

Determinants of the Merger Performance of BUMN Sharia Banks

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Abstract

The phenomenon of the merger of state-owned Islamic banks (BUMN) was predicted to provide increased financing and operational efficiency, which has implications for an increase in the level of operating income and profitability. The purpose of the research was to examine and analyze the effect of the level of financing to deposit ratio and the level of efficiency of operating income on profitability as measured by return on assets, either directly or indirectly through the net operating margin. The research method used was the quantitative method with a sample size of 60, which was sourced from quarterly reports at the Financial Services Authority (OJK), which was a combination of cross-sectional data from three state-owned Islamic bank companies (Bank Mandiri Syariah, BNI Syariah, and BRI Syariah.) during the 2015-2019 period. Data analysis in this research used a panel data regression model with the EViews data processing application program. The results showed that by using a significance level of 5%, the financing to deposit ratio and operating costs operating income affected but not significantly on the net operating margin. Financing to deposit ratio and operating costs direct operating income have a significant effect on return on assets. The originality of this research elucidated from statistical testing shows that the financing to deposit ratio and operating costs operating income affect on but not significant to the net operating margin in the merger of BUMN Islamic banks.

Keywords: *Financing Deposit Ratio, Operational Cost Of Operating Income, Net Operating Margin*



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INTRODUCTION

Indonesia is a country that operates an economic system with a dual banking system, so that the increase or decrease in interest rates carried out by the monetary authority has a direct impact on conventional banking, but not on Islamic banking. Conventional banking operates the system using the interest system, while Islamic banking uses profit sharing. The crisis that occurred in 1998 affected almost all conventional banks in Indonesia, which experienced liquidity problems resulting from the very high-interest rate hike. The increase in interest rates is very high, causing people to withdraw their money from the bank collectively. On the other hand, Islamic banking is more resilient to systemic risks, so that when a crisis occurs, Islamic banking can still operate properly.

Indonesia is a country with the largest Muslim population in the world, but this does not make Islamic economic practices easily implemented in Indonesia. This is shown based on data from the State of the Global Islamic Economy report 2018-2019, Indonesia is ranked 10th in the Islamic Finance category, very far from neighbouring countries such as Malaysia, which is in the first place. However, in 2015-2019 the growth rate of the market share of Islamic banking assets in Indonesia has increased, and conversely, the growth in the market share of conventional banking assets has decreased. The development of the market share of conventional banking assets in 2015 amounted to 95.19%, decreased by 0.48% in 2016 to 94.74%. In 2017, it decreased again by 0.44% or to 94.32%. In 2018 it decreased by 0.18% to 94.15% and in 2019 it decreased by 0.22% to 93.94%. In contrast, the growth in the market share of Islamic banking tends to increase, in 2015,

the market share of Islamic banking assets was 4.81%, an increase of 9.33% in 2016 to 5.26%. In 2017, it increased again by 8.01% to 5.68% of the market share. In 2018 it increased by 2.94% to 5.85%, and in 2019 it increased again by 3.58% to 6.06%. In the last five years, the development of the market share growth of Islamic banking assets was 25.91%, which indicates that the performance of Islamic banking in Indonesia is getting better. The increase in the market share of Islamic banking is supported by product innovation owned by Islamic banking, increasing Islamic financial literacy, the role of the government, and other factors.

The development of the Islamic banking market share is in line with the growth of Islamic banking assets in the last three years (2016-2018), which rebounded to reach 12.53% in 2018 from 2015, which was the lowest point of growth in Islamic banking assets which only reached 8.78% (Authority Financial Services, 2018). The growth of Islamic banking assets, which reached 12.53%, was also driven by the conversion of two banks, namely Bank Aceh and Bank NTB. So that is one of the reasons for some regional banks to convert in order to maintain high growth in Islamic banking. The growth in total assets of Islamic liabilities has tended to have an increasing trend from 2005 to 2018, but this has not increased the market share of sharia banking significantly. This was shown from 2005 to 2016, the Islamic banking market share was still below 5% (OJK, 2018). This also shows that the organic total asset growth of Islamic banking from Islamic Commercial Banks, which is in the range of 15% -20%, has not been able to catch up with the banking industry as a whole. So this is the background for the need for a strategy that is able to encourage the growth of the Islamic banking industry.

Strategies that can encourage the growth of the Islamic banking industry can also be seen from the high competition in the Islamic banking industry. The level of competition in the Islamic banking industry by adopting the Porter model (1997), based on the results of the study (KMKS, 2019), is: the threat from new competitors is at the medium level, which is indicated by the threat of new banks or non-bank institutions which are relatively difficult due to the need for establishment capital. At least 1 billion Islamic banks, the strength of customers is at a medium level, and this is indicated that in general, sharia financing customers are relatively low for government sector customers, while the bargaining power of customers in the productive financing sector tends to be relatively high, the power of owners or providers of funds is at a relatively high level. which is indicated by corporate and institutional customers requesting and requiring a special rate that has an impact on the cost of funds, the threat of sharia banking substitution products is at a high level as indicated by offers from financial institutions (conventional banks, fintech), which offer lower costs, and threats from existing competitors are at a relatively high level as indicated by the number of networks, limited captive market potential, and product innovation by competitors such as Sharia Commercial Banks, Sharia Business Units, and Sharia Rural Banks

The most dominant mergers carried out by state-owned Islamic commercial banks were due to capital limitations, high capital costs, and excess liquidity costs. In line with the Sharia Financial Architecture Master Plan and the Indonesian Sharian Economic Master Plan 2019-2024, the issue of capital is of particular concern, which can have a significant impact on bank business activities. Limited capital will become an obstacle when banks are expanding their business in the corporate sector, institutions, or large government projects that require relatively large funds. The problem of limited capital can be illustrated from the capital of Islamic banks, where based on the capital ratio data, it appears that conventional bank capital reaches around 8.5 times of Islamic banks with a capital adequacy ratio above 20%, on the other hand, Islamic banks are below 20%. Although Islamic banks have shown an increase with a positive trend every year, reaching 20.39% in 2018 (OJK, 2018).

The positive increase in sharia capital adequacy ratio, empirically in line with the productivity of Islamic banks as measured by net operating margins and returns on assets in the 2015-2019 period, shows an increasing trend. Based on data from the Financial Services Authority (2019), the development of the net operating margin ratio for Islamic Commercial Banks from 2015

to 2019 trends to increase. In 2015, the net operating margin ratio was 0.52%. In 2016 it grew by 30% to 0.68%, while in 2017 it decreased by 2% to 0.67%. In 2018 it grew by 114% from the previous year to 1.42%. In 2019 it increased by 35% to 1.92%. Meanwhile, the development of return on assets for Islamic Commercial Banks from 2015 to 2019 trends to increase, except in 2017, it did not change. In 2015, the return on assets of Islamic Commercial Banks was 0.49%. In 2016 it increased by 29% to 0.63%. In 2017 it decreased to 0.62%, and in 2018 it increased quite high, namely 103% so that the return on assets became 1.28%. In 2019, returns on assets increased by 35% or 1.73%. In a period of 5 years, the return on assets of Islamic Commercial Banks grew by 322%. The increase in returns on assets for Islamic Commercial Banks has been significant in the last two years, while the previous year, the increase in returns on assets for Islamic Commercial Banks was still below 1% (Financial Services Authority, 2019)

Many factors can cause an increase in net operating margin and return on assets of Islamic banking. Martono & Rahmawati (2020), through the results of their research, states that simultaneously the capital adequacy ratio, non-performing financing, financing to deposit ratio and the ratio of operating costs to operating income have a significant effect on Return on Assets as an indicator of profitability. However, when the partial effect test is carried out, only the ratio variable has a significant impact on return on assets. This can be interpreted that in order to directly increase returns on assets, what must be improved is the efficiency of using the resources owned. By using resources efficiently, the use of costs will be relatively lower. The use of lower costs with a fixed income value will result in higher profit before tax when profit before tax increases, the return on assets from the same amount of assets will increase. Rakhman, Zakaria, & Manda (2019) stated that simultaneously non-performing financing, financing deposit ratio, debt financing, equity financing, operating efficiency ratio and net operation margin have an effect on return on assets. However, partially debt financing, operating efficiency ratio and operating margin have an impact on return on assets. Meanwhile, non-performing financing, the ratio of savings and equity financing does not have a partial effect on return on assets. Tho'in (2019), through his study, stated that liquidity risk as measured by the financing to deposit ratio and net operating margin has no significant effect on the financial performance of banks in Indonesia, while the composite of Good Corporate Governance and operating expenses have a significant effect on the financial performance of banks in Indonesia. The results of the research (Setiawan & Kodratillah, 2017) state that size, operational efficiency ratio, net profit margin ratio, financing to deposit ratio, and Bank Indonesia rate have a significant effect both simultaneously and partially on return on assets.

Based on the results of the studies above, it appears that the level of financing to deposit ratio and efficiency of operating expenses have inconsistent effects on the level of net operating margin and return on assets. This is also shown based on empirical data on financing to deposit ratio and efficiency of operating expenses in Islamic banking in Indonesia during 2015-2019. The development of Islamic banking financing to deposit ratio from 2015 to 2019 tends to decline. In 2015, the financing to deposit ratio was 88.03% and decreased by 2.33% in 2016 to 85.99%. In 2017 it decreased by 7.41% to 79.61%. In 2018 it decreased again, namely by 1.36% to 78.53%. In 2019, it decreased again by 0.79% to 77.91% (OJK, 2019). Meanwhile, the data on the level of efficiency of operating expenses on operating income during 2015-2019 shows a relatively declining trend. In 2015 operating expenses to operating income amounted to 97.01%, decreased by 0.81% in 2016 to 96.22%. In 2017, it decreased by 1.36% to 94.91%. In 2018, it decreased by 6.04% to 89.18%. In 2019, it decreased again by 5.30% to 84.45% (OJK, 2019).

In previous research conducted (Mujiatun & Handayani, 2018) stated that operating expenses and operating income have a negative effect on return on assets. The results of this study indicate that higher operating expenses and operating income reflect the lack of the Bank's ability to reduce operating costs and increase operating income and consequently will reduce the profit generated by the Bank, and in the end, will reduce the return on assets. Meanwhile, the results of other studies show that the capital adequacy ratio, non-performing financing, financing to deposit ratio and operating costs of operating income affect return on assets simultaneously. However,

partially the capital adequacy ratio, non-performing financing and financing to deposit ratio does not have a significant effect on return on assets while operating costs have a partially significant effect on return on assets (Amelia, 2015). The results of other studies state that the profitability of Islamic banks is influenced by the capital adequacy ratio, operating expenses and profit-sharing (Medyawati & Yunanto, 2018). Simatupang & Franzlay (2016) stated that the financing to deposit ratio and operating expenses on operating income have a significant effect on the return on assets of Islamic Commercial Banks in Indonesia. Sari (2017) states that the capital adequacy ratio, financing to deposit ratio and non-performing financing have a negative effect on return on assets, while the net operating margin has a positive effect on return on assets. The results of other studies indicate that the ratio of risk profile, good corporate governance, and capital has no significant effect on return on assets. Meanwhile, the financing to deposit ratio, operating expenses to operating income, and net operating margin have a significant effect on return on assets (Munawaroh & Azwari, 2019).

Based on the background description above, the main problems of this research can be formulated as follows:

1. Do the financing deposit ratio and operating expense on operating income simultaneously or partially affect the net operating margin of BUMN Sharia Bank?
2. Does the net operating margin affect the return on assets of BUMN Sharia Banks?
3. Do the financing deposit ratio and operating expense on operating income simultaneously or partially affect the return on assets of BUMN Sharia Bank?
4. Does the financing deposit ratio and operating expenses on operating income indirectly affect on return on assets through the net operating margin of BUMN Sharia Bank?

LITERATURE REVIEW

BUMN Sharia Bank

BUMN Sharia Bank is a merger of three state-owned sharia banks, namely BRI Syariah, PT Bank BNI Syariah, and PT Bank Syariah Mandiri. The signing of the conditional merger agreement (CMA) of three state-owned sharia banks on October 12, 2020. Based on the prospectus, P.T. Bank Mandiri (BMRI), as the parent of BSM will control 51.2% ownership of the merged bank. Meanwhile, PT Bank Negara Indonesia (BBNI) at 25.0%, PT Bank Rakyat Indonesia (BBRI) 17.4%, DPLK BRI-Sharia 2% and the public 4.4%. Meanwhile, the Ministry of BUMN will be the ultimate controlling shareholder. The signing of the conditional merger agreement (CMA) is the beginning of a historical process for the birth of a global calibre national Islamic commercial bank. This is because, since the first Islamic bank was established in Indonesia in 1991, until now, there has been no Islamic bank capable of having assets of more than Rp. 115 trillion. After the official merger in the first quarter of 2021, the assets are around Rp 220 trillion. Currently, the assets of the three banks are still less than Rp 210 trillion. This means that until the legal merger is completed in February next year, the asset growth of the three Islamic banks will be around 5%. With these assets, the merged Islamic bank is predicted to become the seventh or eighth largest bank in Indonesia. In the global arena, the merged Islamic bank is also in the top 10.

Financing to Deposit Ratio

The position of funds held by Islamic banks is above the minimum requirements determined by regulations. Liquid funds that are managed by Islamic banks will not be maximized in obtaining income. Even though they generate income, it will be lower than the rate on the market. The excess liquidity position managed by Islamic banks can create business risks and cause the level of profit

offered by Islamic banks to be smaller than conventional banks. One indicator of the health of a bank's liquidity is the financing to deposit ratio. Liquidity assessment is used to determine the bank's ability to maintain adequate liquidity and risk management adequacy. The greater the amount of financing provided by the bank, the smaller the level of liquidity of the bank concerned. However, the greater the amount of financing that is distributed, it is hoped that the bank will also get large profits (Wangsawidjaja, 2012). The financing to deposit ratio is the ratio between the amount of credit provided by the bank and the funds received by the bank. According to government regulations in (Kasmir, 2016) the maximum financing to deposit ratio limit is 110% with the following formulations:

$$FDR = \frac{Total_{Financing}}{Total\ Third\ Party\ Funds + Capital} \times 100\%$$

This ratio is also an indicator of the vulnerability and capability of a bank. Some banking practitioners agree that the safe limit of a bank's financing to deposit ratio is around 80%. However, the tolerance limit ranges between 85% and 100% (Dendawijaya, 2009).

Operating Expenses to Operating Income

Dendawijaya (2009), the ratio of Operating Expenses to Operating Income, is used to measure the level of efficiency and the ability of a bank to carry out its operational activities. The ratio of operating expenses to operating income is obtained from a comparison between total costs and total income generated (Kasmir, 2016). This ratio is used to measure the level of efficiency and the ability of the bank to carry out its operational activities. Considering that the main activity of a bank is to act as an intermediary, namely to raise and distribute funds (for example, public funds), the bank's operating costs and income are dominated by interest costs and interest yields. The smaller this ratio means, the more efficient the operational costs incurred by the bank concerned so that the possibility of a bank in a problematic condition is getting smaller (Martono, 2010). Thus the operating efficiency of a bank which is proxied by the ratio of Operating Expenses to Operating Income, will affect the bank's performance. Based on Bank Indonesia regulations as stated in Bank Indonesia Circular Letter Number 3/30 / DPNP dated December 14, 2001, Operating Expenses to Operating Income (BOPO) is the ratio between operating expenses to operating income using the following mathematical formula:

$$BOPO = \frac{Operating\ Cost}{Operating\ Income} \times 100\%$$

Net Operating Margin

Net operating margin can be interpreted as a profitability ratio to determine the ability of productive assets to generate profits through a comparison of operating income and operating expenses with the average earning assets (Ihsan, 2013). The net operating margin ratio indicates the bank's ability to generate net interest income by placing earning assets. The high level of the ratio of the net operating margin at this Islamic bank shows that the bank is able to generate revenue sharing, which is higher than the cost for the results incurred in managing the financing channelled. The greater this ratio, the higher the interest income earned from productive assets

managed by the bank so that the possibility of the bank in a problematic condition is getting smaller. Based on the Circular Letter of Bank Indonesia No.9 / 24 / DPBs Year 2007, the net operating margin (NOM) is measured by the ratio between net income sharing and earning assets. Systematically this ratio can be formulated as follows:

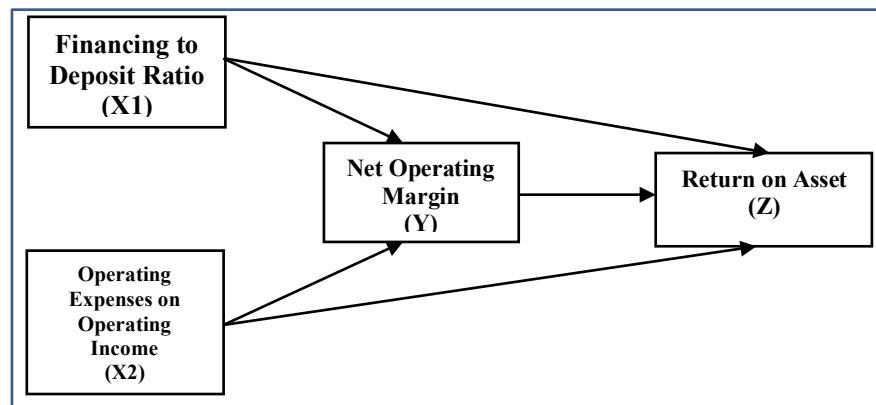
$$NOM = \frac{\text{Net Profit Sharing Income}}{\text{Average Earning Assets}} \times 100\%$$

Return on Asset

Profitability is a ratio that looks at the company's ability to generate profits or profitability. Muhammad (2014) states that return on assets (ROA) is a picture of bank productivity in managing funds so as to generate profits. One of the factors that affect profitability (ROA) is the characteristics of the bank. Each bank has different characteristics, so that the level of profitability of the bank also varies. Another definition explains that ROA is the percentage of gross profit achieved by the company compared to the company's total assets (Yuwono et al., 2007). The profitability ratio used in this study is the return on assets (ROA) which measures the ability of a bank to make a profit from its assets. The greater the return on assets of a bank, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use (Margaretha, 2015). Failure or success can serve as a reference for future profit planning, as well as the possibility to replace new management, especially after the old management has failed. The higher the return on assets, the higher the amount of net profit generated from each rupiah of funds embedded in total assets. Vice versa, the lower the return on assets means the lower the amount of net profit generated from each rupiah of funds invested in total assets. This ratio is used to measure the ability of bank management to gain overall profit (profit). According to Martono (2010), return on assets aims to measure a bank's ability to earn profits and overall efficiency. This ratio is used to determine the company's ability to generate profits or how effective the management of the company is by management. Based on the provisions issued by the Financial Services Authority, Circular No. 10 / SEOJK.03 / 2014, the formula for calculating return on assets (ROA) is as follows:

$$ROA = \frac{\text{Profit Before Tax}}{\text{Total Assets}} \times 100\%$$

Framework



Picture 1. Framework

Research Hypothesis

Based on the above framework, the research hypothesis is:

1. There was an effect of financing to deposit ratio and operating expense on operating income simultaneously or partially on the net operating margin of BUMN Sharia Banks?
2. There was an effect of net operating margin on the return on assets of BUMN Sharia Banks?
3. There was an effect of financing to deposit ratio and operating expense on operating income simultaneously or partially on the return on assets of BUMN Sharia Banks?
4. There was an effect of financing to deposit ratio and operating expenses on operating income, indirectly affecting return on assets through the net operating margin of BUMN Sharia Banks?

RESEARCH METHOD

This research was a quantitative study using secondary data obtained from the Financial Services Authority (OJK) quarterly performance reports. The population in this study were BUMN Sharia Banks resulting from the Merger of Three BUMN Sharia Commercial Banks listed on the Indonesia Stock Exchange in the period 2015 to 2019. Sampling was carried out by purposive sampling technique using the following criteria, namely (1) commercial banks Syariah which is registered with the Financial Services Authority, (ii) publishes financial reports in succession for the period 2015 to 2019, (iii) includes information on financial ratios in published reports, and (iv) displays data and information needed for research.

The independent variables in this study are the Financing to Deposit Ratio (FDR) and Operational Expenses on Operating Income (BOPO), while the Net Operating Margin (NOM) variable is an intervening variable with the dependent variable is return on assets (ROA). Figures from these ratios are obtained from the financial statements obtained and listed in the Microsoft Excel program before being used in statistical testing. Before doing multiple linear regression testing, the data that has been obtained will be made descriptive statistics, normality test, reliability test, classical assumption test, and the last is the panel data linear regression test with the EViews application software.

Panel data regression is known for three kinds of approaches (Ajijja et al., 2011), consisting of the pooled least square approach, the fixed effects approach, and the random effects approach.

Pooled Least Square Model:

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \varepsilon_{it}$$

$$Z_{it} = \beta_3 + \beta_4 X1_{it} + \beta_5 X2_{it} + \beta_6 Y_{it} + \varepsilon1_{it}$$

Zit = Return on Asset (ROA) of the company i in time t

Yit = Net Operating Margin (NOM) of the company i in time t

X1it = Financing to Deposit Ratio (FDR) of the company i in time t

X2it = Operational Expenses on Operating Income (BOPO) of the company i in time t

β_0 dan β_3 = Constant

$\beta_1, \beta_2, \beta_4, \beta_5$ dan β_6 = Regression coefficient

ε_{it} dan $\varepsilon1_{it}$ = Error of company i in time t

Fixed Effect Model:

$$Y_{it} = \beta_{0i} + \beta_1 X1_{it} + \beta_2 X2_{it} + \varepsilon_{it}$$

$$Z_{it} = \beta_{3i} + \beta_4 X1_{it} + \beta_5 X2_{it} + \beta_6 Y_{it} + \varepsilon_{1it}$$

Where β_{0i} and β_{3i} are intercept models that vary between cross-section units and D_i is a dummy variable. From the above equation, the N-1 dummy variable has been added to the model so that the number of degrees of freedom is reduced to NT-N-K.

Random Effect Model:

$$Y_{it} = \beta_{0i} + \beta_1 X1_{it} + \beta_2 X2_{it} + \varepsilon_{it}$$

$$Z_{it} = \beta_{3i} + \beta_4 X1_{it} + \beta_5 X2_{it} + \beta_6 Y_{it} + \varepsilon_{1it}$$

$$\varepsilon_{it} = \mu_{it} + v_{it} + w_{it}$$

where, $u_{it} \approx N(0, \sigma_u^2)$ = error component cross-section; $v_{it} \approx N(0, \sigma_v^2)$ = error component time series; $w_{it} \approx N(0, \sigma_w^2)$ = error component combinations.

From the three-panel data model approaches above, to determine which approach is better used, the Chow Test, Hausman Test, and Lagrange Multiplier Test (LM-Test).

FINDINGS AND DISCUSSION

The research was conducted in the 2015 to 2019 period at BUMN Sharia Banks resulting from the merger of three BUMN Sharia Commercial Banks in Indonesia. In that period, there were three banks that were Islamic commercial banks in a five-year period, so the total research data were 60. Selection of the best data linear regression model, t-test and F-test

Table 1. Selection of Regression Model NOM

No	Method	Testing	Result
1	Chow Test	Common Effect vs Fixed Effect	Fixed Effect
2	Hausmann Test	Fixed Effect vs Random Effect	Random Effect
3	Lagrange Multiplier Test	Common Effect vs Random Effect	Command Effect

Source: Data Processing Results, (Eviews, 2020)

Based on the paired test results using the Chow Test, Hausman Test, and Lagrange Multiplier (LM-test) on the three-panel data regression methods, it can be concluded that the common effect model in the panel data regression method is used further to estimate and analyze the Financing to Deposit Ratio (FDR) and Operational Expenses on Operating Income to Net Operating Margin (NOM) at BUMN Sharia Banks in Indonesia which were samples in the study during the 2015-2019 period.

Table 2. Command Effect Model NOM

Dependent Variable: NOM?
 Method: Pooled Least Squares
 Date: 10/18/20 Time: 17:07
 Sample: 2015Q1 2019Q4
 Included observations: 20
 Cross-sections included: 3
 Total pool (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOPO?	-0.028111	0.035278	-0.796852	0.4288
FDR?	0.044080	0.023335	1.889031	0.0640
C	-0.480938	3.198416	-0.150368	0.8810
R-squared	0.059473	Mean dependent var		0.790333
Adjusted R-squared	0.026472	S.D. dependent var		1.435416
S.E. of regression	1.416290	Akaike info criterion		3.582665
Sum squared resid	114.3350	Schwarz criterion		3.687382
Log-likelihood	-104.4800	Hannan-Quinn criter.		3.623626
F-statistic	1.802153	Durbin-Watson stat		1.323527
Prob(F-statistic)	0.174214			

Source: Data Processing Results, (Eviews, 2020)

Linear model equation Financing to Deposit Ratio (FDR) and Operating Expenses on Operating Income to Net Operating Margin (NOM):

$$NOM_{it} = (-0.480938) + 0.044080 FDR_{it} - 0.028111 BOPO_{it}$$

Based on the t-test, it shows that the financing to deposit ratio variable has a positive but insignificant effect on the net operating margin of the BUMN Sharia Bank with a regression coefficient value of 0.044080, this is indicated by the probability value of t-statistic = 1.889031 and the probability value (Prob.) = 0.0640 greater than $\alpha = 0.05$ ($0.0640 > 0.05$) so that H_0 is accepted or H_a is rejected. This means that the hypothesis which states that the financing to deposit ratio affects the net operating margin of BUMN Sharia Banks is rejected. While the results of the t-test show that the Operational Cost Variable Operating Income has a negative but insignificant effect on the net operating margin of BUMN Sharia Banks with a regression coefficient value of -0.028111, this is indicated by the probability value of t-statistic = -0.796852 and the probability value (Prob.) = 0.4288 is greater than $\alpha = 0.05$ ($0.4288 > 0.05$) so that H_0 is accepted or H_a is rejected. This means that the hypothesis which states that Operational Costs Operational Income affects the net operating margin of BUMN Sharia Banks is rejected.

Table 3. Selection of Regression Model ROA

No	Method	Testing	Result
1	Chow Test	Common Effect vs Fixed Effect	Fixed Effect
2	Hausmann Test	Fixed Effect vs Random Effect	Random Effect
3	Lagrange Multiplier Test	Common Effect vs Random Effect	Command Effect

Source: Data Processing Results, (Eviews, 2020)

Based on the paired test results using the Chow Test, Hausman Test, and Lagrange Multiplier (LM-test) on the three-panel data regression methods, it can be concluded that the common effect model in the panel data regression method is further used to estimate and analyze the Net Operating Margin (NOM). On Return on Asset (ROA) at BUMN Sharia Banks in Indonesia, which were the samples in the study during the 2015-2019 period.

Table 4. Command Effect Model NOM

Dependent Variable: ROA?				
Method: Pooled Least Squares				
Date: 10/18/20 Time: 17:21				
Sample: 2015Q1 2019Q4				
Included observations: 20				
Cross-sections included: 3				
Total pool (balanced) observations: 60				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
NOM?	0.198307	0.075705	2.619475	0.0112
C	0.978438	0.123255	7.938343	0.0000
R-squared	0.105789	Mean dependent var	1.135167	
Adjusted R-squared	0.090372	S.D. dependent var	0.875175	
S.E. of regression	0.834693	Akaike info criterion	2.509259	
Sum squared resid	40.40930	Schwarz criterion	2.579071	
Log-likelihood	-73.27778	Hannan-Quinn criter.	2.536566	
F-statistic	6.861651	Durbin-Watson stat	0.592132	
Prob(F-statistic)	0.011221			

Source: Data Processing Results, (Eviews, 2020)

The equation of the linear model of Net Operating Margin (NPM) to Return on Assets (ROA):

$$ROA_{it} = (0.978438) + 0.198307 NOM_{it}$$

Based on the t-test, it shows that the net operating margin variable has a positive and significant effect on the returns on assets of BUMN Sharia Banks with a regression coefficient value of 0.198307, this is indicated by the probability value of t-statistic = 2.619475 and the probability value (Prob.) = 0.0112 is smaller than $\alpha = 0.05$ ($0.0112 < 0.05$) so that H_0 is rejected or H_a is accepted. This means that the hypothesis which states that the net operating margin affects the return on assets of the BUMN Sharia Bank, is accepted.

Table 5. Simultaneous Selection of Regression Model ROA

No	Method	Testing	Result
1	Chow Test	Common Effect vs Fixed Effect	Fixed Effect
2	Hausmann Test	Fixed Effect vs Random Effect	Fixed Effect
3	Lagrange Multiplier Test	Common Effect vs Random Effect	Command Effect

Source: Data Processing Results, (Eviews, 2020)

Based on the paired test results using the Chow Test, Hausmant Test, and Lagrange Multiplier (LM-test) on the three-panel data regression methods, it can be concluded that the fixed effect model in the panel data regression method is used further to estimate and analyze the Financing to Deposit Ratio (FDR) and Operational Expenses on Operating Income to Return on Assets (ROA) at BUMN Islamic Banks in Indonesia which were the samples in the study during the 2015-2019 period.

Table 6. Fixed Effect Model ROA

Dependent Variable: ROA?

Method: Pooled Least Squares

Date: 10/18/20 Time: 17:16

Sample: 2015Q1 2019Q4

Included observations: 20

Cross-sections included: 3

Total pool (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOPO?	-0.167274	0.013970	-11.97340	0.0000
FDR?	0.023278	0.010884	2.138721	0.0369
C	14.36283	1.405971	10.21560	0.0000
Fixed Effects (Cross)				
_BMS--C	0.331197			
_BNIS--C	-0.392699			
_BRIS--C	0.061502			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.764220	Mean dependent var	1.135167
Adjusted R-squared	0.747072	S.D. dependent var	0.875175
S.E. of regression	0.440142	Akaike info criterion	1.276217
Sum squared resid	10.65488	Schwarz criterion	1.450746
Log-likelihood	-33.28651	Hannan-Quinn criter.	1.344485
F-statistic	44.56706	Durbin-Watson stat	0.824207

Prob(F-statistic) 0.000000

Source: Data Processing Results, (Eviews, 2020)

Linear model equation Financing to Deposit Ratio (FDR) and Operating Expenses on Operating Income to Return on Assets (ROA):

$$ROA_{it} = (14.36283) + 0.023278 FDR_{it} - 0.167274 BOPO_{it}$$

Based on the t-test, it shows that the financing to deposit ratio variable has a positive and significant effect on the return on assets of BUMN Sharia Banks with a regression coefficient value of 0.023278, this is indicated by the probability value of t-statistic = 2.138721 and the probability value (Prob.) = 0.0369. smaller than $\alpha = 0.05$ ($0.0369 < 0.05$) so that H_0 is rejected or H_a is accepted. This means that the hypothesis which states that the financing to deposit ratio affects the return on assets of BUMN Sharia Banks is accepted. While the results of the t-test show that the variable Operating Costs Operational Income has a negative and significant effect on the return on assets of BUMN Sharia Banks with a regression coefficient value of -0.028111, this is indicated by the probability value of t-statistic = -11.97340 and the probability value (Prob.) = 0.0000 is smaller than $\alpha = 0.05$ ($0.0000 < 0.05$) so that H_0 is rejected or H_a is accepted. This means that the hypothesis which states that Operational Costs Operational Income has an effect on the return on assets of BUMN Sharia Banks is accepted.

Testing the effect of financing to deposit ratio (FDR) and operating costs operating income (BOPO) on return on assets (ROA) through net operating margin (NOM) is done using the Sobel Test.

Table 7. Sobel Test

Effect	$(P_2)^2$	$(SE_{p2})^2$	Indirect Effect by NOM	$(P_2) \cdot (P_3)$	S_{p2p3}	t_sobel
FDR → NOM	0,001943	5,445E-02	FDR → ROA	0,008741	0,04964	0,176079
BOPO → NOM	0,000790	1,245E-03	BOPO → ROA	-0,005575	0,00778	-0,716080

Effect	$(P_3)^2$	$(SE_{p3})^2$
NOM → ROA	0,039326	0,075705

Source: Data Processing Results, (Eviews, 2020)

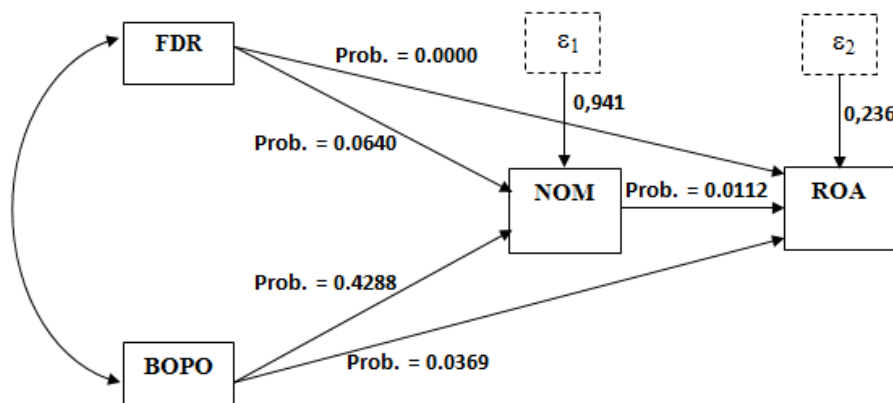
The reduction model for the panel data regression equation return on assets (ROA) through the net operating margin (NOM) variable is as follows:

$$ROA_{it} = (14.36283) + 0.023278 FDR_{it} - 0.167274 BOPO_{it}$$

Based on the Sobel test, it shows that the financing to deposit ratio variable has a positive but insignificant effect on return on assets through the net operating margin at BUMN Sharia Bank companies with a regression coefficient value of 0.008741, this is indicated by the probability value t-statistic = 0.176079 which is smaller than t-table = 0.678743 at $\alpha = 0.05$ so that H_0 is accepted or H_a is rejected. This means that the hypothesis which states that the financing to deposit ratio affects return on assets through the net operating margin at BUMN Sharia Banks, is rejected. Meanwhile, the sobel test results show that the Operational Income Cost variable has a negative but insignificant effect on return on assets through the net operating margin at BUMN Sharia Banks with a regression coefficient value of -0.005575, this is indicated by the probability value t-statistic

= -0,716080 which is greater than t-table = 0.678743 at $\alpha = 0.05$ so that H_0 is rejected or H_a is accepted. This means that the hypothesis which states that Operational Costs Operational Income has an effect on return on assets through the net operating margin at BUMN Sharia Banks is accepted.

Based on the results of hypothesis testing the effect of financing to deposit ratio and operating costs operating income directly or indirectly on return on assets (ROA) through net operating margin, the overall research model can be described as follows:



Picture 2. Research Result Model

CONCLUSION AND FURTHER RESEARCH

Based on the results of the analysis and testing of the research hypothesis, the conclusions of the study are as follows:

1. Financing to deposit ratio and operating expenses on operating income simultaneously or partially have an effect but not significant on the net operating margin of BUMN Sharia Banks
2. Net operating margin has a positive and significant effect on the return on assets of BUMN Sharia Banks.
3. Financing to deposit ratio and operating expenses to operating income simultaneously or partially have a significant and significant effect on return on assets of BUMN Sharia Banks, partially operating expenses to operating income have a more dominant influence on return on assets.
4. The financing to deposit ratio and operating expenses to operating income simultaneously have a significant and significant effect on return on assets through the net operating margin at BUMN Sharia Banks, but partially the financing to deposit ratio has an effect but is not significant to return on assets through the net operating margin on BUMN Sharia Bank.

The research findings show that in the realization of the implementation of BUMN Sharia Banks which are the results of the merger of three state-owned Sharia Commercial Banks, the return on assets of BUMN Sharia Banks can be increased by directly increasing the level of financing disbursement (FDR) supported by reducing or increasing the level of efficiency operational costs

(BOPO). Or an increase in the return on assets of BUMN Sharia Banks can be increased by increasing the net operating margin by decreasing the level of bank operating expenses in running its business.

Based on the research results, the researcher wants to propose several suggestions that can be used as input and consideration for further researchers. These suggestions include:

1. This research uses the variable financing to deposit ratio and operating costs operating income, and net operating margin to determine the direct effect on changes in return on assets. It is recommended that the next researchers examine other financial variables that have a greater influence on return on assets.
2. This research uses the net operating margin variable as an intervening variable on the effect of financing to deposit ratio and operating income operating costs on return on assets at BUMN Islamic Banks in Indonesia. It is suggested to the next researchers regarding the realization of the results of the merger of three state-owned Islamic commercial banks to examine using other intervening variables so as to provide other results on the return on assets of BUMN Sharia Banks in Indonesia.
3. This research was conducted at a BUMN Sharia Bank that had just signed a Conditional Merger Agreement (CMA). For further research, a different analysis model could be carried out so that it was expected to provide more comprehensive results.

REFERENCES

- Ajija, Shochrul R., Dyah W. Sari, Rahmat H. Setianto, Martha R. Primanti. (2011). *Cara Cerdas Menguasai EViews*. Jakarta: Salemba Empat
- Amelia, E. (2015). Financial Ratio and Its Influence on Profitability in Islamic Banks. *Al-Iqtishad: Journal of Islamic Economics*, 7(2), 229–240. <https://doi.org/10.15408/ijies.v7i2.1700>
- Dendawijaya, L. (2009). *Manajemen Perbankan*. Jakarta: Ghalia Indonesia.
- Ihsan, Dwi Nur'aini. (2013). *Analisis Laporan Keuangan Perbankan Syari'ah*. Jakarta: UIN Jakarta Press..
- Kasmir. (2016). *Analisis Laporan Kuangan Edisi Pertama*. Jakarta: PT. RajaGrafindo Persada
- Margaretha, F. (2015). *Manajemen Keuangan*. Jakarta: PT Grasindo
- Martono. (2010). *Bank dan Lembaga Keuangan Lain*. Yogyakarta: EKONISIA FE UII.
- Martono, S., & Rahmawati, N. (2020). Pengaruh Capital Adequacy Ratio, Non-Performing Financing, Financing to Deposit Ratio dan Rasio Biaya Operasional dengan Pendapatan Operasional terhadap Return On Asset sebagai Indikator Profitabilitas (Studi pada Bank Syariah Indonesia yang Terdaftar di . *International Journal of Social Science and Business*, 4(1), 108–115. <https://doi.org/10.23887/ijssb.v4i1.23141>
- Medyawati, H., & Yunanto, M. (2018). The effects of fdr, bopo , and profit-sharing on the profitability of Islamic banks in Indonesia. *International Journal of Economics, Commerce and Management, United Kingdom*, VI(5), 811–825.
- Muhammad, M. (2014). *Manajemen Dana Bank Syariah*. Jakarta: PT Raja Grafindo Persada.
- Mujiatun, S., & Handayani, S. (2018). Effect of operational cost and operational revenue on return on asset of Sharia banking: Case study on Sharia business division of PT. Bank Sumut. *International Journal of Scientific and Technology Research*, 7(7), 223–227.
- Munawaroh, D., & Azwari, P. C. (2019). Effect of Risk-Based Bank Rating on Financial Performance of Sharia Commercial Banks. *Akuntabilitas*, 12(2), 201–214.

<https://doi.org/10.15408/akt.v12i2.13189>

Rakhman, A., Zakaria, H. M., & Manda, G. S. (2019). Factors Affecting Return on Assets. <https://doi.org/10.2991/icebef-18.2019.112>

Sari, S. P. (2017). Analisis Pengaruh Capital Adequacy Ratio , Net Operating Margin , Financing To Deposit Ratio , Non Performing Financing Dan Pembiayaan Bagi Hasil Terhadap Profitabilitas Bank Umum Syariah Di Indonesia (Studi Kasus Bank Umum Syariah Di Indonesia Tahun 2011. *Diponegoro Journal of Management*, 6(4), 1–15.

setiawan, chandra, & Kodratillah, O. I. (2017). Examining Banks Profitability and Banks Efficiency of Islamic Commercial Banks in Indonesia, 1–15. <https://doi.org/10.31227/osf.io/jsn43>

Simatupang, A., & Franzlay, D. (2016). Capital Adequacy Ratio(CAR), Non Performing Financing (NPF), Efisiensi Operasional (BOPO) dan Financing to Deposit Ratio (FDR) Terhadap Profitabilitas Bank Umum Syariah di Indonesia. *Administrasi Kantor*, 4(2), 466–485.

Tho'in, M. (2019). The Comparison of Islamic Banking Financial Performance In Indonesia. *International Journal of Scientific Research and Education*, 7(5), 8181–8186.

Yuwono, Sony, Edy Sukarno dan Muhammad Ichsan. (2007). *Petunjuk Praktis Penyusunan Balanced Scorecard*. Jakarta: PT Gramedia Pustaka Utama.

Wangsawidjaja Z., A. (2012). *Pembiayaan Bank Syariah*. Jakarta: PT. Gramedia Pustaka Utama