The Effect of CAR, FDR, NPF and BOPO to Return on Equity

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ABSTRACT
The purpose of this paper is to determine the effect of the capital adequacy ratio, financing to deposit ratio, non-performing financing and operational income operating costs on return on equity at Islamic Commercial Banks in Indonesia for the period 2011 - 2020. This type of research is quantitative, research using secondary data in the form of an annual report. This study uses a sample of 5 Islamic Commercial Banks in Indonesia for the period 2011 - 2020 with the determination of the sample using the purposive sampling method. The technique for analyzing the data in this study uses multiple linear regression, classical assumption test, and hypothesis testing with data processing using the SPSS v.20 application. Based on the results of multiple linear regression analysis, it is obtained that the capital adequacy ratio, non-performing financing and operating costs of operating income have a negative and significant effect on return on equity, while the financing to deposit ratio has no significant effect on return on equity.

Keywords: Capital Adequacy Ratio, Financing To Deposit Ratio, Non-Performing Financing and Operational Costs of Operating Income and Return On Equity

1. INTRODUCTION

The economy movement can not be separated from the role of financial agency as the source of economy financing. Banking is an institution which influences the economy development of country including Indonesia. The industry of syariah financial service becomes a sector in booster of the economy of Indonesia. Islamic Banking becomes one of sectors in syariah financial service industry which shows a positive trend, approved by the speed of Islamic Banking development that exceeds the development of conventional banking (Wiarta, 2020).

This speedy Islamic Banking development will cause the height of competition inter-bank. Besides, Bank Indonesia has also stricted the national banking regulation. The health bank regulation of Indonesia covers all banking aspects such as collecting dana, utilizing dana and distributing dana. By establishing health bank regulation, operational banking is expected to be in good

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condition so it does not harm the people especially in banking (Syakhrun et al., 2019).

Here is the picture about the Islamic Banking development in 2016 until 2020:

**Figure 1. Islamic Banking Development**

<table>
<thead>
<tr>
<th>Year</th>
<th>Asset %</th>
<th>PYD %</th>
<th>DPK %</th>
<th>NPF %</th>
<th>Profit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>12.3%</td>
<td>6.1%</td>
<td>18.9%</td>
<td>12.6%</td>
<td>11.4%</td>
</tr>
<tr>
<td>2017</td>
<td>13.2%</td>
<td>12.7%</td>
<td>19.9%</td>
<td>13.6%</td>
<td>9.8%</td>
</tr>
<tr>
<td>2018</td>
<td>12.9%</td>
<td>13.0%</td>
<td>17.0%</td>
<td>10.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>2019</td>
<td>13.1%</td>
<td>20.4%</td>
<td>15.0%</td>
<td>9.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>2020</td>
<td>13.7%</td>
<td>20.0%</td>
<td>10.0%</td>
<td>10.5%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

*Source: Otoritas Jasa Keuangan, (2020)*

Based on picture 1 above, the condition of Islamic Banking tenacity becomes stronger in 2020. Meanwhile, the function of Islamic Banking also intermediation runs well. The given funding (PYD) and the third person fund (DPK) show the positive in 8.08% and 11.98%, so the development of Islamic Banking asset in that period is 13.11%. The total, the given funding and the third person fund of Islamic Banking reach Rp608,90 billion, Rp394,63 billion, and Rp475,80 billion in 2020.

One of the indicators that is so appropriate in measuring the performance of a bank is profitability. The better Islamic Banking in bank management will give the advantages which can improving the profitability. The bank ability in improving profitability can indicate the financial bank performance that is good, the other hand if the profitability is low so the bank performance in giving profit will not be optimal. This research use Return On Equity (ROE) to measure the profitablity performance because bank management uses ROE to measure the company effectiveness in giving profit by its capital (Idrus, 2018). ROE is mentioned as bank ability in managing capital of bank to get the net profit (Pardistya, 2021). Besides, ROE becomes a measuring instrument which is used by the potential investor because it can know how efficient the bank in utilizing invested money to get net profit. ROE also shows how much profit that is obtained by company from each rupiah that is invested by its investor (Rosita & Simamora, 2020). The higher ROE so the higher net profit that is obtained, the other hand the lower ROE so the lower net profit that is obtained (Maroni & Simamora, 2020).

The increasing or the decreasing of Islamic Commercial Bank performance which is measured by Return On Equity (ROE) influenced by some factors. The factors which influence Return On Equity (ROE) is Capital Adequacy Ratio(CAR), Financing to Deposit Ratio (FDR), Non Performing Financing (NPF), then Operational Expense and Operational Income (BOPO) (Satria & Saputri, 2016; Pardistya, 2021; Hermina & Suprianto, 2016). Where the factors are the independent variables in this research.

Capital Adequacy Ratio (CAR) can be used to assess the ability of bank in using the capital to resolve the disadvantage risk of its asset. If the CAR is high, so it shows that the bank

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is able to handle the risk of disadvantage. The high value of CAR shows the healthy condition of bank and also the higher profit so CAR ratio gives positive effect to ROE (Romdhoni & Chateradi, 2018; Nurhakim & Rahma, 2021). That research is not in one line with the research result (Idrus, 2018; Pardistya, 2021) that CAR give negative effect to ROE.

The bank ability in distributing the fund with its total asset can be assessed by Financing to Deposit Ratio (FDR). If the value of FDR is high, it means bank has increasingly distributed the funding to the third person, this thing causes the increasing income which is automatically followed by bank profit, so FDR gives positive effect to ROE (Pardistya, 2021). This thing is not suitable with the research result (Idrus, 2018; Maroni & Simamora, 2020) that Financing to Deposit Ratio (FDR) gives negative effect to ROE.

Other factor that can effect ROR is Non performing Financing (NPF) that is able to assess the bank ability in preventing the risk of debtor failed payment. If the measurement of NPF shows the high value, it shows that the bank has quality in managing the funding for client or debtor, so NPF has negative effect to ROE (Idrus, 2018). But this matter is contrary with the research result by Romdhoni & Chateradi, (2018) which define that NPF does not give effect to ROE.

The last factor in this research which influences Return On Equity (ROE) to measure the level of efficiency and ability of bank in carrying out its operation is the Operational Expense To Operational Income (BOPO). If BOPO increases, so ROE decreae or the rise of operational expense that is not followed by the raise of operational income causes the net profit down so ROE will also go down. The high fund to reach profit from company causes the bad operational efficiency of bank and finally ROE decreases (Rosita & Simamora, 2020; Idrus, 2018).

Based on the previous studies about the factors that influence Return On Equity (ROE), there are still the contradictions about the effects of Capital Adequacy Ratio (CAR), Financing To Deposit Ratio (FDR), Non Performing Financing (NPF), and Operational Expense and Operational Income (BOPO) to Return On Equity (ROE). The writers interest in doing this research because the writers want to do further research about that field. This research is conducted to Islamic Bank which is listed in Islamic Commercial Bank of Indonesia in 2011-2020. Based on that thing, so the writer is interested in doing the research entitled “The Effects of Capital Adequacy Ratio (CAR), Financing To Deposit Ratio (FDR), Non Performing Financing (NPF) And Operational Expense and Operational Income (BOPO) To Return On Equity (ROE) (Studi Empiris Pada Bank Umum Syariah Di Indonesia in 2011 - 2020)”. 

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2. LITERATURE REVIEW

Signaling Theory
Signaling theory is a theory that explains about the importance of measuring profitability. Signaling theory defines that the profitable company uses finance information for delivering the signal to the market (Nugraha & Yasrie, 2021). Signaling theory when the performance is good enough, so the management gives certain signal to raise its reputation that can improve profitability and company value. Profit is one of the important signals that is needed by the owner, bank management and fund depositor. Because all business policy and good management strategy will obtain the high profit (Nugraha & Yasrie, 2021). Signaling theory relates to information availability. Financial report can be used as instrument to investor to make decision, and financial report is the most important part on fundamental company analysis. The company clarification which is listed is generally based on the analysis of this financial ratio. This analysis is conducted to make easy the interpretation of financial report that is delivered by management (Sitompul & Nasution, 2019). In using signaling theory, the information like Return on Equity (ROE) or the level of return to equity or how much net profit which is obtained from capital that has been used. So, this high ROE becomes good signal to investor because the high ROE shows good performance of company then the investors will be interested to invest their fund in that company (Romdhoni & Chateradi, 2018).

Financial Performance
According to Caesar & Isbanah, (2020) the financial performance is the bank result by managing its resource to reach the certain purpose. Islamic Bank as important institution in economy needs the good financial performance control from banking regulator. The assessment of financial performance is one of exertion that can be done by management side to fulfill the obligation of investor or creditor and to reach the purpose of company (Hermina & Suprianto, 2016). The financial performance can be measured by financial ratios. The indicator used to measure the financial performance of bank is by seeing the level of its profitability (Pramitasari et al., 2019). The higher profitability ratio can interest the newcomer to the industry because profitability is the most appropriate indicator to organize the financial performance of bank. All bank management includes capital management, asset quality management, public management, remunerative management and liquidity management finally will influence the profitability of banking company (Romdhoni & Chateradi, 2018).

Return On Equity
According to Romdhoni & Chateradi, (2018) Return on Equity (ROE) is a financial ratio analysis that is used to measure the performance efficiency and profitability of a company. The higher Return on
Equity (ROE), so the greater financial performance of company, because the raise of profit is bigger than the raise of equity. Return on Equity (ROE) is used to measure the company ability in giving the profit to the investor or to determine the total of return which is obtained by company in each rupiah of the owner capital (Ayuni & Oetomo, 2017). This ratio uses profit relationship after tax to equity that is used by company. The higher ratio, it means that the performance of company is getting better or more efficient, the capital value of company is increasing when this ratio is also increasing. Return on Equity (ROE) shows the ability of bank management to manage the capital in obtaining the net income. The higher return is better because it means that is divided or invested repeatedly in profit is hold higher. Return on Equity (ROE) compares the net result after tax with invested capital. The high Return on Equity (ROE) often reflects the company acceptance to good investment opportunity and effective fund management. The important sides to know the level of Return on Equity (ROE) are inhabitants, stock holder, taxation, employee and bank management (Romdhoni & Chateradi, 2018).

**Capital Adequacy Ratio**

According to Romdhoni & Chateradi, (2018) Capital Adequacy Ratio (CAR) is the ratio of banking performance that measures the capital sufficiency of bank to subsidy the asset that contains or creates the risk. Capital becomes one of important factors in developing and adapting company to the disadvantage risk, the higher CAR so the higher bank ability to guarantee the risk of risky credit or asset. So, it can be concluded that the higher CAR, the higher ROE. According to Ban Indonesia regulation, minimum value of good CAR is 8%. If the CAR value of company is less than 8%, it means the company is unhealthy. But CAR that is too high means that there is idle fund, so the bank opportunity to get profit will decrease and the result, it will also decrease the bank profitability. The research result which is done by Pardistya, (2021) shows that Capital Adequacy Ratio (CAR) gives negative effect to Return on Equity (ROE). Meanwhile, other research which is done by Romdhoni & Chateradi, (2018) shows that variable Adequacy Ratio (CAR) gives positive effect to Return on Equity (ROE). Other research done by Idrus, (2018) shows that Capital Adequacy Ratio (CAR) gives negative effect to Return on Equity (ROE). Based on the explanation above, it can be taken the hypotheses as follow:

**HI:** Capital Adequacy Ratio (CAR) gives effect to Return on Equity (ROE)

**Financing to Deposit Ratio (FDR)**

According to Wiarta, (2020) Financing to Deposit Ratio (FDR) is the ratio that compares the funding total and the third person which has been collected by Islamic Bank. Financing to Deposit Ratio (FDR) is used to measure the ability of bank in fulfilling the short-term obligation or due date (Lemiyana & Litriani, 2016). Based on Circular Letter of Bank
Indonesia No 6/23/DPNP, the good standard of FDR is 80% up to 110%. If the FDR of bank is over or under the limit that is determined by Bank Indonesia, so it can be told that the bank is not enough to be intermediation. So, the management must be able to manage the collected fund from inhabitants then being distributed again in the credit form. If the FDR bank ratio is suitable with the standard from Bank Indonesia, so the profit of company will be raising (with the assumption that the bank can distribute its credit effectively. By the increasing of profit, so Return on Equity (ROE) is also increasing, because profit is the component that determines Return on Equity (ROE), if the FDR is high so the ROE of bank is also high. The research result done by Pardistya, (2021) shows that variable Financing to Deposit Ratio (FDR) gives positive and not significant effect to Return On Equity (ROE). Other research done by Idrus (2018) shows that Financing to Deposit Ratio (FDR) gives negative and not significant effect to Return on Equity (ROE). Other research done by Maroni & Simamora, (2020) shows that Financing to Deposit Ratio (FDR) gives negative effect to Return On Equity (ROE). Based on those explanations, the hypotheses are:

**H2: Financing to Deposit Ratio (FDR) gives effect to Return on Equity (ROE)**

**Non-Performing Financing**

According to Suwarno & Muthohar, (2018) Non-Performing Financing (NPF) is the financial ratio to show the bank funding by providing the funding and fund investment of bank in any portfolio. The lower Non-Performing Financing (NPF) the lower risk of the bank to guarantee the funding risk. So, if the bank has high Non-Performing Financing (NPF), it can be said that the bank is not professional in managing its funding, besides it indicates that the risk level or the bank funding is enough, in the same direction with the heigh of Non-Performing Financing (NPF) which is faced by a bank. In the regulation of Bank Indonesia, the limit value of NPF that is good is 5%. If the NPF is high so the bank is unhealthy, so if the NPF is high it means the bank quality in funding is bad then it causes the bigger problems to funding total (Karim & Hanafia, 2020). If Non-Performing Financing (NPF) is high, so the Return on Equity (ROE) is low, that also means financial performance of bank decreases because the increasing of credit risk, the other hand if Non-Performing Financing (NPF) decreases it means Return on Equity (ROE) will increase, so the financial performance of bank is getting better. The NPF increasing causes the loss of ability to get income from given funding so it influences the profit achievement and gives negative effect to ROE (Romdhoni & Chateradi, 2018). The research result done by Pardistya, (2021) shows that variable Non-Performing Financing (NPF) gives positive and not significant effect to Return On Equity (ROE). Other research done by Idrus, (2018) shows that Non-Performing Financing (NPF) gives negative and not significant effect to Return on Equity (ROE).
Equity (ROE). Other research done by Maroni & Simamora, (2020) shows that Non-Performing Financing (NPF) gives negative effect to Return on Equity (ROE). Based on those explanations, the hypotheses are:

H3: Non-Performing Financing (NPF) gives effect to Return on Equity (ROE)

Operational Expense to Operational Income (BOPO)

According to Idrus, (2018) Operational Expense To Operational Income (BOPO) is efficiency ratio because it is used to measure management ability in controlling Operational Expense To Operational Income. Operational ratio is used to measure efficiency level and bank ability in conducting its operational activity. If the BOPO ratio is low, it shows the efficiency of operational funding that is come out by the bank. BOPO is the comparison ratio between operational expense and operational income. The higher BOPO, the better management performance of bank, because to use provided resource in company is more efficient. If BOPO increases, the ROE decreases or the increasing of bank operational fund that is not followed by the increasing of operational income causes the net profit down then ROE will also go down. The high of fund to get profit of company causes the bad operational bank efficiency and it impacts to the decreasing of ROE, so BOPO gives the negative effect to ROE. The research result done by Rosita & Simamora, (2020) shows that variable of Operational Expense to Operational Income gives the effect partially to Return on Equity (ROE). Other research conducted by Idrus, (2018) shows that Operational Expense to Operational Income (BOPO) gives negative effect to Return on Equity (ROE). Other research done by Hermina & Suprianto, (2016) shows the result that variable of Operational Expense to Operational Income (BOPO) gives effect partially to Return on Equity (ROE). Based on the clarifications above, there is hypotheses as follow:

H4: Operational Expense to Operational Income (BOPO) gives effect to Return on Equity (ROE)

3. RESEARCH METHOD

The type of this research is quantitative research, by analyzing the data statistically to examine the hypotheses that has been determined and interpret the analysis result to get the conclusion (Sugiyono, 2017). This research uses causality approach. Causality approach is used to know the effect among one variable to other variables. Causality approach is the research that aims to know how far the independent variable in influencing the dependent variable (Sugiyono, 2017).

Data in this research is secondary data, which is not gotten directly by the researcher, but it is gotten by other side. The data used in this research is

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http://openjournal.unpam.ac.id/index.php/EAJ
the financial report of Islamic Commercial Bank in Indonesia which is gotten from legal website of Bank Indonesia or the website of every Islamic Commercial Bank.

Data Collection Techniques
The method of collecting data used in this research is documentation, it is the technique of collecting data and information from literature book, previous research journal and any publication reports in order to get the problem description that will be examined. Other secondary data also obtained from internet through the annual report of each Islamic Commercial Bank page.

Operational Definitions of Variables
Dependent variable in this research

\[ ROE = \frac{Net\ Profit\ After\ Tax}{Total\ of\ Equity} \times 100\% \]

is Return on Equity (ROE). It is the profit ratio after tax to equity used to measure the company ability in providing the profit for stock holder (Idrus, 2018). Return on Equity (ROE) can be counted by the formula below:

Capital Adequacy Ratio
Capital Adequacy Ratio (CAR) is capitality ratio used to measure the sufficiency of minimum capital that must be possessed by bank based on Risk Weighted Asset (RWA) (Idrus, 2018). Capital Adequacy Ratio (CAR) can be counted by the formula below:

\[ CAR = \frac{Capital\ of\ Bank}{Risk\ Weighted\ Asset\ (RWA)} \times 100\% \]

Financing to Deposit Ratio
Financing to Deposit Ratio (FDR) is the comparison ratio between distributed funding total with collected fund total by banking side from the third person (Romdhoni & Chateradi, 2018). Financing to Deposit Ratio (FDR) can be counted with this formula:

\[ FDR = \frac{Funding\ Total}{Fund\ Total\ of\ Third\ Person} \times 100\% \]

Non-Performing Financing
Non-Performing Financing (NPF) is the comparison ration between the trouble funding total of bank with the distributed funding total of bank (Romdhoni & Chateradi, 2018). Non-Performing Financing (NPF) can be counted by the formula as follow:

\[ NPF = \frac{Trouble\ Funding}{Funding\ Total} \times 100\% \]

Operational Expense to Operational Income
Operational Expense to Operational Income (BOPO) is the comparison ratio between bank efficiency in pressing operational funding while doing its operational activity with the income obtained by operational activity (Idrus, 2018). BOPO can be counted using the formula below:

\[ BOPO = \frac{Total\ of\ Operational\ Expense}{Total\ of\ Operational\ Income} \times 100\% \]
Sample Collection Techniques

Population used in this research is all Islamic Commercial Bank in Indonesia during 2011-2020. The technique of determining sample in this research based on some considerations and certain criteria (Sugiyono, 2017).

Data Analysis Techniques

The technique of analyzing data used in this research points to quantitative analysis, the analysis that uses mathematic or statistics calculation. The analysis in this research is helped by the program SPSS (Statistical Product and Service Solution) version 20. This research uses classical assumption test, hypotheses test and double linear regression analysis, because this research uses more than two variables. Doubled linear regression analysis is used to know the relationship between dependent variable with independent variable.

4. RESULTS AND DISCUSSION

Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR (X1)</td>
<td>50</td>
<td>11.351</td>
<td>45.949</td>
<td>19.73628</td>
<td>8.597780</td>
</tr>
<tr>
<td>FDR (X2)</td>
<td>50</td>
<td>68.889</td>
<td>102.700</td>
<td>84.50030</td>
<td>8.207024</td>
</tr>
<tr>
<td>NPF (X3)</td>
<td>50</td>
<td>.098</td>
<td>7.114</td>
<td>3.16374</td>
<td>1.980952</td>
</tr>
<tr>
<td>BOPO (X4)</td>
<td>50</td>
<td>75.167</td>
<td>272.345</td>
<td>104.18682</td>
<td>29.633365</td>
</tr>
<tr>
<td>ROE (Y)</td>
<td>50</td>
<td>.208</td>
<td>17.647</td>
<td>5.81868</td>
<td>4.446744</td>
</tr>
<tr>
<td>Valid N</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

From the table above can be seen that dependent variable of Return on Equity has minimum value in 0.208 and maximum value in 17.647 and also mean in 5.81868 with the deviation standard in 4.446744. Next, for independent data variable of capital adequacy ratio is about 11.351 until 45.949 with mean 19.73628 with deviation standard 8.597780. Data of financing to deposit ratio is about 68.889 until 102.700 with mean in 84.50030 with deviation standard in 8.207024.

Data of non-performing financing is about 0.098 until 7.114 with mean 3.16374 with deviation standard 1.980952. The last data of independent variable is Operational Expense to Operational Income that is about 75.167 until 272.345 with mean 104.18682 with deviation standard 29.633365.

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Normality Test

*Table 2 The Result of Normality Test*

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov Z</th>
<th>Sig. (2-tailed)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.480</td>
<td>0.976</td>
<td>Data normally distributed</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

The result of normality test above shows the value of Asymp.Sig (2 Tailed) as many as 0.976 > 0.05. It shows that the data in this research is normally distributed.

Multicollinearity Test

*Table 3 The Result of Multicollinearity Test*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>0.592</td>
<td>1.690</td>
<td>Multicollinearity does not happen</td>
</tr>
<tr>
<td>FDR</td>
<td>0.790</td>
<td>1.265</td>
<td>Multicollinearity does not happen</td>
</tr>
<tr>
<td>NPF</td>
<td>0.550</td>
<td>1.818</td>
<td>Multicollinearity does not happen</td>
</tr>
<tr>
<td>BOPO</td>
<td>0.782</td>
<td>1.278</td>
<td>Multicollinearity does not happen</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

The multicollinearity test result above shows that independent variable has value of tolerance > 0.10 and VIF < 10. So, there is no multicollinearity in this research data.

Heteroscedasticity Test

*Table 4 The Result of Heteroscedasticity Test*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>0.109</td>
<td>heteroscedasticity does not happen</td>
</tr>
<tr>
<td>FDR</td>
<td>0.967</td>
<td>heteroscedasticity does not happen</td>
</tr>
<tr>
<td>NPF</td>
<td>0.068</td>
<td>heteroscedasticity does not happen</td>
</tr>
<tr>
<td>BOPO</td>
<td>0.090</td>
<td>heteroscedasticity does not happen</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

Based on that table can be seen that all independent variables in this research show the value that sig is bigger than 0.05, so it can be said that all independent variables in this research are free from heteroscedasticity.

Autocorrelation Test

*Table 5. The result of Autocorrelation Test*

<table>
<thead>
<tr>
<th>Durbin-Watson</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.895</td>
<td>Tidak Terjadi Autokorelasi</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

The result of autocorrelation test above shows that the value of Durbin-Watson is 1.895. The value of Durbin-Watson from the research data is between 1.5 and 2.5 that means there is no autocorrelation in regression similarity.

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Multiple Linear Regression Test Results

Table 6. The Result of Regression Model Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>34.697</td>
<td>7.480</td>
<td></td>
<td>4.639</td>
</tr>
<tr>
<td>CAR (X1)</td>
<td>-0.388</td>
<td>.074</td>
<td>-0.750</td>
<td>-5.252</td>
</tr>
<tr>
<td>FDR (X2)</td>
<td>-0.127</td>
<td>.067</td>
<td>-0.234</td>
<td>-1.890</td>
</tr>
<tr>
<td>NPF (X3)</td>
<td>-1.205</td>
<td>.333</td>
<td>-0.537</td>
<td>-3.624</td>
</tr>
<tr>
<td>BOPO (X4)</td>
<td>-0.064</td>
<td>.019</td>
<td>-0.429</td>
<td>-3.456</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

The result of regression model test above shows the similarity of regression as follow:

\[
\text{ROE} = 34.697 - 0.388 \times \text{CAR} - 0.127 \times \text{FDR} - 1.205 \times \text{NPF} - 0.064 \times \text{BOPO} + e
\]

Based on the similarity of that regression, it can be interpreted as follow:

The constant value in 34,697 shows that the variables of capital adequacy ratio, financing to deposit ratio, nonperforming financing and Operational Expense to Operational Income are assumed constantly or equals with zero so the value of return on equity is 34,697.

Coefficient of regression on variable of capital adequacy ratio shows the value -0.388 and it has negative sign. This thing shows that if capital adequacy ratio increases 1%, so the value of return on equity decreases 0.388% with the assumption that other variable value is persistent.

Coefficient of regression on variable of financing to deposit ratio shows value in -0.127 and it has negative sign. It shows that if financing to deposit ratio increases 1%, so the value of return on equity decreases 0.127% with the assumption that other variable value is persistent.

Coefficient of regression on variable of nonperforming financing shows value in -1.205 and it has negative sign. It shows that if nonperforming financing increase 1%, so return on equity decreases 1.205% with the assumption that other variable value is persistent.

Coefficient of regression on variable of Operational Expense to Operational Income shows value -0.064 and it is negative. It shows that if Operational Expense to Operational Income increases 1%, so return on equity decreases 0.064% with the assumption that other variable value is persistent.
Determination Coefficient Test (R²)

Table 7 The Result of Determination Coefficient Test (R²)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.676</td>
<td>.457</td>
<td>.408</td>
<td>3.420088</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

Based on table 7 above, there is information about how big the effect of all independent variable to dependent variable. The effect is symbolized R (correlation). The calculation result of adjusted R² is 0.408. It means that independent variable can explain the various of dependent variable in 40.8% meanwhile the residue is 59.2% explained by another variable outside variable of research.

F Test

Table 8 The Result of F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>442.538</td>
<td>4</td>
<td>110.634</td>
<td>9.458</td>
<td>.000</td>
</tr>
<tr>
<td>1 Residual</td>
<td>526.365</td>
<td>45</td>
<td>11.697</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>968.903</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

Based on table 8 above, it can be seen that value F-count is 9.458. Because Sig. 0.000 < 0.05, so related to the basic of decision taking in F test can be concluded that regression model in this research is fit (goodness of fit).

t Test

Table 9. The result of t Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>t hitung</th>
<th>Sig.</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>-5.252</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>FDR</td>
<td>-1.890</td>
<td>0.065</td>
<td>Not Significant</td>
</tr>
<tr>
<td>NPF</td>
<td>-3.624</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>BOPO</td>
<td>-3.456</td>
<td>0.001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: Secondary data which has been analysed by researcher, 2022

Based on the table above, it can be concluded as follows:

Variable of Capital Adequacy Ratio (CAR) the result of test gets value Sig. to variable of capital adequacy ratio that shows significant value 0.000 < 0.05, it means 0.000 is smaller than 0.05 so H1 is accepted and H0 is rejected that means the variable of capital adequacy ratio gives significant effect to return on equity.

Variable of Financing to Deposit Ratio (FDR) the result of test gets value Sig. to variable of financing to deposit ratio that shows value 0.065 > 0.05, it means 0.065 is bigger than 0.05 so H2 is rejected and H0 is
accepted that means the variable of financing to deposit ratio does not give significant effect to return on equity.

Variable of Non-Performing Financing (NPF) the result of test gets value Sig. to variable of non-performing financing that shows significant value $0.001 < 0.05$, it means $0.001$ is smaller than $0.05$, So H3 is accepted and H0 is rejected that means the variable of non-performing financing gives significant effect to return on equity.

Variable of Operational Expense to Operational Income (BOPO) the result of test gets value Sig. to variable of Operational Expense to Operational Income that shows significant value $0.001 < 0.05$, it means $0.001$ is smaller than $0.05$ so H4 is accepted and H0 is rejected that means the variable of Operational Expense to Operational Income gives significant effect to return on equity.

The Effect of Capital Adequacy Ratio to Return on Equity

The result of data analysis shows that capital adequacy ratio gives negative and significant effect to return on equity in Islamic Commercial Bank with the value Sig. is smaller than signification level that has been determined that is $0.000 < 0.05$. The research result indicates that if the capital adequacy ratio is high so the value of return on equity will be going down. Significant result is between capital adequacy ratio with return on equity because the minimum value total of capital adequacy ratio in $11\%$ has been appropriate with the requirement from Regulation of The Financial Services Authority No 21/POJK.03/2014 About the Obligation in Providing Minimum Capital of Islamic Commercial Bank. The result of research shows that capital adequacy ratio gives negative effect to return on equity, so in every increasing of capital adequacy ratio in $1\%$ will cause the decreasing to return on equity in $0.388\%$. Theoretically, the more increasing the capital, so the health of bank is increasing related to capital adequacy ratio (CAR) then with the big capital opportunity, the chance in getting the profit from company is also bigger, because bank management is very flexible with the big capital to invest its fund in investment activity. To sum up, the higher capital adequacy ratio, the higher return on equity, that theory is not suitable with the research result that has been done by researcher. The negative effect given by capital adequacy ratio to return on equity is because of the idle fund, because the value of capital adequacy ratio is too high, so the bank opportunity to gain profit will decrease and finally it decreases the bank profitability. So that, if capital adequacy ratio increases so return on equity will decrease. This research result is in one line with the research done by Idrus, (2018) states that capital adequacy ratio gives negative and significant return on equity.

The Effect of Financing to Deposit Ratio TO Return on Equity

The result of data analysis shows that variable of financing to deposit ratio does not give significant effect
to return on equity in Islamic Commercial Bank with the value Sig. is bigger than signification level that has been determined that is 0,065 > 0,05. The research result indicates that if the financing to deposit ratio is high, so the value of return on equity will decrease but it is not significantly. The result does not give significant effect between financing to deposit ratio with return on equity because financing to deposit ratio is not directly related to return on equity, but financing to deposit ratio is directly related to return on asset. Where return on asset is profit ratio after tax to asset, meanwhile financing to deposit ratio is ratio that shows how big the funding total to collected fund from the third person, so financing to deposit ratio is more directly related to profit of Islamic bank than Islamic bank equity. This research result shows that financing to deposit ratio does not give significant effect to return on equity, that means the higher financing to deposit ratio so return on equity of bank will decrease, so every increasing of financing to deposit ratio in 1% will cause decreasing to return on equity in 0,127%. It happens because the distributed funding does not give big profit that causes the decreasing of bank profitability level related to return on equity. The result of this research is appropriate with the research conducted by Mulyani, (2021) defines that financing to deposit ratio does not give significant effect to return on equity.

The Effect of Non-Performing Financing to Return on Equity

The result of data analysis shows that variable of non-performing financing gives negative and significant to return on equity in Islamic Commercial Bank with the value Sig. is smaller than significance level that has been determined that is 0,001 < 0,05. The research result indicates the higher nonperforming financing, the lower return on equity. The significant result between nonperforming financing with return on equity because the value of non-performing financing is low in Islamic Bank so the bank can be called unhealthy, because it has little credit risk level related to the requirement of Bank that the value of non-performing financing less than 5%. The research result shows that nonperforming financing gives negative effect to return on equity, so each increasing of non-performing financing in 1% will cause decreasing to return on equity in 1,205%. It suitable with the theory that the higher trouble funding in Islamic Bank, the lower income that bank receives, that matter causes the decreasing of Islamic Bank profitability. The funding management is very needed by banking because the role of funding as the source of big income for Islamic Bank. The increasing of non-performing financing causes the loss of ability to gain income from funding given so it effects the profit achievement and gives negative effect to return on equity, so the higher non performing financing, the lower return on equity, it also means the

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financial performance of bank decreases because of the credit risk, the other hand if non performing financing decreases so return on equity increases, it means the financial performance of bank can be said getting better. This research result is suitable with the research done by Mulyani, (2021) stated that nonperforming financing gives negative and significant effect to return on equity.

**The Effect of Operational Expense to Operational Income to Return on Equity**

The result of data analysis shows that variable of Operational Expense to Operational Income gives negative and significant effect to return on equity in Islamic Commercial Bank with value Sig. is smaller than the signification level that has been determined that is 0,001 < 0.05. The result of research indicates that the higher Operational Expense to Operational Income, so the value of return on equity will be getting down. The research result shows that Operational Expense to Operational Income gives negative effect to return on equity, so each increasing of it in 1% will cause the decreasing to return on equity in 0.064%. It is suitable with the theory that if Operational Expense to Operational Income increases, so return on equity decreases or the increasing of bank operational funding is not followed by the increasing of operational income causes the net profit reduces so return on equity will decrease. The high fund to get profit of company causes the bad efficiency of operational bank and the result it decreases return on equity. So Operational Expense to Operational Income gives negative effect to return on equity. The high ratio of Operational Expense to Operational shows that bank cannot press the operational fund well and use it inefficiently to get income. So, the conclusion is that ratio of Operational Expense to Operational Income gives negative and significant effect to return on equity, because the lower Operational Expense to Operational Income, the more efficient to bank in controlling its operational fund. This result is suitable with the research result done by Idrus, (2018) defines that Operational Expense to Operational Income gives negative and significant effect to return on equity.

5. **CONCLUSION**

This research aims to know the variable effects of capital adequacy ratio, financing to deposit ratio, non performing financing, dan Operational Expense To Operational Income to return on equity in Islamic Commercial Bank listed in The Financial Service Authority (OJK) during period 2011-2020. Based on the result of data analysis dan discussion in previous chapter, so it can be concluded that variable of capital adequacy, non performing financing and Operational Expense To Operational Income gives the negative and significant effect to

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return on equity, meanwhile variable of financing to deposit ratio does not give significant effect to return on equity. There is a limit in this research that the next researcher should be noticed, that is using sample of Islamic Commercial Banks listed in The Financial Service Authority (OJK) in 2011 until 2020, from 14 Islamic Commercial Bank listed only 5 Islamic Commercial Banks which are required the sample criteria of this research. Furthermore, the data analysis result from three variables shows that four variables give negative effect to return on equity and one variable does not give significant effect.

Based on conclusion and limits in this research, so the researchers can give suggestions to the next researcher that next research is expected to expand the research object so not only in Islamic Commercial Bank listed in OJK but also Islamic Banking in the whole of Indonesia in order that the sample used becomes various and the result can be generalized. It is also expected to do research about return on equity to Islamic Banking in Indonesia based on other variables that can influence return on equity that is not examined in this research.

REFERENCES


Keuangan.


THE. *Jurnal Ekonomi Syariah Dan Binsin*, 4(November), 36–44.


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http://openjournal.unpam.ac.id/index.php/EAJ
238. https://doi.org/10.33258/birci.v2i3.412


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