The Effect of Non Performing Financing, Capital Adequacy Ratio, Financing to Deposit Ratio, and Provision for Earning Asset Losses on Profitability at Sharia Commercial Banks with Third-Party Fund as a Moderating Variable

Hesti Mutiara Dewi[1*]*, Anton Bawono*[1]

[1]Faculty of Islamic Economics and Business, IAIN Salatiga, Indonesia

Abstract. This study was conducted to know the effect of NPF, CAR, FDR, and PPAP on Sharia Banking ROA with TPF as the moderating variable BUS in 2016-2021. This type of research uses quantitative with multiple regression analysis as data analysis sourced from secondary data. The model selected in this study uses panel data in the form of Common Effect Model annual data of NPF, CAR, FDR, PPAP, TPF, and ROA recorded in BUS for the 2016-2021 period. The research data obtained were analyzed using the Eviews 10 application tool. The results of the research conducted by data processing showed that the TPF variable had a positive and significant against ROA. CAR, FDR, and PPAP variables do not own influence significant against ROA. Then the NPF variable has an effect negative and significant to ROA, while TPF moderated NPF variable has an influence positive and significant against ROA.

Keywords: NPF, CAR , FDR , PPAP, TPF, ROA

1 Introduction

Based on OJK data, banking net profit Sharia per October 2021 increased to Rp 191.58 trillion, which in September 2020 was Rp 92.64 trillion. *Profitability which is* an indicator to calculate bank performance good will also increase the level of public trust, however, the trusted public also will reduce if the bank has poor performance.

In this research, profitability is proxied with using ROA as a measure of bank performance, when ROA is used use bank management measurement profit thorough. Because when ROA increases so Thing the show performance good finance. _ As revealed by Dendawijaya (2000) stated that profitability will be the benchmark of what policies are carried out by a company, both operational policies, and financial policies.

In Bank Indonesia Regulation Number 13/23/PBI/2011 concerning the Implementation of Risk Management for Islamic Commercial Banks and Sharia Business Units, it is explained that when Islamic banks perform financing to customers, Islamic banks will

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* Corresponding : alfathbawono@gmail.com

encounter ten risks which will later make NPF or financing problems, with steps are substandard (*substandard*), doubtful (*doubtful*), and loss (*loss*).

Internal factors that control the *profitability* of Islamic banks, one of which is CAR, which is used to calculate the bank's ability to carry out long-term obligations and liquidity. If the CAR exceeds 8%, the bank's business is more stable, because people believe in using the bank's products, resulting in higher profitability. Good capital can prevent banks from facing losses from their business activities (Syifa, 2018).

The comparison between financing intended by banks using public funds is FDR. From an operational point of view, high asset utilization to gain profit can be obtained using financing. Financing aimed at the bank toward the community will certainly increase the profitability of the bank Rahman and Santoso (2020).

According to the Circular Letter of Bank Indonesia No. 26/4/BPPP dated May 29, 1993, regarding Quality Assets Productive (KAP) and Formation Allowance Removal Assets Productive (PPAP), then all banks operating in the territory of Indonesia must do KAP assessment and forming PPAP (BI, 2012).

According to Bastian (2006), TPF is an important capital or asset owned by a bank. The collected assets are used by banks to grow financing and investment. In this study, the authors developed a TPF model or third party funds as a moderating variable between the dependent variable and the independent variable.

2 Literature Review

The performance of a company that operates well is a signal that the financial statements of the company can be said to be good, this is an explanation of signal theory (Suwardjono, 2005). Signaling theory emphasizes how important the information issued by a company will be related to decision-making by investment parties and parties outside the company.
Sharia Bank according to the provisions contained in Bank Indonesia Regulation number 2/8/PBI/2000, Article I, Sharia Bank is a commercial bank as referred to in Act Number 7 of 1992 concerning Banking and has been amended by Act Number 7 the Year 1998 which conducts business activities based on Islamic sharia principles, including sharia business units and foreign bank branch offices conducting business activities based on Islamic sharia principles.

ROA is a ratio that shows the size of the contribution of assets to make net income, ROA is used to calculate how high the amount of net income obtained from funds invested in total assets is. If the recovery of assets is greater, the amount of net profit generated will also be greater and vice versa (Dendawijaya, 2000).

NPF describes the work evaluation equipment contained in Islamic banks as an interpretation of earning assets, namely in the type of non-performing financing. NPF is the ratio of non-performing financing to the amount of financing rolled out by Islamic banks (Wandisyah & Hutagalung, 2019).

CAR is a ratio that tells about all bank assets that cover risk (bills, securities, credit, investments in other banks) intended through their capital funds, as well as obtaining funds from outside, such as loans (debt), public funds, and so on. The bank's performance ratio to calculate the bank's capital adequacy that supports the assets contained or removes the risk is another meaning of CAR. (Dendawijaya, 2000)

FDR is the number of third-party funds that can be distributed by Islamic banks to customers. The higher the FDR ratio indicates the weak liquidity of Islamic banks. This is due to the high demand for financing in the community (Muhammad, 2005).
a.   Allowance Removal Assets Productive (PPAP)

Bank Indonesia regulation No. 5/9/PBI/2003 explains that PPAP is a reserve that must be formed at a certain percentage of the amount of remainder tree loan in a period certain based on the classification of KAP as stipulated in a Bank Indonesia Regulation.

TPF is funds that come from residents, the source of these funds can cover 80% -90% of all funds processed by Islamic banks. The increase in TPF can have an impact on the high volume of financing, on the other hand, the value of the company obtained by Islamic banks also increases (Wandisyah & Hutagalung, 2019)**.**

3 Research Method

This study uses quantitative methods with collection techniques in the form of literature studies obtained through research journals, books, articles, and available research gaps. The data source used is secondary data from the 2016-2021 financial statements obtained through annual reports from the official websites of each Islamic bank and other websites that support research which in processing data using the eviews 10 application tool.

The research population is 10 Islamic commercial banks in 2016-2021 registered in www.ojk.go.id which in this population there is a merger of 3 Islamic banks namely BRI Syariah, BNI Syariah, and Bank Mandiri Syariah which became Bank Syariah Indonesia (BSI) in 2021.

For sampling using the purposive sampling method as follows:
1. BUS registered with OJK in the period 2016-2021
2. There are financial data, financial statements, and other ratios in the annual financial statements available and published in each bank during the 2016-2021 period.
3. Islamic banks that publish reports on NPF, CAR, FDR, PPAP, TPF, and ROA sequentially in the 2016-2021 period.

The theoretical framework, the variables to be tested in this study are NPF, CAR, FDR and PPAP on ROA with TPF as Moderating Variable

The regression model for this study is as follows:

$Y=b+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b_6Z+b_7X_{1*Z}+b_8X_{2*Z}+b_9X_{3*Z}+b_{10}X_{4*Z}+e$

4 Results and Discussion

As previously mentioned, data management begins with descriptive statistical testing which can be seen in the table below.

Table 1. Descriptive statistics table

| Statistics Descriptive	Mean	Median	Maximum	Minimum	Std. Dev.
ROA	1.009367	1.015000	2.630000	0.020000	0.699759
NPF	2.075333	1.815000	4.970000	0.010000	1.491980
CAR	23.67233	21.37000	54.98000	11.51000	9.450797
FDR	86.86033	87.16500	196,7300	38.33000	19.35701
PPAP	2.072333	1.850000	6.670000	0.010000	1.313258
TPF	42.76455	14.98150	233.2510	2.680000	55.66571

Source: Data processed, 2022

The selection of the panel data regression model was carried out with 3 stages of testing the regression model method to determine the best and most efficient method for testing the CEM, FEM, and REM tests. The estimation model was selected in 3 stages, namely the Chow test, Hausmant test, and the Lagrange multiplier test.

Table 2. Regression Model Test Results

Effect Test	Statistics	Results
Stage 1 Result of the Chow Test		
Cross-section F	1.814860	CEM
Cross-section Chi-square	21.161812	FEM
Stage 2 Result of the Haussman Test		
Random cross-section	16.333744	REM
Stage 3 Result of the Lagrange Multiplier Test		
One-sided cross-section	0.9518	CEM
Both	0.5346	CEM

Source: Data processed, 2022

After testing the regression model, the three models show that the best and most efficient method to be used in this research is the Common Effect Model (C EM).
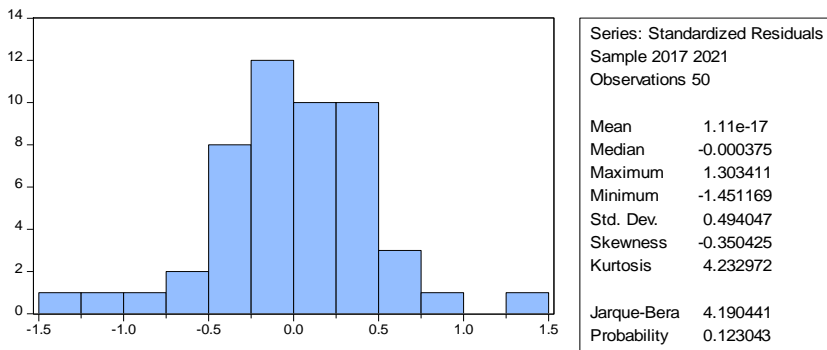
Figure 1. Main Regression Normality Test

Based on the test results, it is known that the probability value is $0.123043 > 0.05$, so it can be ascertained that the data is normally distributed.

Table 3. Main Regression Multicollinearity Test

R^2 variable explanation		Comparison	R^2 regression main
NPF	0.121086	<	0.517562
CAR	0.313363	<	0.517562
FDR	0.150461	<	0.517562
PPAP	0.420227	<	0.517562
TPF	0.508139	<	0.517562
NPF_TPF	0.428949	<	0.517562
CAR_TPF	0.443540	<	0.517562
FDR_TPF	0.437966	<	0.517562
PPAP_TPF	0.165159	<	0.517562

Source : Data processed, 2022

Based on the results of the multicollinearity test above, it can be concluded that there is no multicollinearity problem, meaning that the model is in a good category. (Ghozali, 2013)

Based on the results of the heteroscedasticity test in the two main and intervening regression tables above, it can be concluded that there is no heteroscedasticity problem, meaning that the model is in a good category. (Ghozali, 2013) . This is because the probability value of each variable is greater than 0.05.

Table 4. Main Regression Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.355692	0.058033	6.129087	0.0000
D(NPF)	0.150543	0.438571	0.343258	0.7332
D(CAR)	-0.230586	0.218229	-1.056625	0.2970
D(FDR)	2.347816	1.530522	1.533996	0.1329
D(PPAP)	-0.247340	0.159136	-1.554269	0.1280
D(TPF)	0.005014	0.003254	1.540716	0.1313
D(NPF_TPF)	0.096580	0.050416	1.915638	0.0626
D(CAR_TPF)	0.010423	0.011126	0.936882	0.3544
D(FDR_TPF)	-0.455017	0.367112	-1.239451	0.2224
D(PPAP_TPF)	-0.008590	0.028782	-0.298459	0.7669

Source: Data processed, 2022

Table 5. Main Regression Autocorrelation Test

R-squared	0.517562	Mean dependent var	0.032103
Adjusted R-squared	0.409014	S.D. dependent var	0.711291
S.E. of regression	0.546809	Akaike info criterion	1.807424
Sum squared resid	11.96002	Schwarz criterion	2.189828
Log likelihood	-35.18559	Hannan-Quinn criter.	1.953045
F-statistic	4.768033	Durbin-Watson stat	1.937127
Prob(F-statistic)	0.000243		
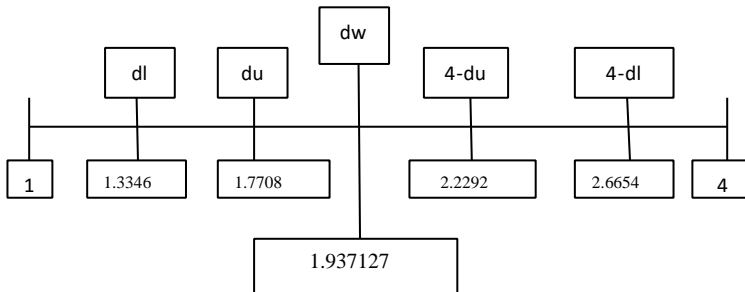
Figure 2. Durbin Waston

From the tables and figures, the results of the autocorrelation test from the main regression and the intervening regression show that there is no autocorrelation because Durbin Waston using the C EM estimation model is between dL and 4-dL. Or it can be concluded that dw is in the range $d < 0 < dL$ and the data are free from autocorrelation.

Adjusted R-square value of 0.51756 means that 51.75% of *Profitability* can be influenced by variables NPF, CAR, FDR, PPAP, and TPF while 48.25% is influenced by other variables outside this study.

Based on the test results, the probability value of the *F-statistic* is 0.000243. Because the probability value is below 0.05, it can be interpreted that the variables NPF, CAR, FDR, PPAP, and TPF jointly affect ROA.

The equation of the regression model can be explained that the variables NPF, CAR, PPAP, as well as CAR and FDR moderated by TPF, have negative coefficient values. Whereas FDR, TPF, and TPF - moderated NPF and PPAP variables have a mark coefficient positive.

Table 6. Main Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.026007	0.102804	0.252974	0.8016
D(NPF)	-1.997292	0.776911	-2.570814	0.0140
D(CAR)	-0.006525	0.386584	-0.016877	0.9866
D(FDR)	4.788251	2.711259	1.766062	0.0850
D(PPAP)	-0.287743	0.281903	-1.020716	0.3135
D(TPF)	0.020498	0.005765	3.555671	0.0010
D(NPF_TPF)	0.423364	0.089311	4.740351	0.0000
D(CAR_TPF)	-0.047002	0.019708	-2.384890	0.0219
D(FDR_TPF)	-0.503053	0.650324	-0.773543	0.4437
D(PPAP_TPF)	0.034137	0.050986	0.669536	0.5070

Source: Data processed, 2022

For the results of the T-test or partial test, the probability value NPF, TPF, and NPF and CAR variables moderated by TPF lower than 0.05 which means variable the influential significant against ROA. Whereas the variables of CAR, FDR, PPAP, as well as FDR and PPAP moderated by TPF are not own influence ROA.

5. Conclusions

The NPF variable has a negative and significant effect on ROA. This means that NPF has a strong influence on ROA. However, increasing NPF will decrease ROA. The CAR variable has a negative and insignificant effect on ROA. This means that the level of CAR has no significant effect on ROA. The FDR variable has a positive and insignificant effect on ROA. This means that the high and low FDR has no significant effect on ROA. PPAP variable has a negative and insignificant effect on ROA. This means that the high and low PPAP has no significant effect on ROA. The TPF variable has a positive and significant effect on ROA. This means that TPF has a strong influence on ROA. An increase in TPF will also increase ROA. TPF variable moderating NPF has a significant positive effect on ROA. This means that TPF has a strong influence on the effect of NPF on ROA. TPF variable moderating CAR has a negative and insignificant effect on ROA. This means that the high and low TPF does not affect the effect of CAR on ROA. The TPF variable moderating FDR has a negative and insignificant effect on ROA. This means that the high and low TPF does not affect the effect of FDR on ROA. The TPF variable moderating PPAP has a positive and insignificant effect on ROA. This means that the high and low TPF does not affect the effect of PPAP on ROA. Suggestions

This research is still far from perfect due to the lack of experience and knowledge of the author. Suggestions for further research can consider adding variables related to R OA and also adding years to the research period so that it can affect the value of banking.

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