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Research Paper

Influence of Liquidity, Profitability, Inflation and Interest Rates on Stock Prices in The Indonesian Islamic Banking Sector 2019-2022

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Abstract

Islamic banks play an important role in supporting economic growth through financing the real sector and various development initiatives. However, in certain periods, the stock prices of Islamic banks in Indonesia have decreased due to micro and macroeconomic factors. This study examines how liquidity, profitability, inflation, and interest rates affect the stock prices of Indonesian Islamic banks, aiming to improve stock performance and support economic growth. The study uses a quantitative approach with secondary data from the Indonesia Stock Exchange (IDX), and uses an unbalanced panel data regression method. The results show that both micro and macro factors influence stock prices. Specifically, the Current Ratio (CR) significantly negatively affects stock prices, Return on Equity (ROE) has a significant positive effect, while Inflation and Interest Rate have no significant impact when considered individually. This study provides new insights into the dynamics of stock prices in Islamic banks and highlights the importance of integrating micro and macro factors in financial analysis.

Keywords *Liquidity; Profitability; Inflation; Interest Rates; Islamic Banking; Halal Finance*

INTRODUCTION

Investment development is closely related to a country's economic growth, and Indonesia, as a rapidly developing economy, is a clear example of this relationship. Islamic finance, as emphasized by the Cabinet Secretariat of the Republic of Indonesia, plays an important role in driving economic progress. Minister of Finance Sri Mulyani Indrawati emphasized that Islamic finance not only empowers individuals and communities but also encourages entrepreneurship and investment in the real sector within an ethical financial framework. As a sector that follows Islamic principles, Islamic finance is one of the fastest-growing segments globally, surpassing conventional financial markets' growth. In May 2021, data showed that Islamic banking assets in Indonesia increased by 15.6% year-on-year, reaching IDR 598.2 trillion, showing a stronger performance than conventional banking. With the largest Muslim population and an extensive Islamic financial network, Indonesia is strategically positioned to leverage these assets for sustainable economic growth.

However, in 2022, the share prices of Islamic banking in Indonesia experienced a decline, where PT. Bank Aladin Syariah Tbk (BANK) fell by 11.79%, PT. Bank Syariah Indonesia Tbk (BRIS) fell by 11.24%, and PT. Bank BTPN Syariah Tbk (BTPS) fell by 3.63% (Li, 2022). These fluctuations indicate concerns about the factors influencing Islamic banking stocks and their broader impact on the sector. Understanding the determinants of stock price movements is critical for both individual investors and policymakers, aiding in economic strategy planning, financial crisis prediction, and financial risk management. Various factors influence these movements, including microeconomic elements such as liquidity and profitability, as well as macroeconomic conditions such as inflation and interest rates. As stated by Yartey (2008), microeconomic variables play a significant role in

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shaping stock prices. However, Indonesia's economic conditions—marked by slowing growth, rising inflation, and political uncertainty—threaten investor confidence, especially in the Islamic banking sector. In addition, rising interest rates can increase funding costs for these banks, which can ultimately affect profit margins and stock price performance (Wisniewski & Jackson, 2020).

The impact of global crises on investor behaviour has been widely studied; Baker et al. (2020) noted that large-scale public health crises, such as the COVID-19 pandemic, disrupt fundamental economic stability and exacerbate stock volatility through investors' emotional responses. Furthermore, You and Zhou (2006) highlighted that in analyzing stock price determinants, the semiparametric panel data regression model is effective in understanding the heterogeneity of the underlying factors that influence volatility.

This study aims to examine the influence of microeconomic (liquidity and profitability) and macroeconomic (inflation and interest rates) factors on the stock prices of Islamic banks in Indonesia, thereby filling the gap in understanding how these factors affect financial performance in this growing sector.

LITERATURE REVIEW

Islamic banking in Indonesia has experienced rapid development over the past few decades, driven by the need for Sharia-compliant banking alternatives. As the country with the largest Muslim population in the world, Indonesia has great potential to develop a strong Islamic financial system. According to data from the Financial Services Authority (OJK), Islamic banking has recorded significant growth in terms of assets and market share, with Islamic banking assets growing by 15.6% in 2021, reaching IDR 598.2 trillion. The contribution of Islamic banking to national economic growth is seen in its role in providing financing for the real sector and participation in development initiatives.

Unlike conventional banking, Islamic banking adopts financial mechanisms that comply with Islamic law, such as profit sharing (*mudharabah*) and partnership (*musharakah*), which focus on ethics and fairness in financial transactions. This operational model of Islamic banking has attracted investor interest, especially in markets that are sensitive to Islamic financial principles. However, despite experiencing strong growth, Islamic banking stocks in Indonesia experienced a decline in 2022, influenced by micro and macroeconomic factors. This decline indicates the need for further research into the dynamics that influence stock prices in the Islamic banking sector.

Understanding the determinants of stock price movements is critical for both individual investors and policymakers. As Aliani et al. (2022) noted, the stock price reflects the market value of a company and serves as an indicator of its performance, reflecting investors' perceptions of stability and profitability. This definition underscores the importance of understanding how various factors, including macroeconomic conditions and investor sentiment, impact stock prices in the Islamic banking sector.

The recent fluctuations in Sharia banks' stock prices raise concerns about the underlying factors influencing their performance. It becomes essential to analyze both microeconomic variables, such as liquidity and profitability, and macroeconomic conditions, like inflation and interest rates. These factors can erode investor confidence, particularly in the Sharia banking sector, which is crucial for sustainable economic growth. Therefore, building upon the current issues and supported by findings from previous studies, several hypotheses are formulated for this research. Additionally, the conceptual framework underlying the study is illustrated in Figure 1 below.

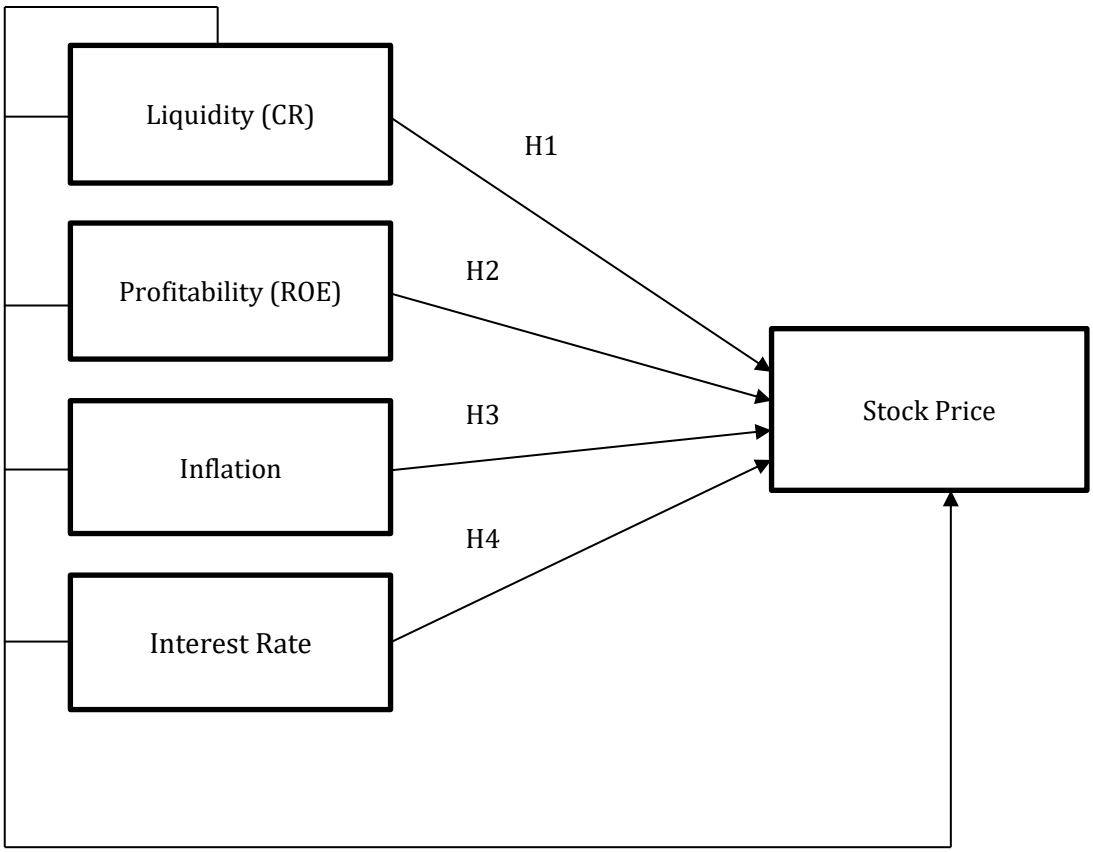

Figure 1. Conceptual Framework

Additionally, several hypotheses are proposed based on insights drawn from the literature review and empirical analysis. The rationale and corresponding hypothesis statements are outlined below.

- **H1:** Liquidity (Current Ratio) has a significant negative influence on stock prices in the Islamic banking sector in Indonesia. Although higher liquidity is generally seen as a sign of financial stability, it may indicate that the company is not effectively using its resources to generate profits, which can reduce investor interest and lower stock prices.
- **H2:** Profitability (Return on Equity) has a significant positive influence on stock prices in the Islamic banking sector in Indonesia. Profitability, as measured by ROE, reflects Islamic banks' ability to generate profits from their shareholders' capital. Previous research shows that ROE positively correlates with stock prices, as higher ROE suggests greater potential profits for shareholders.
- **H3:** Inflation does not have a significant influence on stock prices in the Islamic banking sector in Indonesia. In this context, inflation may not directly impact stock price movements due to the unique operational characteristics and financial ethics of Islamic banks, which may reduce inflation's impact on investment decisions.
- **H4:** Interest rates do not have a significant influence on stock prices in the Islamic banking sector in Indonesia. Although Islamic banks do not use interest-based instruments, interest rate fluctuations may not directly impact Islamic banks' financial performance and stock prices due to their reliance on non-interest-based funding structures.

Liquidity (Current Ratio)

The management of liquidity in Shariah-compliant banks holds distinctive importance within the broader landscape of Islamic finance, where adherence to Shariah principles is paramount. Shariah-compliant banks operate under a framework that prohibits usury (*riba*) and emphasizes ethical financial conduct, thus necessitating a unique approach to liquidity management. Unlike conventional banks, Shariah-compliant institutions employ financial instruments such as Mudarabah (profit-sharing) and Musharakah (joint venture), which require careful consideration in liquidity planning. Additionally, the compliance with Shariah law imposes specific constraints and opportunities on liquidity management, influencing the balance between profitability, risk, and ethical considerations.

Liquidity, specifically measured through the current ratio, represents a financial metric that gauges a company's short-term solvency and ability to meet its immediate obligations using its most liquid assets. Liquidity refers to a company's capacity to fulfil its short-term liabilities by utilizing its most liquid assets, thereby maintaining financial stability and adaptability (Bongaerts & Schoenmaker, 2024). According to Martalena and Dini (2020), financial performance evaluation can be conducted through various methods, with financial ratio analysis being a commonly employed method to assess aspects like liquidity, efficiency, asset utilization, and profit generation. The current ratio is calculated by dividing a company's current assets by its current liabilities, providing a numerical expression of the proportion of easily convertible assets relative to short-term liabilities. In academic terms, the current ratio is a key indicator within financial analysis, offering insights into a company's liquidity position and capacity to cover short-term debts. A higher current ratio is generally interpreted as a favourable indication of liquidity, suggesting a robust ability to settle obligations promptly, while a lower ratio may indicate potential challenges in meeting immediate financial commitments. This ratio is integral to financial decision-making, aiding stakeholders in assessing a company's financial health and informing strategic choices related to working capital management.

Within contemporary banking literature, liquidity stands prominently as a pivotal determinant influencing bank profitability. Numerous recent studies have underscored the intricate relationship between liquidity and profitability, positioning it as a focal point in financial research. Previous studies investigating bank lending during periods of economic decline emphasized the critical roles of bank capital (Altunbas et al., 2019; Košak et al., 2015) and bank ownership in sustaining credit growth. However, empirical findings within this domain have yielded varied outcomes. Certain investigations have identified a positive association between liquidity and profitability, exemplified in studies by Molyneux and Thornton (1992) and Barth et al. (2013).

Roy et al. (2019) define bank liquidity as the assurance banks shave on ensuring that they can invest in assets while covering all their required commitments at the right time and at rational spending levels. Yusuf et al. (2019) describe bank liquidity as the holding of monetary funds or the easy conversion of assets to monies. Therefore, liquidity is the ability of banks to ensure account holders can easily access their funds at any time (Alali, 2019) and the guarantee banks provide to ensure all required financial commitments can be settled through possessing a high proportion of liquid assets (Adelopo et al., 2021).

$$Current\ Ratio = \frac{\text{Current Asset}}{\text{Current Liabilities}} \quad (1)$$

Liquidity → Stock Price

The results of research conducted by Clarensia et al. (2011) found that the Current Ratio (CR) had a significant effect on stock prices. Sumando et al. (2022) also indicate that liquidity impacts stock prices on stock prices. According to Yamin and Fitriani (2024) liquidity (Current Ratio) has no effect on stock prices, indicating that investors in making investments do not consider the size of the (Current Ratio).

Profitability

Profitability, in the context of financial analysis, is a quantitative measure that assesses the ability of a business or investment to generate earnings in relation to its invested capital or revenue. It serves as a fundamental metric in evaluating an entity's efficiency and financial health, reflecting the capacity to translate operational activities into financial gains. Academic discussions on profitability often involve an array of financial ratios, such as return on investment (ROI), return on equity (ROE), and net profit margin, to quantitatively express the relationship between profits and various financial parameters. Furthermore, profitability analysis provides crucial insights for stakeholders, including investors and management, into the effectiveness of a business's operational strategies and its potential for sustained financial viability and growth.

Profitability, particularly measured through Return on Equity (ROE), assumes distinctive significance within the framework of Shariah-compliant banks operating under the tenets of Islamic finance. ROE, a key financial ratio, gauges the efficiency with which a bank generates profits from its shareholders' equity, representing a critical metric for assessing financial performance. In the context of Shariah-compliant banks, where adherence to Islamic principles is paramount, the dynamics of profitability take on unique characteristics. Shariah-compliant financial institutions operate within ethical boundaries, avoiding interest-based transactions and engaging in activities aligned with Islamic principles, which can significantly influence their ROE and overall financial health.

The distinctive operational model of Shariah-compliant banks introduces a layer of complexity to the analysis of ROE. These banks typically participate in profit-and-loss sharing arrangements, emphasizing risk-sharing and ethical financial conduct. Therefore, exploring the factors influencing ROE in Shariah-compliant banks becomes essential. This research aims to delve into the intricacies of ROE within the context of Islamic finance, investigating the impact of adherence to Shariah principles on the profitability metrics of these banks. The study will contribute to the broader understanding of financial performance in Shariah-compliant institutions, shedding light on the interplay between ethical considerations, operational strategies, and financial outcomes.

According to Rawat et al. (2022), profitability is a benchmark for the assessment of the level of performance efficiency in a company in obtaining profits by comparing the profits generated with assets or capital that manifest profits. Profitability is the company's ability to generate profit or profit related to sales, total assets, and capital. Profitability ratios are used to determine a company's capacity and a company's chances of profiting over a given period. The profitability ratio indicator uses return on Investment (ROI), equity return (ROE), earnings per share (EPS), Operating Profit Margin, NPM, and ROA. Profitability ratios are used over time to assess changes in profit. If the profitability indicator continues to increase, then the company's perspective becomes better and leads to the demand for shares to be able to raise the stock price. Solvency or leverage is the capacity of a company to meet its financial obligations (Goenawan & Subandriyo, 2023). Furthermore, according to Goenawan and Subandriyo (2023) profitability is measured by ROA (Return on Asset) or ROE (Return on Equity), solvency is measured by DER, and Dividend Policy is measured by dividend payout ratio (DPR).

$$Return\ On\ Equity\ (ROE) = \frac{\text{Net Profit}}{\text{Equity}}\ x\ 100\% \quad (2)$$

The difference in factors influencing the profitability of Islamic banks compared to conventional banks can be observed in Return on Assets (ROA) and Return on Equity (ROE). Research conducted by Ramlan and Adnan (2016) shows that both ROA and ROE have a significant impact on the profitability of Islamic banks, whereas in conventional banks, only ROE has a significant effect. It is important to understand that the operational dynamics underlying Islamic and conventional banks are not the same. Islamic banks must develop various alternative strategies to enhance their profitability. However, the study also finds that the determinants of bank profitability, whether Islamic or conventional, may vary depending on a country's income level, indicating a relationship between macroeconomic conditions and overall bank performance (Yanikkaya et al., 2018).

Profitability → Stock Price

The study found that profitability ratios such as ROE and EPS have a significant positive impact on stock prices, indicating that higher profitability attracts investors, thus increasing stock value (Laili, 2024). Similarly, research conducted by Kusnandar and Sari (2020) indicates that profitability has a significant influence on stock prices.

In the investigation conducted by Murniati (2016), the application of multiple linear regression analysis revealed that the variable representing profitability, proxied by return on equity (ROE), exhibited a noteworthy negative influence that did not attain statistical significance. This finding implies that within the context of Food and Beverage companies listed on the Indonesia Stock Exchange, the negative impact of return on equity (ROE) on stock prices is not statistically significant. Consequently, a reduction in ROE is anticipated to be accompanied by a corresponding diminution in stock prices, indicating that the proxy for profitability, namely ROE, is inclined to diminish investor interest in the company's stock when the ROE value is low.

Complementing this perspective, Ircham (2014) asserts that return on equity (ROE) exerts a statistically significant negative impact on stock prices. According to Ircham (2014), lower ROE figures convey a signal to shareholders about a diminished rate of return on investment, thereby indicating a negative correlation between ROE and stock prices. This assertion contributes to the broader understanding of the intricate relationship between profitability indicators and stock market dynamics, emphasizing the importance of discerning the nuanced effects of ROE on investor perceptions and market valuations within the Food and Beverage sector.

Inflation

Inflation, an enduring economic phenomenon characterized by a sustained increase in the overall price level of goods and services, has profound implications for economies worldwide. Throughout history, inflation has manifested in various forms, from moderate increases to severe hyperinflationary crises, each leaving a distinct imprint on the economic landscape. This research aims to provide a comprehensive background on inflation, tracing its historical roots, exploring the intricate web of factors that contribute to its occurrence, and elucidating the impacts it imposes on individuals, businesses, and economies. By delving into the measurement methodologies, indices, and global perspectives surrounding inflation, the research seeks to offer a nuanced understanding of this complex economic force.

In the realm of Islamic finance, the phenomenon of inflation assumes a distinctive significance, especially within the operations of Sharia-compliant banks. Islamic finance principles, rooted in Shariah law, seek to uphold ethical and equitable financial practices. This research endeavours to provide a comprehensive background on inflation within Shariah-compliant

banking, delving into the unique challenges and opportunities that arise in managing inflationary pressures while adhering to Islamic principles. As the Islamic finance sector continues to grow globally, understanding how inflation impacts Shariah-compliant banks becomes paramount, not only for financial practitioners but also for policymakers and scholars seeking to enhance the resilience and effectiveness of Islamic financial systems.

According to Juárez (2023), inflation is a crucial factor influencing the natural interest rate in an economy, as it affects both short-term and long-term economic stability. Changes in inflation can alter real interest rates, which in turn impact investment decisions and economic growth. Understanding these dynamics is especially important for Shariah-compliant financial institutions that operate under principles that restrict conventional interest-based instruments.

Galindo and Steiner (2022) further emphasize that inflation targeting plays a key role in monetary policy frameworks, where central banks aim to maintain inflation within a specific range to ensure economic stability. In Colombia's case, the central bank uses inflation targeting as a primary tool to manage economic conditions by adjusting the monetary policy rate to influence inflation expectations and aggregate demand. The impact of inflation on financial systems, including Shariah-compliant banks, can be significant, as it affects the cost of funds and profitability in different economic sectors.

Inflation describes a sustained increase in the general price level of goods and services over several periods. A characteristic of inflation is that money—both generally and continuously—loses purchasing power (Shimizu, 2023). Consequently, inflation not only causes a reduction in purchasing power but also has wide-reaching effects on profitability, the real value of investments, and stock prices, which in turn influence the stock market and the broader economy.

Gilarso (2004) defines inflation as a general price increase caused by an imbalance between money and goods flow. A brief definition of inflation is "the tendency of prices to rise in general and continuously." The increase in prices for just one or two goods does not constitute inflation; rather, it must be a widespread and persistent increase in prices across various goods and services. Both macroeconomic variables, namely Bank Indonesia's interest rate policy and inflation, significantly influence stock prices, as evidenced in the theoretical and empirical literature.

Inflation → Stock Prices

The result of research conducted by Fauziah and Fadhilah (2022) states that inflation does not affect stock prices. This research results align with Ginting et al. (2016), which states that inflation has no partially significant effect on stock prices. The research conducted by Jefry and Djazuli (2020) concludes that "inflation has a significant effect on the stock prices of companies in the basic industry and chemical sectors on the Indonesia Stock Exchange (IDX), while interest rates and exchange rates do not have a significant effect on stock prices in the same sectors. Inflation is an increase in the prices of goods and services that has a broad influence on stock prices in the capital market. Inflation has a positive effect on stock prices. If the inflation rate increases, then stock prices also increase, and vice versa. If the inflation rate decreases, then stock prices also fall (Abimanyu, 2004).

Interest Rate

Interest rates in the context of Sharia-compliant banking are a unique and important aspect within the framework of Islamic finance. Unlike conventional banking systems, which rely on interest-bearing transactions, Sharia-compliant banks operate under the principles of Islamic law (Sharia), which strictly prohibits *riba* (usury). This prohibition necessitates alternative financial mechanisms that align with Islamic values, such as profit-loss sharing, asset-backed financing, and ethical investment practices.

According to Galindo and Steiner (2022), the monetary policy interest rate is a primary instrument central banks use to influence liquidity and control inflation. Changes in the policy interest rate are expected to transmit to retail interest rates, subsequently affecting aggregate demand. However, this transmission process is not always linear or complete, as various market frictions may result in asymmetry in the adjustment of interest rates, depending on whether monetary policy is being tightened or loosened. This consideration is crucial in formulating monetary policy, particularly within the context of Islamic banking, which requires a different approach due to the prohibition of *riba*.

Juárez (2023) further explains that the natural interest rate is the real interest rate consistent with the economy's output being at its potential level and inflation remaining stable around the central bank's target. The natural rate serves as a benchmark for assessing the degree of monetary stimulus provided and is influenced by both domestic and external factors, such as country risk premiums and investment efficiency. For Sharia-compliant banking, this concept becomes relevant in developing interest-free financial strategies, especially in evaluating the impact of broader monetary policy changes.

Moreover, interest rates function as a vital monetary tool, enabling governments to regulate the supply and demand for money within the economy. This is supported by Dari et al. (2022), who emphasize the role of interest rates in facilitating a comprehensive review and control of money circulation as part of broader monetary policy measures.

In contrast, Sharia-compliant banks utilize distinctive interest-free financing mechanisms to facilitate economic transactions. Key instruments include *Mudarabah* (profit-sharing), *Musharakah* (joint venture), and *Ijarah* (leasing). Operating under Sharia principles presents both challenges and opportunities, particularly in managing liquidity, achieving profitability, and maintaining competitiveness without resorting to interest-based instruments.

Puspopranoto (2006), adds that interest can be understood as a financial remuneration expressed in monetary terms that lenders earn as compensation for the use of capital. From this perspective, interest represents the cost associated with borrowing funds, indicating the expense incurred to access and utilize the purchasing power of borrowed capital.

The prohibition of *riba* in Islamic banking makes the challenges and opportunities in utilizing interest-free mechanisms increasingly relevant. This study explores efforts to maintain financial stability and attract investor interest while adhering to Sharia principles that prioritize justice and economic sustainability.

Interest Rates → Stock Prices

In accordance with Wira's (2020) findings, it is posited that interest rates exert a positive influence on stock prices. Specifically, the assertion is made that an increase in interest rates corresponds to a simultaneous increase in stock prices. This observation aligns with the notion that interest rate dynamics are crucial in shaping stock market movements, as elucidated in the referenced study.

Contrastingly, the research findings reported by Fauziah and Fadhilah (2022) present a divergent perspective, indicating that interest rates do not have a discernible impact on stock prices. Accepting the null hypothesis (Ho) and rejecting the alternative hypothesis (H1) signify a stance opposing the positive relationship between interest rates and stock prices. Notably, these results are consistent with the assertions made by Ginting et al. (2016), who similarly contended that the Bank Indonesia (BI) rate, representing the interest rate, does not exert a partially significant effect on stock prices. These conflicting outcomes underscore the complexity and multifaceted nature of the relationship between interest rates and stock prices, prompting further inquiry into the contextual factors influencing these dynamics.

RESEARCH METHOD

This study uses a quantitative approach to identify the influence of micro factors (Liquidity and Profitability) and macro factors (Inflation and Interest Rates) on stock prices in the Islamic banking sector in Indonesia. The data used in this study are secondary data obtained from the financial statements of Islamic banks listed on the Indonesia Stock Exchange (IDX) from the first quarter of 2019 to the fourth quarter of 2022.

Research Sample and Reasons for Selection

This study involved four Islamic banks, namely BRI Syariah, BTPN Syariah, Panin Syariah, and Bank Aladin Syariah. The sample selection was carried out using purposive sampling, meaning that the sample was selected based on certain criteria relevant to the research objectives. The reason for selecting these four banks is because all four are large Islamic banks that are actively listed on the IDX and have complete financial reports during the research period. In addition, these four banks represent the performance of the Islamic banking sector in Indonesia, which covers an important period during the COVID-19 pandemic, where significant fluctuations in stock prices and bank financial performance occurred. Thus, this sample is considered representative to analyze the relationship between micro and macro factors with stock prices in the Islamic banking sector.

Data Analysis

Techniques Data analysis was conducted using panel data regression to evaluate the influence of independent variables on dependent variables. The panel regression technique was chosen because the data involved several entities (banks) observed over several periods. The panel data model allows for more detailed analysis by considering variations between banks and over time. Statistical tests used in this study include:

1. t-test: To test the partial influence of each independent variable on the dependent variable.
2. F Test: To test whether the regression model used as a whole is significant in predicting the dependent variable.
3. Coefficient of Determination (R^2): To evaluate how much stock price variability can be explained by the independent variables used in the model.

Before conducting regression analysis, the data collected through financial reports is processed through several stages, such as coding, editing, and tabulation, to ensure the consistency and suitability of the data with the analysis model used.

Reasons for Selecting Sample Size

The four banks selected in this study have publicly available financial reports through IDX, representing Indonesia's growing Islamic banking sector. The sample size is sufficient to capture differences in performance between banks and identify significant trends over the observed period, especially considering the impact of macroeconomic fluctuations such as inflation and interest rate changes that occurred during the pandemic.

FINDINGS AND DISCUSSION

The dataset used in this study was taken from the official website www.idx.co.id, covering the period from the first quarter of 2019 to the fourth quarter of 2022. The sample of this study consists of financial reports from four Islamic banks, namely BRI Syariah, BTPN Syariah, Panin Syariah, and Bank Aladin Syariah. The selection of these four banks was based on the availability of complete financial reports during the research period and the representation of the Islamic banking sector in Indonesia. Overall, 40 financial reports were analyzed in this study, which provides a strong basis for further analysis of financial ratios in the Islamic banking sector.

Table 1. Descriptive Statistics of Liquidity, Profitability, Inflation, Interest Rate, Stock Price Variables

Mean	3.18	0.02	1.75	4.22	1627.44
Median	3.00	0.02	1.73	3.87	1723.00
Maximum	7.41	0.05	12.72	6.00	4250.00
Minimum	0.00	0.01	-35.64	3.50	57.00
Std. Dev	2.26	0.01	6.43	0.87	1354.76

Source: Processed Data

Descriptively, based on the Table 1 above, 54 observations consisting of 4 Islamic banks over the period 2019-2022 were obtained from the official websites of each respective bank.

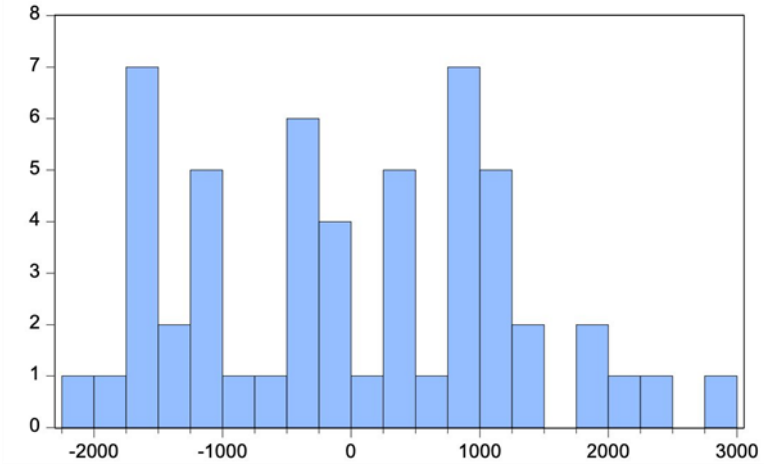

Figure 2. Normality Test
Source: Processed Data

Table 2. Normality Test

Mean	1.52e-13
Median	-83.88
Maximum	2840.62
Minimum	-2020.55
Std. Dev	1212.88
Skewness	0.21
Kurtosis	2.17
Jarque-Bera	1.96
Probability	0.37

Series: Residuals
Sample 1 55
Observations 54

The results of the normality test, showing a profitability value of 0.3743, which is greater than 0.05, indicate that the data is normally distributed. The technique used in this study is panel data regression, where this model combines cross-sectional data with time series data as follows.

Panel Data Regression Model is presented as,

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \ldots + \beta_n X_{nit} + e_{it} \quad (3)$$

Where,

Y_{it} = dependent variable
X_{it} = independent variable
i = i-th entity
t = t-th period

Tsionas (2019) explains that panel data is a combination of cross-sectional and time series data, which includes repeated observations of the same unit over multiple time periods. Panel data allows for modeling unobserved heterogeneity among units by using fixed-effects or random-effects models. The use of panel data enhances estimation accuracy, as it better captures complex variations across units that may not be fully explained by models using only cross-sectional or time series data.

According to Goeltom (1995), panel data is used to analyze behavioural changes in Indonesia's manufacturing sector before and after financial liberalization. Goeltom (1995) explains that panel data in the analysis allows researchers to capture firm-level differences that involve both time variation and cross-sectional differences. Panel data, she notes, not only reduces issues of autocorrelation commonly found in aggregate time series data but also helps yield more precise parameter estimates and enables the exploration of inter-firm variation across different periods. This definition highlights the advantages of panel data analysis in economic research focusing on changes in financial policy and investment structure.

Another study by Hsiao (2022) explains that panel data, also known as longitudinal data, allows for observing the same unit over multiple time periods. Panel data has the advantage of providing more accurate parameter estimates by increasing degrees of freedom and reducing collinearity among explanatory variables. This enables researchers to identify and measure behavioural dynamics that cannot be captured using only cross-sectional or time series data. Before conducting the analysis, the best model for panel data regression was selected:

1. Common effect
2. Fixed effect
3. Random effect

Based on the Breusch-Godfrey serial correlation LM test, where the random effect was tested against the common effect, the random effect model was chosen through the LM test.

Table 3. LM Test

		Breusch-Godfrey Serial Correlation LM Test	
F-statistic	34.90	**Prob.F(2,47)**	0.00
Obs*R-squared	32.27	**Prob. Chi-Square(2)**	0.00

Source: Processed Data

Based on the Lagrange test, the Breusch-Godfrey test results show that the profitability value is 0.00, which is less than 0.05, so the random effect model was chosen for the panel data regression. Before analyzing the influence of liquidity, profitability, inflation, and interest rates on stock prices, classical assumption tests for multicollinearity and heteroscedasticity were conducted. The autocorrelation test is not necessary for panel data, as panel data combines cross-sectional and time series data.

Table 4. T-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2439599.	1167271.	2.09	0.04
CR	-282921.3	95625.55	-2.95	0.00
INF	-19131046	15376624	-1.24	0.21
ROE	63381.54	32250.72	1.96	0.05
SB	74493.50	261375.4	0.28	0.77

Source: Processed Data

Partially, the Current Ratio (CR) has a significant negative effect on stock prices, while inflation and interest rates have no significant impact on stock prices. The Return on Equity (ROE) variable has a positive effect on stock prices. Among the variables, only three are significant: CR shows a significant negative impact at -282, ROE shows a significant positive impact, while inflation and interest rates do not have a significant impact on stock prices.

Table 5. F-Test Results

Test Equation:
Dependent Varriable: RESID^2
Method: Least Squares
Date: 11/28/23 Time: 14.:47
Sample: 1 55
Included observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2439599.	1167271.	2.090003	0.0418
CR	-282921.3	95625.55		0.0047
INF	-19131046	15376624	-1.244164	0.2194
ROE	63381.54	32250.72	1.965275	0.0551
SB	74493.50	261375.4	0.285006	0.7768
R-Squared	0.226484	S.D. dependent var		1579317
Adjusted R-Squared	0.163340	Mean dependent var		1443848
S.E. of regression	1444588	Akaike info criterion		31.29257
Sum squared resid	1.02E+14	Schwarz criterion		31.47673
Log likelihood	-839.8993	Hannan-Quinn criter.		31.36359
F-statistic	3.586771	Durbin-Watson Stat		1.422553

Prob (F-statistic)	0.012125

Source: Processed Data

The R-Square results indicate that 22% of the variation in stock prices is accounted for by the variables of liquidity, profitability, inflation, and interest rates. This finding demonstrates that the independent variables employed in this study contribute to explaining stock price fluctuations. However, the model exhibits limited explanatory power regarding the impact of microeconomic and macroeconomic factors on stock prices within the Islamic banking sector. The F-Test is significant, indicating that CR, ROE, inflation, and interest rates collectively have a significant and positive effect of 3.5. The collected data were analyzed using panel data regression. The regression results show that Return on Equity (ROE) has a significance level below 0.05, which is 0.055, which indicates that ROE has a statistically significant effect on stock prices. In addition, the analysis results show a positive relationship between microeconomic variables (liquidity and profitability) and macroeconomic variables (inflation and interest rates) with stock prices. Meanwhile, CR has a significant negative effect on stock prices, while the other two variables, inflation and interest rates, have no effect on stock prices.

In the context of Islamic banking, liquidity shows a significant impact on stock prices. As stated by Hasan and Dridi (2010), liquidity management is an important factor in the performance of Islamic banks, especially due to the limited liquidity instruments that comply with Islamic principles. This finding is supported by the studies of Molyneux and Thornton (1992) and Barth et al. (2013), which show that higher levels of liquidity generally increase the attractiveness of stocks to investors because they indicate better financial stability. This study is consistent with the findings of Wasiuzzaman and Nurdin (2019), which show that liquidity plays an important role in stock price stability in the Islamic banking sector. The results of this study also show strong support in line with the aforementioned research.

Profitability, as measured by Return on Equity (ROE), also has a positive and significant effect on stock prices. This finding is supported by the study of Arshad et al. (2015), which shows that profitability is a strong performance indicator in Islamic banking. This study is in line with the study of Al-Jafari and Samman (2015), which concluded that ROE has a positive relationship with stock prices because the higher the rate of return on capital, the more attractive the stock is to investors. In addition, Arifin et al. (2020) found that high profitability in Islamic banks is closely related to investors' positive perceptions of the stability and growth potential of the company, which ultimately affects stock prices. The results of this study also support and align with previous research

Inflation also shows a significant impact on stock prices in the Islamic banking sector in Indonesia. This study is supported by the study of Yusof and Majid (2007), who state that inflation has an impact on demand and people's purchasing power, which ultimately affects stock prices. In this study, it was found that inflation has a negative correlation with stock prices, in line with the findings of Azis et al. (2021), which stated that inflation reduces consumer purchasing power and bank profit margins, which ultimately has a negative impact on Islamic bank stock prices. This study shows that inflation does not affect stock prices, thus not supporting previous research.

Although Islamic banks do not use interest-based instruments, changes in interest rates still affect the Islamic banking sector through changes in the cost of funds and profit margins. This study found that interest rates have a significant effect on the stock prices of Islamic banks. This is in line with the findings of Šeho et al. (2020), which show that Changes in interest rates indirectly impact Islamic banks, particularly on sale-based and lease-based financing instruments, which show a negative correlation with interest rates. This finding is also consistent with the research of

Azmat et al. (2020), which states that interest rates can affect investor preferences for Islamic banks, especially when investors are looking for interest-free alternatives amidst interest rate fluctuations. This study shows that inflation does not affect stock prices, thus not supporting previous research.

Impact of COVID-19

During the research period, the COVID-19 pandemic significantly impacted bank performance, including Islamic banking. The pandemic caused a decline in global economic activity, affecting bank revenues and liquidity. In the context of Islamic banking, these fluctuations are reflected in the financial statements of the banks studied. For example, one bank experienced a decline in ROE during 2020, which could be attributed to the decline in economic activity due to the lockdown and decreased demand for credit. However, several banks, such as BTPN Syariah, were able to maintain relatively stable performance due to strategic adjustments to support financing for the MSME sector, which remained active during the pandemic.

Comparison with Conventional Banking

Islamic banking differs from conventional banking mainly in terms of operational principles. For example, Islamic banks do not use interest-based instruments but focus more on profit sharing and partnerships, which can provide a competitive advantage in certain market situations. During the pandemic, some Islamic banks showed better resilience compared to conventional banks due to the nature of their more asset-based business models and financial ethics. However overall, the economic downturn caused by COVID-19 affected both sectors, but the impact on conventional banking tended to be more visible in interest rate fluctuations.

Islamic Financial Practices and Halal Financial Products

Islamic financial practices, especially in providing halal financial products, are one of the key factors that can increase investor confidence. In this study, liquidity and profitability indicated by ROE indicate that Islamic banking has the potential to provide stable performance, especially for investors looking for ethical investment instruments. Halal financial products, such as sukuk and other Islamic financing products, have been proven to attract investor interest, especially in markets that are sensitive to Islamic principles. Thus, the implementation and development of halal financial products not only support the performance of Islamic banks but can also increase investor confidence, which ultimately contributes to increasing stock prices.

CONCLUSIONS

This study concludes that liquidity and profitability have a significant relationship with stock prices in the Islamic banking sector in Indonesia, while inflation and interest rates do not show a significant impact. These findings emphasize the importance of managing liquidity and profitability to improve stock performance, while macroeconomic factors such as inflation and interest rates appear to have less influence in this context.

LIMITATION & FURTHER RESEARCH

This study has several limitations that need to be considered. First, the sample is limited to four Islamic banks listed on the Indonesia Stock Exchange (IDX) from 2019 to 2022. Although these four banks were selected to represent the Islamic banking sector, the study's results may not be fully generalizable to Indonesia's entire Islamic banking industry. Further research can expand the sample coverage by including more Islamic banks or expanding to the conventional banking sector to allow for more in-depth comparisons.

In addition, this study has not discussed the impact of COVID-19 on banking financial performance comprehensively. Therefore, further research is recommended to examine in more depth how the pandemic affects the financial performance of Islamic banks in terms of liquidity, profitability, and investor confidence.

Further research is also needed to examine the context of halal finance more deeply in the Islamic banking industry. Halal financial products, such as Sukuk and Sharia-based financing, have the potential to increase investor confidence and bank performance. Focusing on how the implementation of these products can provide competitive advantages for Islamic banks will be an important topic to explore further.

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