

INTEREST RATES AND INVESTOR RETURNS: A STUDY OF DYNAMICS IN ISLAMIC BANKING

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Abstract. This study aims to evaluate the effect of interest rates on stock returns for investors in Islamic banking in Indonesia. The study employs a descriptive quantitative method and utilizes simple regression analysis to evaluate the impact of interest rates on investor stock returns. The findings indicate that fluctuations in interest rates do not affect the stock returns of investors in Islamic banking in Indonesia. This can be attributed to the fact that Islamic banks operate under a profit-sharing system rather than an interest-based system. Furthermore, Indonesia's predominantly Muslim population places significant importance on Sharia compliance, which serves as a primary consideration for investors in Islamic banking. This indicates that interest rates do not influence investors' interest in investing in Islamic banks.

Keywords: interest rate, stock returns, Islamic banking

1. Introduction

Investment interest in sharia-compliant stocks is steadily increasing in Indonesia, as evidenced by the rise in the number of sharia securities and the expanding base of sharia stock investors. According to the Sharia Securities List (DES) data for the second period of 2023 released by the Financial Services Authority (OJK), there are currently 629 sharia stocks, representing 69% of the total stocks listed on the Indonesian capital market. By the end of 2023, the Indonesia Stock Exchange (IDX) reported that the number of sharia stock investors in Indonesia reached 136,418. Companies listed as sharia stocks operate across various sectors and industries, with sharia banking stocks being particularly sought after by investors who aim for optimal returns that align with Islamic principles (Andiansyah et al., 2023).

Stock returns are undoubtedly the primary objective of investing in the stock market (Kusumaningtyas et al., 2021). Stock returns refer to the profits earned by investors who allocate their capital to a company over a specified period (Hardianti et al., 2024). These returns can be realized in the form of dividends (Arsal, 2021), which are distributions of profits made by the company to investors, either in cash, shares, or property. Additionally, stock returns may arise from capital gains, representing the difference between the selling price and the purchase price of shares (Maruta, 2020; Yap & Firmanti, 2019). Stock price fluctuations are significantly influenced by both microeconomic and macroeconomic factors related to the company (Wong, 2022). These factors include company policies, financial performance, inflation rates, exchange rates, and interest rates (Fatmawati & Hermafiani, 2022).

Interest rates are a critical factor affecting stock price movements. According to the Financial Services Authority (OJK), rising banking interest rates have led to a general decline in stock prices within the capital market. However, the banking sector benefits as many investors gravitate towards banking products such as deposits, enhancing the performance and profit growth of banks. As of January 2024, Indonesia's interest rate is set at 6.00% to maintain

stability and promote economic growth, thereby creating opportunities for the banking sector to maximize profits (Setiawati, 2023).

Research by Ayub & Masih (2014) indicates that when interest rates rise, both domestically and internationally, Muslim investors tend to increase their purchases of sharia-compliant stocks, leading to a rise in the prices of such stocks. Research conducted by (Farich & Kornitasari, 2024) shows that interest rates positively influence the returns of banking stocks. An increase in interest rates results in higher interest income for banks from loans, which can attract investor interest and subsequently drive up banking stock prices and returns. Contrarily, studies by (Kusumaningtyas et al., 2021) and (Adnanhasan et al., 2020) indicated that interest rates have a negative impact on the returns of banking stocks. Research by (Agestiani & Sutanto, 2019) on the Jakarta Islamic Index (JII) shows that rising interest rates adversely affect stock movements in the JII, as investors tend to shift their funds from the stock market to other investment instruments, leading to declining stock prices and reduced returns. The findings (Zainol & Kassim, 2010) reveal that changes in conventional interest rates exert pressure on the profit-sharing rates of Islamic deposits. This disparity can create favorable arbitrage opportunities, causing Islamic banks to be similarly affected by interest rate movements as conventional banks, since the returns of Islamic banks are sensitive to changes in interest rates. While numerous studies have explored the impact of interest rates on stock returns, there remains a gap in the literature regarding a comprehensive examination of this relationship specifically within the context of Islamic banking.

Based on the author's knowledge, there is currently a lack of research examining the relationship between interest rates and stock returns in Islamic banking. Therefore, it is important to investigate it to understand the impact of interest rates on stock returns within the context of Islamic banking stocks listed in the Indonesia Stock Exchange.

2. Literature Review

Literature Review

Signaling Theory

Signal theory is employed in this research to elucidate how companies or management communicate signals that inform investor decision-making (Arsal, 2021). For investors, rising interest rates often diminish interest in stock investments, prompting a preference for reallocating funds to other, lower-risk investment instruments. An increase in interest rates is perceived as a negative signal, suggesting that stock prices may correct or decline, which in turn reduces the returns investors receive from their stocks. Conversely, the banking sector benefits as many investors shift towards banking products such as deposits, thereby enhancing the performance and profit growth of banks (Bahmani-Oskooee & Baek, 2021; Wong, 2022).

Stock Return

Stock return refers to the expected level of return that investors anticipate when investing their funds in a company over a specified period (Hardianti et al., 2024). This return is derived from the profits or losses generated by the company. Realized stock returns may manifest as dividends or capital gains (Arsal, 2021), with capital gains representing the difference between the selling price and the purchase price of the shares (Yap & Firmanti, 2019). Macroeconomic factors such as money supply, exchange rates, interest rates, and inflation are recognized as sources of stock market volatility and serve as key indicators for bank stock returns (Ayub & Masih, 2014).

Islamic Bank

A bank is essentially an entity that collects funds from the public in the form of financing or, in other words, performs the function of financial intermediation (Hardianti et al., 2024). Indonesia's banking system, there are two types of banking operational systems, conventional banks and Islamic banks. According to Law Number 21 of 2008 concerning Islamic Banking, an Islamic Bank is one that conducts business activities based on Sharia principles (Arsal et al., 2016), or Islamic law principles regulated in the fatwas of the Majelis Ulama Indonesia (Zainol & Kassim, 2010), such as the principles of justice and balance ('adl wa tawazun), public interest (maslahah), universality (alamiyah), and that does not contain gharar, maysir, riba, oppression, or haram objects (Arsal et al., 2016; Ulfah et al., 2023). In addition, Islamic banks perform social functions by acting as baitul mal institutions, which receive funds from zakat (Smadi et al., 2013), infak, almsgiving, hibah, or other social funds and distribute them to waqf managers (nazhir) according to the wishes of the waqf giver (wakif). The implementation of the regulation and supervision of Islamic banking from the perspective of implementing prudential principles and good governance is carried out by the Financial Services Authority (OJK), just as it is in conventional banking, but with regulations and a supervisory system tailored to the unique characteristics of the Islamic banking operational system (OJK, 2017).

Interest Rate

Banking plays a crucial role as a financial intermediary between those with surplus funds and those in need of financing (Habib, 2015). Through this process, banks collect funds from the public and reallocate them in the form of loans (Hardianti et al., 2024). Borrowers then repay these loans with interest, providing banks with a return on their financial intermediation services (Thakor, 2020). Interest rates represent the cost of borrowing or the price paid for funds obtained through loans. The interest rate is regulated by Bank Indonesia, which sets it monthly as part of its monetary policy, based on decisions made during the meetings of the Board of Governors. This policy is issued with consideration of the country's economic conditions to maintain stability and promote economic growth (Sari & Nurjannah, 2023). 5 According to the Financial Services Authority (OJK), the increase in banking interest rates has led to a decline in stock prices within the capital market. However, the banking sector benefits as many investors shift their focus to banking products such as deposits, thereby enhancing the performance and profit growth of banks.

Conversely, changes in interest rates can adversely impact bank income and economic value. Sustained increases in interest rates can create several challenges for banks, including rising costs, as they must offer higher interest rates to attract new deposits and retain existing ones. Variations in market interest rates can also affect the economic value of a bank's assets and liabilities, as well as its overall financial position, due to mismatches between interest-sensitive assets and liabilities. Consequently, banks must remain vigilant to avoid declining income or losses that could threaten financial stability by undermining capital adequacy and reducing market confidence (Zainol & Kassim, 2010).

While Islamic banking is not directly affected by interest rates, Islamic banks that provide Sharia-compliant financing face a higher return risk compared to those that do not. This discrepancy arises from the differing sensitivities of assets and liabilities in Islamic banks. Unlike conventional banks, which can more readily adapt on the asset side, Islamic banks often have fixed-rate assets that are not sensitive to fluctuations in market interest rates, while their liabilities are subject to such changes. As a result, Islamic banks are less able to swiftly adjust

to interest rate variations, leading to greater exposure to return risk (Ayub & Masih, 2014; Zainol & Kassim, 2010). Based on this analysis, the following hypothesis is proposed:

H1: Interest rates affect the returns of Islamic bank stocks

3. Method

This research employs a quantitative methodology. The population for this study consists of sharia banking stocks listed on the Indonesia Stock Exchange (IDX) for the period from 2021 to 2023. A saturated sampling approach is utilized, meaning the entire population is included as the sample. Data collection is conducted through documentation, gathering secondary data from the Indonesia Stock Exchange. For interest rate data, the BI Rate is utilized, sourced from the Bank Indonesia website (<http://www.bi.go.id/>). The details of the sample in this research are as follows:

Table 1. List of Sample Companies

No.	Nama Perusahaan	Kode Saham	Tanggal IPO
1	PT Bank Syariah Indonesia Tbk	BRIS	09 Mei 2018
2	PT Bank Panin Dubai Syariah Tbk	PNBS	15 Januari 2014
3	PT Bank BTPN Syariah Tbk	BTPS	08 Mei 2018
4	PT Bank Aladin Syariah Tbk	BANK	01 Februari 2021

Source: <https://www.idx.co.id/>

The independent variable in this study is the Interest Rate, specifically the BI Rate, which is published monthly by Bank Indonesia (BI). The dependent variable is Stock Return, calculated by summing capital gains or losses with dividends. Capital gains or losses represent the difference between the current stock price and the previous stock price. Dividends refer to the profits distributed by the company to shareholders, either in cash or in shares (Arsal, 2021). However, since this study uses a semiannual period, only capital gain/loss is considered. The scale used is a ratio scale formulated as follows (Yap & Firmanti, 2019b).

$$Rs = \frac{(P_s - P_{s-1})}{P_{s-1}}$$

Description:

R_s : Stock Return

P_s : Stock price in s period

P_{s-1} : Stock price before s period

The data analysis method used is simple linear regression analysis technique and hypothesis testing using t test. Before starting simple linear regression analysis, classical assumption tests are necessary to ensure that the model does not encounter issues of normality, multicollinearity, and autocorrelation. If these conditions are met, then the analysis model is suitable for use.

$$Y = a + \beta X$$

Description:

Y: Stock Return

a: Constant

b: Coefficient

X: Interest Rate

4. Result and Discussion

Results

Descriptive Statistics

Table 2. Descriptive Statistics

Variabel	N	Minimum	Maximum	Mean	Std. Deviation
Suku Bunga	24	3,50	6,00	4,6250	1,15862
Return Saham	24	-920	700	-167,04	419,462

Source: SPSS (2024)

Based on table 2, the Interest Rate variable has a minimum value of 3.50, a maximum of 6.00, a mean of 4.6250, and a standard deviation of 1.15862. The standard deviation is smaller than the mean, indicating that the data dispersion in the study is relatively low. In contrast, the Stock Return variable has a minimum value of -920, a maximum of 700, a mean of -167.04, and a standard deviation of 419.462. The standard deviation exceeds the mean, indicating that the data dispersion for this variable is relatively high.

Classic Assumption

Normality Test

Table 3. One-Sample Kolmogorov-Smirnov

Unstandardized Residual		
N		24
Normal Parameters ^{a,b}	Mean	0,0000000
	Std. Deviation	416,25395469
Most Extreme Differences	Absolute	0,158
	Positive	0,120
	Negative	-0,158
Test Statistic		0,158
Asymp. Sig. (2-tailed)		0,127 ^c

Source: SPSS (2024)

Based on Table 3, it can be observed that the significance value (Sig.) is 0.127. According to the decision-making process for the Kolmogorov-Smirnov normality test, data is considered to be normally distributed if the significance value (Sig.) is greater than 0.05. Consequently, it can be concluded that the data is normally distributed.

Multicollinearity Test

Table 4. Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF	
(Constant)	-373,744	364,755				
Suku Bunga	44,692	76,596	0,123	1,000	1,000	

Source: SPSS

Based on the output of Table 4, it is known that the tolerance value of the interest rate variable (X) is 1, which is greater than 0.10. Meanwhile, the VIF value is 1, which is less than 10.00. Referring to the basis for decision-making in the multicollinearity test, it can be concluded that there are no signs of multicollinearity.

Autocorrelation Test

Table 5. Autocorrelation Test

Model	R	R Square	Adjust R Square	Std. Error of the Estimate	Durbin-Watson
1	123	0,015	-0,30	425,609	2,505

Source: SPSS

Table 5 shows that the Durbin-Watson (d) value is 2.505. This value will be compared with the Durbin-Watson table value at a significance level of 5%. The number of variables "k" is 1, while the sample size "N" is 24, thus (k;N) = (1;24). This number is then looked up in the Durbin-Watson distribution table, yielding a "dU" value of 1.446. Therefore, the Durbin-Watson value is greater than "dU" and less than (4-dU), or $dU = 1.446 < d = 2.505 < (4-dU) = 2.554$. Based on the criteria for the Durbin-Watson test, it can be concluded that there is no autocorrelation.

Analysis and Hypothesis Tes

Table 6. Hypothesis Test

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	-373,74	364,75			-1,025	0,31
Suku Bunga	44,69	76,59	0,12		0,583	0,56

Source: SPSS (2024)

Simple Regression Analysis

$$Y = a + \beta X$$

$$Y = -373,744 + 44,692$$

Description:

Y: Stock Return

a: Constant

b: Coefficient

X: Interest Rate

If the variable Interest Rate (X) is assumed to be constant, then the Stock Return is -373.744. The regression coefficient for the Interest Rate (X) is 44.692, which means that if the interest rate increases by 1, the stock price (Y) increases by 44.692.

t Test

The significance value of the Interest Rate (X) is 0.583, which exceeds the threshold of 0.05. This indicates that H1 is rejected and H0 is accepted. Therefore, it can be concluded that the Interest Rate (X) does not have a significant effect on Stock Return (Y) of Islamic Banks.

Discussion

The results of this study indicate that interest rates do not significantly affect the returns of sharia bank stocks listed on the Indonesia Stock Exchange (IDX). This occurs because Islamic banking operates on a profit-sharing system for its products and services, rather than relying on interest rates (Arsal et al., 2016; Ulfah et al., 2023). As a result, Islamic banks are less affected by and do not react quickly to changes in interest rates (Ayub & Masih, 2014; Zainol & Kassim, 2010). The findings of this study do not align with signal theory, which posits that rising interest rates convey negative information, leading to stock price corrections and decreased stock returns. While higher interest rates may prompt investors to shift their funds from the stock market to other investment instruments, which can lead to declining stock prices, they can also attract investors to alternative instruments such as Islamic bank deposits. This influx can positively influence the stock prices of Islamic banks, contributing to their stability and consequently maintaining stable stock returns.

This research does not align with the findings of (Farich & Kornitasari, 2024), which examined the impact of interest rates on the returns of banking stocks. This discrepancy may occur because banks generally derive their main income from interest on loans. In contrast, Islamic banks operate on a profit-sharing system, meaning that interest rates do not affect the income levels of Islamic banks, resulting in stable stock prices and no significant fluctuations in stock returns.

Interest rates certainly affect various sectors of the economy, especially in the banking sector, which deals directly with money. However, in countries with a predominantly Muslim population, interest rates do not impact the performance of Islamic banks. This is because for Muslims, the primary consideration in choosing investments is based on religious principles (Mebarki, 2023). Indonesia is a country with a majority Muslim population, so Islamic banks in Indonesia are not influenced by interest rates, making them more stable compared to conventional banks.

5. Conclusions

The results of this study indicate that interest rates do not significantly affect the returns of sharia bank stocks listed on the Indonesia Stock Exchange (BEI). An increase in interest rates typically causes investors to shift their funds from the stock market to other investment instruments, which can lead to a decline in stock prices. However, higher interest rates also attract investors to invest in other instruments, such as sharia bank deposits, which can positively influence the stock prices of sharia banks. This results in the stability of sharia stock prices, thereby maintaining stable returns for sharia bank stocks.

The results of this study indicate the need for further in-depth research. Future investigations should not only focus on stock return variables but also consider additional variables such as stock prices and Islamic bank deposits. Incorporating these elements could yield more specific and comprehensive findings.

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