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IMPAIRED LOAN: MUDHARABAH AND MUSYARAKAH FINANCING RISK ON RETURN ON EQUITY AT ISLAMIC COMMERCIAL BANKS FOR THE PERIOD 2014-2020

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Abstract

The purpose of this study is to determine the effect of Mudharabah and Musyarakah Financing Risks on Return on Equity at Islamic Commercial Banks for the 2014-2020 period. Research method Data analysis uses correlation and determination coefficient analysis and partial and simultaneous hypothesis testing. This research is categorized into descriptive and verification research. The data used in this study are secondary. Panel data testing which includes CEM, FEM, REM, Chow Test, Hausman Test, LM Test, Classical assumption tests includes Normality Test, Multicollinearity, Heteroscedasticity, and autocorrelation. Findings Based on the results of the research conducted, the result is that NPF Mudharabah partially affects Return On Equity. The value seen from the t-count is smaller than the t-table, namely $-2.552355 < -1.895$ with a significance level of 0.0134 which is smaller than 0.05. NPF Musyarakah partially does not affect Return On Equity, as seen from the t-count which is smaller than the t-table, namely $1.082097 < -1.895$ with a significance level of 0.2837 which is greater than 0.05. Simultaneously NPF Mudharabah and NPF Musyarakah affect Return On Equity. Judging from the probability, namely 0.0000, it is smaller than the alpha value (0.05) and the F-count is greater than the F-table, namely $8.350840 > 4.74$.

Keywords: Mudharabah NPF, Musyarakah NPF, Return on Equity

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh Risiko Pembiayaan Mudharabah dan Musyarakah terhadap Return on Equity pada Bank Umum Syariah periode 2014-2020. Metode penelitian Analisis data menggunakan analisis koefisien korelasi dan determinasi serta pengujian hipotesis secara parsial dan simultan. Penelitian ini dikategorikan ke dalam penelitian deskriptif dan verifikatif. Data yang digunakan dalam penelitian ini adalah data sekunder. Pengujian data panel yang meliputi CEM, FEM, REM, Uji Chow, Uji Hausman, Uji LM, Uji Asumsi Klasik yang meliputi Uji Normalitas, Multikolinieritas, Heteroskedastisitas, dan autokorelasi. Temuan Berdasarkan hasil penelitian yang dilakukan, diperoleh hasil bahwa NPF Mudharabah secara parsial berpengaruh terhadap Return On Equity. Nilai yang dilihat dari t-hitung lebih kecil dari t-tabel yaitu $-2,552355 < -1,895$ dengan tingkat signifikansi 0,0134 yang lebih kecil dari 0,05. NPF Musyarakah secara parsial tidak berpengaruh terhadap Return On Equity, terlihat dari t-hitung yang lebih kecil dari t-tabel yaitu $1.082097 < -1.895$ dengan tingkat signifikansi 0.2837 yang lebih besar dari 0.05. Secara

simultan NPF Mudharabah dan NPF Musyarakah berpengaruh terhadap Return On Equity. Dilihat dari probabilitasnya yaitu 0,0000 lebih kecil dari nilai alpha (0,05) dan F-hitung lebih besar dari F-tabel yaitu $8,350840 > 4,74$

Kata kunci: Mudharabah NPF, Musyarakah NPF, Return on Equity

Introduction

Banks are used as a place to conduct various transactions related to finance. For example, payment, billing, or storage. According to the Statement of Financial Accounting Standards (PSAK) No. 31, the definition of a bank is an institution that acts as a financial intermediary between parties who have excess funds and parties who need funds, as well as an institution that functions to facilitate payment traffic. The function of banks as intermediary institutions, especially in terms of lending activities, has a very important role in the movement of the economy as a whole and facilitates economic growth. Lending is the most important bank activity in generating profits but also provides the greatest risk to the bank (Islam & Ahmad, 2020; Mukhibad et al., 2023). Conventional banks use conventional principles regarding national and international regulations based on applicable law. Based on Law No. 21 of 2008 concerning Islamic Banking, Islamic banks are banks that carry out business activities based on Sharia principles or Islamic legal principles. The Islamic sharia principles include the principles of justice and balance ('adl wa tawazun), benefit (maslahah), universalism (alamiyah), and do not contain gharar, maysir, usury, zalim and haram objects, as regulated in the fatwa of the Indonesian Ulema Council (Othman et al., 2023). In addition, the Islamic Banking Law also mandates Islamic banks to always carry out social functions while carrying out functions such as baitul mal institutions. A baitul mal institution is an institution that receives funds from zakat, infaq, sadaqah, grants, or other social funds and distributes them to waqf managers (nazhir) according to the will of the waqf giver (wakif). (www.cimbniaga.go.id).

The Financial Services Authority (OJK) has identified several opportunities that support the development of Islamic banking in the future. Among these supporting factors are the rapid advancement of technology and digitalization, economic growth in the halal industry, and the increasing religious awareness of the Indonesian people. Islamic banking emerged to meet the demand for the availability of financial services by sharia principles by realizing a banking system that avoids practices that are not in line with Sharia principles such as usury, maysir, gharar, and so on. The development of Islamic banking is also driven by the desire of the community to carry out economic and financial activities under sharia guidance (Danlami et al., 2022; Kurniawati & Nasution, 2021). Islamic banking must transform into highly competitive Islamic banking and play a more significant role in the national economy and social development in Indonesia.

Gambar 1.1

Pertumbuhan Pembiayaan Yang Diberikan (PYD) Perbankan



Source: (www.ojk.co.id)

Financing exists in contract products at Islamic Commercial Banks (BUS), Islamic Business Units (UUS), and BPRS. The principle of the Mudharabah contract refers more to the principle of cooperation between the owner of the capital and the manager. Musyarakah is a cooperation contract between two or more parties in a business to combine capital and run a business together in a partnership with profit sharing according to agreement and losses based on the portion of capital contribution (Kamsani et al., 2022).

The following is data on the composition of financing provided by Islamic banking for the 2014-2020 period:

Tabel 1.1
Pembiayaan disalurkan oleh perbankan Syariah yang terdaftar di ojk
pada tahun 2014-2020

| NO | AKAD | TAHUN (Milyar) | | | | | | |
|----|------------|----------------|--------|---------|---------|---------|---------|---------|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| 1 | Mudharabah | 8.424 | 7.979 | 7.577 | 6.584 | 5.477 | 5.413 | 4.098 |
| 2 | Musyarakah | 40.278 | 47.357 | 54.052 | 60.465 | 68.466 | 84.582 | 92.279 |
| 3 | Murabahah | 91.867 | 93.642 | 110.063 | 114.458 | 118.134 | 122.725 | 136.990 |
| 4 | Salam | 13 | 15 | 14 | 0 | 0 | 0 | 0 |
| 5 | Istishna | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | Ijarah | 1.171 | 1.883 | 2.791 | 3.180 | 3.138 | 3.210 | 2.720 |
| 7 | Qordh | 3.883 | 6.848 | 9.276 | 9.376 | 9.410 | 9.863 | 10.425 |

Source: www.ojk.go.id

Minister of Finance (Menkeu) Sri Mulyani Indrawati said the Covid-19 pandemic has greatly depressed the Indonesian economy, especially in the second quarter of 2020. This pressure is no exception to the Islamic banking sector. The State Treasurer, who is also the Chairperson of the Association of Economists (IAEI), explained that so far the majority of Islamic bank financing has been channeled to sectors that are not business fields. This sector is sector that is currently under pressure from the Covid-19 pandemic so the risk of bad financing must be watched out for. These sectors are residential houses IDR 83.7 trillion and other household appliances including multipurpose of IDR 53.8 trillion. Meanwhile, business sectors such as wholesale and retail trade reached IDR 37.3 trillion, construction IDR 32.5 trillion, and processing industry IDR 27.8 trillion. "PSBB is caused by the decline in various activities such as manufacturing, trade, and projects experiencing a decline or cancellation. These risks faced by banking institutions in general and sharia must be watched out for". Said the Ministry of Finance Sri Mulyani Indrawati (<https://www.cnbcindonesia.com/>).

According to Ismail & Zulkhibri, (2024) The problem of Islamic banking is the emergence of Non-performing Financing which results in default on the financing that has been provided by the Bank, Performing Financing is one of the performance assessment instruments of an Islamic bank which is an interpretation of the assessment of productive assets, especially in the assessment of non-performing financing. Non Performing Financing needs to be considered because of its fluctuating and uncertain nature (Alandejani, 2022). Efforts to Handle Non-Performing Finance (NPF) in the Sharia Business Unit of Bank Sumut). Based on the results of research by Fitri & Sisdianto, (2020) mudharabah financing has a negative and significant effect on ROE, while musyarakah financing has a positive and significant effect on ROE level. Simultaneously mudharabah and musyarakah

financing have a significant effect on the level of ROE. Dian Permatasari (2018) mudharabah financing has a positive and significant effect on Return On Equity (ROE) and musyarakah financing has a negative and significant effect on Return On Equity (ROE). Neneng Widyawati (2020) The level of risk of Musyarakah financing on profit has a negative and insignificant effect, while the level of risk of Mudharabah financing on profit has a positive and significant effect.

In light of these findings, the authors plan to conduct a study titled "The Effect of Mudharabah and Musyarakah Financing Risk on Return on Equity at Islamic Commercial Banks for the 2014-2020 Period." This study aims to further explore the relationship between financing risks and ROE in Islamic Commercial Banks.

Research Method

The object of research is something that is the center of attention in a study according to Djaali, (2021) research object: "Attributes or properties or values of people, objects or activities that have certain variations set by researchers to study and then draw conclusions". The type of research is descriptive statistics, which is a type of research whose purpose is to present a complete picture of the social setting or is intended for exploration and clarification of a phenomenon or social reality, by describing several variables related to the problem and the unit under study between the phenomena being tested. In this study used statistical analysis with the help of reviews 09 and 10. The method used by the author in this study when viewed from the type of analysis is a quantitative method with a descriptive approach.

Data Collection

The data analysis technique used in the study is a regression analysis of the model with a combination of time series and cross-section, also called panel data, with the help of the eviews v 09 or 10 program. Panel data is a group of individual data examined during a certain time frame so that panel data provides observation information for each individual in the sample. The stages in analyzing this research data are as follows. The estimation of an economic model is necessary to know the true condition of the observed: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$

In the estimation method, regression models using panel data can be done through three approaches, among others:

The pooled Least Square (Common Effect) approach combines time series and cross-section data and assumes that the behavior of company data is the same across different periods. This approach can use either the Panel Least Square or the least squares technique for estimation.

The Fixed Effect model assumes that the intercepts are different between companies, capturing differences in work culture, management, and intensity. However, the slope is assumed to be the same across companies. The estimation of this model utilizes dummy variables to capture the intercept differences and is often referred to as the Least Square Dummy Variable technique.

The Random Effect model estimates panel data where disturbance variables may be interconnected over time and between individuals. This model accommodates differences in intercepts through the error terms of each company. The advantage of using the Random Effect model is that it eliminates Heteroscedasticity and it is also known as the Error Component Model or the Generalized Least Square technique.

The Pooled Least Square (Common Effect) approach combines time series and cross-section data, assuming consistent firm behavior over time. It can be estimated using Panel Least Square or least squares techniques. The Fixed Effect model assumes different intercepts across firms, capturing

cultural and managerial differences, while assuming the slope remains the same. The estimation of this model is done using dummy variables, known as the Least Square Dummy Variable technique. The Random Effect model estimates interconnected disturbance variables over time and across individuals, accommodating intercept differences through the error term. This model eliminates Heteroscedasticity and is also called the Error Component or Generalized Least Square technique. The Chow test compares the Fixed and Common Effect models for panel data estimation.

The Hausman test compares the Fixed Effect and Random Effect models, while the Lagrange Multiplier test determines the better model between Random and Common Effect. The classical assumption test examines normality, heteroscedasticity, and autocorrelation violations. Normality is tested using the Jarque-Bera probability, while multicollinearity is assessed using tolerance and VIF. Heteroscedasticity is detected using the Glejser test. The autocorrelation test is used to identify when there is a lack of independence between residuals in a time series, meaning that errors from one observation can impact the following period. One common test for autocorrelation is the Durbin-Watson test. To determine the type and presence of autocorrelation, the Durbin-Watson test statistic is compared to critical values in the Durbin-Watson table. The interpretation process is as follows: if the test statistic (d) is lower than the lower critical value (dl), it indicates positive autocorrelation; if it is higher than the upper critical value ($4-dl$), it indicates negative autocorrelation; and if the test statistic falls between the upper and lower critical values ($du < d < 4-dl$), it indicates no autocorrelation. By analyzing the Durbin-Watson test results, researchers can identify if there is autocorrelation and its direction in time series data.

Result and Discussion

The regression coefficient for NPF Musyarakah is found to be 3.093349 with a t-count value of 1.082097 and a significance level of 0.2837. However, the t-count is smaller than the t-table value of 1.895, indicating that NPF Musyarakah has no significant effect on Return on Equity (ROE) in Islamic Commercial Banks during the 2014-2020 period. This result contrasts with previous research by Refinaldi and Aditya in 2014, which also found no effect of NPF Musyarakah on ROE. The study suggests that the higher risk level of Musyarakah financing, as well as the impact of the Covid-19 pandemic, has led people to prioritize basic needs over housing finance transactions. Government and company policies implemented during the pandemic, such as work from home policies, have also aimed to minimize capital return for housing purchases, thus reducing the NPF rate for Musyarakah financing.

The study found that NPF mudharabah and Musyarakah together have a significant effect on Return On Equity (ROE) in Islamic Commercial Banks for the period of 2014-2020. The F-table value is 8.350840 with a probability of 0.0000, showing that the F-count is greater than the F-table and the probability is less than the alpha value of $0.0000 < 0.05$. This proves the second hypothesis, indicating that both NPF mudharabah and Musyarakah have a significant effect on ROE. The determination value (R^2) is calculated at 0.6123 or 61%, meaning that the variable Return On Equity can be explained by these two variables, while the remaining 39% is attributed to other financial risks not included in the study. These findings are consistent with a previous study by Permatasari, Dian (2018) which also found a significant effect of NPF mudharabah and Musyarakah on ROE in Islamic Commercial Banks, albeit for a shorter period of time.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) essentially measures how far the Mudharabah (X_1) and Musyarakah (X_2) models can explain the dependent variable ROE. The coefficient of determination is between zero (0) and one (1). A small R^2 value means that the ability of the independent variables (free) to explain the variation in the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable.

Coefficient of Determination (R^2)

| | | | |
|--------------------|-----------------|-----------------------|----------|
| R-squared | 0.612970 | Men dependent var | 3.164000 |
| Adjusted R-squared | 0.539568 | S.D. dependent var | 2.987041 |
| S.E. of regression | 2.026861 | Akaike info criterion | 4.405659 |
| Sum squared resid | 238.2736 | Schwarz criterion | 4.791115 |
| Log-likelihood | -142.81 | Hannan-Quinn | 4.558767 |
| | | criteria. | |
| F-statistic | 8.350840 | Durbin-Watson stat | 1.710491 |
| Prob(F-statistic) | 0.000000 | | |

Source: Processed Secondary Data

The results of the regression test above show an R-squared value of 0.612970 or 61%. The coefficient of determination (R^2) shows that the ability of the Mudharabah and Musyarakah variables to explain the variance of the ROE variable is 61. While the remaining 39% is influenced by the variance of other variables outside the study, so the ability of the Mudharabah and Musyarakah variables to explain the ROE variable can be said to be Strong.

Numerical Results

Panel Data Regression

Common Effect Model

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-------------------|------------------|-----------------|------------------|---------------|
| C | 4.414656 | 0.452585 | 9.754305 | 0.0000 |
| Mudharabah | -5.647749 | 1.386543 | -4.073260 | 0.0001 |
| Musyarakah | 2.955935 | 3.502455 | 0.843961 | 0.4017 |

Source: Processed Secondary Data

From the results of the Common Effect approach above, it can be seen that only Mudharabah (X_1) is statistically significant when viewed from its probability value of $0.0001 < 0.05$.

Fixed Effect Model

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-------------------|------------------|-----------------|------------------|---------------|
| C | 3.768089 | 0.379263 | 9.935286 | 0.0000 |
| Mudharabah | -3.009276 | 1.179481 | -2.551355 | 0.0134 |
| Musyarakah | 3.093349 | 2.858660 | 1.082097 | 0.2837 |

Source: Processed Secondary Data

By using the Fixed Effect Model approach above, it can be seen that of the 2 independent variables above, only Mudharabah (X1) is statistically significant when viewed from the probability value of $0.0134 < 0.05$.

Random Effect Model

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-------------------|------------------|-----------------|------------------|---------------|
| C | 4.015512 | 0.522924 | 7.678961 | 0.0000 |
| Mudharabah | -3.971005 | 1.126390 | -3.525425 | 0.0008 |
| Musyarakah | 2.756923 | 2.771415 | 0.994771 | 0.3234 |

Source: Processed Secondary Data

By using the Random Effect Model approach above, it can be seen that of the 2 independent variables above, only Mudharabah (X1) is statistically significant when viewed from the probability value, which is $0.0008 < 0.05$. From the results of the panel data regression analysis above, an explanation can be drawn, regression of panel data uses three types of tests (CEM, FEM, and REM) to determine the significance of each variable. Of the three types of testing, where only the Mudharabah variable (X1) is significant because its position is below the alpha value (0.05).

The Chow test

The hypothesis formed in the chow test is as follows:

H0: Common Effect Model

H1: Fixed Effect Model

H0 is rejected if the probability < 0.05 , which means that the most appropriate model to use is the Fixed Effect Model. Conversely, H0 is accepted if the probability > 0.05 and the model used is the Common Effect Model.

Chow Test

| Redundant Fixed Effects Tests | | | | |
|----------------------------------|-----------|--------|--------|--|
| Equation: Untitled | | | | |
| Test cross-section fixed effects | | | | |
| Effects Test | Statistic | d.f. | Prob. | |
| Cross-section F | 6.839403 | (9,58) | 0.0000 | |
| Cross-section Chi-square | 50.633125 | 9 | 0.0000 | |

Source: Processed Secondary Data

From the table above, it can be seen that the results show the probability value of the F test is 0.0000 and the Chi-square is 0.0000. By using the significance level ($\alpha = 0.05$) it can be said that the probability of $0.000 < 0.05$, then H0 is rejected and H1 is accepted, which means that a good model is to use the Fixed Effect Model. The Hausman test is a statistical test to choose whether the Fixed Effect or Random Effect model is most appropriate to use. The decision-making criteria are if the probability value < 0.05 then H0 is rejected and the model chosen is the Fixed Effect Model. Vice versa, if the probability value > 0.05 then H0 is accepted and the selected model is the Random Effect Model.

Hausman Test

| | | | |
|--|----------------------|-----------------|--------|
| Correlated Random Effects - Hausman Test | | | |
| Equation: Untitled | | | |
| Test cross-section random effects | | | |
| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
| Cross-section random | 12.432663 | 2 | 0.0020 |

Source: Processed Secondary Data

From the table above, it can be seen that the probability value is $0.0020 < 0.05$, meaning that H_0 is rejected and H_1 is accepted, so the better model is the Fixed Effect Model.

The Lagrange Multiplier (LM) test is a test to determine whether the Random Effect model is better than the Common Effect method. The decision-making criteria are if the probability value (BP) < 0.05 then H_0 is rejected and the selected model is Random Effect, and vice versa if the probability value (BP) > 0.05 then H_0 is accepted and the selected model is Common Effect Model.

Lagrange Multiplier Test

| | | | |
|---|----------------------|----------------------|----------------------|
| Lagrange Multiplier Tests for Random Effects | | | |
| Null hypotheses: No effects | | | |
| Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided | | | |
| (all others) alternatives | | | |
| | Test Hypothesis | | |
| | Cross-section | Time | Both |
| Breusch-Pagan | 30.89229 (0.0000) | 0.983403 (0.3214) | 31.87570 (0.0000) |
| Honda | 5.558084 (0.0000) | -0.991667 -- | 3.228944 (0.0006) |
| King-Wu | 5.558084 (0.0000) | -0.991667 -- | 2.747099 (0.0030) |
| Standardized Honda | 6.167001 (0.0000) | -0.773684 -- | 0.573475 (0.2832) |
| Standardized King-Wu | 6.167001 (0.0000) | -0.773684 -- | 0.077159 (0.4692) |
| Gourieriou, et al.* | -- | -- | 30.89229 |

(< 0.01)

Source: Processed Secondary Data

From the table above, it can be seen that the Breusch-Pagan (BP) probability value is 0.0000 < 0.05 , so H_0 is accepted and H_1 is rejected, in other words, the suitable model in this study is the Random Effect Model.

Hypothesis Testing (t-test)

Hypothesis testing in this study is to use the t test which basically shows how far the influence of one independent variable individually in explaining variations in the dependent variable.

1. The calculated t value of the independent variable Mudharabah is $-2.551355 < t$ table -1.895 and the probability value is $0.0134 < 0.05$. So that the independent variable Mudharabah can be said to affect the dependent variable ROE.
2. The t value of the independent variable Musyarakah is $1,082097 < t$ table 1.895 and the probability value is $0.2837 > 0.05$. So that the independent variable Musyarakah can be said to not affect the dependent variable ROE.

Hypothesis Testing (f-test)

The F test is used to determine whether the multiple correlation coefficient can be generalized to the population or not. In this study, the F test was used to determine the effect of variables between Mudharabah and Musyarakah on ROE variables simultaneously. The F-statistic value is 8.350840 with a probability value of 0.0000. Because the F-count is greater than the F-table value, namely $8.350840 > 4.74$ and the probability value is less than the alpha value (0.05), namely $0.0000 < 0.05$. This means that the independent variables simultaneously have a significant effect on the dependent variable.

Graphical Results (11 font) Grafik ROE

In this study there are 10 companies where these companies are companies that have been selected and then used as research samples. The graph showing the development of Return On Equity (ROE) is as follows:

Picture 5.1: ROE Movement 2014-2020 Period

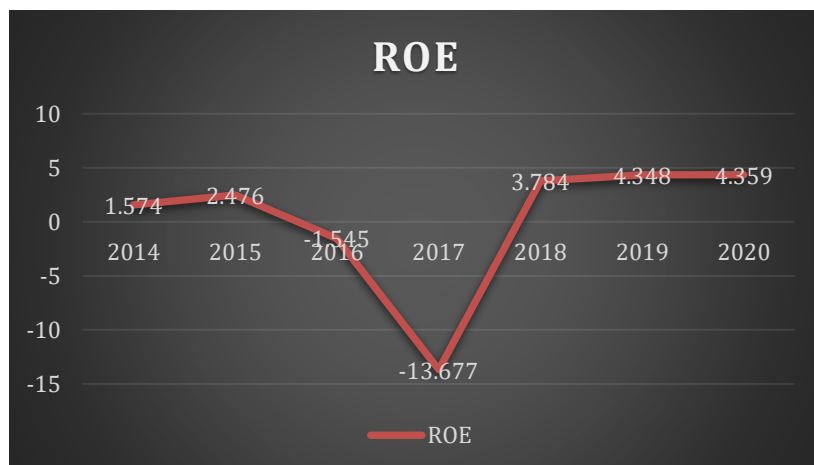


Figure 5.1 shows the movement of Return on Equity (ROE) which fluctuates. In 2017 the movement of the ROE graph experienced a very significant decline until it stepped on -13.677% , where the company that stepped on the lowest number occurred at Bank Panin Dubai Syariah and in 2018 it increased significantly again.

The graph showing the development of NPF Mudharabah Islamic Commercial Banks is as follows:

Picture 5.2: NPF Mudharabah Movement 2014-2020 Period

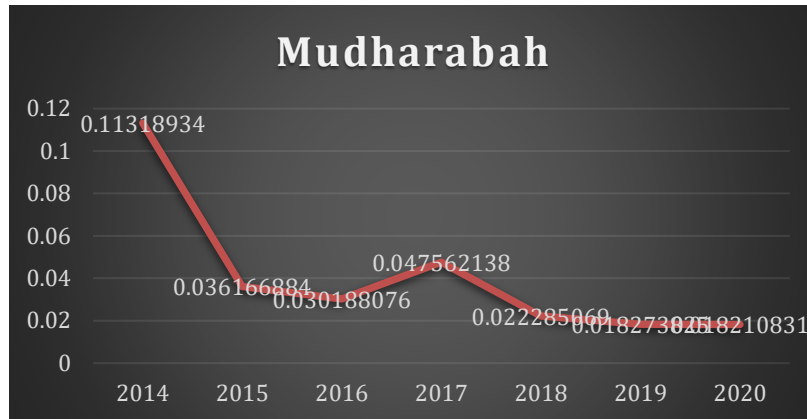
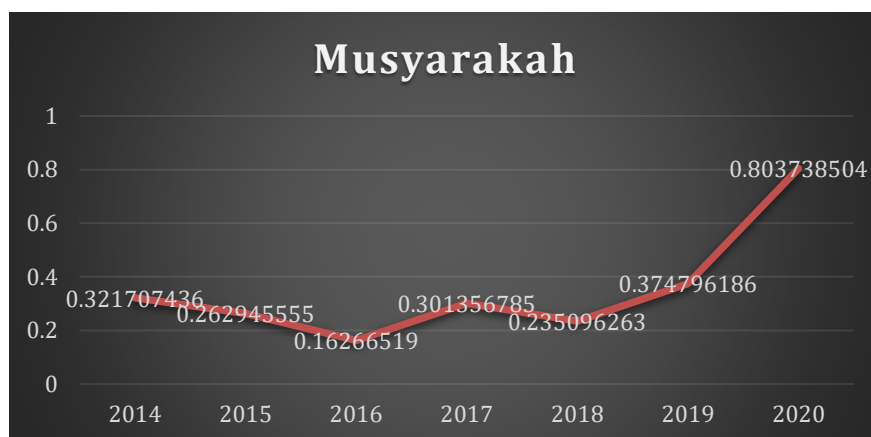


Figure 4.2 shows the movement of Mudharabah NPF which fluctuates. Where if observed NPF Mudharabah touched the highest average number in 2014 with 0.113. And the lowest occurred in 2020 with several 0.01821.

The graph showing the development of NPF Musyarakah of Islamic Commercial Banks is as follows:

Picture 5.3: NPF Musyarakah Movement 2014-2020 Period

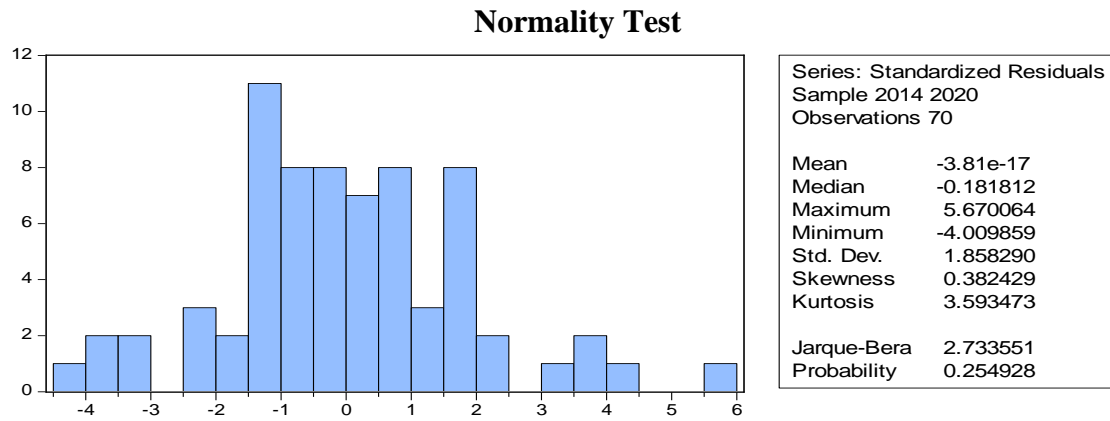


In Figure 5.3 above shows the movement of NPF Musyarakah Islamic Commercial Banks which fluctuates. Where in 2016 NPF Musyarakah decreased to 0.16266, and the highest was in 2020.

Proposed Improvements (11 font) Saran 3 ->2

For future researchers, the variables used should be further developed. Apart from the Mudharabah and Musyarakah financing factors, because there are still many financing products channeled by the bank. For Investors, you should pay more attention and re-observe the NPF and Return on Equity values because when the NPF value increases, Return On Equity will decrease and vice versa.

Validation (11 font) normal - hetero



Source: Processed Secondary Data

The decision whether the residuals are normally distributed or not is simply by comparing the calculated JB (Jarque-Bera) Probability value with an alpha level of 0.05 (5%). If Prob. JB count > 0.05, it can be concluded that the residuals are normally distributed and vice versa, if the value is smaller, there is not enough evidence to state that the residuals are normally distributed. From the picture above, it can be seen that the Prob. JB calculated at $2.733551 > 0.05$ with a Probability of $0.254928 > 0.05$ so it can be concluded that the residuals are normally distributed, which means that the classic assumption of normality has been met.

Multicollinearity Test

The multicollinearity test is used to test whether there is a relationship between independent variables. To detect the relationship between variables in this study by looking at the correlation coefficient between each variable, if it is greater than 0.8 then there is multicollinearity in the regression model, but if the correlation coefficient between each variable is less than 0.8 then there is no multicollinearity in the regression model. The multicollinearity test results can be seen in the table below:

Multicollinearities Test

| | Mudharaba h | Musyaraka h |
|------------|----------------|----------------|
| Mudharabah | 1.000000 | 0.351060 |
| Musyarakah | 0.351060 | 1.000000 |

Source: Processed Secondary Data

Based on the table above, namely the display matrix of the pair-wise correlation coefficient between independent variables produces a value below 0.8. So an explanation can be drawn that there is no multicollinearity.

Heteroscedasticity Test

To test for heteroscedasticity, in this study researchers used the Glejser Test. This test procedure is carried out by blurring the residuals from the regression results that have been carried out. Because the regression model used is the Random Effect model, the residuals from the Random Effect are used in this heteroscedasticity test. After that, the residuals were regressed with all independent variables. The regression results can be seen in the table below:

Heteroskedasticities Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|------------|-------------|------------|-------------|--------|
| C | 1.645960 | 0.186995 | 8.802170 | 0.0000 |
| Mudharabah | -0.761208 | 0.581540 | -1.308952 | 0.1957 |
| Musyarakah | -0.600801 | 1.409455 | -0.426265 | 0.6715 |

Source: Processed Secondary Data

Based on the table above, it shows that the regression model in this study does not occur heteroscedasticity. This can be seen from the probability value of Mudharabah and Musyarakah which is greater than 0.05. Mudharabah is 0.1957 and Musyarakah is $0.6715 > 0.05$.

Autocorrelation Test

Autocorrelation problems often occur in time series data. Autocorrelation detection in panel data can be done with the Durbin-Watson test. The Durbin-Watson test value is compared with the Durbin-Watson table value to determine the presence of positive or negative correlation. The decision regarding the presence of autocorrelation is as follows:

1. If $d < dl$, then there is positive autocorrelation
2. If $d > (4-dl)$, it means there is negative autocorrelation
3. If $du < d < (4-dl)$, there is no autocorrelation.

The test results can be seen in the table below:

Non-Autocorrelation Test

| | | | |
|--------------------|-----------|-----------------------|-----------------|
| R-squared | 0.612970 | Mean dependent var | 3.164000 |
| Adjusted R-squared | 0.539568 | S.D. dependent var | 2.987041 |
| S.E. of regression | 2.026861 | Akaike info criterion | 4.405659 |
| Sum squared resid | 238.2736 | Schwarz criterion | 4.791115 |
| Log likelihood | -142.1981 | Hannan-Quinn criter. | 4.558767 |
| F-statistic | 8.350840 | Durbin-Watson stat | 1.710491 |
| Prob(F-statistic) | 0.000000 | | |

Source: Processed Secondary Data

Because: $N = 10$; $K = 2$

Then obtained: $DL = 0.6972$; $DU = 1.6413$; $4-DU = 2.3587$; $4-DL = 3.3028$

Judging from the table, the DW value is 1.710491.

With information: $du < d < (4-dl)$. Then there is no autocorrelation.

Conclusion

The researcher concluded that partially, non-performing financing (NPF) mudharabah has a significant effect on Return on Equity (ROE) in Islamic commercial banks for the 2014-2020 period. This means that if there is a failure of profit sharing, the bank's ROE will decrease. On the other hand, partially, NPF musyarakah does not affect ROE in Islamic commercial banks. This is because people are more concerned with basic needs than housing financing transactions. However, the government and companies have implemented work-from-home policies to minimize the NPF rate for musyarakah financing. Furthermore, both NPF mudharabah and musyarakah have a simultaneous

effect on ROE in Islamic commercial banks. The F-test results showed that their combined effect is significant.

References

- Alandejani, M. (2022). An overview of efficiency and profitability in Islamic banking: A comparative study between Islamic banking and conventional banking / Maha Alandejani. *Social and Management Research Journal (SMRJ)*, 19(1), Article 1.
- Danlami, M. R., Abduh, M., & Razak, L. A. (2022). CAMELS, risk-sharing financing, institutional quality and stability of Islamic banks: Evidence from 6 OIC countries. *Journal of Islamic Accounting and Business Research*, 13(8), 1155–1175. <https://doi.org/10.1108/JIABR-08-2021-0227>
- Djaali, P. D. H. (2021). *METODOLOGI PENELITIAN KUANTITATIF*. Bumi Aksara. <http://repo.iainbatusangkar.ac.id/xmlui/handle/123456789/22503>
- Fitri, A., & Sisdianto, E. (2020). ANALYSIS OF THIRD PARTIES FUNDS AND INFLATION TO PROFITABILITY (Survey On Commercial Bank Shariah Period 2013-2018). *Hunafa: Jurnal Studia Islamika*, 17(1), Article 1. <https://doi.org/10.24239/jsi.Vol17.Iss1.573>
- Islam, R., & Ahmad, R. (2020). Applicability of Mudarabah and Musharakah as Islamic Micro-equity Finance to Underprivileged Women in Malaysia. *The European Journal of Development Research*, 32(1), 176–197. <https://doi.org/10.1057/s41287-019-00225-3>
- Ismail, A. G., & Zulkhibri, M. (2024). *Economic Capital and Risk Management in Islamic Finance*. Taylor & Francis.
- Kamsani, N. F., Hussin, S. A. S., & Zahid, Z. (2022). Credit Risk Analysis Of Islamic Bank VS Conventional Bank In Malaysia. *Journal of Pharmaceutical Negative Results*, 264–270. <https://doi.org/10.47750/pnr.2022.13.S10.027>
- Kurniawati, S. L., & Nasution, Z. (2021). Implementation Of Good Corporate Governance (Gcg) And Profit-Sharing Financing On Profitability In Sharia Commercial Banks. *Dinar: Jurnal Ekonomi Dan Keuangan Islam*, 8(2), Article 2. <https://doi.org/10.21107/dinar.v8i2.10959>
- Mukhibad, H., Yudo Jayanto, P., Alirastra Budiantoro, R., Bagas Hapsoro, B., Nurasyiah, A., & Michael Musyaffi, A. (2023). Equity-based financing and risk in Islamic banks: A cross-country analysis. *Cogent Economics & Finance*, 11(2), 2235117. <https://doi.org/10.1080/23322039.2023.2235117>
- Othman, N., Abdul-Majid, M., & Abdul-Rahman, A. (2023). Equity financing and Islamic bank stability: Evidence from Malaysia and Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(6), 1248–1268. <https://doi.org/10.1108/IMEFM-03-2022-0106>