

The Effect of Inflation and Economic Growth on Return on Asset (ROA) of Syariah Banks in Indonesia

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Abstract

The purpose of this study is to examine how inflation and economic expansion affect Indonesian Islamic banks' return on assets (ROA). Time series data from the Central Statistics Agency (BPS), Bank Indonesia, and the Financial Services Authority (OJK) from 2014 to 2023 are used in this analysis. The Vector Error Correction Model (VECM), VECM Estimation, IRF and VD, Stationarity Test, Optimal Lag Test, Stability Test, Cointegration Test, Causality Test are the analysis method employed. With trace statistics and significant, the study's findings indicate a long-term link between the variables according to the Johansen cointegration test. According to the VECM results, economic growth has a positive impact on ROA, while inflation has a negative effect. However, neither effect is statistically significant in the short run. According to IRF research, inflation's effect on ROA is first erratic but eventually tends to be neutral. VD demonstrates that internal factors have a greater impact on ROA fluctuation than either inflation or economic growth.

Pengaruh Inflasi dan Pertumbuhan Ekonomi terhadap *Return on Asset (ROA)* di Bank Syariah Indonesia

Abstrak

Tujuan dari penelitian ini adalah untuk menguji pengaruh inflasi dan ekspansi ekonomi terhadap return on asset (ROA) bank syariah Indonesia. Data time series dari Badan Pusat Statistik (BPS), Bank Indonesia, dan Otoritas Jasa Keuangan (OJK) dari tahun 2014 sampai dengan 2023 digunakan dalam analisis ini. Metode analisis yang digunakan adalah Vector Error Correction Model (VECM), estimasi VECM, IRF dan VD, uji stasioneritas, uji lag optimal, uji stabilitas, uji kointegrasi, uji kausalitas. Dengan trace statistics dan signifikansi, temuan penelitian ini menunjukkan adanya hubungan jangka panjang antar variabel menurut uji kointegrasi Johansen. Menurut hasil VECM, pertumbuhan ekonomi memiliki dampak positif pada ROA, sementara inflasi memiliki dampak negatif. Akan tetapi, tidak satu pun dampak yang signifikan secara statistik dalam jangka pendek. Menurut penelitian IRF, dampak inflasi pada ROA awalnya tidak menentu tetapi akhirnya cenderung netral. VD menunjukkan bahwa faktor internal memiliki dampak yang lebih besar pada fluktuasi ROA daripada inflasi atau pertumbuhan ekonomi.

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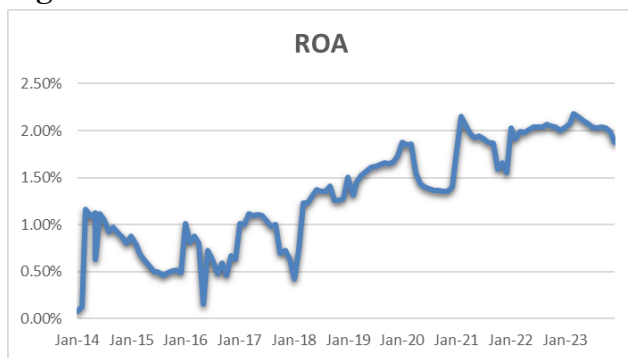
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Indonesia's Islamic banking sector has advanced significantly (Fatimah Tuzzuhro, Noni Rozaini, 2023). Sharia banking is increasingly well accepted by society (Saputra & Fasa, 2024). This is supported by the use of a profit sharing scheme which makes operations more connected to economic activities in the real sector (Annisa & Yaya, 2015).

Islamic banks have an important role as intermediaries between parties who need financing and parties who save funds, and also support national economic growth. However, they still face complex challenges related to financial performance (Saputri & Hannase, 2021). An indicator of asset profitability is return on assets. A bank's return on assets (ROA), which comes primarily from community savings funds, shows how well it manages its assets to generate income (Meidisari, 2019). A higher ROA level indicates the efficiency of asset use and the level of profit achieved. Therefore, ROA is an important indicator in assessing banking performance (Mujiatun & Handayani, 2018).

Figure 1. Return On Aset 2014-2023

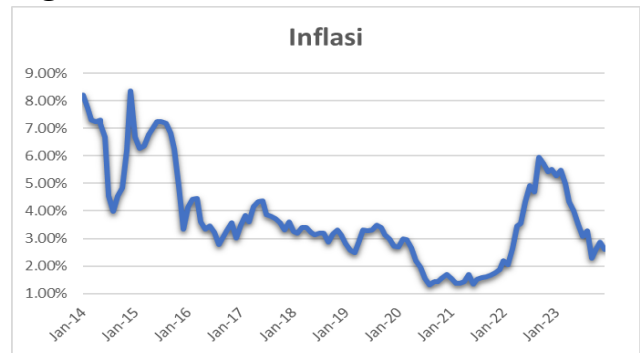


Source: Financial Services Authority

The results of the Return on Assets (ROA) graph from 2014 to 2023 show an increasing trend in financial performance. Starting from 0.08% in January 2014, ROA had decreased to 0.16% in May 2016. However, since then, there has been a consistent increase, peaking at 2.15% in March 2023, although it dropped slightly to 1.88% in December 2023. This trend reflects an increase in the efficiency of asset use, although influenced by internal management and market conditions.

Macroeconomic variables like inflation and economic growth will continue to have an impact on this industry. High inflation will raise operating expenses and reduce Islamic banks' profitability (Iqbal & Ilmiah, 2024).

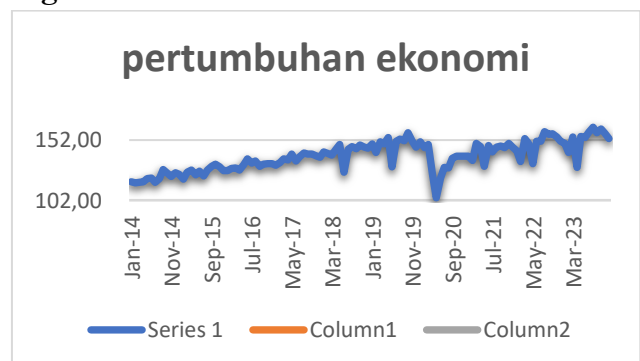
Figure 2. Inflasi 2014-2023



Source: Bank Indonesia

The results of the inflation rate graph show that inflation has decreased significantly in the last decade, from 8.36% in 2014 to 2.61% in 2023, with stability in the range of 2.5%-3.5% since 2018. This decline has an impact on banking credit policies, where high inflation encourages banks to be more careful with strict risk analysis.

Figure 3. Pertumbuhan Ekonomi 2014-2023



Source: Central Statistics Agency(BPS) large and medium industry production index

The Central Statistics Agency (BPS) graph indicates that the large and medium industry production index was 117.32 in 2014 and grew slowly until the end of 2015. There was more variance from 2018 to 2019; the highest figure was 158.00 in October 2019. In 2020, the covid19 pandemic caused a significant decline of 104.02. The value increased once again to 162.67 in August 2023, despite a few minor declines throughout that

period. Notwithstanding significant obstacles like the pandemic, the Indonesian economy has bounced back and exhibits promising development prospects for the years to come.

With the economic uncertainty due to uncontrolled inflation, it is important to evaluate how inflation and economic growth affect ROA in Indonesian Islamic Banks in order to formulate strategies that support long-term stability and profitability (Salim, 2021). This study aims to investigate whether strong economic growth can increase Islamic banks' return on assets (ROA) and how variations in inflation affect their profitability (Handayani, 2024). In order to address inflationary challenges and take advantage of chances for economic expansion, Indonesia's Islamic bank development requires a better understanding of how macroeconomic issues impact banking performance. The impact of inflation and economic growth on Islamic banks' return on assets has been extensively studied.

The results of the study showed that inflation had no discernible effect on return on assets at Islamic Commercial Banks (Selayan et al., 2023). It was shown in the study (Sholihah & Arif, 2019) showed that inflation (ROA) had an insignificant effect on the profitability of return on assets. However, interest rates, inflation, and exchange rates all significantly impacted ROA at Bank Muamalat (Zuhdi et al., 2024)

The GDP, a measure of economic growth, has an impact on Islamic banks' return on assets (ROA). Numerous studies have demonstrated that GDP has a favorable effect on ROA; for example, research conducted in Malaysia and Indonesia has demonstrated that GDP growth has a positive effect on ROA (Qomar et al., 2024). Higher GDP, on the other hand, raises people's ability to save, which boosts Islamic banks' profitability. But research (Maharani & Budiman, 2022) found that inflation, exchange rates, and GDP did not have a significant effect on the profitability of Islamic banks. On the contrary, a study (Rahmansyah &

Ashar, 2023) showed that inflation and exchange rates had a negative effect on ROA, while GDP had a significant positive impact.

Thus, the goal of this research is to examine the effects of economic expansion and inflation on Return on Assets in Indonesian Islamic banks. Therefore, it is anticipated that the results of this study will assist Islamic bank managers in refining their financial plans and serve as a guide for the formulation of policies that promote the stability and expansion of Islamic banking in the face of constantly shifting economic conditions.

LITERATURE REVIEW

Return On Assets (ROA)

Return on assets (ROA) is a statistic that illustrates the potential of a bank's management to create profits from managing its assets (Rifky et al., 2024). A higher return on assets indicates that the bank is in a better position in terms of utilization (Hartini, 2016). ROA is a ratio that measures a bank's ability to generate profitability. Bank Indonesia sets a minimum ROA standard of 1.5% for the "healthy" category. The higher the ROA, the greater the profit and efficiency of asset use (Wahyudi & Sari, 2019).

A study by (Jahan, 2020) on Islamic banks in Bangladesh discovered that operational effectiveness and asset utilization are crucial in determining the amount of ROA and have a strong relationship with bank profitability, including ROA. This demonstrates that internal bank management is a significant determinant of ROA, in addition to macroeconomic considerations. In the meantime, (Ekuitas & Hakim, 2023) discovered that inflation and BI interest rates significantly impact Indonesian Islamic banks' return on assets (ROA). High economic growth tends to raise ROA, whereas unchecked inflation tends to lower it, according to research (Hayati, 2014) for Islamic banks to continue to be profitable, economic stability is essential.

Inflation

When prices for goods and services keep rising over time, the currency's purchasing power declines, which is known as inflation (Pujadi, 2022). Inflation can occur naturally or intentionally, and if not controlled, it can increase further (Syakir, 2015). A nation's inflation is influenced by a number of factors. By definition, inflation is a decline in a nation's currency's value relative to commodities like gold or foreign exchange rates. According to (Rusmadi, 2017) inflation must always be steady and kept to a minimum.

According to previous studies, there is considerable disagreement regarding how inflation affects Islamic banks' Return on Assets. For example, a study conducted by (Ishak et al., 2020) found that inflation had no discernible effect on the return on assets of Islamic Commercial Banks between 2011 and 2019. Similar results were also found by (Sholihah & Arif, 2019) who contended that inflation had no discernible impact on bank profitability as determined by ROA. But contrary to earlier research, a study by (Zuhdi et al., 2024) showed that interest rates, inflation, and exchange rates significantly impacted the return on assets (ROA) of Muamalat banks. This study looks at how inflation, benchmark interest rates, and Indonesian Islamic banks' return on assets (ROA) relate to one another. The results show that inflation has a major effect on roa (Alim, 2014). When paired with other factors, research indicates that inflation has an 11.5% impact on Islamic banks' return on assets (Dima Maulika Sehany, 2022). (Fitria, 2017) asserts that while inflation has no direct effect on Islamic banks' profitability, exogenous factors such as the macroeconomy have a major influence on Islamic banking performance. Inflation may affect bank liquidity, which could thus affect ROA, claims (Nurhayati, 2017)

Economic growth

According to (Puspita et al., 2020). economic growth is the process of improving a nation's

economic circumstances during a specific time period, which is marked by an increase in state revenue and production capability. The demand for banking services, such as credit and savings, can rise in response to positive economic growth, which eventually boosts bank profitability (Todaro & Smith, 2020). According to (Hutahaean, 2019) economic growth is the rise in a nation's real Gross Domestic Product (GDP), which indicates an increase in its production capacity. Sustainable economic growth is crucial to improve people's welfare and reduce poverty.

Economic growth, as indicated by GDP, is the primary factor affecting Islamic banks' Return on Assets (ROA). Numerous studies have demonstrated that rising GDP positively affects ROA; for example, research conducted in Malaysia and Indonesia revealed that higher economic growth can boost Islamic banks' profitability. (Qomar et al., 2024). However, several studies have also found different results (Maharani & Budiman, 2022) claiming that when compared to GDP, inflation, and exchange rates, there is no discernible impact on Islamic banks' profitability. However, as demonstrated by (Rahmansyah & Ashar, 2023) GDP continues to have a beneficial effect on Islamic banks' profitability, whilst inflation and currency rates actually have a negative effect on ROA. Economic growth and inflation are significantly correlated. Low and stable inflation can encourage economic growth, whereas high and uncontrolled inflation might obstruct it (Hafidz Meiditambua Saefulloh et al., 2023). Therefore, in order to achieve sustained economic growth, macroeconomic stability including the control of inflation must be preserved. Establishing measures that can sustain price stability and encourage robust economic growth is crucial for the government and central bank (Hakiki et al., 2024) according to a study by (Maya, 2019) non-performing loans and economic expansion have a moderating impact on Indonesian Islamic banks' profitability when inflation is present. Profitability is therefore

positively and significantly impacted by economic growth.

RESEARCH METHODOLOGY

Time series data types and secondary data sources are used in this quantitative study (Toto Suwarsa, SE., Ak. & Indonesia, 2021). The analysis makes use of official statistics on inflation, economic development, and the return on assets of Islamic bank from 2014 to 2023 from the central statistics agency (BPS), Bank Indonesia (BI), and the financial services authority (OJK). The Vector Error Correction Model approach in the EViews 13 program is used to analyze the data for this study in order to look into both short-term and long-term relationships as well as the dynamic interactions between inflation, economic growth, and return on assets in Islamic banks. After the data is gathered, the first step of the analysis is a stationarity test using the Augmented Dickey-Fuller method. The Johansen technique is then used to do a cointegration test to determine whether there is a long-term relationship between the variables of inflation, economic growth, and roa. If cointegration is discovered based on the test findings, the short- and long-term correlations between these variables will be examined using the Vector Error Correction Model. Researchers can find important patterns and trends in the correlation between macroeconomic factors and Islamic banks' financial performance by employing this methodology. It is anticipated that these discoveries would advance Indonesian Islamic banking and economic theory and practice.

RESULTS AND DISCUSSION

Stationarity Test is the initial stage in using VAR or VECM models to ensure that the data does not contain a unit root.

Table 1. Unit root test results

Variable	Augmented Dickey-Fuller test statistic			
	Level		First difference	
	t-Statistic	Prob.*	t-Statistic	Prob.*
Inflation	-2.627155	0.0904	-8.933384	0.0000
Economic Growth	-2.752671	0.0684	-11.32506	0.0000
ROA	-2.367273	0.1532	-12.37281	0.0000

Source: processed secondary data (2025)

Since the findings of table 1 show that the data at the initial level is not steady according to the unit root test, a first difference must be made. The three variables have a probability value less than 5% after the first difference, which suggests that the data is stationary. In order to prevent the VECM model's regression results from displaying an erroneous association between variables, data stationarity is crucial. As a result, the data is prepared for further examination.

Using the Lag Order Selection Criteria, the Optimal Lag Test determines the ideal lag.

Table 2. Optimal lag test results

La	LogL	LR	FPE	AIC	SC	HQ
g						
0	597.35		4.48	10.709	10.635	10.679
	31	NA	e-09	07	84*	36*
1	611.01	26.336	4.12	10.793	10.500	10.674
	35	27*	e-09*	04*	11	21
2	617.62	12.3850	4.31	10.749	10.237	10.542
	29	7	e-09	96	35	01
3	622.37	8.65471	4.65	10.673	9.9411	10.376
	87	7	e-09	49	84	42
4	627.65	9.31392	4.99	10.606	9.6543	10.220
	34	7	e-09	37	71	17
5	631.87	7.23307	5.45	10.520	9.3486	10.045
	91	2	e-09	34	55	02
6	634.62	4.55083	6.12	10.407	9.0162	9.8432
	44	5	e-09	65	66	05
7	640.26	9.04882	6.54	10.347	8.7360	9.6935
	72	3	e-09	16	85	92
8	648.16	12.2378	6.73	10.327	8.4965	9.5846
	49	6	e-09	30	32	08

Source: processed secondary data (2025)

According to table 2's results, the ideal lag is at lag 1, as demonstrated by the criteria denoted by an asterisk (*), including LR, FPE, AIC, SC, and HQ. Understanding the relationship between the

variables in the model depends on choosing the right lag. A lag that is too small could make the model miss the dynamism of the interaction between the variables, while a lag that is too high could lead to an inefficient model.

Test of stability The stability test's objective is to confirm that the VECM model is suitable for forecasting the impulse response function (IRF) and variance decomposition (VD). Unstable models can produce inaccurate estimates.

Table 3. Stability test results

Root	Modulus
0.948796	0.948796
0.885530	0.885530
0.707648	0.707648
-0.327905	0.327905
0.244960	0.244960
-0.091418	0.091418

Source: processed secondary data (2025)

Table 3 displays the stability test results with first difference lag 1, demonstrating that the VAR model is stable and suitable for additional investigation because all modulus values are less than 1.

The VECM model is chosen based on the results of the cointegration test. The VECM model can be applied since the Johansen cointegration test (JCT) results demonstrate cointegration.

Table 4. Cointegration Test Results (Johansen Cointegration Test)

Hypothesized		Trace	0.05	Prob**
No. of CE(s)	Eigenvalue	Statistic	Critical Value	
None*	0.560573	204.6881	29.79707	0.0000
At most 1*	0.417632	108.4808	15.49471	0.0000
At most 2*	0.320593	45.22451	3.841465	0.0000

Source: processed secondary data (2025)

The Trace Statistic is greater than the "critical value" at the 5% significance level and "prob = 0.0000," as shown in Table 4, suggesting that the null hypothesis is rejected at all levels. The identification of at least three cointegration

relationships shows that the variables in the model move together over a long period of time.

The purpose of the Causality Test is to identify the relationships between variables. The variable is considered causal if the probability value is less than 0.05 and non-causative if it is more than 0.05.

Table 5. Causality test results

Null Hypothesis:	Obs	F-Statistic	Prob.
ECONOMIC	118	0.21429	0.8074
GROWTH Does Not			
Granger Cause		1.27780	0.2826
INFLATION			
INFLATION does not	118	0.15495	0.8566
Granger Cause		0.24507	0.7831
ECONOMIC			
GROWTH			
ROA Does Not Granger	118	2.73040	0.0695
Cause INFLATION			
		0.91882	0.4019

Source: processed secondary data (2025)

Table 5's test findings show that neither inflation nor economic growth are impacted by one another. Furthermore, neither inflation nor return on assets are impacted by the other. Nonetheless, there is proof that economic growth could have a slight effect on ROA. Therefore, there is no proof that these factors have a meaningful causal relationship.

Table 6. Vector Error Correction Estimates

Long-term			
Variables	Coefficient	t-table	t-statistic
D(inflation(-1))	1.000000		
D(economic growth(-1))	0.003906	1.90845	[11.0448]
D(ROA(-1))	-4.323488		[-3.28152]

Source: processed secondary data (2025)

The long-term estimation results in table 6, that Return on Assets of bank syariah indonesia is significantly affected by inflation with a coefficient of 1.000000, which means that ROA will increase if inflation is higher. Economic growth also significantly affects ROA with a coefficient of 0.003906 and a t-statistic of 11.0448, which is

greater than the t-table of 1.90845. Conversely, ROA in the previous period has a negative effect on current ROA with a coefficient of -4.323488 and a t-statistic of -3.28152. Therefore, ROA in the previous period was higher, this tends to cause a decrease in ROA at this time, while inflation and economic growth have a positive impact on ROA.

Table 7. Vector error correction estimates

Short-term			
Variables	Coefficient	t-table	t-statistic
COINTEQ1	-0.074327		[-2.41522]
D(inflation(-1),2)	-0.298235		[-3.32554]
D(economic growth(-1),2)	0.000178	1.90845	[2.42173]
D(ROA(-1),2)	-0.192941		[-0.87715]

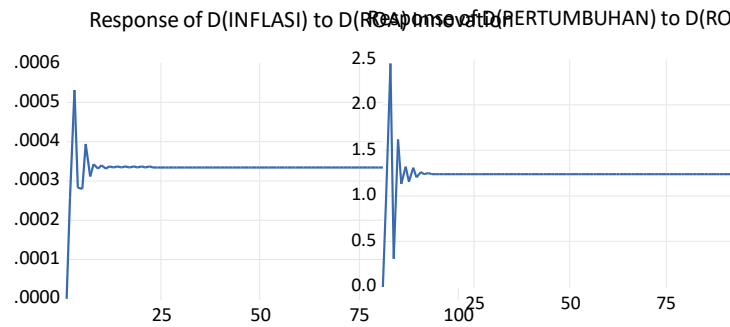
Source: processed secondary data (2025)

The short-term estimation results in Table 7 show that the long-term imbalance is gradually being corrected. Inflation had a negative and large effect on ROA over the prior period, even while economic growth had a positive and considerable impact. However, ROA in the preceding era did not have a substantial effect on current ROA, therefore inflation tends to diminish ROA, whereas economic growth has a positive and large impact. Thus, inflation tends to lower ROA, while economic growth has a favorable impact in the short term

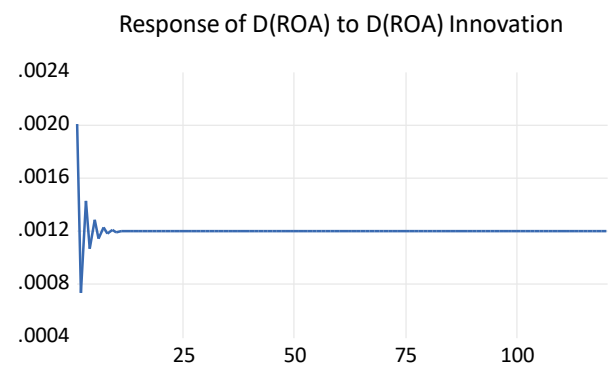
Impulse Response Function (IRF) characterizes how a variable reacts to a shock to itself and all other system variables. This analysis includes both the short-term response at the start of the period and the long-term response at the end of the period. The IRF graph's vertical axis displays the magnitude or value of the shock-induced reaction, while the horizontal axis displays the analysis period or time. We can better comprehend the dynamics of the relationship between variables throughout time with the aid of this figure.

Figure 4 (Impulse Response Function Results)

Response to Cholesky One S.D. (d.f. adjusted) Innovations



Response to Cholesky One S.D. (d.f. adjusted) Innovations



Source: processed secondary data (2025)

The following is an analysis of the Impulse Response Function (IRF) results based on data for 120 periods:

1. Response of D (Inflation) to D (ROA)
At the beginning of the period, the inflation response to roa shocks is quite small but positive, around 0.0004. This response fluctuates over the first few periods, indicating an unstable impact pattern. After about fifteen periods, the response stabilizes at around 0, indicating that the impact of ROA shocks on inflation becomes insignificant in the long run .
2. Response of D (Economic Growth) to D (ROA).
Return on asset (ROA) significantly affects economic growth in the early periods. A positive response occurs in the early period of around 1.5, and gradually decreases towards stability near level

1 after about twenty periods. This demonstrates how ROA initially has a large impact on economic growth before gradually waning.

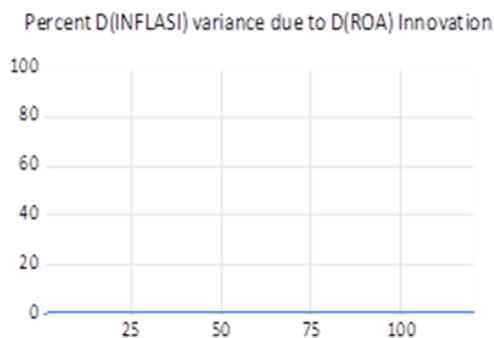
3. Response of D(ROA) to D(ROA).

Initially, the response of roa to shocks from itself shows a significant positive pattern around 0.002, but then decreases rapidly until it stabilizes again around 0.001, indicating that the effect of internal shocks on ROA tends to subside over time.

Variance Decomposition (VD) demonstrates the contribution of each variable, as well as the contributions of other variables, to the variance of a variable in the system.

Figure 1: Percent D(INFLATION) Variance due to D(ROA) Innovation

Variance Decomposition using Cholesky (d.f. adjusted) Factors

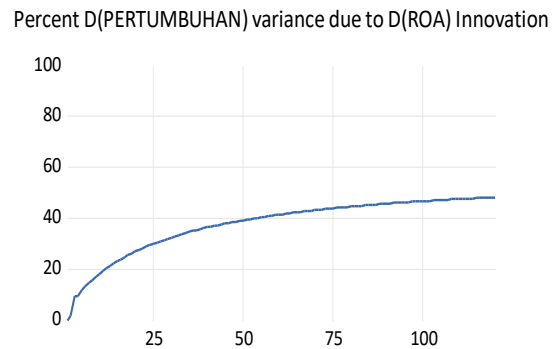


Source: processed secondary data (2025)

In this graph, the variation of D(ROA) is dominated by the innovation of D(ROA) itself from 2014 to 2023. The contribution of D(ROA) to its own variation remains high, almost 100%, from the beginning of the period to the end of the period. This shows that internal factors or the dynamics of ROA itself greatly affect ROA, and external factors such as inflation or economic growth only affect it slightly.

Figure 2: Percent D (ECONOMIC GROWTH) variance due to D (ROA) Innovation

Variance Decomposition using Cholesky (d.f. adjusted) Factors

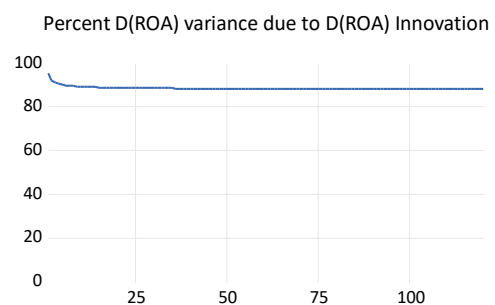


Source: processed secondary data (2025)

The graph indicates that over a period of 120 periods, the impact of innovation D (ROA) on the variation of D (ECONOMIC GROWTH) increases progressively. The contribution of D (ROA) to economic growth is still quite minor in the early years of the analysis, but it gradually grows until the end of the period (2023), when it reaches about 40%. It illustrates how changes in Bank Syariah Indonesia's return on assets have a significant long-term impact on the growth of the overall economy.

Figure 3: Percent D (ROA) Variance due to D (ROA) Innovation

Variance Decomposition using Cholesky (d.f. adjusted) Factors



Source: processed secondary data (2025)

In this graph, the variation of D (ROA) is explained more by the innovation of D (ROA) itself than by other external variables. The contribution of innovation of D (ROA) to the variation of D (ROA) is very high, almost 100%, both at the start of the analysis period and at its conclusion. This demonstrates that ROA's internal

dynamics are primarily to blame for variations in ROA.

The Effect of Inflation on ROA

The analysis's findings reveal that inflation has a harmful influence on Indonesia's Islamic banks' return on assets, despite having a modest short-term effect. The stationarity test indicates that the inflation variable is initially unstable but stabilizes after the first differencing, with a probability of 0.0904. The optimal lag test indicates that lag 1 is the most appropriate based on the aic criteria. The var stability test confirms that the model is stable when all modulus values are below the cutoff of 1. A trace statistic of 204.6881, which is higher than the critical value of 29.79707 at a significance level of 5%, indicates a long-term correlation between inflation, economic growth, and return on assets, according to the Johansen cointegration test.

With an F-statistic of 0.15495 and a p-value of 0.8566, the Granger causality test reveals no significant correlation between inflation and ROA, suggesting that inflation has no direct effect on Islamic banks' profitability. According to vecm data, inflation has a marginally favorable long-term influence on roa but a short-term negative and negligible effect. The Impulse Response Function indicates initial instability in ROA due to inflation shocks, which later stabilizes. Variance Decomposition reveals that internal factors play a greater role in ROA fluctuations than inflation or economic growth.

These findings are consistent with studies by (Ishak et al., 2020), (Handayani, 2024), and (Sholihah & Arif, 2019) which discovered that inflation had no discernible effect on Islamic banks' return on assets. This result, however, runs counter to research by (Zuhdi et al., 2024) which demonstrates that inflation has a major impact on Bank Muamalat's return on assets

Overall, this study shows that the profitability of Indonesian Islamic banks is not affected by inflation, and to improve the efficiency

and profitability of Islamic banks, optimal internal policies are needed.

The Effect of Economic Growth on ROA

The analysis's findings indicate that economic growth has a favorable effect on Islamic banks' Return on Assets (ROA), albeit not significantly so in the short or long run. With a trace statistic of 204.6881 higher than the crucial value of 29.79707 and a significance level of 0.0000 (<0.05), the Johansen cointegration test revealed a long-term association between economic growth and ROA.

The Vector Error Correction Model assessment indicates that economic expansion has a short-term positive impact on ROA, with a coefficient of 0.00017 and a t-statistic of 2.4217. Nevertheless, with a probability of 0.4019 (more than 0.05), this effect is not significant. Furthermore, the impulse response function results indicate that at the start of the period, economic growth responds favorably to ROA innovation. This effect then decreases and reaches stability in the long term. Variance decomposition shows that economic growth only contributes little to the variation of return on assets, which is more influenced by internal bank factors.

Economic growth in Malaysia and Indonesia boosts Islamic banks' profitability, according to research by (Qomar et al., 2024) The Return on Assets of Islamic banks is also positively impacted by economic growth, but this effect is relatively marginal in the short term, according to (Handayani, 2024) Furthermore, the demand for financial services may rise in response to economic expansion, according to (Godaro & Smith, 2020). In the end, this will result in increased bank profits. The results of this study, however, are different from those of (Maharani & Budiman, 2022) who discovered that economic development had no discernible impact on Indonesian Islamic banks' return on assets.

All things considered, these findings imply that while economic expansion tends to raise the

return on assets of Islamic bank, its effect is still minimal, with internal bank policies and asset management plans, for instance, probably having a bigger influence on Islamic banking profitability than other variables.

CONCLUSION

The study's findings show that while economic growth has a favorable effect on Islamic banks' return on assets and inflation has a negative effect, both effects are not statistically significant over the medium and long terms. While the causality test finds no significant association between variables, the cointegration test reveals a long-term relationship. While economic growth has a favorable initial impact but wanes over time, IRF shows that inflation has an unstable initial impact but a neutral long-term influence. The profitability of Islamic banks depends more on internal policies since VD demonstrates that internal factors have a bigger impact on ROA than macroeconomic factors.

REFERENCES

- Alim, S. (2014). Analysis of the influence of inflation and BI rate on return on assets (ROA) in Islamic banks in Indonesia. *Journal of Economics and Modernization* .
- Annisa, LN, & Yaya, R. (2015). The Effect Of Third Party Funds, Profit Sharing Level And Non Performing Financing On The Volume And Portion Of Sharing-Based Financing . *d* (1), 79–104.
- Dima Maulika Sehany, MN (2022). The Effect Of Third Party Funds And Inflation On Profitability In State-Owned Islamic Commercial Banks In 2016-2020. *Asy-Syarikah Journal of Islamic Financial Institutions, Economics and Business* , 4 (2), 92–108.
- Ekuitas, S., & Hakim, A. (2023). The Effect of Inflation and Interest Rates on Economic Growth in Indonesia . *4* (4), 1283–1291. <https://doi.org/10.47065/ekuitas.v4i4.3377>
- Fatimah Tuzzuhro, Noni Rozaini, M. Yusuf. (2023). Development Of Islamic Banking In Indonesia. *PeKA: Journal of Accounting Economics Education* , 11 (2), 78–87.
- Fitria, Leny Nur. (2017). Analysis of financial ratios and third party funds on profitability through financing to deposit ratio as an intervening variable in Islamic banking .
- Hafidz Meiditambua Saefulloh, M., Rizah Fahlevi, M., & Alfa Centauri, S. (2023). The Effect of Inflation on Economic Growth: An Indonesian Perspective. *Journal of State Finance and Public Policy* , 3 (1), 17–26.
- Hakiki, A., Suhaimi, B., Mu'ammarr, N., & Kurniasari, D. (2024). Analysis of Monetary, Fiscal, and Inflation Policies on Economic Growth. *PRESTISE: Journal of Community Service in the Field of Economics and Business* , 4 (1), 41–63.
- Handayani, S. (2024). The Influence of Macroeconomic Indicators on the Performance of Islamic Banking in Indonesia. *Media for Development Economic Research (MedREP)* .
- Hartini, T. (2016). The Effect Of Operating Costs And Operating Income (BOPO) ON . *2* (1), 20–34.

- Hayati, SR (2014). The Role of Islamic Banking in Indonesia's Economic Growth . 41–66.
- Hutahaean, P. (2019). Economic & Financial Study of State Expenditure and Indonesian Economic Growth: Financial Economics Study .
- Iqbal, M., & Ilmiah, J. (2024). Affecting Bank Capitalization Ratio In Banks . 7 (2), 157–166.
- Ishak, I., Rasyid, A., Hasibuan, AN, & Efendi, S. (2020). The Effect Of Inflation And The Amount Of Money Circulation On Return On Assets (Roa) In Sharia Commercial Banks Period 2011-2019. *Journal Of Sharia Banking* , 1 (1), 61–70. <https://doi.org/10.24952/jsb.v1i1.4743>
- Jahan, N. (2020). Determinants of Profitability of Banks: Evidence from Islamic Banks of Bangladesh . XXXIX (June), 136–149. <http://arxiv.org/abs/2005.08759>
- Maharani, ED, & Budiman, A. (2022). The Influence of Macroeconomic Factors on BUS Profitability: A Study of Islamic Commercial Banks in Indonesia Registered with the OJK for the 2018-2020 Period. *Al-Kharaj: Journal of Islamic Economics, Finance & Business* , 5 (3), 1405–1418. <https://doi.org/10.47467/alkharaj.v5i3.1725>
- Maya, Vita Nur. (2019). The effect of economic growth and non-performing financing on profitability with inflation as a moderation in Islamic banking in Indonesia in 2013-2018 .
- Meidisari, S. (2019). The effect of LDR and NIM through NPL on the profitability of general banks. *Journal of Management Science and Research* , 7 .
- Mujiatun, S., & Handayani, S. (2018). Effect Of Operational Cost And Operational Revenue On Return On Assets Of Sharia Banking: Case Study On Sharia Business Division Of PT. North Sumatra Bank. *International Journal Of Scientific & Technology R* , 7 (7), 223–227.
- Nurhayati, R. (2017). Analysis of the influence of macroeconomic variables on the performance of Islamic banking business with liquidity as an intervening variable (case study on Islamic commercial banks in 2011-2015) .
- Pujadi, A. (2022). Inflation: Theory and Policy. *Journal of Diversity Management* , 2 (2), 73–77.
- Puspita, Y., Wicaksono, G., Dwi, N., Asmandani, V., & Boedijono, B. (2020). Digital Repository Universitas Jember The Role of Population, Inflation and Economic Growth of Local Tax Revenues in East Java Province, Indonesia . 24 (04), 5136–5146. <https://doi.org/10.37200/IJPR/V24I4/PR201612>
- Qomar, M.N., Rusgianto, S., Muttaqin, I., & Hidayati, A. (2024). A Cross-Country Analysis of Islamic Bank's Performance in Malaysia and Indonesia. *Falah: Jurnal Ekonomi Syariah* , 9 (1), 31–42. <https://doi.org/10.22219/jes.v9i1.31489>
- Rahmansyah, MF, & Ashar, K. (2023). The Influence of GDP, Inflation, and Exchange

- Rates on the Profitability Level of Islamic Banks. *Islamic Economics and Finance in Focus* , 2 (4), 750–761.
- Rifky, A., Pratama, Y., & Prapanca, D. (2024). Share Prices (Case Study Of Automotive Subsector Companies And Components Listed On The Indonesian Stock Exchange In 2020-2023). Return On Asset (ROA), Return On Investment (ROI), Earning Per Share (EPS) Against Share Prices (Case Study Of Automotive Subsector Companies And Components Listed On The Indonesian Stock Exchange In 2020-2023). 5 (2), 5755–5769.
- Rusmadi. (2017). The Effect Of Chili Prices On Inflation Levels In Indonesia In 2016. *Syntax Literate: Indonesian Scientific Journal* , 2 (2), 124–132.
- Salim, A. (2021). The Effect of Inflation on Indonesia's Economic Growth . 7 , 17–28.
- Saputra, R., & Fasa, MI (2024). Development Of Sharia Banking In Islamic Countries . 1 (November), 8086–8098.
- Saputri, O., & Hannase, M. (2021). The Influence of Macroeconomic Indicators on the Financial Performance of Islamic Commercial Banks During the Covid-19 Pandemic. *Tabarru' Journal: Islamic Banking and Finance* , 4 (1), 139–151. [https://doi.org/10.25299/jtb.2021.vol4\(1\).6590](https://doi.org/10.25299/jtb.2021.vol4(1).6590)
- Selayan, AN, Yafiz, M., & Daulay, AN (2023). The Effect of Inflation, Exchange Rate, and GDP on the Profitability of Islamic Commercial Banks in Indonesia with Financing as an Intervening Variable. *Intelektualita Journal: Islam, Social, and Science* , 12. <https://doi.org/10.19109/intelektualita.v12i2.19364>
- Sholihah, H., & Arif, M. (2019). Analysis of the Influence of Macroeconomic Factors on Profitability Return on Assets (ROA) of PT. Bank Muamalat Indonesia Tbk. Period 2014Q4-2017Q4 . <https://eprints.ums.ac.id/id/eprint/71676%0Ahttps://eprints.ums.ac.id/71676/11/NAS-PUB.pdf>
- Syakir, A. (2015). Inflation in the Islamic Perspective. *IEF Trisakti Intake S3 Journal* , 9 , 1–13.
- Todaro, M. P., & Smith, S. C. (2020). *Economic Development*. Thirteenth Edition. In Pearson (Issue 13th Edition). <https://www.mkm.ee/en/objectives-activities/economic-development>
- Toto Suwarsa, SE., Ak., M., & Indonesia, PP (2021). *Accounting journal* . 54 .
- Wahyudi, S., & Sari, SP (2019). Capital Adequacy Ratio, Profit-Sharing and Return On Assets: Case Study of Indonesian Sharia Banks. *Wseas Transactions on Business and Economics* , 16 , 138–144.
- Zuhdi, MN, Wulandari, R., & Setyowati, E. (2024). Analysis of the Effect of Inflation, Gross Domestic Product (GDP), Foreign Currency Exchange Rates and Interest Rates on the

Profitability of Sharia Commercial Banks in Indonesia (Case Study of Bank Muamalat for the 2007-2023 Period). *Literature* , 6 (1), 186–198. <https://doi.org/10.37010/lit.v6i1.1575>