



# The Effect of Non-Performing Financing (NPF) and *Mudaraba* Through Profitability with Macroeconomic as Moderation Factor (Case Study During COVID-19)

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**Introduction:** COVID-19 impacts business sectors, with no exception to the banking sector. Many policies are made by the government, such as in providing relaxation of financing. This research will look at Non-Performing Financing (NPF) and *Mudaraba* financing, through profitability, with macroeconomics moderating.

**Purpose:** This research is intended to examine the impact of COVID-19 on Non-Performing Financing and *Mudaraba* Financing on profitability by using macroeconomics as a moderating factor. So that it can be input for stakeholders related to regulatory design and future decision making.

**Methodology:** This research using quantitative research with Multiple Linear Regression Analysis and Moderated Regression Analysis. The sample using in this research is 10 Islamic Commercial Banks. The research starts from January 2020 to September 2020.

**Findings:** This result indicated that variable non-performing financing (NPF) has a negative effect on profitability while *mudaraba* financing positively affects profitability. The regression coefficient value in this study is 0.483, and it can be concluded that the variable non-performing financing (NPF) and *mudaraba* financing on profitability is 48.3%. The contribution of 51.7% can be explained by other variables that are not in this study. Inflation can moderate non-performing financing (NPF) and *mudaraba* financing through profitability. Non-performing financing (NPF) and *mudaraba* financing have a simultaneous effect on the profitability of Islamic Commercial Banks during 2019-2020. The inflation variable can moderate non-performing financing and *mudaraba* financing on the profitability variable during the pandemic.

**Paper Type:** Research Article

**Keywords:** *Non-Performing Financing* (NPF); *Mudaraba* Financing; Profitability.

## Introduction

In 2020 the world was shocked by the emergence of a new virus, namely the coronavirus disease (COVID-19). COVID-19 has begun to spread to various regions of the world. The virus has spread to more than 100 countries, and more than millions of people worldwide have tested positive for the case. The number of new cases reported in Wuhan has decreased. Still, it is different from other regions and countries that have experienced spikes, such as South Korea, Italy, and Iran (Sumadi, 2020), as well as Indonesia. COVID-19 is an infectious disease caused by acute respiratory syndrome coronavirus 2 (SARS-Cov-2). This outbreak first occurred in December 2019 in Wuhan, the capital of China's Hubei province, and since then, it has begun to spread worldwide. This viral pandemic has continued until now. (M. ja'far & Itsnaini, 2020).

Indonesia is one of the countries affected by the COVID-19 pandemic. The number of confirmed cases to date is 1.5 million, 1.34 million recovered, and 40,581 died. According to a report from the World Health Organization (WHO), this spreading will continue and increasing every day. With various efforts to deal with the virus, the Indonesian government has taken action, especially for areas affected by the pandemic, which must take large-scale social restrictions and a vaccination program (Ubaidillah & Syah Aji, 2020).

The impact of COVID-19 is not only on the health sector but also affects the all-sectors education, social, political, economic, etc. Sharia banking in Indonesia is one of those involved. For almost two periods, Islamic banking was able to withstand the shocks of the domestic and global crises. COVID-19, there are different waves of problems. There are three major crises, the health crisis, the economic crisis, and the social crisis (Wahyudi, 2020).

Banking is an institution that has a significant role in the development of a country. This role is manifested in the bank's function as an intermediary financial institution that collects funds from the public in deposits and distributes them in the form of credit. In law No. 10 of 1998, based on its operational principles, banks are divided into 2, namely conventional banks, which are based on interest principles, and Islamic banks based on sharia principles (Umam & Utomo, 2016).

Sharia banks during the COVID-19 pandemic still have to carry out their function as an intermediary for people who are short of funds and people who are excess funds. On the other hand, Islamic Banks are also facing several possible risks, such as the risk of non-performing financing, distribution of financing, and other risks that will impact the performance and profitability of Islamic Banks. In addition, it also has an impact on macroeconomic factors such as inflation (Wahyudi, 2020). On the other hand, the government policy pushing the banking industry to provide relaxation to affected customers.

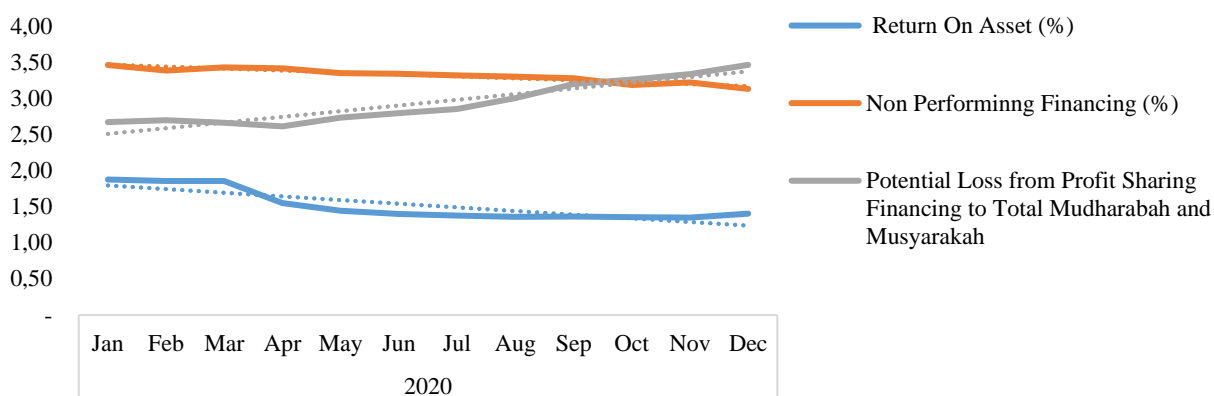
**Table 1:** Distribution of Banks on the Island of Java

<b>Province</b>	<b>Level Bank</b>	<b>Branch Office</b>	<b>Sub-Branch Office</b>	<b>Kantor Kas</b>
West Java		63	214	27
Banten		20	58	8
DKI Jakarta		65	141	34
DI. Yogyakarta		9	25	10
Central Java		37	88	16
East Java		44	142	22
<b>Total</b>		<b>238</b>	<b>668</b>	<b>117</b>

Source: Indonesia Banking Statistic 2020

Demographically, Islamic Commercial Banks have a network of offices spread throughout Indonesia as many as 2,034, starting from branch offices, sub-branch offices, and cash offices, which are dominated by the island of Java, which is the region most exposed to COVID-19 with the distribution as listed in table 2. Banking those in the red zone must reduce services during their working hours. This has an impact on optimization and effectiveness in banking performance increasing potential losses. (Ningsih & Mahfudz, 2020).

**Fig. 1** Return on Asset, Non-Performing Financing, and Potential Financing Losses



Source: Indonesia Banking Statistic 2020

Based on the statistical data of Islamic banking until December 2020, it shows that the overall growth of ROA (%) and NPF (%) in the Islamic banking industry is still at the standard threshold even though ROA has decreased, but this is also supported by a decrease in NPF, although the ability of banks to produce the profit with the assets owned reductions as well as the problematic financing. The following spotlight is on the increase in the potential for financing losses based on *mudaraba* and *musyarakah* investments.

**Table 2:** Profit Statistics, NPF, Net Operation Margin, Potential losses (in billion) 2020

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Profit	6,495	6,463	6,478	5,404	5,029	4,886	4,821	4,780	4,821	4,827	4,846	5,087
Non Performing Financing	7,720	7,585	7,828	7,766	7,704	7,768	7,780	7,765	7,879	7,719	7,903	7,713
Operating income	6,697	6,532	6,303	5,412	4,885	4,779	4,748	4,781	4,798	4,818	4,856	5,137
Potential losses for <i>Mudaraba</i> and <i>Musharaka</i>	2,350	2,369	2,423	2,378	2,514	2,610	2,677	2,807	3,036	3,100	3,210	3,336

Source: Indonesia Banking Statistic 2020

Throughout 2020 the potential for losses has increased significantly. In January 2020, the loss based on *mudaraba* and *musyarakah* investment was 2,350 billion, and at the end of the year, it grew to 3,336 billion, an increase of 41.96%. This makes Islamic banking must be careful in channeling its financing. In terms of potential losses, in terms of income, operating income also decreased in the middle of the month from May to November.

The importance of total asset value and profitability for each bank means that the bank must increase its assets and profitability so that its business activities can survive. Banks with relatively large ownership of total assets will have better performance so that the ability to achieve profits or profits is higher (Husaeni, 2017).

One of the tools to measure a bank's profitability is a return on assets (ROA). The ratio is used to measure the effectiveness of the company in generating profits by utilizing its assets. Return on assets (ROA) is the ratio obtained between yield before tax to total assets (Parenrengi & Hendratni, 2018). The greater the return on assets (ROA) owned by a bank, the greater the level of profit that the bank will get and the better the bank's position in the use of assets. The study results from (Hutagalung 2019) show that NPF has a positive and significant effect on ROA, and inflation cannot moderate the impact of NPF on ROA. Even further (Nawawi, Nurdiansyah, & Al Qodliyah, 2018) show that *mudharaba* financing has a positive effect on ROA and (Cahyaningrum, 2016) show that *mudharaba* financing, Third Party Fund (DPK), and NPF have a simultaneous impact through ROA and the results of the study from (Ali, 2018) show that inflation has a negative and insignificant effect in moderating *mudharaba* financing on profitability.

## Methodology

This type of research is a quantitative study using data in financial reports published by Islamic Commercial Banks and inflation data published by the Central Statistics Agency (BPS). The sample in this study was 10 Islamic Commercial Banks that were included in the criteria, namely Sharia Commercial Banks that are registered and operating in Indonesia in 2020, PT Bank Panin Dubai Syariah, PT Bank BCA Syariah, PT. BPD Nusa Tenggara Barat Syariah, PT. Bank BNI Syariah, PT. Bank BRI Syariah, PT. Bank Syariah Bukopin, PT. Bank Syariah Mandiri, PT. Bank Mega Syariah, PT. Bank Muamalat Indonesia, PT. Bank Victoria Syariah. Sharia Commercial Banks that issue financial reports in 2020, Sharia Commercial Banks that have complete data and ratios according to the variables used in the study.

The sampling period was from January 2020 to September 2020.

## Results and Discussion

### Multiple Linear Regression Analysis

The test results using multiple linear regression analysis show the relationship between variables X1, X2, and variable Y. The results mentioned in the table below.

**Table 3** Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.014	.003		5.676	.000
NPF	-.228	.054	-.588	-4.222	.000
<i>Mudharaba</i> Financing	4.609E-9	.000	.306	2.200	.037

a. Dependent Variable: ROA

The regression coefficient is negative and positive, which means that there is a negative and positive relationship with the profitability of Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic. The constant value is 0.014, which means that non-performing financing (NPF) and *mudharaba* financing are variable. The value of the profitability variable is 0.014

## Hypothesis Test

**Table 4. T-Test Result**

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.014	.003		5.676	.000
NPF	-.228	.054	-.588	-4.222	.000
<i>Mudaraba</i> financing	4.609E-9	.000	.306	2.200	.037

a. Dependent Variable: ROA

**Table 5. F-Test Result**

ANOVA <sup>a</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.001	2	.000	12.636	.000 <sup>b</sup>
Residual	.001	27	.000		
Total	.001	29			

a. Dependent Variable: ROA

**Table 6. R<sup>2</sup>Test Result (Coefficient Determination)**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.695 <sup>a</sup>	.483	.445	.0053069

a. Predictors: (Constant), *Mudaraba* Financing, NPF

### The effect of non-performing financing (NPF) on profitability at Islamic Commercial Banks during Coronavirus Disease (COVID-19).

The test results from table 13 above obtained a positive effect and a significance value of 0.000. the comparison of the significant value with the level is  $0.000 < 0.05$ . because of  $\text{Sig.} < \alpha$ , so it can be concluded that  $H_a$  is accepted and  $H_0$  is rejected, meaning that the regression coefficient on the non-performing financing (NPF) variable partially has a negative and significant effect on profitability at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic.

According to Bank Indonesia regulations, a good NPF value is below 5%. If it exceeds 5%, it shows that the financing at Islamic banks is getting worse, so that it can influence Islamic banks to earn a profit and adversely affect ROA. The results of this study are in line with research conducted by (Rachmat & Komariah, 2017)in. This research shows that non-performing financing has a significant negative effect on profitability.

### The effect of *mudaraba* financing on profitability it Islamic Commercial Banks during Coronavirus Disease (COVID-19).

The test results from table 13 above obtained a positive and significant effect of 0.037. the comparison of the significant value with the significance level is  $0.037 < 0.05$ . because of  $\text{Sig.} < \alpha$ , so it can be concluded that  $H_a$  is accepted and  $H_0$  is rejected, meaning that the regression coefficient on the *mudaraba* financing variable partially has a positive and significant effect on profitability at Islamic Commercial Banks during the 2019 coronavirus disease pandemic (COVID-19).

This explains that the higher the distribution of *mudaraba* financing to customers, it is not always or very little to increase a bank's profitability. The study results are in line with previous research conducted by (Nawawi et al., 2018), showing that partially *mudaraba* financing has a positive effect on return on assets (ROA).

### Non-Performing Financing and *mudaraba* financing on profitability it Islamic Commercial Banks during Coronavirus Disease (COVID-19).

The test results in table 5 above show that the F value is 12,636 with a significance level of 0.000 <0.05. So it can be concluded that the variable non-performing financing (NPF) and *mudaraba* financing have a simultaneous (joint) effect on the profitability of Islamic Commercial Banks during the 2019 coronavirus disease pandemic (COVID-19).

The results of this study are in line with previous research conducted by (Cahyaningrum, 2016) showing that there is an effect of *mudaraba*, DPK, and NPF financing together on return on assets (ROA).

### Moderated Regression Analysis

**Tabel 6.** MRA Test Result

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	.016	.010		1.501	.146
NPF	-.251	.221	-.647	-1.134	.268
<i>Mudaraba</i> financing	3.667E-9	.000	.244	.439	.665
Inflasi	-.061	.459	-.051	-.132	.896
X1Z	1.041	9.818	.068	.106	.916
X2Z	4.227E-8	.000	.067	.117	.908

a. Dependent Variable: ROA

**Tabel. 7** F-test MRA Result

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	2	.000	9.482	.001 <sup>b</sup>
	Residual	.001	27	.000		
	Total	.001	29			

a. Dependent Variable: ROA  
b. Predictors: (Constant), X2Z, X1Z

### Inflation moderates the effect of non-performing financing (NPF) on profitability at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic.

The test results in table 16 above show that inflation cannot moderate non-performing financing (NPF) on profitability (ROA) with the multiplication regression coefficient of NPF and inflation (X1Z) of 1.041 and a significance value of 0.916 > 0.05. it can be concluded that Ha is rejected and H0 is accepted, meaning that inflation cannot moderate the effect of non-performing (NPF) on profitability at Islamic Commercial Banks during the 2019 coronavirus disease pandemic (COVID-19).

The results of this study are in line with previous research by (Hutagalung, 2019) showing that inflation cannot moderate the effect of NPF on ROA. Thus, the inflation variable cannot be used as moderation for the impact of non-performing financing (NPF) on profitability (ROA) at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic. In theory, if the higher the NPF value, the smaller the ROA value.

Banking in this modern era already has good banking, so that banks are required to expand their reach, which is not only focused on financing, fee-based income is also one of the potentials for banks to earn profits such as securities and other investments. With the existence of other income obtained by the bank through its business activities, the bank can cover the financing risk that will occur to the bank.

### Inflation moderates the effect of *mudaraba* financing on profitability at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic.

The test results in table 6 above show that inflation cannot moderate *mudaraba* financing on profitability (ROA) with the multiplication coefficient value of *mudaraba* financing and inflation (X2Z Interaction) of

4.227E-8 and a significance value of  $0.908 > 0.05$ . So it can be concluded that inflation cannot moderate the relationship of the *mudharaba* financing variable to profitability at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic. This is because the profit opportunity in the financing of Islamic Commercial Banks has been agreed upon at the beginning of the contract. When inflation occurs, the agreement cannot change. The results of this study are in line with research (Hanania, 2015), showing that inflation in the short term does not have a significant effect on profitability.

**Inflation moderates the effect of non-performing financing (NPF) and *mudharaba* financing on profitability at Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic.**

The test results in table 7 can be seen that the significance value is  $0.001 < 0.05$ . So it can be concluded that simultaneously the inflation variable can moderate the influence of the non-performing financing and *mudharaba* financing variables on the profitability variable (ROA) of Islamic Commercial Banks during the 2019 coronavirus disease pandemic (COVID-19).

**Conclusion**

Based on the results of the study, it can be concluded that the variable non-performing financing (NPF) and *mudharaba* financing have a simultaneous (joint) effect on profitability at Islamic Commercial Banks during the 2019 coronavirus disease pandemic (COVID-19). Meanwhile, the inflation variable can moderate the influence of the non-performing financing and *mudharaba* financing variables on the profitability variable (ROA) of Islamic Commercial Banks during the 2019 coronavirus disease (COVID-19) pandemic.

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