## LITERATURE REVIEW

The growth of Islamic banking from year to year has increased, until the end of September 2020, the total assets owned by Islamic Commercial Banks reached 375,156 billion Rupiah. The high number of assets held is inseparable from the risks faced by Islamic banking. The greater the assets owned by a bank, the greater the volume of credit/financing that can be distributed by the bank.

Risk is closely related to uncertainty and possible losses. Credit risk is the risk of customer failure to fulfill their obligations in full and on time according to the agreement at the beginning of the agreement. Usually, this risk arises because the customer fails to fulfill his obligation to pay off his debt at the time specified at the beginning of the agreement. In previous research (Ekinici & Poyraz, 2019; İncekara & Çetinkaya, 2019; Mismam et al., 2015; Naili & Lahrichi, 2020) Non-Performing Loans (NPL) is used as an indicator of credit risk or in Islamic banking it is also called Non-Performing Financing (NPF).

Non-Performing Financing (NPF) indicates the risks associated with financing and investment banks hand over funds in different portfolios. The

smaller Non-Performing Financing (NPF), the smaller the credit risk faced by the bank. Thus, if a bank has high Non-Performing Financing (NPF), it indicates that the bank is not professional in managing their credit, as well as indicating that the level of risk or lending to the bank is quite high in alignment with the high Non-Performing Financing (NPF) faced by the bank (Suryanto & Susanti, 2020).

### **Islamic Bank Financing**

Financing is one of the main duties of a bank, namely providing facilities for providing funds to customers who need funds. Financing is the biggest source of income for Islamic banks, but at the same time, it is the biggest source of business operation risk, namely the emergence of problematic financing, because problematic financing will not only reduce income for Islamic banks but will also have an impact on the health of Islamic banks and ultimately harm customers. The financing given by Islamic banks is diverse from the loans given by conventional banks. In Islamic banking, the return on financing is not in the form of interest but in other forms in accordance with the contracts provided in Islamic banks.

Islamic banking has several superior products and is in great demand by customers, such as mudharabah, musyarakah, murabahah, and ijarah financing. Mudharabah, musyarakah, murabahah, and ijarah financing that banks distribute to customers/managers significantly influence the bank's development. If the financing is higher, then the profits obtained by the bank will also be higher, so that it can help in returning capital and getting profits. (Rahayu et al., 2016).

### **Mudharabah Financing**

Mudharabah is a profit-sharing contract in which one party provides 100 percent of funds to be invested and others act as managers (mudharib). Mudharabah financing is a business cooperation agreement between the bank as an owner of funds (shahibul maal) and the customer as a fund manager (mudharib) to carry out business activities with a profit-sharing ratio (profit or loss) according to an agreement in advance. (Rahman, 2011). Based on PSAK 105, mudharabah is a business agreement between two parties in which the first party (owner of funds) provides all funds and the second party as manager, profits are divided according to the agreement, and the owner of funds only bears financial losses. From the understanding, it can be concluded that mudharabah financing is financing provided by the capital owner to the manager to run a business, where all funds are from the capital owner and manager who runs the business and profits are mutually agreed.

### **Musharaka Financing**

According to law number 21 of 2008 concerning Islamic Banking, Musyarakah is a cooperation agreement between two or more parties for a business in which each party provides funds with provisions that the profits will be divided according to the agreement, while the respective portion of the funds bears the losses. Musharaka involves a partnership between two parties that both provide funds for a new or established business. Both parties share profits with a ratio that has been agreed beforehand, with the loss divided on the basis of equity participation (Ernawati, 2016).

In musharakah financing, the capital given must be cash, gold, silver, or the same value. Capital can also be in the form of trading assets, such as goods, property, etc. If the capital is in the form asset, it must first be valued in cash and agreed upon by the partners. The parties may not borrow, lend, donate or gift Musyarakah capital to other parties, except based on an agreement. In principle, in Musharaka financing, there is no guarantee, but to avoid irregularities, LKS can ask for guarantees (Fatwa DSN NO: 07/DSN-MUI/IV/2000).

### **Murabahah Financing**

Murabahah is a sale and purchase contract between a bank as a provider of goods and a customer who orders and buys goods, with the provisions of benefits according to the agreement. The bank's selling price is obtained from the purchase price from the supplier added to the profit earned by the bank, and the payment method and term are mutually agreed upon. Bank Indonesia Regulation No. 9/19 / PBI / 2007 defines Murabahah as a sale and purchase transaction of an item at the cost of the goods plus the margin agreed upon by the parties, where the seller informs the buyer in advance of the acquisition price. Thus murabahah is seen to help customers obtain the goods they need, and payments are deferred for payment by installments or other similar arrangements.

In the murabahah contract, the bank raises the price (mark-up) of the agreed profits in the initial agreement. In this murabahah contract, the bank purchases goods or assets needed by customers by buying these goods from suppliers then selling them to customers by adding a mark-up or profit. According to (Fadhila, 2015) in his research, it is stated that murabahah financing has a low level of risk or almost no risk. It is possible that banks will find it easier to manage their financing by using the principle of buying and selling with a murabahah contract.

### **Ijarah Financing**

One of the sharia financing products is ijarah which in society is synonymous with leasing in non-bank financial institutions, ijarah financing in Islamic banks places the bank as the owner of the asset and the customer as lessee

by renting out the asset. The agreement between bank and customer is contained in ijarah financing contract with standard clauses that the Islamic bank has prepared by demanding the rights and obligations of the parties as well as other requirements related to the implementation of ijarah financing. Ijarah is the sale of benefits or the use of something or service at a fixed price or wage (Diallo et al., 2015). DSN MUI Fatwa No.09 / DSN-MUI / IV / 2000 on defining Ijarah or Ijarah Financing al-Ijarah as transfer contract for goods or services through lease payment, without being followed by the transfer of ownership of goods or services.

### **Previous Research**

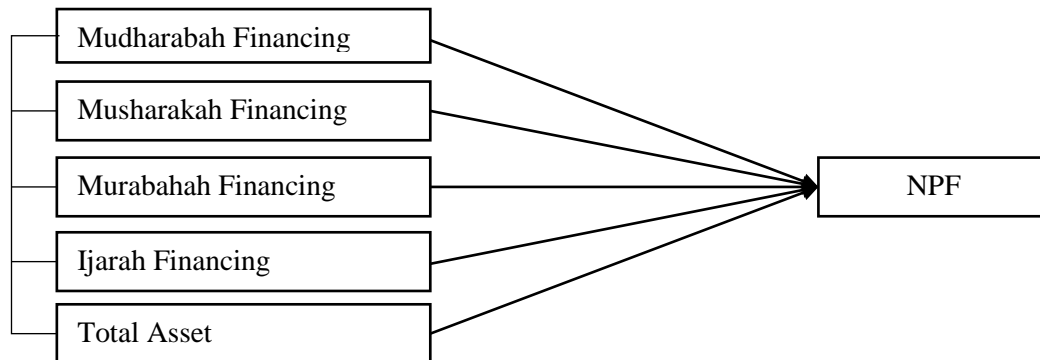
How et al. (2005) conducted research related to financing and bank risk. The results show that the banks that offer islamic financing have a much lower credit risk than banks that do not offer islamic financing. (Abusharbeh, 2014) investigated the relationship between Islamic financing, NPF, and the profitability of Islamic banks. The results showed that equity financing has a significant positive relationship with financing problems. Islamic banks can effectively manage their risk in sharing financing to have positive and beneficial implications for banks and increase the efficiency of their assets. Warninda et al. (2019) examined the effect of profit-sharing financing in Islamic banks on credit risk. This study analyzes whether mudarabah is riskier than Musharaka. The results of this study that mudharabah is not riskier than musyarakah. Mudarabah does not show a non-linear impact, while Musyarakah shows a non-linear effect on Islamic bank credit risk.

Incekara & Çetinkaya (2019) conducting research to determine the factors that affect credit risk management that is important for the banking sector's stability. The results showed a significant positive relationship between credit risk and capital adequacy ratio, net profit sharing, and total assets. A significant negative relationship was found between gross domestic product and credit risk variables, including the macroeconomic research variables. Aprilianto (2020) conducted a study to know the impact of financing contracts on risks faced by Islamic banks. The results showed that the financing schemes based on musyarakah, mudharabah, and ijarah financing were proven to increase financing risk. Meanwhile, murabahah financing reduces the risk of financing.

Based on previous studies, the factors that influence NPF based on the type of financing contract are still very minimal, explicitly looking for the effect of various types of financing based on financing contracts on credit risk. Previous research has focused more on the factors that influence NPF in terms of financing in general, namely financing based on profit and loss sharing. Because in this study, the financing contracts under study are more comprehensive, namely the

mudharabah, musyarakah, murabahah, and ijarah contracts in Islamic banks in Indonesia.

### Research Framework



Source: Data processed (2019)

Figure 2  
Research Framework

The development of this model is to test whether financing affects credit risk in Islamic banking in Indonesia. So, mudharabah financing, musyarakah financing, murabahah financing, ijarah financing, and total assets are independent variables. Non-performing financing (risk factors) or NPF is the dependent variable.

### METHODOLOGY

This research uses quantitative methods with multiple linear regression analysis techniques. The data used in this study is secondary data obtained from the OJK Islamic Banking Statistics. The variables in this study include NPF, mudharabah financing, musyarakah, murabahah, ijarah and total assets. The data in this study used monthly data from January 2015 to September 2020.

To see the extent of the influence of the regression model in this study, a regression test was carried out using the OLS (Ordinary Least Square) method or often called the least-squares regression analysis method. The regression analysis model is as follows:

$$NPF = \beta_0 + \beta_1 MDA + \beta_2 MSA + \beta_3 MRA + \beta_4 IJR + \beta_5 LOGASSET + e_i$$

Table 2  
Variable Description

NPF	<i>Non Performing Financing</i>
MDA	Mudharabah Financing
MSA	Musyarakah Financing
MRA	Murabahah Financing
IJR	Ijarah Financing
LOGASSET	Total Asset

Source: Data processed (2021)

## RESULT

Table 1  
Regression Analysis Results

Dependent Variable: NPF				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.012.673	1.516.387	1.327.282	0.1892
MDA	0.304891	0.206452	1.476.810	0.1447
MSA	0.102126	0.094901	1.076.128	0.2860
MRA	0.129556	0.075407	1.718.099	0.0907
IJR	0.168780	0.308306	0.547445	0.5860
LOG(ASSET)	-2.325.441	1.056.630	-2.200.809	0.0314
Adjusted R-squared	0.909543			
F-statistic	1.377.479			
Prob(F-statistic)	0.000000			

Source: Data processed (2021)

Based on Table 1, the multiple linear regression analysis equations used in this study can be formulated as follows:

$$NPL = 20.12673 + 0.304891MDA + 0.102126MSA + 0.129556 MRA + 0.168780IJR - 2.325441Log(ASSET)$$

The results of the regression model estimation using the ordinary least square approach are presented in Table 1 have a value of adjusted R<sup>2</sup> is 0.9095. This indicates that variation in the effect of total assets, ijarah financing (IJR), mudharabah financing (MDA), murabahah financing (MRA) and musyarakah financing (MSA) on Non-Performing Financing (NPF) is 90.95%. It quite describes the proportion of the influence of independent variables on the dependent variable NPF.



If seen from the feasibility test models (Test F), the model is still considered feasible to explain the influence of the independent variables on the dependent variable. This is evident from the calculated F probability value smaller than the error rate of 0.1 in Table 1. From the F test, it is known that the F statistical value is 137.7479. At the same time, the F table with 0.1 (10%) degrees of freedom is obtained at 2.36. because the F count is greater than the F table, it rejects H<sub>0</sub> and accepts H<sub>1</sub>. Therefore, it can be concluded that all independent variables (mudharabah, musyarakah, murabahah, ijarah, and total assets) simultaneously have a significant effect on the dependent variable (non-performing financing).

Total assets have a t-calculated probability value that is smaller than the error level of 0.1, so it can be said that total assets have a significant effect on NPF. Meanwhile, murabahah financing (MRA) has a t count value that is smaller than the error level of 0.1, so it can be said that total assets have a significant effect on NPF with an error rate of 10%. Total assets have a negative coefficient value of -2.325441. Its means that for every 1 unit increase in total assets, the NPF will decrease by -2.325441, assuming the other variables are constant. At the same time, MRA has a positive coefficient value, so that MRA has a unidirectional effect on NPF. When the MRA increases, the NPF will also increase and vice versa. When CAR declines, then NPF will also decrease. MRA coefficient value is 0.129556. Its means that for every 1 unit increase in MRA, the NPF will increase by 0.129556, assuming the other variables are constant.

In contrast to the total variable assets and murabahah financing (MRA) above, the variable mudharabah financing (MDA), musyarakah financing (MSA), and ijarah financing (IJR) do not have a significant effect on NPF. This is because the probability value of the t count of the three is greater than the error level of 0.05. Therefore, when MDA increases or decreases, the NPF will relatively not experience significant changes. Likewise, changes in the MSA and IJR values will not affect the increase or decrease in the NPF ratio.

The above analysis results indicate that the relationship between total assets and Non-Performing Financing (NPF) is negative. This shows that the higher the total assets, the lower the Non-Performing Financing (NPF). The low Non-Performing Financing (NPF) is due to many Islamic commercial banks being invested in various fields. Supporting research (Widarjono, 2020), that the more significant assets on Islamic banks, the ability of Islamic banks to manage to finance is getting better. Significant assets can increase the performance and efficiency of Islamic banks due to economies of scale. Therefore, significant assets can reduce the level of non-performing financing (NPF) of Islamic banks to support researchers (Abedifar et al., 2013).

Murabahah financing shows a significant positive effect on NPF. Its shows that the higher low-cost financing, the higher risk faced by the bank, and vice versa. The high risk is because most financing disbursements to Islamic banks are

channeled to murabahah financing, which is commercial financing. In contrast to previous studies, our results indicate that murabahah financing has a positive effect on NPF. This is because the high portion of murabahah financing channeled by Islamic banks and murabahah financing is consumptive to increase the risk of financing.

Mudharabah financing does not affect the NPF of Islamic banks. It is because mudharabah financing is still very low. The low level of mudharabah financing is because Islamic commercial banks are still relatively new compared to conventional banks. So that it will not affect the NPF, this is consistent with research conducted by (Sanulika et al., 2020) which states that mudharabah financing has no significant effect on NPF. Thus, having high mudharabah financing will not necessarily increase the NPF because other indicators also influence changes in the NPF level outside of this study.

Musyarakah financing does not affect NPF. Like mudarabah, musyarakah financing is still very low. Supporting research (Warninda et al., 2019) that musharakah financing has no significant effect on NPF because the proportion of musharakah on Islamic banks is relatively small. Likewise, ijarah financing has no significant effect on NPF. Its because ijarah financing is still minimal, namely an average of 1.30% of other financing. It is why ijarah financing does not affect the NPF.

## **CONCLUSION**

Based on the research, it can be concluded that murabahah financing affects NPF. This is because the portion of murabahah financing distribution still dominates. Meanwhile, mudharabah, musyarakah, and ijarah financing have no effect on NPF. This is because the portion of the financing is smaller than murabahah financing. Although mudharabah and musyarakah financing are financed with a profit-sharing system that tends to have a relatively higher risk because the portion of the financing is still shallow, Islamic Banking can mitigate this risk well. The results of the analysis also show that the relationship between total assets and NPF is negative. The greater the total assets owned by Islamic banks, the better the ability of Islamic banks to manage their assets. Significant assets can improve the performance and efficiency of Islamic banks to reduce the level of non-performing financing (NPF).

The recommendation put forward by the researcher is that in order to reduce the risk of problematic financing, Islamic banks can develop and innovate their products based on sharia principles, as well as strive to improve risk management to reduce the ratio of problem financing. In addition, OJK as the regulator, is advised to increase supervision and enforce regulations relating to problem financing. For further research, it can be developed with other variables that influence problematic financing ratios.

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