**AUTOREGRESSION (VAR) METHOD** 

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Nofinawati<sup>1</sup><sup>•</sup>, Dede Ruslan<sup>2</sup>, Muhammad Fitri Rahmadana<sup>3</sup>, Adanan Murroh Nasution<sup>4</sup>

\*Corespondence : Email : nofinawati@uinsyahada.ac.id

### Abstract

ANALYSIS OF ASSET AND FINANCING CONTRIBUTION TO

ISLAMIC BANKING PROFIT IN INDONESIA BY VECTOR

Authors Affiliation:

<sup>1&4</sup>Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidimpuan, *Indonesia* <sup>2&3</sup>Universitas Negeri Medan, Indonesia

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**Kata Kunci :** Aset, Pembiayaan, Laba, Perbankan Syariah

**Keyword :** Assets, Financing, profits, Islamic banking The profit growth of Islamic banks in Indonesia tends to decline from the Covid - 19 period to date. However, the number of assets and the amount of financing of Islamic banks tend to increase from one period to the next. This article discusses the contribution of assets and financing to the profitability of Islamic banking in Indonesia. This article was created using quantitative research methods. The data comes from the Financial Services Authority (OJK), namely data related to the amount of profit, assets, and financing in the Sharia Banking Statistics report, especially Sharia Commercial Banks from 2019 to 2023. Then the analysis of the contribution between the variables of assets, financing and profits of Islamic banks was analyzed using an econometric approach, namely the Vector Auto Regression (VAR) Method. The results of this study show that the profit variable of the previous period has a negative contribution to the endogenous profit variable. However, asset and financing variables in the previous period contributed positively to endogenous profit variables. There has been no previous research that discusses the contribution of variable assets and financing to the profit of Islamic banking in Indonesia using Vector Autoregressive Models. In order for the profit of Islamic banks to always increase, Islamic banks must always increase the number of their assets by increasing the amount of financing disbursed.

Pertumbuhan laba bank syariah di Indonesia cenderung menurun dari periode Covid-19 hingga saat ini. Namun, jumlah aset dan jumlah pembiayaan bank syariah cenderung mengalami peningkatan dari satu periode ke periode berikutnya. Artikel ini membahas mengenai kontribusi aset dan pembiayaan terhadap profitabilitas perbankan syariah di Indonesia. Artikel ini dibuat dengan menggunakan metode penelitian kuantitatif. Data berasal dari Otoritas Jasa Keuangan (OJK), yaitu data terkait jumlah laba, aset, dan pembiayaan pada laporan Statistik Perbankan Svariah khususnya Bank Umum Svariah dari tahun 2019 sampai dengan tahun 2023. Kemudian analisis kontribusi antara variabel aset, pembiayaan dan laba bank syariah dianalisis dengan menggunakan pendekatan ekonometrika yaitu Metode Vector Auto Regression (VAR). Hasil temuan penelitian ini menunjukkan bahwa variabel laba periode sebelumnya memiliki kontribusi negatif terhadap variabel laba endogen. Namun, variabel aset dan pembiayaan periode sebelumnya berkontribusi positif terhadap variabel laba endogen. Belum ada penelitian sebelumnya yang membahas mengenai kontribusi variabel aset dan pembiayaan terhadap laba perbankan syariah di Indonesia dengan menggunakan Vector Autoregressive Models. Agar laba bank syariah selalu meningkat, maka bank syariah harus selalu meningkatkan jumlah asetnya dengan cara meningkatkan jumlah pembiayaan yang disalurkan.

### **INTRODUCTION**

Islamic banking in Indonesia has experienced significant growth in recent decades, driven by increasing public awareness of financial products and services that are in accordance with sharia principles. This development requires an in – depth analysis of the factors that affect the financial performance of Islamic banking, especially profit. Profit is



the main indicator of the health and operational sustainability of a bank, including Islamic banks.

The condition of Islamic bank profit growth tends to decline from 2019 to 2023. The actual data can be seen in the table below:

| Table. 1 Islamic Bank Profit Growth |       |       |        |        |        |  |
|-------------------------------------|-------|-------|--------|--------|--------|--|
| Year                                | 2019  | 2020  | 2021   | 2022   | 2023   |  |
| <b>Profit Growth</b>                | -2,8% | -4,6% | 31,01% | -3,07% | -4,47% |  |
| Source : www.oik.go                 | o.id  |       |        |        |        |  |

Numbers with a minus sign indicate that profit growth in that period has decreased by a number of figures listed in the table. Meanwhile, data that does not have a minus sign means that profit growth has increased. Thus, we can see and know that the growth of Islamic bank profits tends to decline from one period to the next. The growth of Islamic bank profits can be influenced by many factors, such as assets and the amount of financing disbursed and so on.

Financing in Islamic banking includes various products such as murabahah, mudharabah and musharakah which are aimed at meeting the financing needs of the community by using the principle of buying and selling, the principle of profit sharing and the principle of rent and does not violate sharia rules. These products cater to various community financing needs, from personal consumption to entrepreneurial ventures. Islamic banking financing products are designed to meet the diverse financial needs of the community while adhering strictly to Sharia principles, which prohibit interest (riba) and emphasize ethical and equitable financial transactions. By avoiding speculative and exploitative practices, Islamic financing fosters sustainable economic development. Islamic financing plays a crucial role in fostering sustainable economic development by adhering to ethical principles and avoiding speculative and exploitative practices. By grounding financial activities in ethical principles, real assets, and social responsibility, Islamic financing creates a foundation for sustainable and inclusive economic development. This model not only addresses financial stability but also contributes to broader societal well-being. Meanwhile, the assets of Islamic banks, which include various forms of fund distribution, both in the form of working capital, investment and consumptive goods such as property ownership, also play an important role in supporting bank operations and growth.

The fact that the value of the asset size representing the size of the bank is lower in Islamic banks compared to conventional banks supports the fact that the portion of Islamic banks in the banking sector is below the target. This result is in line with the understanding that Islamic banks distribute the collected funds with the principle of profit sharing and risk sharing for the economy, but do not aim to maximize profits (3uruk et al., 2020). Many other studies that have investigated the performance and profitability of Islamic banks, including Alali et al., (2024), AlKhazali et al., (2024), Gazi et al., (2024), Ninglasari et al., (2024), Alqsass et al., (2024), Saggay et al., (2023), Qabajeh et al., (2023), Zheng et al., (2023), Abbas et al., (2023), Lalon et al., (2023), Alqsass & Maali, (2023). Each uses different indicators and models.

Based on several existing references, the author has not found a study that discusses the contribution of asset variables and financing variables to the profit variables of Islamic banking in Indonesia using the VAR analysis method. The Vector Auto Regression (VAR) method is an effective approach in analyzing the contribution between several economic variables. In this context, the VAR method can be used to evaluate the contribution of financing and assets to the profitability of Islamic banking more comprehensively. Using this model, this study aims to identify and measure the contribution of assets and financing to the profitability of Islamic banking in Indonesia. It is hoped that this research can make a significant contribution to the literature of Islamic banking and provide practical recommendations for Islamic bank managers and policymakers to improve the financial performance of Islamic banking in Indonesia.

# METHOD

The object of this research is Sharia Banking, especially Sharia Commercial Banks and Sharia Business Units operating in Indonesia in the monthly period, namely the period January 2019 to the period of December 2023. The data source for this study is secondary data, namely total profit, total assets and total financing available in Sharia Commercial Banks and Sharia Business Units. The data processed in this study is secondary data in the form of a time series. Data was obtained from a report published by the Financial Services Authority on the Sharia Banking Statistics menu. The data is published on the OJK's official portal or website, namely www.ojk.go.id. The population in this study is the entire period of Sharia Banking Statistics reports published by Sharia Commercial Banks and Sharia Business Units operating in Indonesia from 2014 to the present. However, the sample in this study is only 60 reporting periods available on the official OJK website from January 2019 to December 2023. The econometric approach using the Vector Auto Regression (VAR) method is the analysis method used in this study. Vector Auto Regression (VAR) is one of the analysis tools used to look at causality and contribution relationships between variables. So the VAR model for this study based on the sequence of variables used is as follows :

 $log (LABA) = laba [log (LABA_{t-p}), log (ASET_{t-p}), log (PEMBIAYAAN_{t-p}), \in_{1t}].....(i) \\ log (ASET) = aset [log (ASET_{t-p}), log (PEMBIAYAAN_{t-p}), log (LABA_{t-p}), \in_{2t}].....(ii) \\ log (PEMBIAYAAN) = pembiayaan [log (PEMBIAYAAN_{t-p}), log (LABA_{t-p}), log (ASET_{t-p}), \in_{3t}](iii)$ 

Information:

| LABA       | : Total Profit                |
|------------|-------------------------------|
| ASET       | : Total Assets                |
| PEMBIAYAAN | : Total Financing             |
| ε1,εn      | : Residual error (error term) |
| t          | : Monthly period              |
| р          | : Lag Length                  |

# **RESULTS AND DISCUSSION**

## Results

To analyze the contribution between the variables of assets, financing and profits of Islamic banks was analyzed using an econometric approach, namely the Vector Auto Regression (VAR) Method, the following section of this article shows the results of the data processing.

# Normality Test

| Table. 2 Descriptive Statistics and Normality Test |   |  |  |  |  |
|--|---|--|--|--|--|
| Profits  | Asset   | Financing  |  |  |  |
| 17.963,12  | 630.000,6   | 415.231,3  |  |  |  |
| 16.023,00  | 616.138,0   | 394.096,0  |  |  |  |
| 31.841,00  | 868.986,0   | 568.435,0  |  |  |  |
| 8.819,00   | 466.800,0   | 317.438,0  |  |  |  |
| 6.597,154  | 116.461,2   | 71.180,67  |  |  |  |
| 0,524611   | 0,275852  | 0,633659   |  |  |  |
|  | Profits<br>17.963,12<br>16.023,00<br>31.841,00<br>8.819,00<br>6.597,154 | Profits         Asset           17.963,12         630.000,6           16.023,00         616.138,0           31.841,00         868.986,0           8.819,00         466.800,0           6.597,154         116.461,2 |  |  |  |

|             | Profits  | Asset    | Financing |
|-------------|----------|----------|-----------|
| Skewness    | 2,060228 | 1,797224 | 2,207132  |
| Kurtosis    |          |          |           |
|             | 4,960100 | 4,377617 | 5,586835  |
| Jarque-     | 0,083739 | 0,112050 | 0,061212  |
| Bera        |          |          |           |
| Probability |          |          |           |

The object of this research is Sharia Banking, especially Sharia Commercial Banks and Sharia Business Units operating in Indonesia in the monthly period, namely the period January 2019 to the period of December 2023, with the number of observations as many as 60. The source of data for this research is secondary data, namely data on total profit, total assets and total financing distributed in Sharia Commercial Banks and Sharia Business Units. The data is taken from a report published by the Financial Services Authority on the Sharia Banking Statistics menu. The data is published on the official portal or website of the Financial Services Authority, namely <u>www.ojk.go.id</u>. Based on the normality test table above, you can see the description of the data for each variable, namely the average value (average) of each variable, the median (middle) value of each variable, the maximum value of each variable and the minimum value of each variable. In addition, we can also find out that the normality test results for each variable are distributed normally, with the Jarque – Bera Probability value greater than 0.05.

## **Data Stationarity Test**

To be able to estimate a Vector Autoregressive (VAR) model, the main step that must be carried out is the data stationarity test. Stationary data will have a tendency to approach the average value and fluctuate around the average value (Gujarati 1995). The purpose of this test is to ensure that the data used is stationary at level or first difference or second difference. Data stationarity testing can be done using the Unit Root Test. The Unit Root Test results from the asset, financing and profit variable data are as follows:

|                 | Augmented Dickey Fuller           |                       |        |           |  |  |
|-----------------|-----------------------------------|-----------------------|--------|-----------|--|--|
| Variable        | ADF value                         | <b>Critical Value</b> | Prob   | Result    |  |  |
|                 | t-statistik<br>In 2 <sup>nd</sup> | McKinnon<br>10%       |        |           |  |  |
|                 | Differences                       |                       |        |           |  |  |
| D(Pembiayaan,2) | -11,02960                         | -2,595033             | 0,0000 | Stasioner |  |  |
| D(Aset,2)       | -5,924204                         | -2,925169             | 0,0000 | Stasioner |  |  |
| D(Laba,2)       | -8,414817                         | -2,595033             | 0,0000 | Stasioner |  |  |

 Table. 3 Data Stationarity Test Results with Unit Root Test in 2nd Difference

 Augmented Dickey Fuller

Table. 3 above has shown that the *Unit Root Test results* of the profit, asset and financing variable data do not contain unit roots or all of them show stationary in *2nd Difference*. The data is declared to have passed the stationarity test, it can be seen that the probability value is 0.0000 < 0.05. Apart from that, being declared stationary can also be seen based on the value of the *Augmented Dickey Fuller* (ADF) t-statistic in 2nd differences for the asset variable, financing variable and profit variable which is greater than the *McKinnon critical value*.

## **Cointegration Test**

The next testing stage is the cointegration test. The method used to carry out the cointegration test in this research is the Johansen Cointegration Test method, by looking at the Trace Statistics test value. Cointegration is a long-term bond or correlation between several variables, although individually they do not pass the stationary test, the linear combination between these variables can become stationary. If there is a cointegration relationship then it can be continued with Vector Auto Regression (VAR) estimation. Based on the results of data processing using the Eviews application, the results of the cointegration test with stationary in 2nd difference are as follows:

| Table 4. Cointegration Test Result   |                                  |  |                                  |                            |
|--------------------------------------|----------------------------------|--|----------------------------------|----------------------------|
| Hipotesis<br>No, of CE(s)            | Eigenvalue                       | Trace<br>Statistic                                   | 0,05<br>Critical Value           | Prob                       |
| None *                               | 0,547243                         | 103,7056   | 29,79707                         | 0,0000                     |
| At most 1 *                          | 0,470528                         | 60,12369   | 15,49471                         | 0,0000                     |
| At most 2 *                          | 0,366098                         | 25,12053   | 3,841465                         | 0,0000                     |
|                                      |                                  | Max-Eigen  |                                  |                            |
| None *<br>At most 1 *<br>At most 2 * | 0,547243<br>0,470528<br>0,366998 | <i>Statistic</i><br>43,58195<br>34,97316<br>25,15053 | 21,13162<br>14,26460<br>3,841465 | 0,0000<br>0,0000<br>0,0000 |

# Table. 4 cointegration test results show that there are indications of 3 cointegration at a significance level of 0.05. Indications of cointegration between variables can be seen from the trace statistic value < critical value and max – eigens statistic < critical value at the 5% significance level. This shows that the hypothesis which states that there is no indication of cointegration is rejected and the alternative hypothesis which states that there is an indication of cointegration is accepted.

## **Determination of Lag Lenght Criteria**

Data that has been declared to have passed the data stationarity test at the 2nd difference level is then continued to the cointegration test stage, it is stated that there are indications of cointegration, then it will be continued to the next stage, namely the stage of determining the optimal lag. Determining the optimal lag is done to calculate and decide on the choice of lag length. The stage for determining the optimal lag can be obtained by selecting one of several criteria for determining the optimal lag. Among them are the LR (Likehood Ratio), FPE (Final Prediction Error), AIC (Akaike Information Criterion), SC (Schwarz Information Criterion), HQ (Hannan–Quinn Information Criterion) model criteria. At this stage, to determine the optimal lag value, you need to look at how most of the asterisks in the test results are at the same lag. The test results for determining optimal lag can be seen in the table below:

|     | Tusto, o Dotormination of Lug Longitt enterin |           |                  |                       |                       |           |
|-----|---|-----------|------------------|-----------------------|-----------------------|-----------|
| Lag | LogL  | LR        | FPE              | AIC                   | SC                    | HQ        |
| 0   | -1690,604                                     | NA        | 3,73e+22         | 60,48586              | 60,59436              | 60,52792  |
| 1   | - 1657,411                                    | 61,64331  | 1,57e + 22       | 59,62184              | 60,05584              | 59,79010  |
| 2   | 1632,166                                      | 44,18004* | $8,83e + 21^{*}$ | 59,04163 <sup>*</sup> | 59,80114 <sup>*</sup> | 59,33609* |

Based on table 5, it is known that the maximum interval length for the Profit, Assets and Financing variables is at lag 2 for each criterion. Lag 2 was chosen because there is an asterisk (\*) in each lag determination criterion. So lag 2 will be used in the next stage of the VAR method analysis.

# **Stability Test**

The stability of a VAR system can be assessed by examining the inverse roots of its characteristic AR polynomial. This is determined by looking at the modulus values in the AR roots table. If all AR roots values are less than one, the data is considered stable.

| Root                  | Modulus  |
|-----------------------|----------|
| -0,448884 - 0,7306461 | 0,857520 |
| -0,448884 + 0,7306461 | 0,857520 |
| 0,541098              | 0,541098 |
| -0,353635 - 0,3908361 | 0,527077 |
| -0,353635 + 0,3908361 | 0,527077 |
| 0,117274              | 0,117274 |

 Table. 6 Stability Test Result

Based on the table above, it can be observed that all modulus values of the root roots in the test are less than or smaller than 1, indicating that the data for asset, financing, and profit variables are in a stable condition.

## **Granger Causality Test**

The next stage is the Granger Causality Test or Block Exogeneity Test stage which is used to test whether changes in a time series in the past can predict changes in another time series in the current period.

| Null Hypothesis :                           | Observ | F-Statistik | Prob   |  |  |
|---|--------|-------------|--------|--|--|
| D(asset,2) dan D(Financing,2) does not      | 60     | 4,157853    | 0,1251 |  |  |
| Granger Cause D(Profit,2)                   |        | 1,749711    | 0,4169 |  |  |
| All   |        | 4,162890    | 0,3444 |  |  |
| D(Profit,2) dan D(Financing,2) does not     | 60     | 0,914506    | 0,6330 |  |  |
| Granger Cause D(Asset,2)                    |        | 0,550681    | 0,7593 |  |  |
| All   |        | 1,339354    | 0,8547 |  |  |
| D(Profit,2) dan D(Asset,2) do Granger Cause | 60     | 1,163375    | 0,5690 |  |  |
| D(Financing,2)                              |        | 18,18997    | 0,0001 |  |  |
| All   |        | 18,60071    | 0,0009 |  |  |

**Table. 7 Granger Causality Test** 

Table 7 shows the results that there is a causal relationship between profit variables and asset variables on financing variables. This means that it has a cause and effect relationship if seen from the probability value which is smaller than 0.05. However, the asset and financing variables on the profit variable do not have a causal relationship if seen from the probability value exceeding 0.05. Likewise, the profit and financing variables on the asset variables also do not have a causal relationship or causality relationship if seen from the probability value which exceeds 0.05. So it can be seen that the cause and effect relationship or causality relationship between each variable has a low value, so the next stage is VAR estimation.

# Vector Auto Regression Estimates

The Vector Auto Regression analysis stage begins with a data stationery test that is tested on all variables, the result is obtained that all variables are stationary at the level *of 2nd difference*, then continued with the cointegration test, then continued with the determination of optimal lag, then continued with the stability test, and then continued with the Granger causality test. After that, it can be continued with the Vector Auto Regression estimation stage as follows:

# Table. 8 Vector Auto Regression Estimates

|                    | D(Profit,2)             | D(Asset,2)             | D(Financing,2)         |
|--------------------|-------------------------|------------------------|------------------------|
| D(Profit(-1),2)    | -0,658590               | 0,864699               | 0,168203               |
|                    | (0,14122)               | (1,08763)              | (0,31875)              |
|                    | [-4,66354]              | [0,79503]              | [0,52770]              |
| D(Profit(-2), 2)   | -0,284605               | -0,020855              | -0,157680              |
|                    | (0,13738)               | (1,05807)              | (0,31008)              |
|                    | [-2,07162]              | [-0,01971]             | [-0,50851]             |
|                    | [-2,07102]              |                        |                        |
| D(Asset(-1),2)     | 0,028465                | -0,829337              | -0,048549              |
|                    | (0,01875)               | (0,14438)              | (0,04231)              |
|                    | [1,51842]               | [-5,74420]             | [-1, 14741]            |
| D(Asset(-2), 2)    | 0.005504                | -0,712658              | -0,181119              |
|                    | 0,007581                | (0,15021)              | (0,04402)              |
|                    | (0,01950)<br>[-0,38871] |                        | [-4,11432]             |
|                    | [-0,30071]              | [-4,74437]             | []                     |
| D(Financing(-1),2) | -0,051095               | -0,349250              | -0,775483              |
|                    | (0,06127)               | (0,47184)              | (0,13828)              |
|                    | [-0,83400]              | [0,47184]              | [-5,608021]            |
| D(Financing(-2),2) | 0.010216                | 0.000100               | 0 1020 / 1             |
|                    | 0,018216<br>(0,06250)   | -0,200199<br>(0,48137) | -0,103941<br>(0,14107) |
|                    | [-0,04939]              | [-0,41589]             | [0,73679]              |
|                    | [-0,04939]              | [-0,41369]             | [0,73079]              |
| С                  | -11,13088               | 912,4572               | 164,6079               |
|                    | (225,351)               | (1375,57)              | (508,635)              |
|                    | [-0,04939]              | [0,52574]              | [0,32363]              |
| R-Squared          | 0,396921                | 0,589809               | 0,658281               |
| Adj. R–Squared     | 0,323074                | 0,539581               | 0,616438               |

Based on the table of VAR estimation results above, the VAR model can be obtained as follows:

D(Profit, 2) = -0.658589793697 \* D(Profit(-1), 2) - 0.28460456908\* D(Profit(-2), 2) + 0.0284649468152 \* D(Asset(-1), 2)-0.00758127055648 \* D(Asset(-2), 2) - 0.0510953467102\* D(Financing(-1),2) + 0.0182156498481\* D(Financing(-2),2) - 11.1308840263 D(Asset, 2) = 0.864698887534 \* D(Profit(-1), 2) - 0.0208550618186\* D(Profit(-2), 2) - 0.829337327833 \* D(Asset(-1), 2) -0.712657532868 \* D(Asset(-2), 2) - 0.349249656716*∗ D*(*Financing*(−1), 2) − 0.200199176954 \* D(Financing(-2), 2) + 912.457200876 D(Financing, 2) = 0.168202959862 \* D(Profit(-1), 2) - 0.157680398526\* D(Profit(-2), 2) - 0.0485493792676 \* D(Asset(-1), 2)-0.181119033332 \* D(Asset(-2), 2) - 0.775482870597*∗ D*(*Financing*(−1), 2) − 0.103941368687 \* D(Financing(-2), 2) + 164.607917916

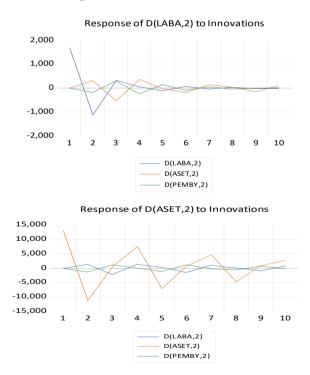
Based on the provisions of the t statistical value and the t table value: if the t statistic > t table, the result is not significant (negative value); if t statistic < t table, the result is significant (negative value); if t statistic > t table, the result is significant (positive value); and if the t statistic < t table, the result is not significant (positive value). From this

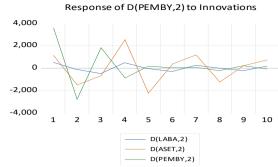
analysis it can be seen that several variables are significantly influenced by the lag of the variable itself:

Based on the results of statistical analysis, the profit variable has a significant influence on the current profit variable, where the t-value of the profit statistic (-1) is  $-4.66354 \le t$  table -2.00247, indicating that the previous month's profit significantly affects the current profit. In addition, the t-value of the profit statistic (-2) of  $-2.07162 \le th t - table -2.00247$  is also significant, indicating that the profit of two months ago has a significant influence on the current profit. Furthermore, the asset variable shows a significant influence on the current asset variable, with the asset statistical t-value (-1) of  $-5.74420 \le t-2.00247$  table, indicating that the previous month's assets affect the current asset significantly. Something similar happened to assets two months ago, with the t-value of the asset statistics (-2) of  $-4.74437 \le t$  table -2.00247, which is also significant. In addition, the asset variable two months ago has a significant influence on the current financing variable, with a statistical t-value of  $-4.11432 \le t-2.00247$  table. Finally, the previous month's financing variable significantly affected the current financing, as shown by the t-value of the financing statistics (-1) of  $-5.608021 \le t-2.00247$  table.

## **Impulse Respon Function (IRF)**

Impulse Response Function (IRF) analysis shows how each endogenous variable responds over time to shocks from that variable itself and other endogenous variables. IRF is used to see the contemporary influence of a dependent variable if it receives a shock or innovation from the independent variable of one standard deviation.





Graph 1. Impulse Respon Function

Graph.1 above explains the response of the endogenous profit variable due to shocks to the endogenous profit, asset and financing variables. There was a shock to the profit and financing variables on profits which caused in the first to the second period the profit and financing variables to decrease drastically until their movement crossed the zero line, meaning they reached a negative value. Meanwhile, in the following period it had the opposite impact, namely shocks to profit and financing variables on profits which caused an increase and then the upward movement continued upwards until it crossed the zero line which indicated a positive movement. Then, the shock of the asset variable to profit causes the shock in the first to second periods to increase, then the increase moves to the top of the line, which indicates a positive movement. The existence of shocks in profits, assets and financing on the endogenous profit variables resulted in fluctuating shocks from the first period to the next period, namely alternating between decreasing and increasing shocks, although the decreases and increases that occurred were not too wide. The shock of the previous period's profit variable to the current period's profit is greater when compared to the 'hock of the asset and financing variables to the endogenous profit variable.

## Variance Decomposition

The Variance Decomposition analysis stage is used to find out how much of the variance in the profit variable for the current period is determined by the contribution of asset and financing variables and is even determined by the contribution of the profit variable itself.

| Table. 9 Variance Decomposition of D(Laba,2) |          |           |           |            |  |  |
|--|----------|-----------|-----------|------------|--|--|
| Period                                       | S.E      | D(Laba,2) | D(Aset,2) | D(Pemby,2) |  |  |
| 1  | 1685,988 | 100,0000  | 0,000000  | 0,000000   |  |  |
| 12   | 2255,813 | 83,91346  | 11,88240  | 4,204147   |  |  |

 Table. 9 Variance Decomposition of D(Laba,2)

| Table. 10 Variance Decomposition of D(Aset,2) |          |           |           |            |  |  |
|---|----------|-----------|-----------|------------|--|--|
| Period  | S.E      | D(Laba,2) | D(Aset,2) | D(Pemby,2) |  |  |
| 1   | 12984,87 | 0,002506  | 99,99749  | 0,000000   |  |  |
| 12  | 21977,73 | 2,716765  | 95,85553  | 1,427706   |  |  |

| Table. If Vallance Decomposition of D(Femby,2) |          |           |           |            |  |  |
|--|----------|-----------|-----------|------------|--|--|
| Period   | S.E      | D(Laba,2) | D(Aset,2) | D(Pemby,2) |  |  |
| 1  | 3805,411 | 1,898048  | 8,789846  | 89,31211   |  |  |
| 12   | 6779,994 | 2,215855  | 43,50996  | 54,27418   |  |  |

| Table. | 11 | Variance | Decomposition | of D(Pemby,2) |
|--------|----|----------|---------------|---------------|
|--------|----|----------|---------------|---------------|

The results of the Variance Decomposition test, if seen from the table above, show that the profit variable has the largest contribution from the previous period's profit variable. The highest contribution in the first period was 100%. In the following period the ability to explain profit variability in each period decreased until in period 12 it was 83.91346%. Meanwhile, the contribution of asset variables increases in each period, starting with 0% from the beginning of the period. In the following period the ability to explain the profit variable in each period increased until in period 12 it was 11.88240%. The same thing also applies to the financing variable. The contribution of the period. In the following of the period. In the following period the ability to explain profit variable increases in each period, starting with 0% from the beginning of the period. In the following period the ability to explain profit variable increases in each period, starting with 0% from the beginning of the period. In the following period the ability to explain profit variable increases in each period, starting with 0% from the beginning of the period. In the following period the ability to explain profit variability in each period also increased until in period 12 it was 4.204147%.

## Discussion

Based on the analysis of the results of the Variance Decomposition Test processing, it can be seen that the contribution of the asset variable from the previous period to the profit variable has a positive contribution. Even though the contribution value moves slowly, within one year the contribution only increased by 11.88%. On average, the increase in contribution is only 1% each month. Likewise, the contribution. Even though the contribution. Even though the contribution of the previous period's financing variable to the profit variable has a positive contribution. Even though the contribution value moves slowly, within one year the contribution only increased by 4.20%. On average, the increase in contribution is only 0.35% each month. However, the contribution of the profit variable in the previous period or the contribution. Even though the profit variable itself to the profit variable has a negative contribution. Even though the contribution value moved slowly, within one year the contribution. Even though the contribution value moved slowly, within one year the contribution. Even though the contribution value moved slowly, within one year the contribution. Even though the contribution value moved slowly, within one year the contribution. Even though the contribution value moved slowly, within one year the contribution.

The results of this study are in line with research conducted Iqbal et al., (2023) examining the relationship between profit sharing, financing risk, and profitability of Islamic banks in Pakistan. Their research using secondary data from certain Islamic banks in Pakistan showed that there was a strong positive relationship between return on equity and musharakah in the secondary data set. In line with that, Syahri & Harjito, (2020) explores the impact of financing using the profit—sharing principle on the profitability of Islamic banks registered with Bank Indonesia. Their investigation revealed that the profitability of Islamic banks was significantly influenced by profit—sharing financing products. The profitability of Islamic banks is often significantly influenced by profit—sharing financing products, such as Mudarabah (profit—sharing) and Musharakah (joint venture). These financing structures are core to Islamic banking as they align with Shariah principles, avoiding interest (riba) while promoting shared risk and reward. Mudarabah and Musharakah allow banks to earn a share of the profits from financed ventures. Successful ventures can result in high returns, boosting profitability.

Likewise, the contribution of profits and financing from the previous period to the total assets of the current period has a positive contribution. Meanwhile, the contribution of variable assets in the previous period has a negative contribution to total assets in the current period. However, the amount of contribution is greater when compared to the profit and financing variables of the previous period. The results of this research are in line with research results which show that there is a positive relationship between profitability and assets (Derbali, 2021). Internal factors are considered more important than external factors. Among them are the following: reduction in operational costs, increase in the volume of collection and distribution of financing, increase in returns on fixed assets, and so on (Shvachych & Kholod, 2020).

Then it is the same as the contribution of profits and assets from the previous period which has a positive contribution to the total financing for the current period. Meanwhile, the contribution of the financing variable for the previous period has a negative contribution to the total financing for the current period. However, the amount of contribution is greater when compared to the profit and asset variables of the previous period. The results of this research are not in line with research conducted by Abusharbeh, (2020) which shows that inflation and profitability have a negative impact on Islamic bank financing in the long term. This paper also reveals a two—way causality between GDP variables and bank size and Islamic bank financing. This shows that GDP and bank size are very dominant factors in sharia bank financing in the short term.

The results of this research also contradict the results of research conducted by Alshubiri & Al Ani, (2023), the results show that there is a significant negative relationship in the short and long term between financing and contract returns according to sharia and sustainable investment. Islamic banking in Oman is measured based on asset quality, capital adequacy and risk sensitivity unless there is a significant positive relationship in the long term between sharia – compliant contract financing and capital adequacy. In addition, there is an insignificant long – term relationship between the two parties to sharia – compliant contract financing and capital adequacy. An insignificant long – term relationship between the two parties to Sharia – compliant contract financing and capital adequacy could stem from several factors inherent to Islamic finance, such as Risk – Sharing Nature, Profit Volatility, Regulatory Framework, Nature of Islamic Contracts, Operational and Compliance Costs, and others. Banks may need to focus on optimizing operational efficiency and cost management to enhance the overall contribution of such contracts to capital adequacy. Apart from that, sharia bank financing is also influenced by the volatility of conventional bank interest rates (Nouman et al., 2022).

# CONCLUSION

Based on the results and discussion above, it can be concluded that the contribution of asset variables in the previous period to the profit variable has a positive contribution. Although the contribution value moved slowly, in one year the contribution only increased by 11.88%. On average, the increase in contributions is only 1% per month. Similarly, the contribution of the financing variable of the previous period to the profit variable has a positive contribution. Although the contribution value moved slowly, in one year the contribution only increased by 4.20%. On average, the increase in contributions is only 0.35% every month. However, the contribution of the profit variable in the previous period or the lag contribution of the profit variable itself to the profit variable has a negative contribution. Although the contribution value moved slowly, in one year the contribution. Although the contribution value moved slowly, in one year the contribution. Although the contribution value moved slowly, in one year the contribution. Although the contribution value moved slowly, in one year the contribution decreased by 83.91%. On average, the decrease in contributions is 1.33% every month.

Similarly, the contribution of profit and financing from the previous period to the total assets of the current period has a positive contribution. Meanwhile, the contribution of variable assets in the previous period had a negative contribution to total assets in the current period. However, the amount of this contribution is greater when compared to the profit and financing variables of the previous period. Then it is the same as the contribution of profit and assets from the previous period which has a positive contribution to the total financing for the current period. Meanwhile, the contribution of the financing variable in the previous period had a negative contribution to the total financing of the previous period. However, the amount of contribution to the total financing of the previous period had a negative contribution to the total financing of the previous period. However, the amount of contribution is greater when compared to the profit and asset variables of the previous period.

Implications this study is that the findings of this study support the theory that emphasizes the importance of internal factors such as assets and financing making a positive contribution to the profitability of Islamic banking. In addition, the results that show the negative contribution of the previous period's profit variables to the current profit provide a new challenge to understand the dynamics of financial variables in the framework of sharia economics, thus expanding the existing literature by integrating the Vector Autoregressive (VAR) approach. In addition, the implication is that these findings open up opportunities for further research that focuses on exploring causality relationships between financial variables using more in – depth approaches, such as panel data analysis, comparative analysis or testing the impact of external variables on the profitability of Islamic banks.

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