



Effect of FDR, NPF and Inflation on the Profitability of Bank BNI Syariah

Zia Firdaus Nuzula¹

¹Islamic University of Bandung, Indonesia

ziafirdaus@unisba.ac.id

Abstract

Purpose - This study aims to determine the effect of the amount of financing, financing problems and inflation on the profitability of Bank BNI Syariah. In addition, it is also to determine what variables have the most influence on the level of profitability.

Method - This study uses secondary data from time series (time series). The research data is sourced from Bank BNI Syariah and BPS from the first quarter of 2011 to the first quarter of 2020. The data analysis method uses the Vector Error Correction Model (VECM) with the Eviews 10 software tool

Result - The results showed that the amount of financing has a positive relationship with the profitability of Bank BNI Syariah. Non-performing financing and inflation have a negative relationship with the profitability of Bank BNI Syariah. Meanwhile, based on the variance decomposition, problematic financing is the variable that provides the largest contribution to the profitability of Bank BNI Syariah.

Implication - The ratio of non-performing financing should be suppressed as much as possible so as not to reduce profitability.

Originality - This study uses the VECM method to determine the factors that affect the profitability of Islamic banks.

Keywords: FDR; NPF; Inflation; ROA; VECM.



Introduction

Profitability or ROA is a ratio to assess the company's ability to seek profit (Zulkarnain & Heliyani, 2020). Profitability (profit) can be said as one of the most appropriate indicators to measure the performance of a company. Because the company's ability to generate profits can be a measure of the company's performance. The higher the profitability, the better the company's financial performance. Profitability is needed to assess changes in potential economic resources that may be controlled in the future (Marginingsih, 2018). The low profitability of the bank indicates that the bank is not doing well (Fatmawati & Hakim, 2020).

As for the influence of profitability itself there are many, for example, the effect of capital, this capital has a very significant effect on profitability on BUS. Then the impact of assets, the impact that will be caused by the effect of assets is the emergence of non-performing loans (NPL). And the last one is the influence of company size, the bigger the company size, the bigger the resources and assets to get profit (Adawiyah & Suprihhadi, 2017).

Profitability ratios are used to assess and measure the company's financial position in a certain period (Afendi, 2018). Indicators commonly used to measure the level of profitability of a company are return on equity (ROE) for companies in general and return on assets (ROA) in the banking industry. Both can be used in measuring the amount of financial performance in the banking industry. But generally, ROE only measures the return obtained from the investment of the company owner. while ROA focuses more on the company's ability to obtain earnings in company operations.

Before channeling funds through financing, Islamic banks / Sharia Banking (Suhirman, 2020), need to do a deep financing analysis. The nature of financing is not a debt or receivable, but is an investment that the bank gives to customers in doing business. To see the amount of financing used the Finance to Deposit Ratio (FDR) which is listed in the Bank's financial statements. So that it can be measured if the amount of financing increases, it will increase the amount of bank income. Islamic bank (sharia bank) (Mashilal, 2020), itself as



a business entity that collects funds from the public in the form of savings and distributes them to the public in the form of credit or other means to improve the people's standard of living (Hakiim & Rafsanjani, 2016).

In every distribution of funds or financing, there is always a delayed payment due to external or internal factors to the customer or financing recipient, which causes financing problems. Non-performing financing can be seen from the level of Non-Performing Financing (NPF), non-performing financing is financing that experiences repayment difficulties due to deliberate factors and / or other factors beyond the control of borrower customers. NPF risk will ultimately have an impact on the performance and profitability of Islamic banking (Wahyudi, 2020).

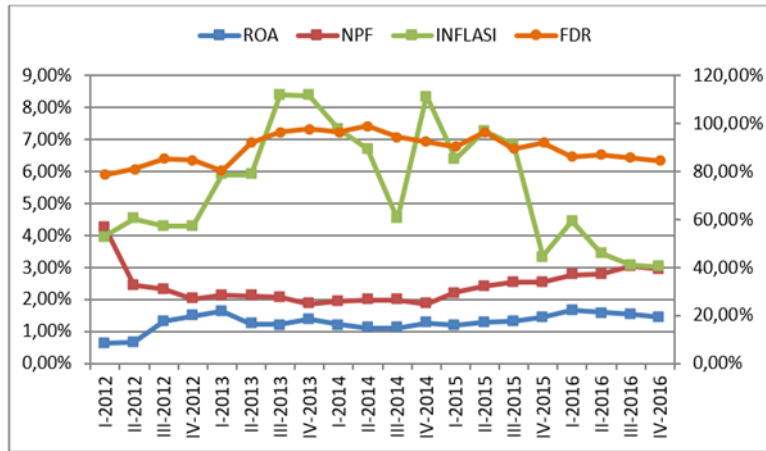
So, the size of the NPF shows the performance of a bank in managing the funds that have been distributed. If the portion of problem financing grows, this will ultimately reduce the amount of revenue the Bank will receive. The following are bank health criteria according to the NPF ratio. The importance of assessing the soundness of a bank is due to the development of a bank's business that is dynamic and affects the level of risk it faces, therefore the soundness of a bank which is a reflection of the condition and performance of a bank must be presented in a transparent manner to the general public (Sari, 2019).

Apart from the two internal factors, there are external factors that affect the income of Islamic banks, namely the inflation rate. In research conducted by Demirguic-kunt and Huizinga. He explained that inflation has a positive effect on bank income on the condition that the bank is able to increase its interest rate faster than the costs arising from inflation. In macroeconomic theory, inflation is always related to the monetary policy taken by the government through the central bank. The government can control the amount of money in circulation by influencing the process of money creation.



So, when the inflation rate increases, it can reduce bank income because the bank bears interest expense.

Gambar 1.1
Grafik Finance to deposite Ratio (FDR), Non Performing Financing (NPF),
Tingkat Inflasi Terhadap Return On Asset (ROA)



Based on the picture above, it can be seen that the average FDR has fluctuated, increasing and decreasing, but it shows a pretty good development, which is above 79% and below 100% but at the end of the 2016 quarter, it has decreased although not significantly. If the FDR or financing increases, the ROA will also increase because the amount of financing issued will get a high rate of return as well. However, in several quarters of each year when FDR increases, ROA actually decreases or vice versa when FDR goes down, ROA actually increases.

The average NPF has fluctuated, increasing and decreasing, but it shows unfavorable development because the NPF is not on average above 0% and below 2%, but in several years the development is quite good, although still quite high. Should the NPF increase, the ROA or income will decrease. However, in several quarters of each year, it is found that the NPF level goes up. ROA also goes up or vice versa, when the NPF falls, the ROA also falls.



The average rate of inflation has fluctuated, increasing and decreasing, but it shows a pretty good development at the end of 2016 because changes in the inflation rate are not too far away. When the inflation rate is high or rising, the ROA should go down. However, in several quarters in 2013-2016, it was found that an increased inflation rate was followed by an increased ROA value, and vice versa.

From the above explanation, the writer finds differences in financial statement facts with existing theories. Therefore, the author wants to examine how much influence these three factors have on the company profits of PT. Bank BNI Syariah, in order to find out how much influence these factors have on the profitability of the Bank.

If the ratio is getting higher, it will indicate the lower liquidity capacity of the bank concerned

Literature Review

Financing to Deposit Ratio (FDR)

FDR is the ratio between the amount of financing provided by the bank and the funds received by the bank. If the ratio is getting higher, it will indicate the lower liquidity capacity of the bank concerned (Almunawwaroh & Marliana, 2018). (FDR) Financing to Deposit Ratio in an Islamic bank (Medyawati & Yunanto, 2018), determined by the ratio between the amount of loans and public funds collected, which includes demand deposits, time deposits (time deposits), and savings. FDR (Financing to Deposit Ratio) (Nihayah & Rifqi, 2020), This states how far the bank's ability to repay depositors' withdrawals by relying on the financing provided as a source of liquidity. The measure of liquidity used is the Financing to Deposit Ratio (FDR) (Lidyah et al., 1970). The higher the FDR, the higher the funds distributed to Third Party Funds (DPK) (Rasyidin, 2016). The greater the financing, the higher the income earned, because the income increases automatically the profit will also increase. Hadith Imam Ibn Majah no. 2280, Kitab at-tijarah, quoted by Muhammad Syafi'i as one of the shari'ah foundations for al-mudharabah and bai as-salam products (in-



front payment sale). Zainul Arifin also quoted the hadith above when talking about the issue of al-mudaraba (profit and loss sharing) (Abdillah, Muhamad Yusuf, Mighfari Elsha Rabi, 2020), [56] 4 "Whoever performs salaf (salam), for a known period of time" (Narrated by al-Bukhari in his sahih, Beirut: Dar al-Fikr, 1995, volume II, p. 2)

Financing to Deposit Ratio (FDR) in Islamic banks (Medyawati & Yunanto, 2018), can also be used to assess a bank's strategy. Conservative bank management usually tends to have a relatively low FDR. Conversely, if FDR exceeds the tolerance limit, it can be said that the bank management is very expansive or aggressive. This ratio is also used to indicate whether a loan can still experience expansion or is otherwise limited. If the bank is Islamic / Islamic banking (Ilahi & Afendi, 2019). Having an FDR that is too small, the bank will find it difficult to cover customer deposits with the existing financing amount. If a bank has a very high FDR, the bank will have a high risk of uncollectible loans and at a certain point the bank will experience a loss.

FDR is calculated from the ratio between the total financing provided by the bank and third party funds obtained by the bank (Fadli, 2018). Total financing is defined as financing provided to third parties (excluding financing to other banks). Third party funds include, among others, demand deposits, savings, time deposits (not including between banks).

Assessment of the performance of Islamic banks as intermediation institutions, may use the Financing to Deposit Ratio (FDR), based on the provisions set forth in Bank Indonesia Circular Letter No. 26/5 / BPPP dated 29 May 1003, the amount of FDR determined by Bank Indonesia may not exceed 110%. With this provision, it means that a bank may provide financing in excess of the amount of third party funds as long as it does not exceed 110%, because this will endanger the survival of the bank and will definitely endanger the deposits of customers who deposit funds from the bank.

The FDR ratio is used to measure the extent to which loan funds that are successfully mobilized by banks to borrowing customers come from third party funds. The level of this ratio indicates the level of bank liquidity. So that



the higher the FDR number of a bank, it means that it is described as a bank that is less liquid than a bank with a smaller FDR value. Based on Bank Indonesia Circular Letter No. 26/5 / BPPP dated 2 May 1993, the amount of this FDR is determined by Bank Indonesia not to exceed 110%. This means that banks may provide financing or financing exceeding the amount of third party funds that have been raised as long as it does not exceed 110%. So, the allowable FDR is $80\% < \text{FDR} < 110\%$, meaning that the minimum FDR is 80% and the maximum FDR is 110%.

The effect of FDR on ROA in Islamic commercial banks / Sharia Commercial Banks (Marwini & Salam, 2020), is that the lower the FDR, it indicates that a bank is less able to maintain its level of liquidity which is seen as less effective in channeling credit or financing, and vice versa if the higher the FDR is within a certain limit, the bank's profit will also increase, assuming the bank is able to channel its funds in effective (Yusuf, 2017).

Non Performing Financing (NPF)

Non Performing Finance (NPF) is a ratio that identifies high levels of financing (Yokoyama & Mahardika, 2019). Non performing finance (NPF) according to the Indonesian dictionary is non-performing financing consisting of loans classified as substandard, doubtful and non-performing. NPF termination is intended for commercial banks while NPF is for Islamic banks (Islamic banking) (Cahya Rosyadah et al., 2020). Non Performing Finance (NPF) shows the collectability of a bank in collecting the financing issued by the bank until it is paid off. NPF is the percentage of the amount of non-performing financing (with the criteria of less current, doubtful and loss) to the total credit issued by the Bank. Non Performing Financing (NPF) in a sharia bank shows the quality of an unhealthy Islamic bank (Muksal, 2018). The level of occurrence of problem financing is described by the NPF ratio. The lower the NPF, the lower the level of problem financing that occurs means the better the condition of the bank (Aryani et al., 2016; Aulia, 2016). Non Performing Financing (NPF) is an intermediate ratio financing that is problematic with the total financing channeled by Islamic banks (Vien et al., 2017). NPF is an



indicator of problem financing that needs attention because of its fluctuating and uncertain nature so it is important to observe it with special attention (Popita, 2013).

According to Veitzhal, problematic financing means financing that in its implementation has not reached or met the target desired by the Bank, such as: return of principal or problematic profit sharing, financing that has the possibility of risk arising in the future for the Bank. In another definition, problematic financing is non-current financing ranging from substandard to non-performing (Ubaidillah, 2018). Financing that is included in the current category, which has the potential for arrears in returns.

Non-performing financing, in terms of productivity, namely in relation to the ability to generate income for the Bank, has decreased and may even no longer exist. In fact, from a bank perspective, it certainly reduces revenue, increases the cost of provision, namely the Provision for Earning Asset Losses (PPAP), while from a national perspective, it reduces the contribution to economic development and growth. (Settlement of Non-Performing Financing in Islamic Banks – Fathurrahman Djamil – Google Books, nd, p.66)

Debtors or groups of debtors that fall into groups 3, 4, 5 of 5 financing categories, namely debtors who are substandard, doubtful and loss. It should always be remembered that the change in the classification of financing from current financing to NPF is a gradual process of decreasing the quality of financing (Bank Auditing Risk-Based Audit in Credit Examination of Commercial Banks/Z Dunil; Editor, Bambang Sarwiji I OPAC National Library of Indonesia, Nd). In other words, NPF is the ratio of financing problems in a bank, if problematic financing increases, the risk of a decline in profitability is greater. If profitability decreases, the bank's ability to expand financing will decrease and the rate of financing will decrease. NPF is the level of risk experienced by a bank (Adawiyah & Suprihhadi, 2017). The high NPF indicates that the bank is not professional in managing its financing, so this indicates that the level of risk on financing the bank is quite high in line with the NPF (Aulia, 2016; Ikhwal, 2016).



Inflation

According to Lipsey, et al (1997), inflation is the average increase in all price levels. Sometimes the increase is continuous and prolonged according to Friedman in Miskhin (2001). Inflation is a monetary phenomenon that always occurs anywhere. Or in other words, a situation where the value of money always decreases (Jibril et al., 2019). Inflation also causes a decrease in people's purchasing power which results in decreased sales (Kuswahariani et al., 2020).

Inflation can occur in two ways, namely from the supply side (cost-push inflation) and the demand side (demand-pull inflation). Inflation is defined as the general tendency of price increases. The trend is meant here is that the increase did not happen for a moment. For example, the price of goods ahead of Eid or other holidays tends to increase. However, after the celebration is over, the community will return to life as before, prices will return to their original condition. The rise of inflation is a symptom of a general and continuous increase in the price of goods. This does not mean that the prices of the various goods have increased by the same percentage (Prakkasi & Idris, 2018).

The sources and causes of inflation are:

Demand full inflation, this inflation usually occurs when the economy is developing rapidly. High job opportunities create high income levels and subsequently very high purchasing power. The high purchasing power currently pushes the demand to exceed the total available product. Aggregate demand increases faster than the economy's productive potential, resulting in inflation.

Cost Push Inflation, this inflation occurs when production costs increase continuously. The increase in production costs can originate from an increase in input prices such as an increase in fuel and other input increases which may be increasingly scarce and must be imported from abroad.

Imported Inflation, inflation can also come from an increase in the prices of imported goods, especially imported goods, which play an important role in every production activity.



In the monetary sector, an uncontrolled high inflation rate could disrupt banking efforts to mobilize public funds. This is because the high inflation rate causes the real interest rate to decline. This fact will reduce people's desire to save so that the growth of banking funds sourced from the public will decline.

According to Revell, there is a relationship between bank profitability and inflation. And the impact of inflation depends on higher bank interest and other operating costs. In addition, most studies see a positive relationship between inflation or long-term interest rates and profitability. As well as a negative relationship between inflation and bank profitability, as stated by uche (1996).

Return on Asset (ROA)

ROA analysis measures the company's ability to generate profits by using the total assets (wealth) owned by the company after adjusting for the costs to finance these assets. ROA is a measuring tool to assess the ability of the Bank's management to get the benefits generated by the average total assets of the bank (Pravasanti, 2018). ROA shows the company's ability to generate return on assets used (Watung & Ilat, 2016). If the ROA of a bank is large, the greater the profit the bank will get. A positive ROA shows that the total assets used for the company's operations are able to provide profits for the company (Ikhwal, 2016).

The variation in the ROA calculation, in addition to the calculation, includes the cost of funding. The financing costs referred to are the margin which is the cost of financing with debt. Dividends which are the cost of funding with shares in the ROA analysis are not calculated. Margin fee is added to the profit earned by the company. ROA (Return on Assets) (Effendi et al., 2017), can be interpreted as the result of a series of company policies (strategic) and the influence of environmental factors (environmental factory).

In the above formula, the margin is added back to the net profit, while the tax savings due to interest are deducted from the net profit. In this case the average total assets are used in this case, not the total assets at the end of the period. This is more consistent with the use of ROA as a measure of performance over a given period. Usually the average asset is calculated by



adding up the assets at the beginning of the period with the assets at the end of the period and dividing it in half. For non-seasonal businesses, such use is sufficient. But for seasonal businesses, the average asset at the end of each quarter is better used.

ROA (return on assets) (Maula et al., 2019), reflects the company's ability to use investment used for company operations in order to generate company profitability. Profitability is the most important factor considered by management in dividend policy, as is investment as measured by operating (net) assets. Operating (net) assets are operating assets after deducting the calculated depreciation (depreciation) of the fixed assets.

ROA (a measure of profitability) is also a measure of a company's effectiveness in generating profits during a certain financial reporting period (Efendy & Fathoni, 2019) by utilizing fixed assets used for operations. Level of Return On Assets (ROA) is used to measure the profitability of the bank (Hijriyani & Setiawan, 2017). The greater the ROA, the better the company's performance, because the rate of return on investment (return) is greater.

Methods

Object of Research

The research was conducted at Bank BNI Syariah Pusat. This is done because the head office has the most complete and most accessible data required by researchers. In addition, Bank BNI Syariah is quite attractive in Indonesia. Therefore, this bank must have a high transaction rate, so the required data is easy and interesting to study.

Data Sources

This study uses secondary data from time series (time series). The data used is in the form of quarterly data from 2011 first quarter to 2020 first quarter. The variables in this study are ROA (return on assets) as an indicator of profitability, FDR (financing to deposit ratio) as an indicator of the amount



of financing, NPF (non performing financing) as an indicator of problem financing and inflation. The data is obtained from the website of Bank BNI Syariah and the Central Statistics Agency (BPS) for inflation data.

Data Analysis Method

This research is a quantitative research. The data analysis method used is the Vector Error Correction Model (VECM). Vector Error Correction Model is an restricted form of VAR. This additional restriction is done because the data is not stationary at the level but has a cointegration relationship. The research models are as follows:

$$ROA_t = \alpha_{10} + \sum_{j=1}^k \alpha_{11} ROA_{t-j} + \sum_{j=1}^k \alpha_{12} FDR_{t-j} + \sum_{j=1}^k \alpha_{13} NPF_{t-j} + \sum_{j=1}^k \alpha_{14} INF_{t-j} + \mu_{1t}$$

Where,

- ROA : *Return on Asset*
- FDR : *Financing to Deposit Ratio*
- NPF : *Non Performing Financing*
- INF : *Inflation*
- k : *Maximum lag length*
- j : *Lag*
- α_{10} : *Constants*
- $\alpha_{11} \dots \alpha_{14}$: *Regression coefficient*
- μ_{1t} : *Error term*

The VECM modelling is carried out with various stages that must be passed, namely data stationarity test, optimal lag test, model stability test,



cointegration test, impulse response function and forecast error variance decomposition.

1. The data stationarity test used the Augmented Dickey-Fuller (ADF) test.
2. The optimal lag test uses the SC (Schwarz Information Criterion) criteria.
3. The model stability test can be seen from the modulus value in its AR-roots table.
4. Cointegration test using the Johansen test.
5. Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) to see the shock behaviour and role of each variable against certain variables.

Results and Discussion

Data Stationarity Test

The first step in estimating the model is to test the data stationarity for each research variable. This is important to do to avoid the problem of spurious regression. The data stationarity test was performed using the Augmented Dickey-Fuller (ADF) test. If the level is not stationary (containing unit root) then the stationarity test is again carried out at the first difference level. The results of the data stationarity test for each research variable showed that only the ROA variable was stationary at the level, while the FDR, NPF and inflation variables were only stationary at the first difference level. Thus, data analysis will use the VAR model at the first difference level or the VECM model depending on the cointegration test.

Determination of Optimal Lag

Lag in the VAR system is an important thing. This is because besides being useful for showing how long a variable reacts to other variables, determining the optimal lag is also useful for eliminating autocorrelation problems in the



VAR system. The optimal lag test in this study uses the SC (Schwarz Information Criterion) criteria, namely using lag 1.

VAR System Stability Test

After determining the optimal lag, the next step is to test the stability of the VAR system. Arsana (2006) states that the estimated VAR is stable if all roots have a modulus less than one and are located in the unit circle. The results of the VAR system stability test in table 1 show that the modulus is smaller than one so that the VAR model system in this study is stable.

Table 1. VAR System Stability Test

Root	Modulus
0.935432	0.935432
0.549265 - 0.410057i	0.685448
0.549265 + 0.410057i	0.685448
-0.477652	0.477652
0.286167 - 0.360782i	0.460495
0.286167 + 0.360782i	0.460495
-0.234806 - 0.358217i	0.428314
-0.234806 + 0.358217i	0.428314

Source: Eviews 10

Cointegration Test



The cointegration relationship in a system of equations indicates an error correction model which describes a long-term equilibrium relationship. The cointegration test in this study uses the Johansen approach by comparing the trace statistic value with the critical value used (5%). If the trace statistic is greater than the critical value, then there is cointegration in the system of equations. Based on the results of the cointegration test as shown in table 2, this research model has two cointegration ranks at the 5% real level used. Thus, because it has a cointegration relationship, this study will use the VECM model.

Table 2. Johansen Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.562669	70.10818	54.07904	0.0010
At most 1 *	0.493057	41.16092	35.19275	0.0101
At most 2	0.378929	17.38343	20.26184	0.1188
At most 3	0.020154	0.712587	9.164546	0.9817

Source: Eviews 10

Impulse Response Function (IRF)

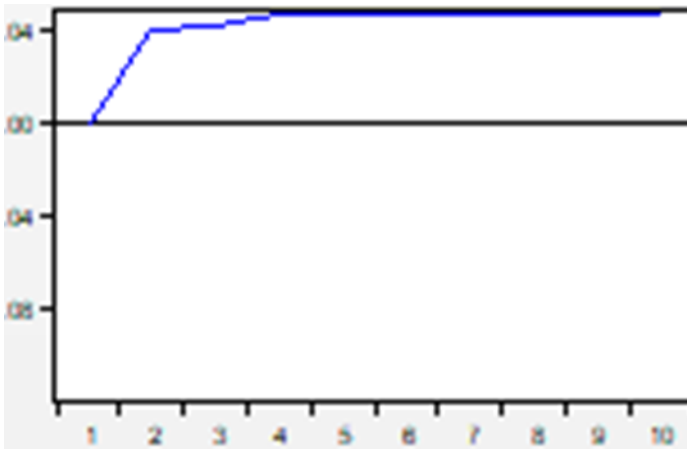
One of the weaknesses of the VAR system is the difficulty of interpreting the coefficients generated in the VAR estimation results. Therefore, the IRF is used to answer this research. IRF is useful for showing how a variable responds to a shock in the variable itself and other endogenous variables. In this study, the timeframe used in analyzing the response of the ROA variable to the FDR, NPF and inflation variables is projected in the next 10 periods (10 quarters).

ROA Response to FDR Shock



The FDR shock of one standard deviation in the first quarter has not been responded to by ROA. Based on Figure 1, shocks to the FDR were responded positively by ROA starting in the second quarter of 0.041%. This positive response is increasing, where in the sixth quarter it was 0.048%. In the following quarter, the positive response to ROA was almost the same as in the sixth quarter.

Graph 1. ROA Response to FDR



Source: Eviews 10

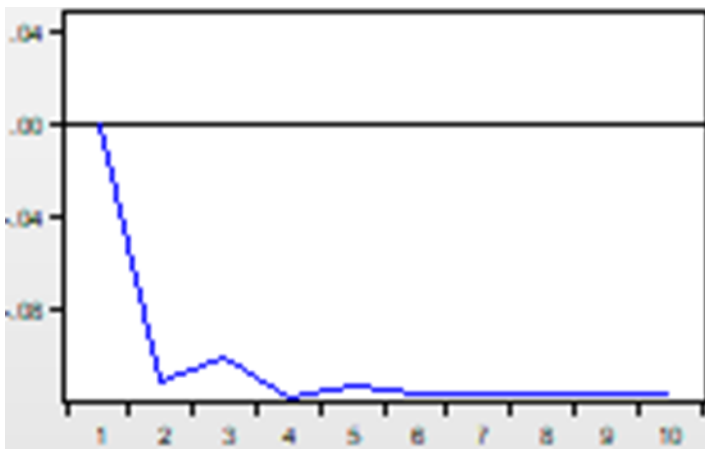
FDR can provide an indication of a bank's liquidity capability. The higher the FDR, the lower the bank's liquidity capacity. This is because the amount of funds needed to finance financing is getting bigger. Within a certain limit, the higher the FDR, it is expected that the bank's profit will increase provided that the financing that has been distributed is effective financing (Yusuf, 2017). The results of this study suggest that FDR has a positive effect on ROA. If the FDR is higher, the profitability (ROA) of Islamic banks will increase, and vice versa. The results of this study are in line with research conducted by Simatupang A and Franzlay (2016) and Yusuf (2017).

ROA Response to NPF Shock



ROA does not appear to respond to NPF shocks of one standard deviation in the first quarter. ROA began to respond negatively to this shock in the second quarter. Based on graph 2 for this period, the NPF shock results in a decrease in ROA by 0.11%. In quarter 4, 6, and so on, the ROA response to the increase in NPF each decreased almost the same as in the second quarter, namely around 0.11%.

Graph 2. ROA Response to NPF



Source: Eviews 10

If the NPF ratio increases, the profitability of Islamic banks will decrease. Likewise, vice versa, the lower the NPF ratio, the profitability of the Islamic bank will increase. The results of this study support previous studies that NPF has a negative effect on ROA, such as research conducted by Syah (2015) and Kusuma (2018).

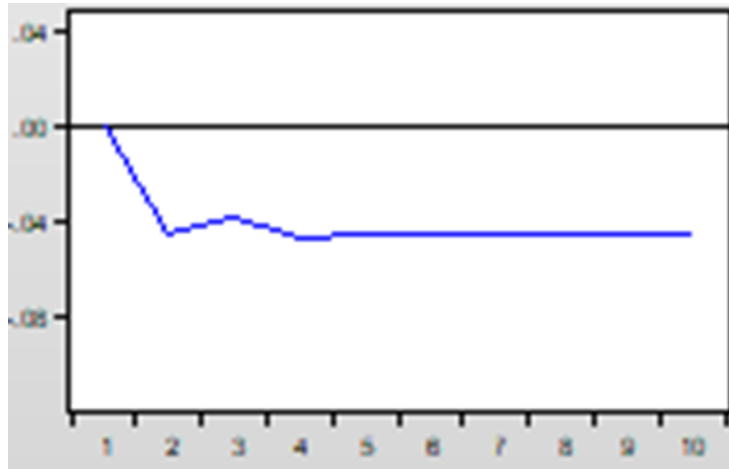
ROA Response to Inflation Shock

It also appears that ROA has not responded to the inflation shock of one standard deviation in the first quarter. Based on graph 3, from the second quarter to its long-term period, it appears that the ROA responded negatively to the inflation shock. In the second quarter, the ROA responded negatively to the increase in inflation of 0.04%. Although in the third quarter, the decrease



in ROA was less, namely by 0.03%, in the fourth quarter onwards it again experienced an average decline of 0.04%.

Graph 3. ROA Response to Inflation



Source: Eviews 10

The results of this study suggest that inflation has a negative effect on the profitability of Islamic banks. If inflation increases, profitability will decrease. Vice versa. The results of this study are in line with research by Sumarlin (2016) and Syah (2018).

Forecast Error Variance Decomposition (FEVD)

FEVD analysis is useful for explaining the contribution of each variable to the shocks it causes to the main observed endogenous variables. In general, the largest shock that affects the diversity of each variable is the one that originates from itself.

**Table 3. Forecast Error Variance Decomposition**

Period	S.E.	DROA	DFDR	DNPF	DINF
1	0.260839	100.0000	0.000000	0.000000	0.000000
2	0.437129	91.59729	0.897130	6.412365	1.093218
3	0.578117	91.19203	1.062245	6.680402	1.065320
4	0.696609	90.17077	1.216158	7.441889	1.171185
5	0.799002	89.83835	1.281695	7.683231	1.196725
6	0.890321	89.53259	1.331227	7.909406	1.226777
7	0.973233	89.35687	1.362275	8.038300	1.242552
8	1.049689	89.21618	1.385898	8.142010	1.255913
9	1.120952	89.11502	1.403315	8.216396	1.265273
10	1.187957	89.03384	1.417104	8.276165	1.272892

Source: Eviews 10

The biggest contribution to the ROA variable is the variant on the ROA variable itself. It can be seen in table 3 that the contribution of variance to the ROA variable continues to decline but remains the most dominant. In the sixth quarter, the variance contribution to the ROA variable has decreased to 89.53% from the previous 91.59% in the second quarter. The contribution of variance to the ROA variable until the tenth quarter was 89.03%.

The effect of variable shocks to FDR, NPF and inflation that has the greatest contribution to ROA is the variant on the NPF variable. In the sixth quarter, the variance contribution to the NPF variable was 7.90%, an increase from the third quarter of 6.68%. The second and third biggest influences were occupied by the FDR variable and inflation in the sixth quarter, respectively 1.33% and 1.22%.

Conclusion

This study uses the VECM model through impulse response analysis and variance decomposition to determine the impact of variable shocks (shock) FDR, NPF and inflation on the profitability of Bank BNI Syariah. The profitability indicator in this study uses the ROA variable. The results showed that the amount of financing (FDR) has a positive relationship with the



profitability of Bank BNI Syariah. Non-performing financing (NPF) and inflation have a negative relationship with the profitability of Bank BNI Syariah. Meanwhile, based on variance decomposition, NPF is the variable that provides the largest contribution to the profitability of Bank BNI Syariah. The second and third places are affected by the FDR and inflation variables, respectively.

Non-performing financing through the NPF indicator is closely related to the profitability obtained by Islamic banks. This is confirmed by this study. Therefore, the Islamic bank must as much as possible to reduce the rate of problem financing ratios so that the profitability of Islamic banks continues to increase.

References

- Abdillah, Muhamad Yusuf, Mighfari Elsha Rabi, R. N. F. (2020). Tawarruq Application in Islamic Banking: A Comparative Study between Malaysia and Indonesia. *Al-Arbah: Journal of Islamic Finance and Banking*, 2(1), 17–32. <https://doi.org/10.21580/al-arbah.v2i1.5540>
- Adawiyah, A. Z., & Suprihhadi, H. (2017). Pengaruh Modal, Aset, dan Ukuran Perusahaan terhadap Profitabilitas Perbankan. *Jurnal Ilmu Dan Riset Manajemen (JIRM)*, 6(1). <http://jurnalmahasiswa.stesia.ac.id/index.php/jirm/article/view/629>
- Afendi, A. (2018). Analisis Pengaruh Struktur Kepemilikan Manajerial, Kebijakan Deviden, Profitabilitas dan Ukuran Perusahaan terhadap Struktur Modal Perusahaan (Studi di Bursa Efek Indonesia). In *SEGMENT Jurnal Manajemen dan Bisnis* (Vol. 14, Issue 2). <https://doi.org/10.37729/SJMB.V14I2.5225>
- Almunawwaroh, M., & Marlina, R. (2018). Pengaruh CAR, NPF dan FDR terhadap Profitabilitas Bank Syariah di Indonesia. *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah*, 2(1), 1–17. <https://doi.org/10.29313/amwaluna.v2i1.3156>
- Aryani, Y., Anggraeni, L., & Wiliasih, R. (2016). Faktor-faktor yang Memengaruhi Non Performing Financing pada Bank Umum Syariah



- Indonesia Periode 2010-2014. *Al-Muzara'ah*, 4(1), 44–60. <https://doi.org/10.29244/jam.4.1.44-60>
- Aulia, F. (2016). Pengaruh CAR, FDR, NPF, dan BOPO terhadap Profitabilitas (Return on Equity). *Diponegoro Journal of Management*, 5(1), 1–10. <http://ejournal-s1.undip.ac.id/index.php/djom>
- Cahya Rosyadah, P., Rachmat Arifin, N., Muhtadi, R., & Safik, M. (2020). Factors That Affect Savings In Islamic Banking. *Journal of Islamic Finance and Banking*, 2(1), 33–46. <https://doi.org/10.21580/al-arbah.2020.2.1.5499>
- Efendy, F., & Fathoni, S. (2019). Pengaruh Rasio Kinerja Bank Terhadap Profitabilitas Industri Bank Umum Syariah di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 5(3), 217. <https://doi.org/10.29040/jiei.v5i3.655>
- Effendi, J., Thiarany, U., & Nursyamsiah, T. (2017). Factors Influencing Non-Performing Financing (NPF) at Sharia Banking. *Walisongo: Jurnal Penelitian Sosial Keagamaan*, 25(1), 109. <https://doi.org/10.21580/ws.25.1.1540>
- Fadli, A. A. Y. (2018). Pengaruh Financing to Deposit Ratio (FDR) dan Non-Performing Financing (NPF) terhadap Bagi Hasil Deposito Mudharabah pada Bank Syariah Mandiri. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 8(1), 98. <https://doi.org/10.30588/jmp.v8i1.391>
- Fatmawati, N. L., & Hakim, A. (2020). Analisis Tingkat Profitabilitas Perbankan Syariah di Indonesia. *Jurnal BAABU AL-ILMI: Ekonomi Dan Perbankan Syariah*, 5(1), 1. <https://doi.org/10.29300/ba.v5i1.3115>
- Hakiim, N., & Rafsanjani, H. (2016). Pengaruh Internal Capital Adequency Ratio (CAR), Financing To Deposit Ratio (FDR), dan Biaya Operasional Per Pendapatan Operasional (BOPO) dalam Peningkatan Profitabilitas Industri Bank Syariah di Indonesia. *Jurnal Aplikasi Manajemen*, 14(1), 161–168. <https://doi.org/10.18202/jam23026332.14.1.17>
- Hijriyani, N. Z., & Setiawan, S. (2017). Analisis Profitabilitas Perbankan Syariah di Indonesia sebagai Dampak Dari Efisiensi Operasional. *Jurnal Kajian Akuntansi*, 1(2), 2579–9975. <https://doi.org/10.33603/jka.v1i2.823>
- Ikhwal, N. (2016). Analisis ROA dan ROE terhadap Profitabilitas Bank di Bursa Efek Indonesia. In *Al-Masraf: Jurnal Lembaga Keuangan dan Perbankan* (Vol. 1, Issue 2). <https://doi.org/10.15548/AL-MASRAF.V1I2.57>



- Ilahi, A. P., & Afendi, A. (2019). Factors To Influence Employee Performance In Bank Tabungan Negara Sharia Semarang. *Journal of Islamic Finance and Banking*, 1(1), 1–18. <https://doi.org/10.21580/al-arbah.2019.1.1.4108>
- Jibril, H. T., Ardiansyah, A., Kaluge, D., & Karim, K. (2019). Permintaan Pembiayaan Murabahah Berdasarkan Tingkat Inflasi dan Suku Bunga BI Rate pada Bank Syariah di Indonesia. *BISMA*, 13(3), 172. <https://doi.org/10.19184/bisma.v13i3.11242>
- Kuswahariani, W., Siregar, H., & Syarifuddin, F. (2020). Analisis NoN Performing Financingg (NPF) Secara Umum dan Segmen Mikro pada Bank Syariah Nasional di Indonesia. *Jurnal Aplikasi Manajemen Dan Bisnis*, 6(1). <https://doi.org/10.17358/jabm.6.1.26>
- Lidyah, R., Riski, O. S., Yo Putri, D. C., & Agustina, T. (1970). Pengujian Financing to Deposit Ratio (FDR) sebagai Mediasi antara Pembiayaan, Non Performing Financing (NPF) dan Biaya Operasional Pendapatan Operasional (BOPO) terhadap Laba pada Bank Umum Syariah Indonesia. *I-Finance: A Research Journal on Islamic Finance*, 5(2), 181–200. <https://doi.org/10.19109//ifinace.v5i2.4914>
- Marginingsih, R. (2018). Faktor-Faktor yang Mempengaruhi Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal Ecodemica*, 2(1), 74–85. <https://ejournal.bsi.ac.id/ejurnal/index.php/ecodemica/article/view/2904>
- Marwini, & Salam, A. N. (2020). E-Money Based Boarding School Cooperative Development Model (Kopontren) As An Sharia Economic Acceleration Effort In Indonesia. *AL-ARBAH: Journal of Islamic Finance and Banking*, 2(1), 103–117. <https://doi.org/10.21580/al-arbah.v2i1.5496>
- Mashilal. (2020). Risk Of Sharia Banking In Indonesia: Viewed From Types Of Financing. *ARBAH: Journal of Islamic Finance and Banking*, 2(1), 61–80. <https://doi.org/10.21580/al-arbah.v2i1.5669>
- Maula, H., Saifullah, M., & Zakiy, F. S. (2019). The Influence of Return on Assets, Leverage, Size, and Capital Intensity on Tax Avoidance. In *AFEBI Accounting Review* (Vol. 4, Issue 01). <https://doi.org/10.47312/AAR.V4I01.223>
- Medyawati, H., & Yunanto, M. (2018). The Effects of FDR, BOPO, and Profit Sharing on The Probability of Islamic Banks in Indonesia. In *International Journal of Economics, Commerce and Management United Kingdom: Vol. VI (Issue 5)*. <http://ijecm.co.uk/>



- Muksal, M. (2018). The Impact of Non-Performing Financing (NPF) to Profitability (Return On Equity) at Sharia Bank in Indonesia. *European Journal of Islamic Finance*, 0(11). <https://doi.org/10.13135/2421-2172/2739>
- Nihayah, A. Z., & Rifqi, L. H. (2020). Variables Determining For Impairment On Productive Assets In Islamic Banks In Indonesia. *AL-ARBAH: Journal of Islamic Finance and Banking*, 2(1), 1–16. <https://doi.org/10.21580/al-arbah.v2i1.5539>
- Popita, M. S. A. (2013). Analisis Penyebab Terjadinya Non Performing Financing pada Bank Umum Syariah di Indonesia. *Accounting Analysis Journal*, 2(4). <https://doi.org/10.15294/aaj.v2i4.2884>
- Prakkasi, & Idris. (2018). Inflasi dalam Perspektif Islam. In *Laa Maisyir : Jurnal Ekonomi Islam* (Vol. 4, Issue 2). <https://doi.org/10.24252/LAMAIYIR.V4I2.4420>
- Pravasanti, Y. A. (2018). Pengaruh NPF dan FDR Terhadap CAR dan Dampaknya Terhadap ROA Pada Perbankan Syariah Di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 4(03), 148. <https://doi.org/10.29040/jiei.v4i03.302>
- Rasyidin, D. (2016). Financing to Deposit Ratio (FDR) sebagai Salah Satu Penilaian Kesehatan Bank Umum Syariah (Study Kasus Pada Bank BJB Syariah Cabang Serang). *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 7(1). <https://doi.org/10.32678/ijei.v7i1.34>
- Sari, Y. M. (2019). Analisis Tingkat Kesehatan Bank Umum Syariah Sebelum dan Sesudah Terdaftar di BEI. *I-Finance: A Research Journal on Islamic Finance*, 5(1), 70–84. <https://doi.org/10.19109/ifinace.v5i1.3717>
- Suhrman. (2020). The Future Of Sharia Based Village Business Agencies Religious Response Management Of Village-Owned Enterprises In Central Lombok. *AL-ARBAH: Journal of Islamic Finance and Banking*, 2(1), 81–102. <https://doi.org/10.21580/al-arbah.v2i1.5677>
- Ubaidillah, U. (2018). Pembiayaan Bermasalah Pada Bank Syariah: Strategi Penanganan Dan Penyelesaiannya. *El-Jizya : Jurnal Ekonomi Islam*, 6(2), 287–310. <https://doi.org/10.24090/ej.v6i2.2042>
- Vien, R., Aziza, S., & Sofyan, A. (2017). Analisis Pengaruh Dana Pihak Ketiga, Non Performing Financing, Capital Adequacy Ratio, Modal Sendiri dan Marjin Keuntungan terhadap Pembiayaan Murabahah. In *JEBI (Jurnal*



- Ekonomi dan Bisnis Islam) (Vol. 2, Issue 1).
<https://doi.org/10.15548/JEBI.V2I1.63>
- Wahyudi, R. (2020). Analisis Pengaruh CAR, NPF, FDR, BOPO dan Inflasi terhadap Profitabilitas Perbankan Syariah di Indonesia: Studi Masa Pandemi Covid-19. *At-Taqaddum*, 12(1), 13.
<https://doi.org/10.21580/at.v12i1.6093>
- Watung, R., & Ilat, V. (2016). Pengaruh Return on Asset (ROA), Net Profit Margin (NPM), dan Earning Per Share (EPS) terhadap Harga Saham pada Perusahaan Perbankan di Bursa Efek Indonesia Periode 2011-2015. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 4(2), 518–529. <https://doi.org/10.35794/emba.v4i2.13108>
- Yokoyama, E. P., & Mahardika, D. P. K. (2019). Pengaruh Non Performing Financing (NPF), Return on Asset (ROA), dan Financing to Deposit Ratio (FDR) terhadap Capital Adequacy Ratio (CAR). *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 3(2), 28–44.
<https://doi.org/10.31955/mea.vol3.iss2.pp>
- Yusuf, M. (2017). Dampak Indikator Rasio Keuangan terhadap Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal Keuangan Dan Perbankan*, 13(2), 141–151.
<http://journal.ibs.ac.id/index.php/jkp/article/view/53>
- Zulkarnain, M., & Heliyani, H. (2020). Peran Non Performing Financing terhadap Profitabilitas Bank Pembiayaan Rakyat Syariah dengan Inflasi sebagai Variabel Moderasi. *EKONOMIKA SYARIAH: Journal of Economic Studies*, 4(1), 111. <https://doi.org/10.30983/es.v4i1.3305>