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## The effect of non-performance financing and bank size on profitability in sharia banking in Indonesia

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### Abstract

Banking is a company that offers products in the form of services. Seeing this, the existence of customer trust is one of the important factors in smooth operations. Seeing this, Islamic banking as a type of banking requires good financial performance. Of course, this will make many investors come and make transactions at the bank. Therefore, the purpose of this research is to analyze the effect of non-performing financing (X1) and bank size (X2) on the so-called Return of Assets (ROA) (Y) in Islamic Commercial Banks. The method used to analyze this relationship is a quantitative method. The population taken is Islamic Commercial Banks in Indonesia. The year of focus is 2014-2020. The research subjects are in five Islamic banks, namely, PT. Bank Syariah Mandiri, PT. BCA Syariah, PT. Bank Muamalat Indonesia, PT. BRI Syariah, and PT. BNI Syariah. The data taken is secondary data and library research. The data was collected by using documentation study technique where the data were collected by category and classification of written materials that have a relationship and support the running of the research. The results obtained are the independent variable NPF (X1) has a large influence on ROA (Y), which is caused by the significance level of the variable is smaller than the 0.05 level of significance. On the other hand, the independent variable Bank Size (x2) does not have a major influence on ROA (Y) because the significance level of the variable exceeds 0.05. The results of the coefficient of determination between NPF (x1) and Bank Size (x2) on the profitability of Islamic banks (ROA) (Y) obtained the value of R<sup>2</sup> (0.288) or 28.8% NPF variable (X1) and bank size (X2) affects ROA (Y). While 71.2% is influenced by other variables that are not included in this study.

**Keywords:** non-performing financing, bank size, return on assets (ROA), islamic banking

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### Introduction

It can be said that Islamic banks are an important element in the economic development of a country. For now, Islamic banks have begun to show their existence and their popularity is also increasing. This thing benchmark in seeing the growth of the Islamic economy in Indonesia. Bank Muamalat Indonesia is one of the examples and pioneers of Indonesian Islamic banking, followed by other banks such as Bank BCA Syariah, Bank Mega Syariah, BNI Syariah, BRI Syariah, Mandiri Syariah, BTN Syariah, and so on. In 1998 there was a severe financial crisis so that the existence of conventional banks was increasing, especially with their system that uses interest. However, the case is different with Islamic banking where this bank was able to maintain its consistency in the 1998 crisis through the Islamic economic system (No finawati 2015). The role of Islamic banks instead of using the interest system or usury, using a profit-sharing system in accordance with Islamic teachings, make economy to grow and stand out. The financial industry sector, in particular banking sector is the most prominent sector growth in the economy. The development carried out by the government also cannot be separated from the success of the banking world which is able to raise funds from the public <sup>[1]</sup> (Walangitan, n.d., 2017)

Good management can create success in the banking world. In the management of the banking world, market challenges and taking advantage of existing opportunities even though they are small are things that are required to maintain competition now and in the future. In the survival of banking itself, the ability to solve marketing problems, getting the right solution, and finding market opportunities are existing expertise for banking. Conditions ultimately require banking to be active in introducing and distributing products widely so that their existence can be accepted by the public which will later have an effect on the options taken by customers in choosing products in Islamic banking <sup>[2]</sup> (Haryanto, 2016)

According to data released by the OJK or commonly known as the Financial Services Authority in 2018, it indicates that the assets owned by Islamic banks grew by 12.5% from IDR 424 trillion to IDR 477 trillion in 2017. This overall growth was higher than conventional banks which were only at 18.81% in 2012-2018. Penetration from Islamic banks has also increased since 2014. In just four years, this percentage reached 5.91% in 2018 compared to 4.85% in 2014. Total Islamic financial assets reached Rp1,741.87 trillion in 2020. In 2020, the recorded growth of Islamic financial assets exceeded the annual increase in the last three years where this

asset grew by 14.5% in 2018, and by 13.84% a year later.. In 2020, total Islamic financial assets grew rapidly, with a total of 22.79%. This figure is up about 8.95% from last year's period. (<https://www.ojk.go.id>)<sup>[3]</sup>.

Profitability Ratio is a way to measure the performance of a company in generating profit with the things it has by the company starting from sales, assets, or capital. Profitability Ratio is also used to see the size of profitability, starting from ROE or Return of Equity, ROA or Return of Assets, and Profit Margin (Sudana 2015)<sup>[4]</sup>. Ratio This is used to see the company's performance in getting net profit from all activities carried out there isdain one accounting quarter. Profit itself is an indication of work performance obtained from the general transaction process by a company within a certain period. This profit is also used as a benchmark for stakeholders in seeing the performance of management in managing the company in question. By analyzing the financial statements obtained from the Profitability Ratio, it can also be seen the company's ability to generate profits (Septiana and Nur, 2012)<sup>[5]</sup>.

ROA is used to see the level of profit of a bank by considering the efficiency of the utilization of assets and also the profit obtained from the use of the assets in question. With the higher number obtained in calculating this ROA, the bank's performance can be assessed as good, especially in the utilization of assets owned. On the other hand, ROE is used to see the company's ability to generate net profit with its own capital and capital obtained from investors. Moreover, profitability is a way of looking at financial performance using ROE and ROA. Included is a tabular way to find out the ROE and ROA ratios of several Islamic banks from 2014-2020 in Indonesia.

In the services provided, the bank can be said as a company or financial institution in providing and disbursing financing. By focusing the explanation on this financial institution, the function obtained is none other than collecting funds from customers and later will be channeled back to parties who are considered to need funds. The goal is to make a profit. However, it cannot be denied if this distribution of funds exists risk of problematic or non-performing financing. This risk can also be said to be credit risk or what is called NPF or Non-Performing Financing. The risk here is unavoidable and NPF is the risk of bank financing itself. The high NPF number indicates the bank's work is less efficient, but the lower the NPF owned, the more efficient the ability to channel funds to the public and determine the high level of profitability.

The strategic focus of Islamic Commercial Banks is to maintain NPF so that it does not increase every year because if the NPF is high then the performance of Islamic banks is low, and vice versa if the NPL level is low, the profitability level is high because there are many problematic financing so that the profitability level of Islamic Commercial Banks decreases. From the OJK provisions, the NPF value is said to be low if the NPF value is below 5%.

The value of NPF or non-performing financing can also be influenced by several factors including ROA, ROE, CAR, FDR, NOM, and GDP. However, this research will focus on ROA and ROE only. From table 1.3 above shows that the NPF value. In the example, Bank Muamalat, for the last seven years, had the highest NPF value in 2014 at 4.85% and the lowest in 2016 at 1.40%, with an average NPF at 3.43%. At Bank Syariah Mandiri, the highest was in 2014 at 4.29% and the lowest in 2020 at 0.72%, and the average was 2.49%. In BNI Syariah, the highest was in 2016 at 1.64% and the lowest was in 2014 at 1.04%, and the average was 1.42%. At BRI Syariah, the highest was in 2018 at 4.99%, the lowest in 2020 at 1.77%, and the average was 3.66%. At BCA Syariah, the highest was in 2014 at 0.7%, the lowest in 2020 at 0.01%, and the average was at 0.28%. The conclusion is that the NPF of the bank in question is considered low because it is still below the OJK (Financial Services Authority) stipulation, which is 5%.

Continuing the explanation, bank size or commonly known as Bank Size, is defined as the size of the bank which is determined in sales, capitalization, and total assets (assets). The larger the three components, the larger the size of the company (Ardi & Lana.)<sup>[6]</sup>. The size here can be seen from the assets owned, ranging from cash, disbursed financing, placements with other banks, securities, investments, fixed assets, prepaid expenses, leased assets, and other assets.

According to Medina Almunawwaroh, Rina Marlia (2018), NPF and Capital Adequacy Ratio (CAR) have a negative influence on the ROA obtained. In contrast to the Financing to Deposit Ratio (FDR) on ROA which sees a positive effect. The three variables above on ROA can be predicted with a figure of 80.19%, where the remaining 19.1% is a percentage for other factors not examined in this study. To find out how the variable financing problems and the size of the bank with the addition of the object of research in Islamic Commercial Banks. Therefore, the researcher wants to take the title "The Effect of Problem Financing and Bank Size on Profitability in Islamic Banking".

## Research methods

With a quantitative method and with the website of each Islamic bank company that has met the requirements, the sample will be drawn for this study. The research location here looks at financial reports that have been routinely published every month through the official websites of BI and OJK ([www.bi.go.id](http://www.bi.go.id) and [www.ojk.go.id](http://www.ojk.go.id)). The population will refer to Islamic commercial banks in Indonesia where the research period is years, from 2014-2020. For more details, the population of this research is PT Bank Jabar and Banten Syariah, PT BPD Nusa Tenggara Barat Syariah, PT Bank Mega Syariah, PT Bank Syariah National Pension Savings, PT Maybank Syariah, PT BCA Syariah, PT Bank Panin Dubai, PT BNI Syariah, PT BRI Syariah, PT Bank Victoria Syariah, PT Bank Syariah Mandiri, PT Bank Bukopin Syariah, and PT Bank Muamalat. The sample was also carried out by purposive sampling where the criteria set were the existence of quarterly financial statements that had been

released in the 2014-2020 period specifically for Islamic banks. Therefore, the Islamic commercial banks that meet the requirements are PT BCA Syariah, PT BNI Syariah, PT BRI Syariah, PT Bank Muamalat, PT Syariah Mandiri.

## Discussion

Looking at the research that has been done, it can be seen that the regression used to determine the correlation of the independent variable to the dependent variable. Regression analysis is used to see the effect of non-performing financing and bank size on profitability by looking at ROA in Islamic banking. The results of the research instrument testing can be seen through the data below:

### 1. Statistical T Test

To see the effect of the independent variable on the dependent variable (Sugiyono, 2015) <sup>[7]</sup>. Moreover, this exam also saw the relationship owned by one independent variable individually with its explanation of the dependent variable.

**Table 1:** T Uji test

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.773974	0.902734	0.857367	0.3976
NPF	-0.195793	0.050705	-3.861384	0.0005
SIZE	0.029605	0.050842	0.582293	0.5645
Effects Specification				
			SD	Rho
Random cross-section			0.438671	0.7014
Idiosyncratic random			0.286254	0.2986
Weighted Statistics				
R-squared	0.30541	Mean dependent var		0.19003
Adjusted R-squared	0.288700	SD dependent var		0.331329
SE of regression	0.279438	Sum squared resid		2.498741
F-statistics	7.899893	Durbin-Watson stat		1.962790
Prob(F-statistic)	0.001628			
Unweighted Statistics				
R-squared	0.452849	Mean dependent var		0.843143
Sum squared resid	5.821666	Durbin-Watson stat		0.842457

Source: Data processed by researchers, 2021

It was found that the independent variable NPF has a significant relationship to ROA where the level of significance is seen from the variable which is smaller than 0.05. On the other hand, the independent variable company size was found not to have a strong relationship or a large influence on ROA because the significance level of the variable was more than 0.05.

### 2. F Statistic Test

This test is carried out to see ANOVA or analysis of variance in analyzing more than two samples and analysis of variance can also be referred to as hypothesis testing (Nazaruddin & Basuki 2016) <sup>[8]</sup>. The goal is to see the truth of the independent variables (X) simultaneously having relation to the dependent variable (Y). In addition, the simultaneous test of the F test also has an objective to, simultaneously, see the relationship of the independent variable on the dependent variable.

**Table 2:** F Uji test

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.773974	0.902734	0.857367	0.3976
NPF	-0.195793	0.050705	-3.861384	0.0005
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Unweighted Statistics			
R-squared	0.452849	Mean dependent var	0.843143
Sum squared resid	5.821666	Durbin-Watson stat	0.842457

Source: Data processed by researchers, 2021

If the significance value obtained is  $0.001 < 0.05$ , then there is an effect. This test looks at the existence of a regression model that can be used because it can simultaneously predict ROA. Seeing this, it can be proven that NPF and size have a significant effect on ROA simultaneously. The conclusion is  $H_0$  can be accepted in the regression model in this study.

### 3. Coefficient of Determination Test

**Table 3:** Coefficient of Determination Test

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.773974	0.902734	0.857367	0.3976
NPF	-0.195793	0.050705	-3.861384	0.0005
SIZE	0.029605	0.050842	0.582293	0.5645
Effects Specification				
			SD	Rho
Random cross-section			0.438671	0.7014
Idiosyncratic random			0.286254	0.2986
Weighted Statistics				
R-squared	0.30541	Mean dependent var	0.19003	
Adjusted R-squared	0.288700	SD dependent var	0.331329	
SE of regression	0.279438	Sum squared resid	2.498741	
F-statistics	7.899893	Durbin-Watson stat	1.962790	
Prob(F-statistic)	0.001628			
Unweighted Statistics				
R-squared	0.452849	Mean dependent var	0.843143	
Sum squared resid	5.821666	Durbin-Watson stat	0.842457	

Source: Data processed by researchers, 2021

Adjusted R Squared. Values as big as 0.288 or 28.8% NPF and Size variables affect the ROA variable. While 71.2% obtained as a number influenced by variables not mentioned in this analysis.

Seeing the results of testing the above instruments, the discussion can be seen as follows:

#### 1. The effect of non-performing financing (NPF) on Bank Profitability as measured by ROA

From the results obtained, NPF was found to be significant and negative to the ROA of Islamic banks in Indonesia at BNI Syariah, BCA Syariah, BRI Syariah, Bank Syariah Mandiri, and Bank Muamalat. Proof can be found with a probability value of 0.0005. With this, the conclusion can be drawn that the higher the NPF value in the bank, the lower the effect on the profitability of the bank. This can be seen from the calculations obtained at the five banks mentioned above.

According to Dahlan (2007), non-performing loans which are often also referred to as NPLs and also non-performing financing or commonly referred to as NPFs have a definition as difficulty in paying off loans for various reasons, ranging from intentional or external such as the ability of creditors to control. Non-Performing Loans are seen from their collectibility ability where this can be interpreted as the return of loans and interest as well as potential funds back from invested securities. The existence of losses that may occur due to this credit practice is due to the negligence of the bank in paying attention to the credit when it has been given. In addition, there is also a lack of analysis carried out by banks in a business period. Seeing this,

If the NPF continues to increase, the higher the risk of the bank in carrying out its business activities to the fullest so that it can also affect the decline in income or profit at the bank, therefore accuracy and prudence on the part of the bank itself is needed in carrying out its functions effectively. maximum. This problematic financing of course has a negative impact on the financing provided so that the expected results may not be achieved and affect the decline in the performance of Islamic banking. The emergence of larger reserves is the effect of the high NPF in the bank where the result is a decrease in capital. The effect that occurs can be seen in the health of the bank where the greater the NPF value, the losses experienced by the bank will also be higher and because this can reduce the profit received by the bank. If the bank's profit decreases, the relationship can be seen in the reduced ROA of the bank. Seeing this, the analysis of the NPF in Islamic banks is an important

component. Currently, Bank Indonesia has provided an NPF limit of 5% for banks in Indonesia as the main bank or the parent bank of Indonesia. While providing financing to customers can increase the bank's profitability, a high level of NPF can also create difficulties for the bank. If the bank's profit decreases, the relationship can be seen in the reduced ROA of the bank. Seeing this, the analysis of the NPF in Islamic banks is an important component. Currently, Bank Indonesia has provided an NPF limit of 5% for banks in Indonesia as the main bank or the parent bank of Indonesia. While providing financing to customers can increase the bank's profitability, a high level of NPF can also create difficulties for the bank. If the bank's profit decreases, the relationship can be seen in the reduced ROA of the bank. Seeing this, the analysis of the NPF in Islamic banks is an important component. Currently, Bank Indonesia has provided an NPF limit of 5% for banks in Indonesia as the main bank or the parent bank of Indonesia. While providing financing to customers can increase the bank's profitability, a high level of NPF can also create difficulties for the bank.

The results obtained here are in line and in accordance with the results of the research of Dian Oktaviani and R. Agus Abikusno (2017) <sup>[9]</sup> "The Effect of Non-performing Financing, Liquidity Levels and Financing Ratios on Profitability of Bank Syariah Mandiri in 2012-2016" and also Madinah Almunawwaroh, Rina Marlina (2018) <sup>[10]</sup> "The Influence of CAR, NPF and Profitability of Islamic Banks in Indonesia" states that NPF has a negative relationship with bank profits as proxied by ROA.

## 2. Effect of Firm Size on Profitability

The results of the analysis of this study see that bank size does not have a large relationship with bank profitability which has been measured using ROA. This insignificant effect can be proven by obtaining a probability value of 0.564. This value exceeds the significance level of 0.05, and it can be concluded that the size of the bank will not have a major influence on the level of bank profits using ROA proxy.

From the results of the regression coefficient for the size of the bank, it was found that with the increase in the size of the bank, the profit received by the company will decrease. This insignificant word indicates that the main factor in influencing profitability is not the size of the bank because this measure cannot be a guarantee of the bank's performance in generating large profits. According to Ardi and Lana 2006, bank size is defined as a small scale of the bank in question and can mean total assets or assets, capitalization, and sales. Here, the larger the three components in question, the larger the size of a bank. This result is in line with search conducted by AA Wela Yulia Putra and Ida Bagus Badjra (2015) with the title "The Effect of Leverage, Sales Growth and Company Size on Profitability".

## Conclusion

In accordance with the results of research on the Effect of Non-performing Financing and Bank Size on Profitability of Islamic Banks, the conclusions obtained are:

1. Variable t-test results show that NPF has a t-statistic value of -3.861, a significance value of 0.0005, and more than an alpha of 0.050. From this it can be seen that there is a large negative influence between NPF and ROA.
2. Result of t-test variable Bank size get t-statistic value 0.582, score significance 0.564, and the value of alpha 0.050. From this it can be seen that there is no major influence between bank size (size) against ROA.
3. The result of the coefficient of determination between NPF and ROA obtained the value of R<sup>2</sup> (0.288) or 28.8% NPF variable and bank size affect ROA. While 71.2% was found to be influenced by an unspecified variable.

## Suggestions that can be submitted are:

1. This research has the potential to be further developed by including other variables or factors that also affect profitability in improving the quality of a greater influence.
2. In further research, it can also be done to increase the research period by using objects in other areas where there is a research gap where research is needed to provide relevant advice to related companies.
3. Expected Islamic Bank in Indonesia can maintain the trust of its customers so that it can increase the rate of economic growth of the community through bank muamalat financing that is more syar'i and fair. In addition, maintaining bank health is also important and not only maintaining bank trust. Sharia parties here also need to be maintained by staying away from the principle of interest or usury where there is a small influence of interest rates on the profits earned by Islamic banks. Banks are also advised to further increase their selective level in channeling financing to the public so that the NPF number can be suppressed and later can increase the expected profit.

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