INFLUENCE INCOME DIVERSIFICATION, BANK LIQUIDITY, AND FINANCIAL LAVERAGE ON PROFITABILITY WITH BANK EFFICIENCY, AS INTERVENING VARIABLES IN SHARIA COMMERCIAL BANKS 2015-2019

Novitasari1, Arna Asna Annisa2*

IAIN Salatiga
Novitasari@gmail.com1, Arna@gmail.com2

Abstract
The purpose of this study was to determine the effect of Income Diversification, Bank Liquidity, and Financial Lverage on Profitability with Bank Efficiency, as an Intervening variable in Islamic Commercial Banks in 2015-2019. This research uses quantitative research by using regression analysis as data analysis. This study uses secondary data in the form of time series annual data of Islamic commercial banks for the period 2015 to 2019. The required data is then analyzed using the SPSS 22 application tool. The results show that FBI, FDR have a positive and non-significant effect on ROA, DER has a negative and no effect significant effect on ROA, FBI, FDR positive and not significant effect on BOPO, DER negatively and not significant on BOPO.

Keywords: Income Diversification, Bank Liquidity, and Financial Lverage on Profitability with Bank Efficiency.

INTRODUCTION

The development of Islamic banking in Indonesia was initially formed by Law Number 10 of 1988 from which it allowed banks to run a dual banking system, namely the conventional banking system and the Islamic banking system. Since then, conventional banking has started to implement the sharia system by opening a Sharia Business Unit (UUS). The rewards received by Islamic banks as well as those paid to customers depend on the contract and agreement between the customer and the bank. Agreements (contracts) contained in Islamic banking must adhere to the terms and pillars of the contract as regulated in IslamSuabtatianto & Yusuf (2018). Evidence of this development is the increasing number of Islamic financial institutions and the number of offices such as Sharia Commercial Banks (BUS), Sharia People's Financing Banks (BPRS). Statistical data from Islamic banking was raised by OJK (Financial Services Authority) with a total of 14 BUS until the end of 2020Financial Services Authority, (2020).

Maximum performance is the company's goal to achieve high benefits so that banks can carry out all activities more effectively and efficiently. The way to consult effectively and efficiently the bank is to check the benefits of the bank,
if the bank has a high profit rate, it will be more efficient and effective in managing activities (Jannah & Mokhamad, 2017). To measure the efficiency of a bank, a comparison of the burden that has been released by the bank is used to the minimum burden that should be released by the bank so that the bank can produce the same output (Sparta, 2017). The function of the BOPO ratio is to determine the efficiency and capability of banking business activities.

To measure bank performance, a profitability ratio is used, namely Return On Assets (ROA), where the function of ROA is to describe the management's efforts at the bank to get the overall benefit (Dendawijaya, 2009). If the ROA value increases, this will also increase the bank's profit, then the bank's position will be much better in various evaluations. This ROA level will form the profit level for the bank (Irawati & Riyanti, 2016).

Therefore, to improve the performance of a bank, the bank began to innovate by producing products through Income Diversification activities. Income Diversification activities are considered capable of increasing bank profits, so that all needs derived from non-interest profits such as fee based income (FBI), trading income and other income outside of operational activities will be met (Edirisuriya et al., 2015).

1. **METHOD STUDY**

   This research is a type of quantitative research using secondary data. The population in

In addition to income diversification, there are other factors that influence the growth of banking profits, namely Bank Liquidity, the level of Financing to Deposit Ratio (FDR). FDR as the proportion of liquidity is called an important factor and must be handled in the banking sector. By disbursing overall financing, a bank will get a higher return and this will give a positive contribution to the liquidity ratio. If the level of liquidity is high, it will improve bank performance (Wibisono & Wahyuni, 2017).

In addition, financial leverage is an indication that shows how far the company uses funds from outside parties to purchase assets. The acquisition of funds through this debt has the hope that it can be used as well as possible and can provide benefits for funds in the future in amounts greater than the amount of funds issued.

Furthermore, the results of previous studies Income Diversification has a positive effect on Bank Efficiency (Brahmins et al., 2018). And from research Abdulkabir (2020) income has a negative effect on the bank. then ROA will move in the opposite direction. Income Diversification has a negative effect on Bank efficiency.

This study is Islamic Commercial Banks in Indonesia registered with the OJK, the determination of the sample uses purposive sampling
technique. After selecting according to the criteria, a sample of 8 Sharia Commercial Banks was obtained. The analysis carried out in this study is path analysis which was previously tested by regression analysis and classical assumption tests.

2. Results and Discussion
2.1. Research result

Test T-test (Individual)

Table 1. ROA . Variable T-Test 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>(Constant)</td>
<td>-13,129</td>
<td>7,820</td>
<td>-1,679</td>
<td>.102</td>
</tr>
<tr>
<td>FBI</td>
<td>.342</td>
<td>1,769</td>
<td>.028</td>
<td>.193</td>
</tr>
<tr>
<td>FDR</td>
<td>-124</td>
<td>.071</td>
<td>.251</td>
<td>1,746</td>
</tr>
<tr>
<td>DER</td>
<td>-.501</td>
<td>.109</td>
<td>-.794</td>
<td>-4.617</td>
</tr>
<tr>
<td>BOPO</td>
<td>.076</td>
<td>.031</td>
<td>.416</td>
<td>2.444</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

Table 2 BOPO Variable T-Test 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>(Constant)</td>
<td>50,084</td>
<td>41,207</td>
<td>1,215</td>
<td>.232</td>
</tr>
<tr>
<td>FBI</td>
<td>14,666</td>
<td>9,191</td>
<td>.218</td>
<td>1,596</td>
</tr>
<tr>
<td>FDR</td>
<td>-.378</td>
<td>.377</td>
<td>-.139</td>
<td>-1.004</td>
</tr>
<tr>
<td>DER</td>
<td>2.237</td>
<td>.449</td>
<td>.645</td>
<td>4.981</td>
</tr>
</tbody>
</table>

a. Dependent Variable: BOPO

Based on the results of the T-test, it can be concluded that:

a. From table 1 above, the FBI coefficient value is 0.342, which means that there is a positive relationship and the significance value is 0.848, which is greater than 0.05, so it can be concluded that the FBI variable has a positive and insignificant effect on ROA.

b. From table 1 above, the FDR coefficient value is 0.124, which means that there is a positive relationship and the significance value is 0.090 where the value is greater than 0.05, so it can be concluded that if the FDR variable has a positive but not significant effect on ROA.

c. From table 1 above, the DER coefficient value is -0.501, which means that there is a negative
relationship and the significance value is 0.000 where the value is greater than 0.05, so it can be concluded that if the FDR variable has a negative but not significant effect on ROA.

d. From table 1 above, the coefficient value of BOPO is 0.076, which means that there is a positive relationship and the significance value is 0.020 where the value is smaller than 0.05, so it can be concluded that the ROA variable has a positive and significant effect on ROA.

e. From table 2 above, the FBI coefficient value is 14,666 which indicates that there is a positive relationship, and the significance value is 0.0119 and the value is greater than 0.05, so it can be concluded that the FBI variable has a positive and insignificant effect on BOPO.

f. From table 2 above, the coefficient value of the FDR is -0.0378, which means there is a positive relationship, and the significance value is 0.322, so it can be concluded that the FDR variable has a positive and insignificant effect on BOPO.

g. From table 2 above, the coefficient value of DER is 2.237, which means that there is a negative relationship, and the significance value is 0.000, so it can be concluded that the DER variable has a negative and insignificant effect on BOPO.

Ftest Test (Simultaneous)

Table 3. Test Ftest

<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>1</td>
<td>Regression</td>
<td>224,204</td>
<td>4</td>
<td>56.051</td>
<td>6.148</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>319,073</td>
<td>35</td>
<td>9.116</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>543,277</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA
b. Predictors: (Constant), BOPO, FDR, FBI, DER

Based on table 3 above, that the f count is 6148 with a significance of 0.001. Because the significance value is less than 0.05, it can be concluded that the FBI, FDR, DER and BOPO variables together have an effect on ROA.
Coefficient of Determination Test

Table 4. Results of the Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>R Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.642a</td>
<td>.413</td>
<td>.346</td>
<td>3.01933</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), BOPO, FDR, FBI, DER

b. Dependent Variable: ROA

From the output results above table 4, the value of R Square is 0.413, meaning that the value of the FBI, FDR, and BOPO variables in the regression is 41.3%. So the contribution of influence or the proportion of independent is 41.3%.

Multicollinearity Test

Table 5. Multicollinearity Test

<table>
<thead>
<tr>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBI</td>
<td>.804</td>
<td>1.243</td>
</tr>
<tr>
<td>FDR</td>
<td>.813</td>
<td>1.230</td>
</tr>
<tr>
<td>DER</td>
<td>.568</td>
<td>1.760</td>
</tr>
<tr>
<td>BOPO</td>
<td>.579</td>
<td>1.727</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

From table 5 the tolerance value for the FBI variable is 0.804 with a VIF of 1.243, the FDR variable with a tolerance value of 0.813 and a VIF of 1.230, the DER variable with a tolerance value of 0.568 and a VIF of 1.760, the BOPO variable with a tolerance value of 0.579 and a VIF of 1.727. Based on the results above, it is known that the VIF value of each variable has shown a value less than 10, and the tolerance value is greater than 0.1 so that it can be concluded that in this study there was no multicollinearity.

Heteroscedasticity Test

Table 6. Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-6.325</td>
<td>2,582</td>
<td>-2.449</td>
</tr>
</tbody>
</table>
a. Dependent Variable: ABRESID

From table 6, the FBI variable Sig value is 0.051, FDR is 0.0937, DER is 0.060 and BOPO is 0.054. The significance value of the three variables exceeds 0.05, so there is no problem with heteroscedasticity in this study.

Normality test

Table 7. Normality Test

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>40</td>
</tr>
<tr>
<td>Normal Parameters, b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mean</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>a. Test distribution is Normal.</td>
<td></td>
</tr>
<tr>
<td>b. Calculated from data.</td>
<td></td>
</tr>
<tr>
<td>c. Lilliefors Significance Correction.</td>
<td></td>
</tr>
</tbody>
</table>

Based on table 7 that the value of Asymp.Sig (2-tailed) is 0.078, this means that this value is greater than 0.05. Based on these results, it is concluded that the value of the regression is normally distributed.

Autocorrelation Test

Table 8. Autocorrelation Test

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R Square</th>
<th>R Square</th>
<th>R</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.642a</td>
<td>.413</td>
<td>.346</td>
<td>3.01933</td>
<td>1.275</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), BOPO, FDR, FBI, DER
b. Dependent Variable: ROA

Based on the autocorrelation test in table 8, the Durbin Watson (DW) value is 1.275. This DW value is greater than the du table of 1.7209 with a sample size of 40 and the
independent variable is 4. The condition for autocorrelation does not occur is the value of \( dw > du \) table and is smaller than 4 – \( du \) (4 – 1.7209 = 2.2791).

Path Analysis (Path Analysis)

Figure 1. Path Analysis Results

From the results of the path analysis, it was then tested using the Sobel test to determine whether the intervening variable was able to mediate between the independent variables and the dependent variable as follows:

\[
Sp^2p^3 = \sqrt{p^2Sp^2 + p^2Sp^2 + Sp^2Sp^2^2}
\]

Information:

Table 4. 17 Path Coefficient Calculation Results
a) Effect of FBI (X1) on ROA (Y) through BOPO (Z)
That is, to see the mediation of the Z variable on the FBI variable on ROA, the standard error of the indirect effect coefficient can be stated as follows:

\[ Sp_{2p3} = \sqrt{p_{2}^{2}Sp_{2}^{2} + p_{3}^{2}Sp_{3}^{2} + Sp_{2}^{2}Sp_{3}^{2}} \]

\[ \sqrt{(0.342)^{2}(1.769)^{2} + (14.666)^{2}(9.191)^{2} + (1.769)^{2}(9.191)^{2}} \]

\[ = 135.7736 \]

And the direct effect is 1.769, but the indirect effect is \( p_2 \times p_3 = 5.015 \). With a total effect of 1.769 + 5.015 = 6.784. From the \( Sp_{2p3} \) value, it can be used to calculate the statistical \( t \) value of the mediation effect using the formula:

\[ t = \frac{p_{2p3}}{Sp_{2p3}} = \frac{5.015}{135.7736} = 0.037 \]

Therefore, the magnitude of \( t \) arithmetic = 0.037 is greater than \( t \) table = 1.6909 with a significance level of 5%, so it can be concluded that BOPO can mediate the influence of the FBI on ROA.

b) Effect of FDR (X2) on ROA (Y) through BOPO (Z)
To determine the mediation level of the Z variable on the FDR variable on ROA, the standard error of the indirect effect coefficient can be stated as follows:

\[ Sp_{2p3} = \sqrt{p_{2}^{2}Sp_{2}^{2} + p_{3}^{2}Sp_{3}^{2} + Sp_{2}^{2}Sp_{3}^{2}} \]

\[ \sqrt{(0.124)^{2}(0.071)^{2} + (-0.378)^{2}(0.0377)^{2} + (0.071)^{2}(0.0377)^{2}} \]

\[ = \sqrt{0.00028775473925} = 0.016963 \]

And from the direct effect of 0.071 while the indirect effect is \( p_2 \times p_3 = -0.047 \). With a total effect of 0.071 + (-0.047) = 0.118. Based on the \( Sp_{2p3} \) value, it can be used to calculate the statistical \( t \) value of the mediation effect using the formula:

\[ t = \frac{p_{2p3}}{Sp_{2p3}} = \frac{-0.047}{0.016963} = -2.7707 \]
Because the magnitude of t count = -2.7707 is smaller than t table = 1.69092 with a significance level of 5%, it can be concluded that BOPO cannot mediate the effect of FDR on ROA.

c) Effect of DER (X3) on ROA (Y) through BOPO (Z) To determine the level of mediation of the Z variable on the DER variable on ROA, the standard error of the indirect effect coefficient can be stated as follows:

$$Sp2p3 = \sqrt{p3^2Sp2^2 + p2^2Sp3^2 + 2p2p3Sp2p3}$$

$$\sqrt{(-0.501)^2(0.031)^2 + (2.237)^2(0.0449)^2 + (0.031)^2(0.0449)^2}$$

$$= \sqrt{0.0103316040923} = 0.10164$$

And from the direct effect of 0.031 while the indirect effect is p2 x p3 = 1.121.

With a total effect of 0.031 + 1.121 = 1.152. Based on the Sp2p3 value, it can be used to calculate the statistical t value of the mediation effect using the formula:

$$t = \frac{p2p3}{Sp2p3} = \frac{1.121}{0.10164} = 11.02912$$

Because the magnitude of t count = 11.02912 is greater than t table = 1.69092 with a significance level of 5%, it can be concluded that BOPO can mediate the effect of DER on ROA.

2.2. Discussion

a. Income Diversification significant positive effect on Profitability (Return On Assets). Based on the results of this study, it shows that the FBI variable can influence the ROA variable in a positive direction, which means that every increase experienced by the FBI will also occur in ROA, then an insignificant result means that every increase in the FBI does not necessarily have an effect on the increase in ROA or vice versa.

From the results of this study, it is in line with research conducted by Osifo & Evbayiro-Osagie, (2020) where the results show that the FBI variable has a positive effect on ROA, which means that every increase that occurs in the FBI variable, there will also be an increase in the ROA variable that will be received by the bank.

b. Bank Liquidty (Financial to Deposit Ratio) has a significant positive effect on Profitability (Return On Assets). Based on the results of his research, it shows that an increase in the FDR ratio does not guarantee an increase in
Because based on the results of the study, it means that the high spending on credit is not with credit quality. Poor credit quality will actually increase the burden on a bank so that the bank must bear greater risk. The results of this study are in line with research conducted by Miratussholihah (2020), which states that the Financing to Deposit Ratio has no significant positive effect on Return On Assets.

c. **Financial Lverage (Debt to Equity Ratio)**

The result is income that has not been deducted by taxes, so the company can understand its desire to generate a net profit from the profit. If the level of leverage is high then profits will decrease and vice versa. The research results are in accordance with the research by Adyatmika & Wiksuana, (2018) which states that Financial Lverage has no impact on profitability.

d. **Bank Efficiency**

Based on the results of the study, it shows that the greater the BOPO, the lower the ROA. If a bank carries out activities by reducing the BOPO, it shows that the bank is efficient so that the banking income obtained is even higher. The results of this study are in line with research conducted by Sunardi (2017) which states that the Operating Cost of Operating Income has a significant negative effect on Return On Assets.

e. **Income Diversification**

An increase in fee-based income can make the bank earn a profit outside of the income. By diversifying income, banks will be more efficient in carrying out their operational activities, because banks get additional income outside of revenue sharing. Thoughts with researchers from Doan (2018), the FBI carried out has a positive effect on BOPO, this is shown that with banks conducting income diversification activities,
banks will enjoy more efficiency and with a high level of diversification, bank efficiency will also increase.

f. Bank Liquidity (Financial to Deposit Ratio) has a significant positive effect on Bank Efficiency (operating costs of operating income). The higher the funds paid, the higher the bank's operational costs. This shows that loans provided by savings will increase operational efficiency, and that the conversion of savings into loans can increase the efficiency of converting assets into liabilities. The relationship between FDR and BOPO requires joint management of liquidity and efficiency of the banking sector. Research from Akhter (2018) support this study where the results are that FDR has a positive effect on BOPO. And this research is in line with research Sunardi (2017) which shows that FDR has a positive and insignificant impact on BOPO.

g. Financial Laverage (Debt to Equity Ratio) significant negative effect on Bank Efficiency (operating costs of operating income). Research from Ruslan et al (2019) support this research where the result is that DER has a negative effect on BOPO.

h. Income Diversification significant positive effect on Bank Efficiency (operating expenses operating income) with Profitability (Return On Assets). Next in line with research conducted by Sari (2018) with the result that Income Diversification has a positive but not significant effect on Bank Efficiency. Thus, this is a renewal because there has been no previous research examining the influence of the income diversification variable on BOPO with profitability as a mediating variable.

i. Bank Liquidity significant negative effect on Bank Efficiency (operating expenses operating income) with Profitability (Return On Assets). Furthermore, in line with research conducted by Syahfrudin (2016) with result Bank Efficiency has a significant negative
effect on ROA profitability.

j. Financial Leverage has a significant positive effect on Bank Efficiency (operating expenses operating income) with Profitability (Return On Assets). Furthermore, in line with research conducted by Basri & Mayasar, (2019) and with the results that Financial Leverage has a positive effect on profitability and bank efficiency.

3. Conclusion

Based on the results of data analysis and discussion in this study, it can be concluded that Income Deverification positive and insignificant to Profitability, Bank Liquidity positive and not significant to Profitability, Financial Leverage has a negative and insignificant effect on Profitability, Bank Efficiency positive and significant on Profitability, Income Deverification positive and not significant to Bank Efficiency, Bank Liquidity positive and and not significant to Bank Efficiency, Financial Leverage negative and insignificant effect on Bank Efficiency, Income Deverification can mediate Profitability with Bank Efficiency, Bank Liquidity cannot mediate Profitability with Bank Efficiency, Financial Leverage can mediate Profitability with Bank Efficiency.

Reference


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Akhter, N. (2018). The Impact of Liquidity and Profitability on Operational Efficiency of Selected Commercial


