

STOCK MARKET DYNAMICS AND JAKARTA ISLAMIC INDEX RETURNS: AN ARDL APPROACH

Adhatya Rizky Suhendar¹
Suriani^{2*}

^{1,2}Universitas Syiah Kuala, Indonesia

*Corresponding Email: suriani@usk.ac.id

ABSTRACT - Understanding the factors that influence stock returns is crucial for investors, particularly the Islamic capital markets. This study examines the impact of company size and key financial fundamentals—return on assets (ROA), debt-to-equity ratio (DER), and earnings per share (EPS)—on stock returns in the Jakarta Islamic Index (JII). Using secondary data from seven companies listed in the JII between 2011 and 2021, this study employs the Autoregressive Distributed Lag (ARDL) model to analyze both short-term and long-term effects. The findings indicate that, in the long run, company size and ROA have a positive impact on stock returns, while the debt-to-equity ratio has a negative effect. However, in the short term, ROA negatively affects stock returns, whereas the debt-to-equity ratio has a positive impact. Interestingly, EPS does not influence stock returns in either the short or long term. These results highlight the importance of maintaining strong financial fundamentals to sustain investor confidence in Sharia-compliant stocks. Companies should focus on enhancing financial stability and risk management to attract and retain long-term investors.

Keywords: Stock Return, Company Size, Return on Assets, Debt-to-Equity Ratio, Earnings per Share

ABSTRAK - Dinamika Pasar Saham dan Retur pada Jakarta Islamic Index: Pendekatan ARDL. Memahami faktor-faktor yang memengaruhi return saham sangat penting bagi investor, terutama di pasar modal syariah. Penelitian ini menganalisis pengaruh ukuran perusahaan dan rasio fundamental keuangan utama—return on assets (ROA), debt-to-equity ratio (DER), dan earnings per share (EPS)—terhadap return saham pada Jakarta Islamic Index (JII). Penelitian ini menggunakan data sekunder dari tujuh perusahaan yang terdaftar di JII selama periode 2011–2021. Untuk menganalisis dampak jangka pendek dan jangka panjang, penelitian ini menerapkan model Autoregressive Distributed Lag (ARDL). Hasil penelitian menunjukkan bahwa dalam jangka panjang, ukuran perusahaan dan ROA berpengaruh positif terhadap return saham, sementara debt-to-equity ratio memiliki dampak negatif. Namun, dalam jangka pendek, ROA berpengaruh negatif, sedangkan debt-to-equity ratio berpengaruh positif terhadap return saham. Menariknya, EPS tidak berpengaruh terhadap return saham, baik dalam jangka pendek maupun jangka panjang. Hasil ini mengindikasikan pentingnya mempertahankan fundamental keuangan yang kuat untuk menjaga kepercayaan investor terhadap saham berbasis Syariah. Oleh karena itu, perusahaan perlu meningkatkan stabilitas keuangan dan strategi manajemen risiko guna menarik dan mempertahankan investor jangka panjang.

Kata Kunci: Return Saham, Ukuran Perusahaan, Return on Assets, Debt-to-Equity Ratio, Earnings per Share

INTRODUCTION

The growth of developing economies relies heavily on investment and capital market development, as these sectors provide essential funding for businesses, governments, and individuals (Saraan et al., 2023). In Indonesia, a country with one of the largest Muslim populations in the world, the Islamic capital market plays a critical role in expanding Sharia-compliant financial instruments. Over the years, Indonesia's stock market has demonstrated steady growth, despite being subject to economic and macroeconomic fluctuations (Hismendi et al., 2021; Suriani et al., 2018, 2024).

Investment has become an essential financial planning strategy, with increasing public awareness of its benefits (Rahmi et al., 2022). The capital market not only serves as a means for businesses to obtain funding but also acts as a critical driver of economic development (Darmadji & Fakhruddin, 2012). However, stock market performance in Indonesia, particularly within the Islamic capital market, remains a subject of concern. Despite the existence of indices such as the Jakarta Islamic Index (JII) and Jakarta Islamic Index 70 (JII70), which serve as benchmarks for Sharia-compliant stocks, their growth and investor participation remain relatively limited (Suciningtias & Khoiroh, 2015). Figure 1 presents the stock returns performance of seven companies on the JII during the period 2016–2022.

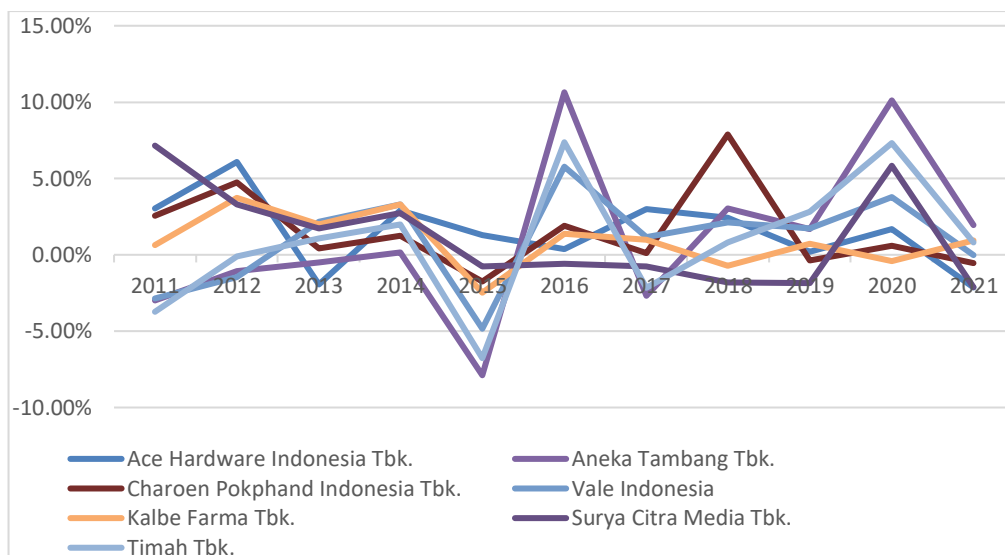


Figure 1. Stock Returns of Seven Companies on JII (2016–2022)
(Source: Excel processed results, 2023)



Stock returns are one of the primary considerations for investors in decision-making. However, maintaining stable and profitable stock returns in the Islamic stock market is challenging. The Financial Services Authority (OJK) has reported that the Islamic capital market's growth has been slow due to investor behavior, as many investors prioritize returns over compliance with Islamic financial principles (Mulyana & Mahadi, 2022). Moreover, stock return volatility is influenced by multiple factors, including fundamental financial indicators such as the return on assets (ROA), debt-to-equity ratio (DER), earnings per share (EPS), and company size (Sudiyatno & Irsad, 2011).

Existing literature provides mixed findings on the relationship between financial fundamentals and stock returns in both conventional and Islamic markets. For instance, Sudarsono and Sudiyatno (2014) found that ROA negatively affects stock returns, while DER and company size have a positive impact. In contrast, Gunawan and Hardyani (2014) reported a positive relationship between ROA and stock returns, but found no significant effect for DER. Meanwhile, Susilowati et al. (2019) and Asia (2020) identified a negative impact of DER on stock returns, further demonstrating the lack of consensus in the literature. Adding to this divergence, A'iniyah and Taufiqurahman (2021) suggested that EPS and ROA negatively affect stock returns, contradicting other studies.

These inconsistencies are compounded by the reliance of prior research on static panel analysis (Asia, 2020; Ajizah & Biduri, 2021; Winata et al., 2021) or multiple linear regression (Prasetia et al., 2014; Aminah, 2019; Lestari & Aziz, 2021; Nurmawati & Diyanti, 2022) to investigate the relationships between financial indicators and stock returns. However, these methodologies are limited in their ability to account for the dynamic nature of stock returns and the temporal variations in their effects. To address these methodological gaps, this study employs the Autoregressive Distributed Lag (ARDL) model, enabling a more robust analysis of both short-term and long-term effects. Through this approach, the study aims to evaluate the impact of company size and key financial fundamentals—namely, ROA, DER, and EPS—on stock returns within the JII.

The findings are intended to provide actionable insights for investors and financial analysts, enabling the formulation of more informed and strategic investment decisions within the Islamic capital market. This study contributes to the existing literature in several key ways. First, it provides new empirical



evidence on the impact of company size, ROA, DER, and EPS on stock returns within the JII, offering insights specifically tailored to the Islamic financial market. Second, this research employs the ARDL model, which allows for a more comprehensive analysis of both short-term and long-term effects, addressing limitations in previous studies that relied on static models. Lastly, the findings have practical implications for Sharia-compliant investment strategies by identifying key financial indicators that influence stock performance, offering valuable guidance for stakeholders in the Islamic capital market.

The rest of the paper is structured as follows: Section 2 reviews the literature and theoretical framework. Section 3 explains the methodology used in the study. Section 4 presents the empirical results and discussion, followed by Section 5, which concludes the study and provides recommendations for future research.

LITERATURE REVIEW

Islamic Capital Market

The Islamic capital market has experienced significant growth, offering investors greater opportunities for portfolio diversification while adhering to Sharia principles. One of the key objectives of investment is to maximize returns by selecting the most suitable financial instruments. However, for Muslim investors, investment decisions are influenced not only by potential financial gains but also by compliance with Islamic law (Kasir, 2021; Suriani et al., 2021).

Historically, Sharia-compliant financial practices were first introduced in the banking sector, with the establishment of the first Islamic bank in Cairo in 1971, known as Nasser Social Bank, which operated on a profit-sharing system rather than charging usury (*riba*). The subsequent development of Sharia-based banking led to the expansion of Islamic financial principles into the capital market sector. The first countries to implement Sharia principles in the capital market were Jordan and Pakistan, both of which had established legal frameworks for issuing Islamic bonds (*Sukuk*) (Khalisah, 2014; Putri, 2022).

In an Islamic capital market, companies seeking to issue securities must comply with Sharia screening criteria, ensuring that their business activities and financial structures adhere to Islamic law (Nurmawilis et al., 2021). While the



fundamental nature of stocks in Islamic and conventional markets remains similar, shares that fulfill Sharia-compliant criteria must be exclusively traded within the Islamic capital market (Khalisah, 2014).

Investors in Islamic stocks hold ownership rights, allowing them to participate in the General Meeting of Shareholders (GMS) and benefit from capital appreciation and dividend payouts. However, they also bear the risk of financial loss, such as declining stock prices, reduced dividends, or even capital loss in cases of bankruptcy. The contractual relationship among shareholders in Islamic finance follows the principles of *Syirkah al-musamahah*, a cooperative contract with no fixed time limit (Abdalloh, 2018).

According to the Financial Services Authority (Otoritas Jasa Keuangan – OJK), the Islamic stock market in Indonesia has witnessed steady growth, particularly between 2016 and 2020. The data suggests that the expansion of Islamic financial instruments holds substantial potential for further development within the Islamic capital market (Roifah & Faris, 2022).

Stock Return

Stock return represents the gain or loss realized by an investor from their investment in stocks. Investors typically aim for high returns, which can be classified into two categories: realized returns, derived from actual market data, and expected returns, which are based on forecasted market conditions (Basri & Mayasari, 2019).

Stock return dynamics are influenced by multiple factors, including fundamental indicators, technical analysis, and market sentiment (Yahya et al., 2022). Fundamental factors are primarily associated with a company's financial health, including aspects such as profitability, company size, and financial ratios (Silalahi, 2015).

These elements directly influence stock price performance, where stronger financial fundamentals enhance investor confidence and drive higher stock valuations (Darmandji & Fakhrudin, 2012). Additionally, fundamental analysis is widely used to predict future stock prices by evaluating the financial indicators that shape stock valuation (Fakhruddin & Hadianito, 2001).



Company Size and Stock Return Relationship

Company size is commonly measured by total sales and total assets, which serve as indicators of a firm's financial strength and growth potential (Tumangkeng & Mildawati, 2018; Lumoly et al., 2018). Larger companies often exhibit greater financial stability, which in turn enhances investor confidence and positively impacts stock prices (Prasetia et al., 2014; Jaya, 2020). According to signaling theory, a strong financial position serves as a positive signal to investors, encouraging greater demand for the company's stock and leading to higher stock prices (Maharani & Mawardhi, 2022).

Empirical studies support the positive relationship between company size and stock returns. For instance, Sudarsono and Sudiyatno (2014) and Ajizah and Biduri (2021) found that larger companies tend to generate higher stock returns. This leads to the following hypothesis:

H₁: Company size has a positive effect on stock returns.

Return on Assets and Stock Return Relationship

Return on Assets (ROA) is a critical profitability metric that reflects a firm's efficiency in generating profits from its total assets (Rambe et al., 2021). A higher ROA indicates that a company is effectively utilizing its assets, making it more attractive to investors. Since profitability plays a crucial role in stock valuation, higher ROA values are generally associated with higher stock returns (Sudarsono & Sudiyatno, 2014).

According to signal theory, a company's financial performance serves as a key indicator for investors when making investment decisions. A high ROA acts as a positive signal, whereas a low ROA may discourage investment (Nurmawati & Diyanti, 2022). Several studies, including Susilowati et al. (2019) and Gunawan & Hardyani (2014), confirm that ROA positively influences stock returns. Based on this, the following hypothesis is formulated:

H₂: Return on assets has a positive effect on stock returns.

Debt-to-Equity Ratio and Stock Return Relationship

The debt-to-equity ratio (DER) measures a company's financial leverage by comparing its total debt to its equity. A high DER indicates a greater reliance



on debt financing, which may reduce the company's ability to generate stock returns due to higher financial obligations (Yap & Firnanti, 2019). In line with signaling theory, a low DER sends a positive signal to investors, while a high DER is perceived as a negative signal (Nurmawati & Diyanti, 2022).

Studies have shown a negative relationship between DER and stock returns. For instance, Asia (2020) and Lestari and Aziz (2021) found that companies with lower DER tend to generate higher stock returns, as investors prefer firms with lower financial risk. This leads to the following hypothesis:

H₃: Debt-to-equity ratio has a negative effect on stock returns.

Earnings Per Share and Stock Return Relationship

Earnings per share (EPS) is a profitability metric that measures the portion of a company's net income allocated to each outstanding share. It reflects the company's ability to generate profits for its shareholders (Gerialdi & Wiksuana, 2017; A'iniyah & Taufiqurahman, 2021). Higher EPS values are often associated with greater investor interest, leading to increased stock demand and higher stock prices (Artamevia & Triyonowati, 2022; Yap & Firnanti, 2019).

According to signaling theory, EPS serves as a financial signal to investors. A high EPS is perceived as a positive signal, attracting investment, while a low EPS is viewed negatively (Nurmawati & Diyanti, 2022). Empirical studies, such as Murhadi (2015) and Yap and Firnanti (2019), confirm the positive relationship between EPS and stock returns. Based on this, the following hypothesis is proposed:

H₄: Earnings per share has a positive effect on stock returns.

METHODOLOGY

This study examines the impact of Company Size (CZ), Return on Assets (ROA), Debt-to-Equity Ratio (DER), and Earnings Per Share (EPS) on stock returns in companies listed on the Jakarta Islamic Index (JII). The analysis covers a sample of 30 companies listed on the JII between 2011 and 2021. The JII was selected as the primary index for this study due to its strong representation of Sharia-compliant stocks, which are among the highest-performing Sharia stocks compared to other Islamic indices such as the



Indonesian Sharia Stock Index (ISSI) and the Jakarta Islamic Index 70 (JII70), both of which are listed on the Indonesia Stock Exchange (IDX).

The study relies on secondary data obtained from publicly available financial reports, including those provided by the Indonesia Stock Exchange (IDX), company annual reports, and other reputable financial sources. However, to ensure the quality and relevance of the data, only seven companies were selected based on specific inclusion criteria.

Sampling Criteria and Data Selection

The selection of the seven companies was guided by the following predetermined criteria:

1. Availability of complete financial data for the full eleven-year period (2011–2021) within JII-listed companies.
2. A debt-to-total asset ratio below 3%, ensuring that the selected companies have low financial leverage and are less reliant on debt financing.
3. A stock return history with no more than five years of negative returns, ensuring that firms with extreme volatility or prolonged underperformance are excluded.

Companies meeting these criteria were chosen to reflect financial stability and conservative capital structures, which are essential for maintaining long-term sustainability (Brigham & Houston, 2019). A debt ratio below 3% is often considered a low leverage level, indicating that the firm is financially independent and has a reduced risk of bankruptcy. Firms with such conservative financial policies tend to perform better in times of economic downturns and are more attractive to risk-averse investors. The resulting sample consists of 7 companies, observed over 11 years (2011-2021), yielding a total of 77 observations ($N=7$, $T=11$).

Research Model

The study applies the Autoregressive Distributed Lag (ARDL) model, using the Pooled Mean Group (PMG) approach, as proposed by Pesaran et al. (1999). The ARDL model is particularly advantageous for small to medium-sized samples, allowing for an efficient estimation of both short-term and long-term relationships among variables (Gujarati & Porter, 2009; Ibrahim, 2023).



According to Blackburne and Frank (2007), the PMG estimator is appropriate for panel ARDL models, particularly when the number of time periods exceeds the number of cross-sectional units. Furthermore, the rule of thumb suggests that for robust estimation, the number of observations (n) should significantly exceed the number of explanatory variables (k) (Pesaran, 2004). Given that this study has four explanatory variables (CZ, ROA, DER, and EPS), the sample size of 77 observations satisfies this criterion.

The statistical analysis is conducted using EViews-13 software, and the following analytical procedures are performed:

1. Descriptive statistical analysis – To summarize the key characteristics of the dataset.
2. Stationarity test – To check for unit roots and ensure data stability.
3. Cointegration test – To determine the existence of long-term equilibrium relationships.
4. Short-term and long-term estimation – Using the ARDL-PMG model to evaluate the dynamic impact of independent variables on stock returns.

Justification for Panel Data and ARDL Approach

The choice of panel data analysis, specifically the ARDL model with a PMG estimator, is justified by several factors:

1. Time Series and Cross-Sectional Dimensions
Panel data allows for the simultaneous analysis of both the time-series dynamics within each company and the cross-sectional differences between companies. This captures the heterogeneity inherent in financial data.
2. Small Sample Suitability
The ARDL approach is particularly well-suited for small to medium-sized samples, as is the case here (Pesaran et al., 1999). The relatively small number of firms ($N=7$) compared to the time periods ($T=11$) strengthens the estimation, making it easier to manage heterogeneity across units (Nkoro & Uko, 2016).
3. Mixed Order of Integration
ARDL models can effectively handle variables that are stationary at different levels ($I(0)$) or after first differencing ($I(1)$), a common characteristic of financial time series data (Pambuko & Masrini, 2013).



This eliminates the need for pre-testing for unit roots, which can be unreliable in small samples.

4. Long-Run and Short-Run Dynamics

The ARDL framework allows for the simultaneous estimation of both short-run and long-run relationships between the variables, providing a comprehensive understanding of the dynamic effects of the independent variables on stock returns. The PMG estimator, in particular, allows for short-run coefficients to vary across companies while constraining the long-run coefficients to be homogeneous, reflecting the assumption that long-run equilibrium relationships are likely to be similar across firms in the same sector (Blackburne & Frank, 2007).

5. Sufficient Observations

The total number of observations (77) significantly exceeds the number of estimated parameters (four independent variables plus lags), adhering to the general rule of thumb ($n \geq 10k$) for reliable estimation and robust hypothesis testing (Pesaran, 2004).

Model Specification

The core of the analysis is the following ARDL model, adapted from Pesaran et al. (2001):

$$\begin{aligned} \Delta SR_{j,t} = & \alpha_{01} + \sum_{i=1}^k \beta_{11i} \Delta SR_{j,t-i} + \sum_{i=1}^k \beta_{12i} \Delta CZ_{j,t-i} + \sum_{i=1}^k \beta_{13i} \Delta ROA_{j,t-i} \\ & + \sum_{i=1}^k \beta_{14i} \Delta DER_{j,t-i} + \sum_{i=1}^k \beta_{15i} \Delta EPS_{j,t-i} + \theta_{11} SR_{j,t-1} + \theta_{12} CZ_{j,t-1} \\ & + \theta_{13} ROA_{j,t-1} + \theta_{14} DER_{j,t-1} + \theta_{15} EPS_{j,t-1} + \varepsilon_{j,t-1} \end{aligned} \quad (1)$$

Where:

SR = Stock Return

CZ = Company Size

ROA = Return on Assets

DER = Debt-to-Equity Ratio

EPS = Earnings Per Share

α_{01} = Constant

$\beta_{11} - \beta_{15}$ = Short-term coefficients

$\theta_{11} - \theta_{15}$ = Long-term coefficients

t = Time period



j = Seven selected companies

i = Lag order

ε = Error term

RESULTS AND DISCUSSION

Results

Stationarity Test

In time-series analysis, ensuring data stationarity is a fundamental prerequisite for reliable statistical modeling. A stationary series implies that its statistical properties remain constant over time, allowing future behavior to be inferred from historical data (Rosadi, 2012). To determine the stationarity of variables in this study, unit root tests were conducted using the Levin, Lin, and Chu (LLC) and Phillips-Perron (PP) Fisher Chi-square methods. The results, presented in Table 1, indicate that stock returns (SR), company size (CZ), and earnings per share (EPS) are stationary at the level $I(0)$, whereas return on assets (ROA) and debt-to-equity ratio (DER) become stationary after first differencing $I(1)$. The presence of a mixture of level and first-difference stationary variables justifies the use of the ARDL panel model, which is particularly suited for analyzing both short-term and long-term relationships between variables.

Table 1. Unit Root Test Results

Variable	LLC		PP		Decision
	I(0)	I(1)	I(0)	I(1)	
SR	0.0237**	-	0.000	-	I(0)
CZ	0.0110**	-	0.0004	-	I(0)
ROA	0.3269	0.0051***	0.1032	0.0000***	I(1)
DER	0.0000***	-	0.0625	0.0000***	I(1)
EPS	1.0000	0.0000***	0.0000***	-	I(1)

Note: Significance at α ***(1%), **(5%)

(Source: Author, Processed, 2023)

Cointegration Test

After confirming the stationarity of variables, a cointegration test was performed using the Kao Residual Cointegration Test. This test determines whether a long-term equilibrium relationship exists between the dependent and



independent variables. Cointegration is established when the ADF probability value is less than 0.05 (Kao, 1999).

The results in Table 2 indicate a probability value of 0.0289, which is below the 5% significance threshold. This confirms the presence of a long-term relationship between SR, CZ, ROA, DER, and EPS across the seven firms listed on the Jakarta Islamic Index (JII) during the 2011–2021 period.

Table 2. Kao Residual Cointegration Test Results

	t-Statistic	Prob.
ADF	1.8964	0.0289**
Residual	0.2971	
HAC variance	0.2030	

Note: Significance at α ** (5%)

(Source: Author, Processed, 2023)

Long-Term Estimation Results

The estimation results for the long-term effects of the independent variables on stock returns (SR) using the ARDL panel model are displayed in Table 3.

Table 3. Long-Term Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long-run (Pooled) Coefficients				
CZ	0.0119	0.004	3.1075	0.0028***
ROA	0.0005	9.04E-05	5.1632	0.0000***
DER	-0.1600	0.0457	-3.5041	0.0008***
EPS	-0.0011	0.0003	-0.3499	0.7275
C	0.0282	0.0883	0.3198	0.7502

Note: Significance at α *** (1%), ** (5%)

(Source: Author, Processed, 2023)

The findings indicate that Company Size (CZ) has a significant positive effect on stock returns ($p = 0.0028$). This result aligns with studies by Sudarsono & Sudiyatno (2014) and Ajizah & Biduri (2021), which suggest that larger companies tend to be more stable and attract more investors, thereby enhancing stock returns. Return on Assets (ROA) also has a significant positive effect ($p = 0.0000$), confirming that firms with higher profitability tend to generate better stock returns. This finding is consistent with Gunawan & Hardyani (2014) and Susilowati et al. (2019).



Debt-to-Equity Ratio (DER) has a significant negative effect ($p = 0.0008$), indicating that firms with higher leverage experience a decline in stock returns. This supports the findings of Asia (2020) and Lestari & Aziz (2021), who argue that excessive debt increases financial risk, leading to lower investor confidence. Earnings Per Share (EPS) does not have a significant impact on stock returns ($p = 0.7275$), suggesting that EPS fluctuations do not necessarily influence investor expectations in the long term, a result consistent with Yap & Firnanti (2019) and Khairunnisa (2016).

Short-Term Estimation Results

The short-term relationships between the variables are presented in Table 4.

Table 4. Short-Term Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>Short-run (Mean-Group) Coefficients</i>				
COINTEQ	-0.9979	0.1931	-5.1683	0.0000***
D(CZ)	-0.1880	0.4153	-0.4527	0.6522
D(ROA)	-0.1138	0.0559	-2.0322	0.0462**
D(DER)	1.3538	0.4862	2.7844	0.0070***
D(EPS)	0.0006	0.0013	0.4914	0.6248

Note: Significance at α ***(1%), **(5%)

(Source: Author, Processed, 2023)

The findings indicate that Return on Assets (ROA) has a significant negative effect on stock returns in the short term ($p = 0.0462$). This suggests that short-term fluctuations in ROA might not immediately translate into stock price movements, aligning with Pauziantara et al. (2020). Debt-to-Equity Ratio (DER) has a significant positive impact in the short term ($p = 0.0070$), consistent with Susilowati et al. (2019), who argue that firms using debt efficiently can generate higher returns. Company Size (CZ) and Earnings Per Share (EPS) do not significantly impact stock returns in the short term. The error correction term (COINTEQ) has a coefficient of -0.9979 and is statistically significant at the 1% level, confirming that deviations from long-run equilibrium are corrected at nearly 100% annually.

Discussion

The findings provide insights into the relationship between stock returns, company size, return on assets (ROA), debt-to-equity ratio (DER), and earnings per share (EPS) in both the short and long term. These results align with various



financial theories, including the Efficient Market Hypothesis (EMH) (Fama, 1970), Pecking Order Theory (Myers & Majluf, 1984), and Trade-Off Theory (Graham & Leary, 2018), as well as previous empirical studies.

Company Size and Stock Returns

The impact of company size on stock returns differs significantly between the short and long term. In the long term, company size positively influences stock returns, while in the short term, it has no measurable effect. Behavioral finance suggests that investors are more likely to recognize and understand larger firms, leading to more positive perceptions and higher stock returns over time. Baker and Wurgler (2022) explain that larger companies benefit from more stable investor sentiment, which contributes to higher returns in the long run, even though sentiment may not play a significant role in the short term. While short-term market movements are often influenced by investor sentiment, company size becomes a more dominant factor in determining returns over extended periods.

The findings consistent with Adiwibowo (2018), who argued that investors do not prioritize company size in short-term decision-making. However, this contrasts with Sudarsono and Sudiyatno (2014), who found a significant positive relationship between company size and stock returns.

Return on Assets and Stock Returns

The results for return on assets (ROA) also reveal a divergence between short-term and long-term effects. In the long term, ROA positively impacts stock returns, as a consistently high ROA signals strong company fundamentals that the market eventually recognizes. This finding aligns with the Efficient Market Hypothesis (EMH) and the work of Fama and French (1992), which demonstrate that profitability ratios, such as ROA, significantly influence stock performance in the long run by reflecting a firm's ability to generate sustainable profits.

However, in the short term, ROA negatively affects stock returns. According to the EMH (Fama, 1970), stock prices reflect all available information, including company performance (Fama & French, 2015). Yet, short-term price movements are often driven more by market expectations than by actual financial results. The cost-growth trade-off theory (Biddle et al., 2009) provides further insight, suggesting that companies focusing excessively on short-term



operational efficiency may neglect strategic investments, leading to reduced stock appreciation. The study differs from the positive effects observed by Gunawan and Hardyani (2014) and Susilowati et al. (2019). Nugroho and Sopian (2019) suggest that this could stem from management's inability to utilize total assets effectively in the short term, thereby failing to enhance stock returns.

Debt-to-Equity Ratio and Stock Returns

The debt-to-equity ratio (DER) has contrasting effects on stock returns in the short and long term. Over the long term, a high DER negatively impacts stock returns, as excessive leverage increases the risk of financial distress. The trade-off theory suggests that while debt can provide tax benefits (the tax shield), high leverage raises bankruptcy risk, which can outweigh these benefits and reduce firm value. Graham and Leary (2018) found that firms with highly leveraged capital structures experience greater volatility in firm value, negatively affecting long-term stock returns.

In the short term, however, DER positively influences stock returns. According to the Pecking Order Theory (Myers & Majluf, 1984), companies prefer debt over equity for funding short-term profitable projects due to the lower cost of debt. When firms effectively manage their debt to finance growth opportunities, investors perceive this positively, leading to higher short-term stock returns. The findings contrast with Asia (2020) and Lestari and Aziz (2021), which reported a significant negative relationship. Andini and Firdaus (2022) attribute this positive effect to investor optimism about firms that efficiently manage debt to finance short-term growth.

Earnings per Share and Stock Returns

The findings indicate that earnings per share (EPS) do not significantly influence stock returns in either the short or long term. This aligns with Yap and Firnanti (2019) and Khairunnisa (2016), which found that changes in EPS do not necessarily help investors predict future stock returns. One possible explanation is that investors rely on more comprehensive financial indicators, such as profitability ratios (e.g., ROA) and leverage (e.g., DER), rather than a single measure like EPS. Furthermore, in an efficient market, stock prices already reflect earnings expectations, reducing the predictive power of EPS.

Market Adjustment and Stability



The short-term estimation results indicate a rebalancing mechanism toward long-term equilibrium. This is evidenced by the cointegration coefficient (-0.9979), which is significant at the 1% level. The negative coefficient suggests that any short-term shocks are corrected within approximately one year. This implies that despite temporary market fluctuations, stock returns tend to realign with fundamental financial variables over time. This result supports the idea that stock markets exhibit mean-reverting behavior, where deviations from fundamental values eventually correct themselves due to market forces.

The findings provide a nuanced understanding of the dynamic relationships between financial indicators and stock returns. While company size and ROA positively influence stock returns in the long term, DER has a negative impact. Conversely, in the short term, ROA and DER exhibit significant effects, but their directions differ from long-term trends. The results underscore the importance of considering both short-term market dynamics and long-term financial fundamentals when evaluating stock performance. Additionally, the study reaffirms the role of established financial theories, such as the Efficient Market Hypothesis, Trade-off Theory, and Pecking Order Theory, in explaining the observed patterns.

CONCLUSION

This study analyzed the impact of company size, return on assets (ROA), debt-to-equity ratio (DER), and earnings per share (EPS) on stock returns in seven large companies listed on the Jakarta Islamic Index (JII) from 2011 to 2021 using the ARDL dynamic panel analysis model. The findings reveal distinct differences between long-term and short-term investment behaviors. In the long run, company size (CZ) and ROA have a significant positive effect on stock returns, while DER has a significant negative impact, and EPS does not significantly influence stock returns. In the short term, ROA has a negative impact and DER exhibits a positive effect on stock returns. The significant negative cointegration coefficient indicates that deviations in stock prices from their long-term equilibrium are corrected over time.

The findings have important implications for both investors and corporate managers. For long-term investors, analyzing a company's financial fundamentals is crucial, as company size and profitability positively influence long-term stock returns, while high financial leverage (DER) poses risks. Short-term investors should be aware that market behavior is influenced by factors



beyond financial fundamentals, such as investor sentiment and market trends, highlighting the need for better investor education. Corporate managers should focus on maintaining financial stability, optimizing debt management, and ensuring profitability to attract long-term investors, emphasizing sustainable growth strategies to enhance investor confidence and stock performance.

This study has several limitations. It focuses on seven large companies within the Jakarta Islamic Index (JII), which may not represent the broader Indonesian stock market. The findings could vary across different industries, firm sizes, and economic conditions. The study primarily considers fundamental financial indicators (CZ, ROA, DER, and EPS) without accounting for macroeconomic conditions, investor sentiment, and market trends. While the ARDL panel model captures dynamic relationships over time, it does not account for external shocks or structural changes during the 2011–2021 period. Future research should include a broader range of companies and variables, examine external shocks, and explore investor psychology and financial literacy in emerging markets like Indonesia to enhance market efficiency and informed investment decisions.

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