

The Mediation Effect of Price to Book Value on Financial Ratio to Stock Return

Almuzayyad¹, Guntur Kusuma Wardana²

^{1,2}Maulana Malik Ibrahim State Islamic University of Malang

Correspondence e-mail: almuzayyad@gmail.com

Receive: 2 Nov 2025; Revised: 26 December 2025; Published: 30 December 2025

Abstract

Stock returns are an essential indicator for investors in assessing the performance of Islamic financial institutions listed on the Indonesia Stock Exchange (IDX). This study examines the effect of Return on Assets (ROA), Debt to Equity Ratio (DER), Current Ratio (CR), Total Asset Turnover (TATO), and Earnings Per Share (EPS) on stock returns, with Price to Book Value (PBV) as a mediating variable. Employing a quantitative approach, this study applies panel data regression and Sobel mediation testing to quarterly data from 9 Islamic financial institutions selected through purposive sampling from a population of 59 firms over the 2020–2024 post-pandemic period. The results indicate that PBV does not mediate the relationship between financial ratios and stock returns. However, DER, CR, TATO, and EPS have a significant direct effect on stock returns, while ROA does not show a significant influence. These findings support signaling theory, indicating that investors in Islamic capital markets place greater emphasis on leverage, liquidity, operational efficiency, and earnings performance. The study contributes to the Islamic finance literature by providing post-pandemic empirical evidence and offers practical implications for investors and management in enhancing stock performance.

Keywords: stock returns; Islamic financial institutions; financial ratios; price to book value; signaling theory

1. INTRODUCTION

Indonesia's economic recovery after the Covid-19 pandemic shows a positive trend, marked by economic growth returning to 5.05% in 2023 after experiencing a contraction of -2.07% in 2020 (Latifah & Rosyadi, 2024). This recovery is inseparable from the role of the financial sector, particularly the capital market, which serves as a source of long-term funding as well as an indicator of investor confidence in economic performance (Hutabarat *et al.*, 2023).

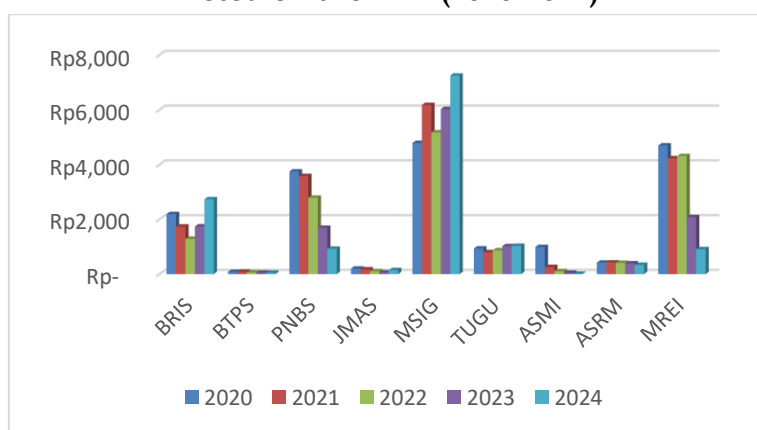
In the context of the capital market, stock returns are the main objective of investors and an important indicator in assessing company performance (Marliastutik & Wardana, 2024). Stock returns reflect the actual results of investment decisions influenced by investors' perceptions of the information available in the market (Isnain & Wardana, 2024). One sector that has shown



significant development in the Indonesian capital market is Sharia Financial Institutions (IFIs), particularly sharia banks and sharia insurance companies listed on the Indonesia Stock Exchange (IDX).

The existence of Islamic financial institutions (IFIs) plays an important role in promoting sharia-based economic development. Islamic financial institutions not only provide financial services that comply with sharia principles, but also contribute to expanding financial inclusion and strengthening public confidence in the Islamic financial system (Yusmaniarti *et al.*, 2023). However, Islamic financial institutions are one of the groups of issuers listed on the IDX that experience fluctuating stock returns. The movement of stock returns that occurred in Islamic financial institutions listed on the IDX is shown in Figure 1 below:

Figure 1. Movement of Returns on Shares of Sharia Financial Institutions listed on the IDX (2020-2024)



Sumber: Laporan Keuangan Lembaga Keuangan Syariah, 2025

Based on Figure 1, despite its strategic role in supporting the sharia-based economy and financial inclusion, the return performance of Islamic financial institutions shares during the 2020-2024 period shows relatively high fluctuations, indicating market uncertainty and differences in investor assessments of the company's performance.

Based on signal theory, according to Michael (1973) in (Oneng *et al.*, 2025) financial information published by companies serves as a signal for investors in assessing the company's future prospects and risks. Financial ratios that reflect the fundamental condition of a company, such as profitability, solvency, liquidity, activity, and profit performance, are the main signals that influence market perception and investment decisions. In this study, fundamental factors

are represented by Return on Assets (ROA), Debt to Equity Ratio (DER), Current Ratio (CR), Total Asset Turnover (TATO), and Earnings Per Share (EPS).

Stock returns can be influenced by profitability ratios, which in this study are measured using Return On Assets (ROA). ROA indicates how effectively a company utilises all of its assets to generate profits (Subekti & Wardana, 2022; Yahya & Fietroh, 2021). A high ROA will send a positive signal to investors regarding profits, which is then reflected in an increase in share prices and ultimately has an impact on an increase in stock. (Khasanah & Suwarti, 2022). According to Laulita & Yanni (2022), the ROA value can be calculated using the following formula:

$$ROA = \frac{Net\ Profit}{Total\ Assets}$$

Another factor that affects stock returns is the solvency ratio, which in this study is measured using the Debt to Equity Ratio (DER). DER shows the comparison of a company's capital structure, between debt capital and total equity capital. An optimal DER can signal a company's ability to utilise leverage to increase profits and stock returns (Delpania *et al.*, 2023). According to Laulita & Yanni (2022), the DER value can be calculated using the following formula:

$$DER = \frac{Total\ Liabilities}{Total\ Equities}$$

Stock returns can also be influenced by liquidity ratios. The current ratio (CR) is one proxy for liquidity ratios to assess a company's ability to meet its short-term obligations. A high CR sends a positive signal about the company's liquidity, which can increase investor confidence and drive up stock returns (Hidayat Zulfikar & Widhiastuti, 2024). According to (Sukma, 2021) the CR value can be calculated using the following formula:

$$CR = \frac{Current\ Assets}{Current\ Liabilities} \times 100\%$$

Activity ratios can also affect stock returns. The activity ratio in this study is proxied by Total Asset Turnover (TATO), which is a ratio that measures all assets owned by a company and measures the amount of sales obtained from each asset (Isman *et al.*, 2025). A high TATO value indicates that the company utilises its assets efficiently to support sales activities and increase profitability, thereby increasing stock returns (Khasanah & Suwarti, 2022). According to Kasmir dalam (Indriyani & Mudjijah, 2022) the TATO value can be calculated using the following formula:

$$TATO = \frac{Sales}{Total Assets}$$

Stock profits measured by Earnings Per Share (EPS) can also affect stock returns. EPS is the income per share given to investors for each share invested (Chandra, 2021). High earnings per share indicate that the company is able to provide high stock returns to investors (Mulyanti & Randus, 2021). EPS can be calculated using the following formula:

$$EPS = \frac{Net Profit}{Number of Shares Outstanding}$$

However, the relationship between financial ratios and stock returns is not always direct. From the perspective of corporate value theory, a company's fundamental performance will first shape its value through market perception before being reflected in stock prices and returns received by investors (Brigham & Houston, 2019). Firm value becomes the transmission mechanism between financial information and market reactions. Therefore, Price to Book Value (PBV) is relevant to use as a mediating variable because PBV represents the market's assessment of enterprise value based on accounting information presented by management. Financial ratios that give positive signals are expected to increase enterprise value through PBV, which in turn has an impact on increasing stock prices and stock returns. In this study, company value is proxied by the Price to Book Value (PBV) ratio. PBV is a ratio that indicates whether a stock is overvalued or undervalued (Jaya & Kuswanto, 2021). Companies with high company value cause investors to see promising prospects, leading to an increase in demand for the stock, which will then have an impact on the stock returns received by investors. According to Mahasidhi & Dewi, (2022), PBV can be calculated using the following formula:

$$PBV = \frac{Price per Share}{Book Value per Share}$$

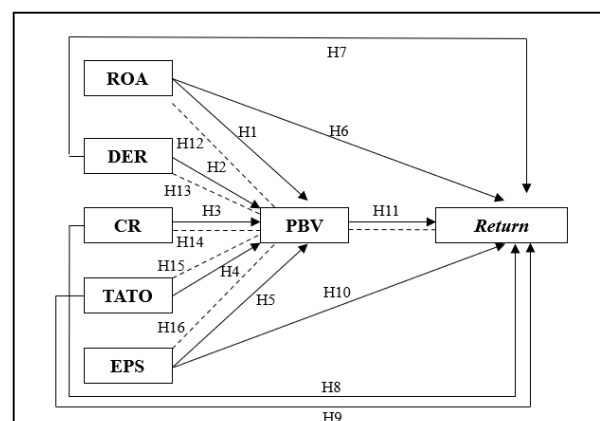
A number of empirical studies show that PBV is able to mediate the effect of financial ratios on stock returns. Darmawan *et al.*, (2023); dan Tirta & Ismiyanti, (2020), reveal that the PBV ratio can mediate the effect of financial ratios on stock returns. This study positions PBV as a mediating variable for the effect of fundamental factors on stock returns. PBV is considered capable of representing the value of a company formed from the market's perception of the issuer's financial performance. High ROA, optimal DER, healthy CR, efficient TATO, and high EPS will send positive signals to the market and increase the value of the company as reflected in PBV (Rahman, 2021; Sudaryo & Yudanegara, 2020). Furthermore, the increase in PBV will drive up stock prices and ultimately have an impact on increasing the stock returns received by investors. Thus, PBV

plays an important role in explaining the mechanism of indirect influence between company fundamental factors and stock returns, thereby providing a more comprehensive picture of the process of return formation in Sharia Financial Institutions (IFIs) listed on the IDX.

Based on previous studies, inconsistent results were found on the factors that influence stock returns. Research by Aminah, (2021); Fitroh & Fauziah, (2022); Dawam *et al.*, (2022); Delpania *et al.*, (2023); Kholifah & Retnani, (2021); Hermuningsih *et al.*, (2022); Aminah, (2021); Hutaauruk *et al.*, (2022); Asriyanti, (2022); Andrie, (2021); Karyatun, (2022); Imara & Erdkhadifa, (2023); Amiputra *et al.*, (2021); Kurniawan & Supriati, (2025); Amaliyah & Kurniawan, (2022); Arfah & Siregar, (2022); Jaya & Kuswanto, (2021); dan Dini *et al.*, (2021) have varying effects on stock returns. Given the inconsistency of these empirical findings, there is a research gap regarding the mechanism of stock return formation through company value in Islamic Financial Institutions. Therefore, the research gap addressed in this study lies in the lack of empirical evidence on the mediating role of PBV in explaining the transmission mechanism between fundamental financial ratios and stock returns within Islamic Financial Institutions. This study differentiates itself from prior research by explicitly positioning PBV as a mediating variable that captures market-based firm valuation in the context of IFIs listed on the IDX during the 2020–2024 period. By integrating signaling theory and firm value theory, this study aims to explain why strong financial fundamentals do not always translate into higher stock returns and whether firm value serves as the missing link in this relationship. Consequently, this research is expected to contribute to the development of Islamic finance literature and provide practical insights for investors and IFI management in making investment and financial performance decisions.

Based on this background, the following conceptual framework was developed:

Figure 2. Conceptual Framework



Explanation:

—————→ = Direct (partial) effect
----- = Indirect (mediated) effect

Signaling Theory as the Grand Theory

This study is grounded in signaling theory as the grand theoretical framework. Signaling theory posits that corporate managers convey private information regarding firm quality and future prospects to external parties, particularly investors, through observable financial indicators Michael (1973) in (Oneng *et al.*, 2025). In capital markets, financial statements and financial ratios function as credible signals that reduce information asymmetry between management and investors. Investors interpret these signals to assess firm risk, performance sustainability, and growth potential, which subsequently influence stock prices and returns.

In the context of Islamic Financial Institutions (IFIs), signaling theory becomes even more relevant due to the dual objectives of financial performance and Sharia compliance. Investors not only evaluate profitability and efficiency but also assess prudence, capital adequacy, and ethical financial management consistent with Islamic principles. Therefore, financial ratios reflecting profitability (ROA), leverage (DER), liquidity (CR), efficiency (TATO), and earnings performance (EPS) serve as essential signals shaping market perceptions of IFIs' quality and credibility.

Development of Hypotheses

Financial Ratios on Price to Book Value (PBV)

Higher profitability, efficient asset utilization, healthy liquidity, optimal leverage, and strong earnings performance signal superior firm quality. In line with signaling theory, such positive signals are expected to enhance market valuation, reflected in higher PBV.

H₁: ROA has a significant effect on PBV

H₂: DER has a significant effect on PBV

H₃: CR has a significant effect on PBV

H₄: TATO has a significant effect on PBV

H₅: EPS has a significant effect on PBV

Financial Ratio and Price to Book Value (PBV) on Stock Returns

An increase in PBV indicates favorable market perception and higher investor confidence, which encourages demand for shares and leads to rising stock prices and returns.

H₆: ROA has a significant effect on Stock Return

H₇: DER has a significant effect on Stock Return

H₈: CR has a significant effect on Stock Return

H₉: TATO has a significant effect on Stock Return

H₁₀: EPS has a significant effect on Stock Return

H₁₁: PBV has a significant effect on Stock Return

Financial Ratios and Stock Returns through Price to Book Value (PBV)

Based on signaling theory and firm value theory, financial ratios influence stock returns indirectly through firm value. PBV functions as a mediating variable that captures how financial signals are interpreted and priced by the market.

H₁₂: ROA has a significant effect on Stock Return through PBV

H₁₃: DER has a significant effect on Stock Return through PBV

H₁₄: CR has a significant effect on Stock Return through PBV

H₁₅: TATO has a significant effect on Stock Return through PBV

H₁₆: EPS has a significant effect on Stock Return through PBV

Based on the theoretical arguments above, this study proposes a conceptual framework in which financial ratios act as signals that influence firm value (PBV), which in turn affects stock returns. PBV serves as the market perception mechanism linking company fundamentals and investor responses in Islamic Financial Institutions listed on the IDX.

2. METHODS

This study utilises a quantitative method with a causal comparative approach. According Creswell, (2017), quantitative research is a type of research that focuses on the collection and analysis of numerical data to test hypotheses or answer research questions using statistical instruments. A comparative causal approach is research that provides characteristics of the cause-and-effect relationship between two or more variables (Ramdhan, 2021). The data used in this study is secondary data, sourced from quarterly reports from Islamic banking companies and Islamic insurance companies listed on the Indonesia Stock Exchange (IDX) during the 2020-2024 period. This study uses Eviews12 software as a data analysis tool. Panel data regression analysis is used as an analysis method that combines cross-sectional and time series data. Then, for

mediation analysis, the Sobel test was used in this study based on the characteristics of the data and the purpose of confirmatory mediation testing, which is to test the statistical significance of the mediation path through a parametric approach. In addition, the Sobel test is considered appropriate for studies with a relatively limited sample size and a simple mediation model, where the relationship between variables has been theoretically determined based on signal theory and corporate value theory. The data used in this study are Return on Assets (ROA), Debt to Equity Ratio (DER), Current Ratio (CR), Total Asset Turnover (TATO), Earning Per Share (EPS), and Price to Book Value (PBV) of Islamic financial institutions listed on the Indonesia Stock Exchange (IDX) for the period 2020-2024. The population in this study consists of Islamic banking and insurance companies listed on the IDX, totalling 59 companies. In this study, the researcher used purposive sampling, meaning that the sample was selected based on criteria determined in accordance with the research objectives. The criteria used in the research sample selection process are shown in Table 1 as follows:

Table 1. Research Sample Criteria

No	Criteria	Number
1	Sharia banks listed on the IDX	4
2	Sharia banks not listed on the IDX during the 2020-2024 period 2020-2024	(1)
3	Insurance companies registered with the Indonesian Sharia Insurance Association (AASI).	55
4	Insurance companies not registered with the Indonesia Stock Exchange (IDX).	(49)
5	Number of selected research samples	9
Total Data (N)		180

Based on the above research sample criteria, the companies selected as samples are shown in Table 2 below:

Table 2. Research Sample List

No	Issuer Code	Company Name
1	BRIS	Bank Syariah Indonesia Tbk.
2	BTPS	Bank BTPN Syariah Tbk.
3	PNBS	Bank Panin Dubai Syariah Tbk.
4	JMAS	Jiwa Syariah Jasa Mitra Abadi Tbk
5	MSIG	Sinarmas MSIG Tbk

6	TUGU	Asuransi Tugu Pratama Indonesia Tbk
7	ASMI	Maximus Graha Persada Tbk
8	ASRM	Ramayana Tbk
9	MREI	Maskapai Reasuransi Indonesia Tbk

Although the number of research samples is relatively limited, the use of these samples can still be accounted for methodologically. This is because this study uses quarterly panel data that produces a larger number of observations, so that it can increase the statistical power in empirical testing. In addition, the selection of samples is based on the consistency of the issuance of financial statements and the completeness of the data of the research variables during the observation period, which is an important prerequisite in maintaining the reliability and validity of the model's estimation results.

Table 3. Operational Definition of Variables

No	Variables	Definition	Measurement
1	<i>Return On Asset</i> (X1)	The company's ability to generate profit from total assets (Yahya & Fietroh, 2021).	$ROA = \frac{Net\ Profit}{Total\ Assets}$ (Laulita & Yanni, 2022)
2	<i>Debt to Equity Ratio</i> (X2)	Comparison between total liabilities and total equity (Hermanto & Ibrahim, 2020).	$DER = \frac{Total\ Liabilities}{Total\ Equities}$ (Laulita & Yanni, 2022)
	<i>Current Ratio</i> (X3)	The company's ability to meet short-term obligations (Anwar & Siswanti, 2021)	$CR = \frac{Current\ Assets}{Current\ Liabilities} \times 100\%$ (Sukma, 2021)
	<i>Total Asset Turnover</i> (X4)	The efficiency of the use of total assets in generating sales (Goo, 2024).	$TATO = \frac{Sales}{Total\ Assets}$ (Indriyani & Mudjijah, 2022)

	<i>Earnings Per Share (EPS) (X5)</i>	Net income per share (Chandra, 2021)	$EPS = \frac{Net Profit}{Number of Shares Outstanding}$ (Mulyanti & Randus, 2021)
6	<i>Return Saham (Y)</i>	The level of profit that investors get from stock ownership (E. Silalahi & Manullang, 2021)	$R_t = \frac{P_t - P_{t-1}}{P_{t-1}}$ (E. Silalahi & Manullang, 2021)
7	<i>Price to Book Value (M)</i>	Company value based on market perception (Dharma <i>et al.</i> , 2022)	$PBV = \frac{Price per Share}{Book Value per Share}$ (Mahasidhi & Dewi, 2022)

3. RESULT AND FINDINGS ANALYSIS

Panel Data Regression Selection Structural I

1. Chow Test

The Chow test is a test that aims to determine the model. The Chow test is a test that aims to determine the model *common effect model* (CEM) or *fixed effect model* (FEM) the most appropriate for estimating panel data (Herusetya, 2025). If the probability (p-value) of the Chow test result is < 0.05, then the selected model is FEM. However, if the probability (p-value) of the Chow test result is > 0.05, then the selected model is CEM.

Table 4. Chow Test

<i>Effects Test</i>	Statistic	Prob.
<i>Cross-section Chi-square</i>	17,541535	0,0249

Based on Table 4, the chow test results show a probability value of 0.0249 < 0.05, so the selected model is the Fixed Effect Model (FEM).

2. Hausman Test

The Hausman test is a test that aims to determine the appropriate model between the fixed effect model (FEM) and the random effect model (REM) to use (Herusetya, 2025). If the probability (p-value) of the Hausman test result is < 0.05 , then the selected model is FEM. However, if the probability (p-value) of the Hausman test result is > 0.05 , then the selected model is REM.

Table 5. Hausman Test

<i>Effects Test</i>	Chi-Sq. Statistic	Prob.
<i>Cross-section Chi-square</i>	8,954866	0,1109

Based on Table 5, the results of the Hausman test show a probability value of $0.1109 > 0.05$, so the selected model is the Random Effect Model (REM).

3. Lagrange Multiplier Test

The Lagrange Multiplier test is conducted to determine the appropriate model between the random effect model (REM) and the common effect model (CEM) (Herusetya, 2025). If the probability (p-value) of the LM test result is < 0.05 , then the selected model is REM. However, if the probability (p-value) of the LM test result is > 0.05 , then the selected model is CEM.

Table 6. Lagrange Multiplier Test

<i>Null (No. rand. Effect)</i>	<i>Cross-section</i>
<i>Breusch-Pagan</i>	0,801420
	(0,3707)

Based on Table 6, the results of the Lagrange multiplier test show a probability value of $0.3707 > 0.05$, so the selected model is the Common Effect Model (CEM).

Panel Data Regression Selection Structural II

1. Chow Test

The Chow test is a test that aims to determine the most appropriate common effect model (CEM) or fixed effect model (FEM) for estimating panel data (Herusetya, 2025). If the probability (p-value) of the Chow test result is < 0.05 , then the selected model is FEM. However, if the probability (p-value) of the Chow test result is > 0.05 , then the selected model is CEM.

Table 7. Chow Test

<i>Effects Test</i>	Statistic	Prob.
<i>Cross-section F</i>	1,003198	0,4356
<i>Cross-section Chi-square</i>	8,548918	0,3818

Based on Table 7, the Chow test results show a probability value of 0.3818 > 0.05, therefore the selected model is the Common Effect Model (CEM).

2. Lagrange Multiplier Test

The Lagrange Multiplier test is conducted to determine the appropriate model between the random effect model (REM) and the common effect model (CEM) (Herusetya, 2025). If the probability (p-value) of the LM test result is < 0.05, then the selected model is REM. However, if the probability (p-value) of the LM test result is > 0.05, then the selected model is CEM.

Table 8. Lagrange Multiplier Test

<i>Null (No. rand. Effect)</i>	<i>Cross-section</i>
<i>Breusch-Pagan</i>	0,649101
	(0,4204)

Based on Table 8, the results of the Lagrange multiplier test show a probability value of 0.4204 > 0.05, so the selected model is the Common Effect Model (CEM).

Classical Assumption Test Structural I

1. Normality Test

This test was conducted to determine whether the data from the selected sample had a normal distribution or could represent a population with a normal distribution (Priyatno, 2023). If the profitability value was > 0.05, it meant that the data was normally distributed. Conversely, if the profitability value was < 0.05, it meant that the data was not normally distributed.

Table 9. Normality Test

<i>Jarque-Bera</i>	1,003524
<i>Probability</i>	0,605463

Based on the data analysis in Table 9, the normality test value is 0.605463 > 0.05 , which means that the data is normally distributed.

2. Multicollinearity Test

Multicollinearity test is used to determine whether there is correlation between independent variables (Priyatno, 2023). If the correlation matrix value is > 0.80 , then the data is multicollinear. Conversely, if the correlation matrix is < 0.80 , then the data is not multicollinear.

Table 10. Multicollinearity Test

	X ₁	X ₂	X ₃	X ₄	X ₅
X ₁	1,000000	-0,073907	0,324011	0,225234	-0,087455
X ₂	-0,073907	1,000000	-0,068429	0,156520	0,062079
X ₃	0,324011	-0,068429	1,000000	0,232201	0,157723
X ₄	0,225234	0,156520	0,232201	1,000000	0,143767
X ₅	-0,087455	0,062079	0,157723	0,143767	1,000000

Based on Table 10, which explains the relationship between independent variables and is understood through each variable having a value < 0.80 , it can be concluded that the data is free from multicollinearity.

3. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the regression model formed has unequal variance from the regression model residuals. Ideal data is data that is free from heteroscedasticity (Priyatno, 2023). If the probability value is > 0.05 , then the data does not exhibit heteroscedasticity. Conversely, if the probability value is < 0.05 , then the data exhibits heteroscedasticity.

Table 11. Uji Heterokedastisitas

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0,467924	0,037508	12,47542	0,0000
X ₁	-0,002686	0,005197	-0,516734	0,6060
X ₂	0,003011	0,006436	0,467860	0,6405
X ₃	-0,000370	0,000602	-0,615391	0,5391
X ₄	-0,046705	0,176432	-0,264721	0,7915
X ₅	-3,00E-07	4,38E-07	-0,684415	0,4946

Based on Table 11, it shows that all probability values are > 0.05 , so it can be concluded that the data does not exhibit heteroscedasticity.

Classical Assumption Test Structural II

1. Normality Test

This test was conducted to determine whether the data from the selected sample had a normal distribution or could represent a population with a normal distribution (Priyatno, 2023). If the profitability value was > 0.05 , it meant that the data was normally distributed. Conversely, if the profitability value was < 0.05 , it meant that the data was not normally distributed.

Table 12. Normality Test

<i>Jarque-Bera</i>	1,384547
<i>Probability</i>	0,500437

Based on the data analysis in Table 12, the normality test value is 0.500437 > 0.05 , which means that the data is normally distributed.

2. Multicollinearity Test

The multicollinearity test is used to determine whether there is correlation between independent variables (Priyatno, 2023). If the correlation matrix value is > 0.80 , then the data is multicollinear. Conversely, if the correlation matrix is < 0.80 , then the data is not multicollinear.

Table 13. Multicollinearity Test

	X ₁	X ₂	X ₃	X ₄	X ₅	M
X ₁	1,000000	-0,073907	0,324011	0,225234	-0,087455	-0,146953
X ₂	-0,073907	1,000000	-0,068429	0,156520	0,062079	-0,036186
X ₃	0,324011	-0,068429	1,000000	0,232201	0,157723	0,105940
X ₄	0,225234	0,156520	0,232201	1,000000	0,143767	-0,020461
X ₅	-0,087455	0,062079	0,157723	0,143767	1,000000	-0,068032
M	-0,146953	-0,036186	0,105940	-0,020461	-0,068032	1,000000

Based on Table 13, which explains the relationship between independent variables and is understood through each variable having a value < 0.80 , it can be concluded that the data is free from multicollinearity.

3. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the regression model formed has unequal variance from the regression model residuals. Ideal data is data that is free from heteroscedasticity (Priyatno, 2023). If

the probability value is > 0.05 , then the data does not exhibit heteroscedasticity. Conversely, if the probability value is < 0.05 , then the data exhibits heteroscedasticity.

Table 14. Heteroscedasticity Test

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	0,467924	0,037508	12,47542	0,0000
X ₁	-0,002686	0,005197	-0,516734	0,6060
X ₂	0,003011	0,006436	0,467860	0,6405
X ₃	-0,000370	0,000602	-0,615391	0,5391
X ₄	-0,046705	0,176432	-0,264721	0,7915
X ₅	-3,00E-07	4,38E-07	-0,684415	0,4946
M	-0,025480	0,014954	-1,703951	0,0902

Based on Table 14, it shows that all probability values are > 0.05 , so it can be concluded that the data does not exhibit heteroscedasticity.

Hypothesis Test Structural I dan II

1. T Test

T-test is used to test the partial effect of each variable in the study (Darma, 2021). Based on significance, if the significance value is > 0.05 , the hypothesis is rejected, meaning that there is no effect of the independent variable on the dependent variable. If the significance value is < 0.05 , the hypothesis is accepted, meaning that there is an effect of the independent variable on the dependent variable.

Table 15. Common Effect Model

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	0,381884	0,370581	1,030503	0,3042
X ₁	0,169305	0,123975	1,365642	0,1738
X ₂	-0,345654	0,147475	-2,343810	0,0202
X ₃	-0,888460	0,449137	-1,978150	0,0495
X ₄	1,415604	1,671316	0,847000	0,3982
X ₅	0,062314	0,020805	2,995146	0,0031
R-squared		0,099382	F-statistic	3,840147
Adjusted R-squared		0,073502	Prob(F-statistic)	0,002518

Model 1: Influence of Independent Variables on Mediating Variables

$$M_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \mu_i + e_{it}$$

Table 16. Common Effect Model

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	241,2733	143,2339	1,684470	0,0939
X ₁	-34,96688	20,16032	-1,734440	0,0846
X ₂	118,7573	24,81669	4,785378	0,0000
X ₃	6,721907	2,471268	2,720023	0,0072
X ₄	5811,717	674,7537	8,613093	0,0000
X ₅	0,009931	0,001677	5,921198	0,0000
M	368,2598	119,3458	3,085652	0,0024
R-squared		0,577397	F-statistic	39,39461
Adjusted R-squared		0,562740	Prob(F-statistic)	0,000000

Model 2: Influence of Independent Variables and Mediating Variables to Stock Returns

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_5 M + \mu_i + e_{it}$$

Based on Tables 15 and 16, the results of the T-test are obtained:

- a. H₁: ROA has a significant effect on PBV
 Nilai probability variabel ROA (X₁) sebesar 0.1738 > 0.05 artinya ROA dinyatakan tidak berpengaruh signifikan terhadap PBV. Hasilnya H₁ ditolak.
- b. H₂: DER has a significant effect on PBV
 The probability value of the DER variable (X₂) is 0.0202 < 0.05, meaning that DER is significantly affected by PBV. The result is that H₂ is accepted.
- c. H₃: CR has a significant effect on PBV
 The probability value of the CR variable (X₃) is 0.0495 < 0.05, meaning that CR is significantly affected by PBV. The result is that H₃ is accepted.
- d. H₄: TATO has a significant effect on PBV
 The probability value of the TATO variable (X₄) is 0.3982 > 0.05, meaning that TATO is not significantly affected by PBV. The result is that H₄ is rejected.
- e. H₅: EPS has a significant effect on PBV
 The probability value of the EPS variable (X₅) is 0.0031 < 0.05, meaning that EPS is significantly affected by PBV. The result is that H₅ is accepted.
- f. H₆: ROA has a significant effect on stock returns

The probability value of the ROA variable (X_1) is $0.0846 > 0.05$, meaning that ROA is not significantly affected by stock returns. The result is that H_6 is rejected.

- g. H_7 : DER has a significant effect on stock returns

The probability value of the DER variable (X_2) is $0.0000 < 0.05$, meaning that DER is significantly affected by stock returns. The result is H_7 accepted.

- h. H_8 : CR has a significant effect on stock returns.

The probability value of the CR variable (X_3) is $0.0072 < 0.05$, meaning that CR is significantly affected by stock returns. The result is H_8 accepted.

- i. H_9 : TATO has a significant effect on stock returns

The probability value of the TATO variable (X_4) is $0.0000 < 0.05$, meaning that TATO is significantly affected by stock returns. The result is H_9 accepted.

- j. H_{10} : EPS has a significant effect on stock returns

The probability value of the EPS variable (X_5) is $0.0000 < 0.05$, meaning that EPS is significantly affected by stock returns. The result is H_{10} accepted.

- k. H_{11} : PBV has a significant effect on stock returns.

The probability value of the PBV (M) variable is $0.0024 < 0.05$, meaning that PBV is significantly affected by stock returns. The result is H_{11} accepted.

2. Test the Coefficient of Determination (R^2)

Based on the results of Table 14. the R-Square value is 0.073502, so the variables ROA (X_1), DER (X_2), CR (X_3), TATO (X_4), and EPS (X_5) can only explain the PBV (M) variable by 7.3%, while the remaining 92.7% is explained by other variables.

Regression models that rely solely on financial ratios tend to have low R^2 values. This is reasonable, as the Islamic market in Indonesia assesses stocks not only based on profitability or leverage, but also on the trust and Islamic values embodied by the company. In other words, investors' perceptions of sharia compliance and institutional reputation are non-financial but crucial in shaping prices. These contextual factors need to be considered in discussions of sharia company value regression models. These values can explain the variability of PBV that is not captured by financial ratio variables.

Then, based on Table 15. the R-Square value of 0.562740, the variables ROA (X_1), DER (X_2), CR (X_3), TATO (X_4), EPS (X_5), PBV (M) can only explain the stock return variable (Y) by 56%, while the remaining 44% is explained by other variables.

Sobel Test

According to (Zakiy, 2021) the Sobel test is used to measure the effect of the independent variable (X), namely the company's financial ratio, on the dependent variable (Y), namely stock return, through the mediating variable (M), namely Price to Book Value (PBV).

$$\text{Formula: } t = \frac{ab}{\sqrt{(b^2 SEa^2) + (a^2 SEb^2)}}$$

Explanation:

a = Path of Independent Variable to mediating variable

b = Path of mediating variable to dependent variable

SE = Standard Error

Based on the results of the Sobel test according to the above formula, the following results were found:

1. H_{12} : ROA has a significant effect on Stock Return through PBV
Based on the test results, the calculated t-value is $1.29 < t\text{-table value of } 3.18$. Therefore, H_0 is accepted and H_{12} is rejected, meaning that the ROA variable does not have a significant effect on Stock Return through PBV.
2. H_{13} : DER has a significant effect on Stock Return through PBV
Based on the results of the Sobel test, the calculated t-value is $-1.91 < t\text{-table of } 3.18$. Therefore, H_0 is accepted and H_{13} is rejected, meaning that the DER variable does not have a significant effect on Stock Return through PBV.
3. H_{14} : CR has a significant effect on Stock Return through PBV
Based on the results of the Sobel test, the calculated t-value is $-1.65 < t\text{-table of } 3.18$. Therefore, H_0 is accepted and H_{14} is rejected, meaning that the CR variable does not have a significant effect on Stock Return through PBV.
4. H_{15} : TATO has a significant effect on Stock Returns through PBV
Based on the results of the Sobel test, the calculated t-value is $0.81 < t\text{-table of } 3.18$. Therefore, H_0 is accepted and H_{15} is rejected, meaning that the

TATO variable does not have a significant effect on Stock Returns through PBV.

5. H₁₆: EPS has a significant effect on Stock Return through PBV

Based on the results of the Sobel test, the calculated t-value is $2.15 < t\text{-table}$ of 3.18. Therefore, H₀ is accepted and H₁₆ is rejected, meaning that the EPS variable does not have a significant effect on Stock Return through PBV.

Discussion

The empirical results indicate that financial ratios, particularly DER, CR, TATO, and EPS have a significant direct effect on the stock returns of Islamic Financial Institutions (IFIs), whereas ROA does not exhibit a significant influence. Meanwhile, Price to Book Value (PBV) is empirically proven to be unable to mediate the relationship between financial ratios and stock returns. These findings provide important insights into the mechanism of stock return formation in the Islamic finance sector in Indonesia.

The insignificant effect of ROA on stock returns suggests that asset profitability is not a primary consideration for investors when evaluating IFI stocks during the 2020–2024 period. This finding supports the results of Aminah (2021) and Kholifah & Retnani (2021), who also found no significant relationship between ROA and stock returns, but contradicts Khasanah & Suwarti (2022), who reported a positive effect. This divergence indicates that, within the Islamic finance context, investors may place greater emphasis on financial stability and risk management indicators rather than profitability alone. The post-pandemic environment, characterized by heightened uncertainty, likely shifted investor preferences toward risk mitigation and sustainability rather than short-term profit performance.

In contrast, the significant influence of DER on stock returns confirms that capital structure remains a critical signal for investors. This finding is consistent with Delpania *et al.* (2023) and Arfah & Siregar (2022), but contradicts Fitroh & Fauziah (2022), who found no effect. From an Islamic finance perspective, a controlled DER reflects prudential fund management aligned with sharia principles, thereby serving as a positive signal regarding financial resilience and long-term business sustainability.

Furthermore, the significant effects of CR and TATO indicate that liquidity strength and asset utilization efficiency are key determinants of investor response in IFIs. These results support Andrie (2021) and Imara & Erdkhadifa (2023), but contradict those of Dawam *et al.* (2022) who found no significant influence. The discrepancies may stem from sectoral characteristics, as Islamic financial

institutions are required to maintain adequate liquidity while ensuring that funds are allocated to productive and halal economic activities. Consequently, liquidity and operational efficiency become salient signals of institutional credibility and market confidence.

EPS is also found to significantly affect stock returns, corroborating the findings of Amiputra *et al.* (2021) and Amaliyah & Kurniawan (2022). Within the framework of signaling theory, EPS represents a clear, direct, and easily interpretable signal of earnings performance, which allows investors to respond more rapidly compared to other financial indicators.

However, the mediation test results show that PBV fails to function as an intervening variable between financial ratios and stock returns. This finding differs from the results of studies by Darmawan *et al.* (2023) and Tirta & Ismiyanti (2020) which found that PBV plays a mediating role. This discrepancy highlights the contextual nature of PBV as a mediating mechanism. Academically, the failure of PBV mediation can be explained by several factors. First, the value of Islamic financial institutions is shaped not only by internal financial performance but also by external and non-financial factors, such as sharia compliance, regulatory frameworks, governance quality, institutional reputation, and investor trust in the stability of the Islamic financial system. These dimensions are not fully captured by PBV.

Second, the research period (2020–2024) encompasses the Covid-19 pandemic and subsequent recovery phase, during which market volatility and shifting investor behavior were pronounced. Under such conditions, investors tend to react directly to short-term financial signals such as EPS, liquidity, and leverage without necessarily translating these signals into longer-term firm value assessments. As a result, the indirect transmission mechanism through PBV becomes weak, leading to the failure of mediation.

From a theoretical standpoint, these findings suggest that signaling theory does not always operate through firm value mechanisms in the Islamic capital market. While fundamental financial signals influence investor behavior, they are not consistently internalized into market-based firm valuation measures such as PBV. This implies that, in the sharia market context, investor responses may be more transactional and information-driven rather than valuation-oriented, especially during periods of economic stress.

Overall, this study demonstrates that stock returns of Islamic financial institutions are more strongly influenced by direct financial signals than by indirect valuation mechanisms. The comparison between significant direct

effects and failed mediation underscores that PBV's role as a mediator is contingent upon market conditions, sector characteristics, and investor behavior. These findings enrich the literature by providing empirical evidence that challenges the universality of firm value mediation models in Islamic finance, particularly in post-crisis environments.

4. CONCLUSION

The results of this study indicate that Price to Book Value (PBV) does not mediate the relationship between Return on Assets (ROA), Debt to Equity Ratio (DER), Current Ratio (CR), Total Asset Turnover (TATO), and Earnings Per Share (EPS) on stock returns of Islamic Financial Institutions (IFIs) listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. However, the direct effect analysis reveals that DER, CR, TATO, and EPS have a significant influence on stock returns, whereas ROA does not exhibit a statistically significant effect. These findings suggest that investors in the Islamic capital market respond more strongly to indicators reflecting financial stability, operational efficiency, and profit quality rather than asset profitability.

From a theoretical perspective, this study contributes to the Islamic finance literature by demonstrating that stock return formation does not always occur through firm value mechanisms proxied by PBV. The findings reinforce signaling theory, indicating that certain financial ratios are capable of transmitting direct signals to investors without necessarily being translated into market-based firm value first. Consequently, the mediating role of PBV appears to be contextual, particularly within the Islamic financial industry and during periods of economic crisis and post-crisis recovery.

From a practical standpoint, Islamic financial institutions are advised to optimize their capital structure by maintaining prudent capital discipline to control risk exposure, ensure adequate liquidity management to enhance the productive use of current assets, improve asset utilization efficiency through increased economic productivity, and emphasize profit quality as a key determinant influencing investor decision-making.

Explicit limitations of this study include the relatively small sample size of Islamic financial institutions, which may limit the generalizability of the findings, the reliance on PBV as the sole proxy for firm value, and the use of the Sobel test for mediation analysis, which assumes the normality of indirect effects and may not fully capture complex mediation structures.

Accordingly, future research is recommended to employ more robust analytical approaches such as Structural Equation Modeling (SEM) or bootstrapping-based mediation techniques to better capture indirect effects. Further studies may also incorporate macroeconomic variables (e.g., inflation, interest rate proxies, or exchange rate volatility), alternative firm value proxies (such as Tobin's Q), and non-financial indicators relevant to Islamic finance, as well as extend the analysis to other Islamic indices beyond the IDX to enhance external validity.

ACKNOWLEDGEMENT:

We thank our institution, **Maulana Malik Ibrahim State Islamic University of Malang** for providing a place to conduct this research.

AUTHORS' CONTRIBUTIONS:

Almuzayyad, Guntur Kusuma Wardani. Writing original draft preparation. Ideas; formulation or evolution of overarching research goals and aims.

CONFLICT OF INTERESTS:

We state that there are no known conflicts of interest linked with this publication, and that there has been no significant financial assistance for this work that could have influenced its outcome.

REFERENCES

- Alfian, Y., & Indah, N. P. (2022). Pengaruh ROA, CR, TATO, dan DER terhadap Return Saham Perusahaan Sub Sektor Aneka Industri Otomotif & Komponen Selama Pandemi Covid-19. *MES Management Journal*, 2(2), 50-64.
- Amaliyah, A. R., & Kurniawan, R. (2022). The Effect of Return on Assets (ROA) and Earning Per Share (EPS) On Stock Returns with Exchange Rates as Moderating Variables. *International Journal of Business Marketing and Management*, 7(3), 2456-4559.
- Aminah, L. S. (2021). The Effect of Current Ratio, Net Profit Margin, and Return On Asset On Stock Return (Study on Food and Beverages Companies Listed on the Indonesia Stock Exchange 2015-2017 Period). *Journal of Management, Accounting, General Finance and International Economic Issues (Marginal)*, 1(1), 1-9.
- Amiputra, S., Kurniasari, F., & Ade, S. K. (2021). Effect of Earnings Per Share

- (EPS), Price to Earnings Ratio (PER), Market to Book Ratio (MBR), Debt to Equity Ratio (DER), Interest Rate and Market Value Added (MVA) on stock prices at commercial banks registered in 2016-2019 Indonesia Stock Exchange. *Conference Series*, 3(2), 200–216.
- Andrie, K. (2021). Analysis of the Effect of Return on Asset, Debt To Equity Ratio, and Total Asset Turnover on Share Return. *Journal of Industrial Engineering & Management Research*, 2(1), 64–72.
- Arfah, Y., & Siregar, S. (2022). Analisis Pengaruh Ukuran Perusahaan, Leverage dan PBV Terhadap Return Saham Perusahaan yang Terdaftar dalam Jakarta Islamic Index (JII). *Jurnal Ilmiah Ekonomi Islam*, 8(1), 862.
- Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of Financial Management*. Cengage Learning.
- Chandra, D. S. (2021). Pengaruh Debt To Asset Ratio, Return On Asset Earning Per Share Terhadap Harga Saham Pada Perusahaan Farmasi Yang Terdaftar di Bursa Efek Indonesiaperiode 2015-2019. *Jurnal Akuntansi Dan Keuangan*
- Creswell, J. W. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publlication.
- Darma, B. (2021). *STATISTIKA PENELITIAN MENGGUNAKAN SPSS (Uji Validitas, Uji Reliabilitas, Regresi Linier Sederhana, Regresi Linier Berganda, Uji t, Uji F, R2)*. Guepedia.
- Darmawan, W., Setiadi, P. B., & Rahayu, S. (2023). Analisis Faktor-Faktor yang Memengaruhi Return Saham dengan Price to Book Value sebagai Variabel Intervening (Studi pada Kelompok Indeks LQ 45). *Jurnal Akuntansi Dan Keuangan*, 8(2), 2503–1635.
- Dawam, A., Arisinta, O., & Suhroh, A. A. (2022). Pengaruh Return on Asset (ROA), Return on Equity (ROE), Earning Per Share (EPS) dan Debt To Equity Ratio (DER), Terhadap Return Saham (Studi Pada Sub Sektor Pulp Dan Kertas Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode Tahun 2017-2019). *Jurnal Pendidikan Ekonomi Akuntansi Dan Kewirausahaan (JPEAKU)*, 1(2), 75–85.
- Delpania, D., Fitriano, Y., & Hidayah, N. R. (2023). Pengaruh ROA, EPS, Dan DER Terhadap Return Saham (Pada Perusahaan Sektor Healthcare Yang Terdaftar di Bursa Efek Indonesia Periode 2017-2021). *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(1), 559–570.

- Fitroh, A. K., & Fauziah, F. E. (2022). Pengaruh Return on Asset, Firm Size dan Price Earning Ratio terhadap Return Saham. *Jurnal Rekoginisi Ekonomi Islam*, 1(1), 135–146.
- Hermuningsih, S., Maulida, A., & Andriyanto, N. D. (2022). Pengaruh DER, ROA, dan DPR Terhadap Return Saham Sektor Utilitas, Insfrastruktur, dan Transportasi. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 4(3), 772–781.
- Herusetya, A. (2025). *Praktik Stata 18.0 pada Pemodelan Analisis Data Panel Studi Ilmu Akuntansi dan Keuangan: Tip dan Trik untuk Peneliti Pemula dan Mahasiswa* (M. Nasrudin (ed.)).
- Hidayah, H., Juliasari, D., & Ifa, K. (2021). the Effect of Good Corporate Governance, Leverage, and Profitability on Returns in Stock. *Assets : Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak*, 5(2), 88–94.
- Hidayat Zulfikar, R., & Widhiastuti, S. (2024). Pengaruh Likuiditas, Profitabilitas, dan Leverage Terhadap Return Saham, dengan Nilai Perusahaan Sebagai Variabel Intervening Pada Perusahaan Tambang Batu Bara yang Terdaftar di Bursa Efek Indonesia Periode 2018-2021. *Jurnal NERACA PERADABAN*, 4(1), 50–61.
- Hisar, R., Suharna, J., & Amiruddin, A. (2021). Pengaruh Return On Asset dan Debt to Equity Ratio terhadap Return Saham Publik. *Forum Ilmiah Universitas Esa Unggul*, 18(2), 178–189.
- Hutabarat, N. N., Lubis, B. M., Adelia, V., & Nasution, A. P. (2023). Analisis Peranan Pasar Modal dalam Mendukung Kebijakan Pemulihan Ekonomi Nasional Pasca Pandemi COVID-19. *Jurnal Ekonomi, Bisnis Dan Manajemen Akuntansi (EBMA)*, 2(1), 1–10.
- Imara, L. L. F., & Erdkhadifa, R. (2023). Pengaruh ROA, TATO, DER, EPS dan CR Terhadap Return Saham Perusahaan Farmasi Periode 2018-2021. *Jurnal Riset Akuntansi Aksioma*, 22(1), 79–91.
- Indriyani, W. W., & Mudjijah, S. (2022). Pengaruh Debt to Equity Ratio, Total Asset Turnover dan Intellectual Capital terhadap Profitabilitas. *Akuntabel*, 19(2), 317–324.
- Isman, H., Wardana, G. K., Barlian, N. A., & Hafizi, M. R. (2025). Bukti Kebijakan Dividen: CR, DER, ROE, dan TATO Perusahaan LQ-45 yang Terdaftar di JII. *J-Mabes: Jurnal Manajemen, Akuntansi, Bisnis Dan Studi Ekonomi*

Syariah, 02(02), 9-21.

- Isnain, B. F., Wardana, G. K., & Holis, M. N. (2024). Dampak Pengumuman Penerbitan Sukuk, Obligasi Konvensional Terhadap Return Saham Perusahaan. *I'THISOM : Jurnal Ekonomi Syariah*, 3(1), 44-56.
- Jaya, E. P., & Kuswanto, R. (2021). Pengaruh Return on Assets, Debt To Equity Ratio Dan Price To Book Value Terhadap Return Saham Perusahaan Lq45 Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2016-2018. *Jurnal Bina Akuntansi*, 8(1), 51-67.
- Khasanah, U., & Suwarti, T. (2022). Analisis Pengaruh DER, ROA, LDR Dan TATO Terhadap Harga Saham Pada Perusahaan Perbankan. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(6), 2.
- Kholifah, D. N., & Retnani, E. D. (2021). Pengaruh Tingkat Suku Bunga, Kebijakan Dividen, dan Struktur Modal Terhadap Return Saham. *Jurnal Ilmu Dan Riset Akuntansi*, 10(7), 1.
- Latifah, L. L., & Rosyadi, S. (2024). Analisis Kebijakan Fiskal Pasca Pandemi Covid-19 Studi Kasus Indonesia. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(3), 1787-1801.
- Laulita, N. B., & Yanni, Y. (2022). Pengaruh Return On Asset (ROA), Return On Equity (ROE), Debt To Equity Ratio (DER), Earning Per Share (EPS) dan Net Profit Margin (NPM) terhadap Return Saham pada Perusahaan Yang Terdaftar Di Indeks LQ45. *Journal of Management*, 5(1), 232-244.
- Lubis, I., & Alfiyah, F. N. (2021). Effect of Return on Equity and Debt to Equity Ratio to Stock Return. *Indonesian Financial Review*, 1(1), 18-32.
- Mahasidhi, I. G. B. N. D., & Dewi, L. G. K. (2022). Pengaruh Price To Book Value, Economic Value Added, Dan Market Value Added Terhadap Return Saham Investor Pada Perusahaan Perbankan Di Bursa Efek Indonesia. *Jurnal Manajemen*, 8(2), 383-392.
- Marliastutik, I. S., & Wardana, G. K. (2024). Bukti Return Saham Perbankan Syariah di Asia: EPS, PER, NPM, dan ROE Dengan Nilai Tukar Sebagai Variabel Moderasi. *NISBAH: Jurnal Perbankan Syariah*, 10(1), 59-73.
- Mudzakar, M. K., & Wardanny, I. P. (2021). The Effect Of Return On Asset, Return On Equity, Earning Per Share, And Price Earning Ratio Toward Stock Return (Empirical Study Of Transportation). *Turkish*

Journal of Computer and Mathematics Education, 12(8), 387–392.

- Mulyanti, K., & Randus, A. A. P. (2021). Pengaruh Earning Per Share (EPS) Dan Price Earning Ratio (PER) Terhadap Return Saham Pada Perusahaan LQ45 Periode 2017-2019. *Land Journal*, 2(1), 65–76.
- Nadyayani, D. A. D., & Suarjaya, A. A. G. (2021). The Effect of Profitability On Stock Return. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 695–703.
- Oneng, M. Y., Muliati, M., Pakawaru, M. I., & Tanra, A. A. M. (2025). Pengaruh Likuiditas, Leverage, Ukuran Perusahaan, dan Kepemilikan Manajerial Terhadap Manajemen Laba Dengan Financial Distress Sebagai Variabel Mediasi (Survei Pada Perusahaan Pertambangan Yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2023). *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, 14(3), 1147–1164.
- Priyatno, D. (2023). *Olah Data Sendiri Analisis Regresi Linier Dengan SPSS Dan Analisis Regresi Data Panel Dengan Eviews* (A. Prabawati (ed.)).
- Rahman, M. R. G. (2021). Pengaruh Kebijakan Dividen Terhadap Nilai Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indoensia. *Nobel Management Review*, 2(4), 580–590.
- Ramdhan, M. (2021). *Metode Penelitian* (A. A. Effendy (ed.); 1st ed.). Cipta Media Nusantara.
- Safira, L., & Budiharjo, R. (2021). Pengaruh Return on Asset, Earning Per Share, Price Earning Ratio Terhadap Return Saham. *AKURASI: Jurnal Riset Akuntansi Dan Keuangan*, 3(1), 43–52.
- Silalahi, P. P. (2022). Pengaruh Inflasi, BI7DRR, Nilai Tukar, ROA, dan DER Terhadap Return Saham Pada Perusahaan Indeks LQ45 di Bursa Efek Indonesia Periode 2017-2021. *J-MAS (Jurnal Manajemen Dan Sains)*, 7(2), 422.
- Simahatie, M., & Inuzula, L. (2022). Effect of Fundamental Factors on Stock Return (On LQ-45 Index Companies In Indonesia Stock Exchange 2017-2020). *Journal of Accounting Research, Utility Finance and Digital Assets*, 1(1), 11–18.
- Subekti, W. A. P., & Wardana, G. K. (2022). Pengaruh CAR, Asset Growth, BOPO, DPK, Pembiayaan, NPF dan FDR Terhadap ROA Bank Umum Syariah. *INOBIIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 5(2), 270–285.

- Sudaryo, Y., & Yudanegara, A. (2017). *Investasi Bank dan Lembaga Keuangan* (P. Christian (ed.); 1st ed.). ANDI OFFSET.
- Sukma, F. M. (2021). Peran Firm Size, Current Ratio, Debt To Asset Ratio, dan Return On Equity Terhadap Price To Book Value Pada Perusahaan Telekomunikasi yang Terdaftar di Bursa Efek Indonesia Periode 2014-2020. *Improvement: Jurnal Manajemen Dan Bisnis*, 1(1), 47.
- Tirta, W. O. P., & Ismiyanti, F. (2020). Efek Mediasi Nilai Perusahaan pada Pengaruh Biaya Modal terhadap Return Saham di Indonesia. *Development Studies Research*, 3(1), 43.
- Worotikan, E. R. C., Koleangan, R. A. M., & Sepang, J. L. (2021). Pengaruh Current Ratio (CR), Debt To Equity Ratio (DER), Return on Assets (ROA) Dan Return on Equity (ROE) Terhadap Return Saham Pada Perusahaan Food and Beverages Yang Terdaftar di Bursa Efek Indonesia Pada Tahun 2014-2018. *Jurnal EMBA*, 9(3), 1296-1305.
- Yahya, K., & Fietroh, M. N. (2021). Pengaruh Return On Asset (ROA) Return On Equity (ROE) dan Net Profit Margin (NPM) terhadap nilai perusahaan. *Jurnal Manajemen Dan Bisnis*, 4(2), 57-64.
- Yusmaniarti, Y., Khair, U., Marini, M., & Rahmawati, E. (2023). Pengaruh Faktor Fundamental Terhadap Harga Saham Bank Dan Lembaga Keuangan Islam Indonesia. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(2), 1549-1562.
- Zakiy, M. (2021). *SPSS Penelitian Keperilakuan: Teori dan Praktik*. Prenada Media.