

## BOYCOTT MOVEMENTS AND STOCK RETURN VOLATILITY: EVIDENCE FROM INDONESIA'S CONVENTIONAL AND ISLAMIC MARKETS

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### Abstract

Geopolitical tensions and consumer boycott movements have increasingly become sources of uncertainty in financial markets, yet their implications for stock return volatility remain underexplored, particularly in dual financial systems. This study examines the influence of boycott movements and macroeconomic factors on the volatility of stock returns of Indonesia's traditional and Islamic stock markets. Daily time series data for the period between January 2021 and April 2025 was considered in order to examine the behaviour of the IDX Composite (IHSG) and Indonesia Sharia Stock Index (ISSI). The volatility dynamics were assessed by applying ARCH/GARCH models, while short-term and long-term relationships were analyzed through the use of the Autoregressive Distributed Lag (ARDL) approach. The results found that the Islamic stocks showed higher resilience compared to traditional shares as indicated by the rapid convergence towards the long-term equilibrium and reduced reactions to shocks associated with the boycott movement. The evidence caused a significant increase in the volatility of the IHSG in the long run; however, it did not impact the volatility of the ISSI because of the protective function of Sharia-based stock selection systems. The reduction of the stock market volatility due to the positive effect of inflation and industrial production rates on stock returns has been found; on the other hand, exchange rate depreciations have opposite effects. Oil prices and sentiment index influence is inconsistent and mostly short-term.

**Keywords:** Boycott Movement; Islamic Finance; IHSG; ISSI; Stock Return Volatility

### INTRODUCTION

Globalization has led to higher integration of national economies, resulting in more chances for economic growth as well as greater vulnerability to global risks (Simanjorang et al., 2023). First, globalization helps in receiving



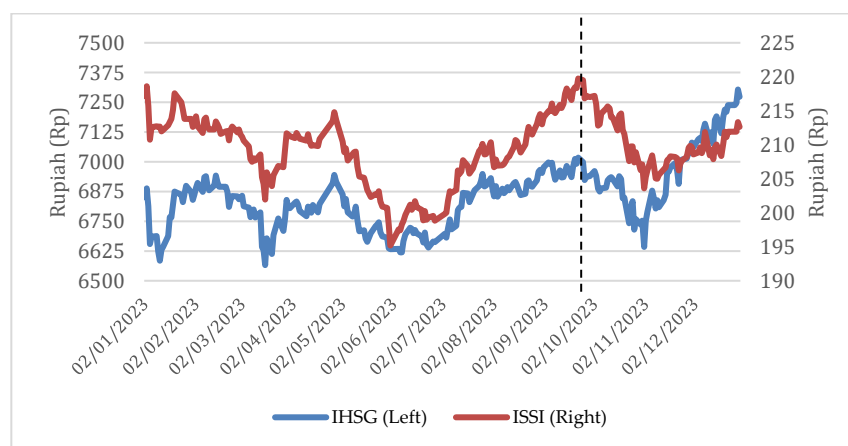
financial investments in national economies and developing markets (Kholil et al., 2025). At the same time, it leads to faster spread of geopolitical uncertainty in different countries, which increases economic and financial instability (Crespo et al., 2025). As an example, there is an acute increase in conflict between Palestine and Israel that took place on October 7, causing many geopolitical and economic implications throughout the world (Schlüter et al., 2025). The conflict caused changes in global perspectives related to oil production because the Middle East is one of the largest regions producing oil, including five of the top ten countries producing oil in the world (Worldometers, 2025). This led to higher fluctuations in the price of oil and, hence, uncertainty in financial markets (Ijaz et al., 2025). In addition, the conflict has contributed to increased boycotting of those companies considered to provide help to Israel, which negatively affected their financial results (Mulyono & Rolando, 2025).

The boycott phenomenon quickly expanded to companies listed on the Indonesia Stock Exchange (IDX) such as PT Unilever Indonesia Tbk, PT Mitra Adiperkasa Tbk, PT MAP Boga Adiperkasa Tbk, PT Fast Food Indonesia Tbk, PT Sarimelati Kencana Tbk, and PT HM Sampoerna Tbk. Before the occurrence of boycotts, the stock market exhibited stability and investments were based on company fundamentals. As the boycott campaign strengthened, companies targeted for boycotting faced abnormal stock returns, decreased transactions, and increased uncertainties in the market environment. These observations illustrate the lack of investors' confidence in reputation and political risks (Sukmawati et al., 2025). In such circumstances, Islamic financial markets can be considered more resilient against shocks due to ethical screening procedures and risk-sharing practices despite being vulnerable to systemic risks and market sentiment (Akhtar & Jahromi, 2017; Essayem et al., 2024). Based on Indonesia's dual financial system, Islamic financial institutions have unique risk-taking adjustments compared to conventional counterparts in times of economic distress due to Sharia screening, asset-based financing, and minimal involvement in speculation activities (Achsani & Kassim, 2021).

Figure 1 portrays the trend of the IDX Composite (IHSG) and the Indonesia Sharia Stock Index (ISSI) from January till November in 2023. The chart reveals that both indexes witnessed a noticeable drop since October 7 to mid-November. While Islamic capital markets should be more resilient under crises situations, the ISSI has also been subjected to considerable depreciation in the face of uncertainties and changed investors' perception. In the process, the IHSG declined 1.2% and ISSI fell 4.5% month-on-month, respectively. Most importantly, this market performance occurred amid increased intensity of boycott campaigns in Indonesia. Market information related to the boycott

caused more negative abnormal returns in companies under pressure, signifying a growing concern for reputational damage and declining investor confidence (Sukmawati et al., 2025). At the same time, firms involved in boycott campaigns had higher negative abnormal returns compared to the unboycotted firms, implying that market reaction was driven not by sectoral substitution effects but rather by politics and reputation concerns. Yet, ISSI demonstrated signs of selective resilience, whereby the impact of boycott pressure is observed only in selected firms instead of the entire Islamic market (Yanti & Ermawati, 2025).

In view of the increasing role played by ethical, political factors and consumer activism in shaping investor decision-making processes, an analysis to determine the possible impact of boycott campaigns on stock return volatility is becoming necessary. Prior literature in this domain has tended to focus more on abnormal returns, trading volume and other market reactions, leaving us in the dark regarding the effects of boycotts on persistence and volatility adjustment processes. In light of this, this study aims at comparatively analyzing the volatility dynamics of both the IDX Composite (IHSG) and the Indonesia Sharia Stock Index (ISSI) using a combined approach of ARCH/GARCH and ARDL model. While prior studies have been preoccupied with how changes in stock returns happen and what causes them, this paper will try to understand how volatility arises, spreads and continues through time using a combination of both the ARCH/GARCH and ARDL models. Specifically, this study tries to determine the effects of introducing a boycott variable along with other macroeconomic factors such as inflation, IPI, Rupiah Exchange Rates, world oil prices and VIX. This study is therefore expected to shed light on the issue of market resilience amid geopolitical risks and Islamic finance.



**Figure 1. IHSG and ISSI 2023**  
Source: investing.com (2025)



## LITERATURE REVIEW

### Boycott Movement

The global boycott movement towards companies seen as backing Israel gained institutionalization via the formation of the Boycott, Divestment, and Sanctions (BDS) Movement in 2005, shifting from political consumerism to encompass the use of product boycotts, academics boycott, and investment divestment (Morrison, 2022). Over time, boycott movements have gone past mere political statements to activities with tangible implications for the economy and finance. Previous research has shown that firms under boycott campaigns usually witness drops in stock prices, abnormal returns, trading volume, sales, and firm profitability (Ahsyam et al., 2024; Sukmawati et al., 2025). This shows that boycott movements are activities that can influence financial markets through impacting both the expectations of investors and consumers. In the case of financial markets, firms that are embroiled in political and ethical scandals make it more difficult to predict their future income levels and reputation, thus heightening the sensitivity of financial markets to any news. It is, therefore, evident that boycott movements are no longer seen solely as socio-political but also non-economic shocks to financial markets.

Moreover, the international evidence highlights the impact of the boycott movement on reputation and financial implications for businesses. According to Alqatan (2025), companies viewed as endorsing Israel are likely to have higher risks associated with their reputation, increased pressure on their corporate governance, and poor financial performance due to the growing interest in the ethical standpoint of firms. Similarly, Elshaer et al. (2025) report about reduced sales, closures of sales points, and the loss of reputation that multinationals such as McDonald's and Starbucks encounter after an escalation of boycotts. Consequently, a consumer-based boycott may lead to repercussions that will be much more substantial than just a drop in sales. In particular, it may lead to investors' rethinking and affect the evaluation of a company's worth on the market. Indeed, as demonstrated by the research findings, under these conditions, the nature of political shocks and their implications for expectations and market valuation change (Munawarah et al., 2025).

In relation to Indonesia, it has been observed that boycott movements create an impact on stock market performance especially for firms that are linked to the boycott campaigns. It has been found that boycott movements impact significantly the stock prices and abnormal returns of the firms on which boycott movements have been launched while their competitors who operate in the same industry remain unaffected (Ahsyam et al., 2024;



Sukmawati et al., 2025). The fact indicates that there exists a distinct difference made by the investors between firms that might face boycott movement and those that do not have any association with boycott movements. This difference in responses from the market indicates that boycott effects on firms' performance are mainly firm-specific rather than industry-specific. In simple words, it can be said that the market participants make distinctions based on the exposure to the boycott movements. This observation corresponds to previous studies according to which the effects of boycott movement have mainly focused on targeted firms rather than being uniformly distributed over all industries (Huka & Kelen, 2022).

Religion is another factor that influences investor behaviour in the investment process, especially in the Islamic capital market where ethical and religious motivations could affect their decisions. With regard to the guidance of *maqasid shariah* principles, Muslim investors will lessen, defer, or dispose of their investments if the involvement in boycott actions is regarded as a moral or religious duty. This would lead to more selling activity in the market, which may result in increased market volatility especially when there is greater geopolitical risk. The empirical results found by Sukmawati et al. (2025) and Munawarah et al. (2025) also support the idea that boycott activities have significant impacts on abnormal returns and trading volume. Thus, boycott activities can be considered as political risks shocks that have financial implications. Such effects could be more pronounced in developing countries because of the strong religiosity and ethicality of the investors in the market. Therefore, boycott activities must be treated not only as economic but also socio-political variables that could affect stock return volatility.

### Signaling Theory

In signal theory, signaling is the method used to convey relevant signals between parties with more information to those with less information in an environment where there is information asymmetry. This concept was created by Spence (1973) and it mainly focuses on the fact that the party with more information can use the signals sent through actions or communication to minimize uncertainty. For instance, in capital markets, the firm sends out information about its internal situation, performance and future opportunities through the financial statement, dividends payment policy or any other corporate activity (Ross, 1977). This creates a point of reference for investors when making assessments concerning the performance of the firm and future expectations. Good news about the firm leads to increased confidence while bad news leads to uncertainty among investors. It is clear that the investors'



decision-making process will be significantly affected by how firms send signals to the market (Habibah et al., 2022).

When studying boycott movements, signaling theory plays an important role in explaining how socio-political events affect the behavior of investors in the capital markets. As opposed to the common corporate signaling that is associated with management decisions, boycott movements give rise to negative signals that are associated with political, ethical, and social pressures surrounding companies. These signals reflect increased reputational risks and reduced future sales or income for firms, hence affecting investors' expectations about firm performance and cash flows. According to Heijnen and Van Der Made (2012), in cases where consumers are under the influence of asymmetric information, they can express their concerns in terms of taking actions such as reducing their consumption levels or participating in boycotts; indeed, boycott movements can be a more powerful sign, which can force companies to make certain changes. Within the capital markets, boycott signals can be considered as negative information by investors, who consequently assess their risks. More specifically, within the Islamic capital markets, this effect becomes even stronger because of the ethical considerations inherent in the investment process.

### **Arbitrage Pricing Theory**

In this study, the conceptual framework to guide the choice of macroeconomic indicators as systematic risk factors is the Arbitrage Pricing Theory (APT), where asset returns depend on market risk and other unexpected and unpredictable factors that cannot be diversified. As a result, macroeconomic variables are commonly employed as proxies for these types of risks since they incorporate the state of the economy and influence investment decisions in the market (Azeez & Yonezawa, 2006; Ross, 1977). Based on the above notion, macroeconomic factors serve as exogenous factors that impact expected returns and investor behaviour at the same time, making them ideal explanatory variables for volatility studies (Daariy et al., 2023). Within the multi-factor approach, geopolitical conflict and boycott activities can be regarded as shocks to the market environment that are reflected in pricing through uncertainty and expectations of investors.

### **HYPOTHESES DEVELOPMENT**

Stock market performance is usually indicated using stock indices, where the stock index shows the performance of a number of stocks at certain periods of time and indicates general market condition (Rindika, 2024). In Indonesia, IHSG is the representation of all the issuers that are listed at the stock exchange



and is used as the principal stock indicator for indicating the performance of conventional market while Indonesia Sharia Stock Index (ISSI) consists of all the firms that are included into the Sharia Securities List and indicate the performance of Islamic capital market (Hidayat, 2019). Since stock performance depends on both dividend yield and gain capital, investors usually aim to achieve the perfect balance between the two. In this regard, stock return volatility is a key factor, since it helps to estimate the level of uncertainty and risk exposure (Nafkha & Suchodolska, 2024; Wahyuni & Djamaludin, 2016). That is why it is important to investigate factors that determine stock return volatility, especially in times of uncertainty and risk exposure.

Prior research has proven that boycott movements have considerable economic impacts based on the influence boycotts have on stock prices, sales, and company valuation. In Indonesia, for instance, the stock prices and abnormal returns of pro-Israel companies were highly impacted by boycotts targeting their products, whereas the non-targeted firms were found to react rather minimally to the movements (Ahsyam et al., 2024; Sukmawati et al., 2025). Other empirical evidence from other countries shows reputation and economic decline among companies facing boycott movements, as evidenced by the reduced revenues and closing down of outlets among some of the largest international firms in these countries (Alqatan, 2025; Elshaer et al., 2025). Economic impacts of boycott movements are not only affected by political factors but also by socio-economic factors and culture such as religious beliefs, ethnocentrism, and views about the moral implications of buying certain products, which affect consumers' behaviour of substituting their purchases (Herani & Angela, 2025). Religious legitimacy plays a critical role in boycott movements and helps reduce firm revenues through consumer behaviour change (Witro., 2024).

Despite all the evidence collected on the impact of boycott campaigns on stock prices, stock performance, and consumers' decisions, little is known about their influence on stock return volatility. Current research on volatility has mostly been concentrated around macroeconomic shocks, as opposed to socio-political and ethical shocks. For instance, Almansour (2021) demonstrates that negative shocks contribute to volatility in both regular and Islamic stocks while Salamah (2023) shows that Islamic stocks had relatively less volatility during the COVID-19 pandemic period owing to the stricter screening of assets and lesser leverages. Previous studies on IHSG and ISSI stock return volatilities have highlighted the importance of such factors as inflation rates, oil prices, and global uncertainty. However, there is no existing literature on the impact of boycotts on market volatilities in Indonesia or the



effect of the latter on conventional and Islamic stocks differently. Thus, this paper aims at testing the hypothesis that boycott movements can create sustained volatilities in the country's stock market as well as comparing their impacts on IHSG and ISSI indices.

Inflation is normally associated with rising prices, reduced purchasing power, and higher costs of production, which can be detrimental to the profits of the firm and expectations of its investors. With regards to the cost of capital framework, the effect of inflation on the firm is to create more uncertainty about future earning potential, which translates to higher financial risk and increased market volatility (Fordian et al., 2025). With higher inflation, real returns on investments become lower, necessitating investors to re-look at their portfolio management strategies, hence causing financial market volatility. In developing countries like Indonesia, where issues of macroeconomic instability and changes in monetary policy are of great concern, the effect of inflation is bound to be greater.

*H<sub>1</sub>: There is a positive effect of inflation on stock return volatility.*

It is predicted that the relationship between the Industrial Production Index (IPI) and the volatility of stock returns would be negatively correlated since this index will capture economic performance and productive industry performance. Under the business cycle approach, economic growth increases the expectations of companies regarding income potential as well as lowers uncertainty in the capital market (Indarwati, 2021). Higher industrial production indicates that there will be an improvement in the economic condition, which will lead to improved investor sentiment and lower perceived risks. Hence, lower industrial production might increase uncertainty and concerns about poor economic conditions and firm performance, resulting in increased volatility.

*H<sub>2</sub>: There is a negative effect of the Industrial Production Index on stock return volatility.*

The change in the value of currencies represents a major macroeconomic determinant of the behaviour of the stock markets based on its effect on competitive position, international business, and expectations of the investors. Exchange rates influence the behaviour of the companies' profits and valuations based on the effect on import prices, export performance, and foreign capital inflows, which is based on the goods market approach model (Dornbusch & Fischer, 1980). The depreciation of exchange rates can lead to uncertainty among the investors who might choose to rebalance their portfolios through the purchase of foreign currency-denominated assets offering more stable returns, thus leading to increased stock selling and volatility of the markets (Fordian et al., 2025).



*H<sub>3</sub>: There is a positive effect of the exchange rate on stock return volatility.*

World oil prices will also be projected to cause higher volatility in stock returns due to the role of oil as an important production and transportation input in several industries. From the cost of capital theory point of view, increases in oil prices increase the costs of firms, lower profitability expectations, and introduce uncertainties about future financial performances (Istamar et al., 2019). In light of the potential influence on investors' sentiments, oil prices can become an important source of volatility in the stock markets, especially for those countries that experience sensitivity to oil prices.

*H<sub>4</sub>: There is a positive effect of world oil prices on stock return volatility.*

Market fear sentiment is measured using the Volatility Index (VIX). It is known that market fear sentiment is perceived as a measure of market fear and global uncertainty. When the VIX values rise, it suggests that investors are more risk-averse, which causes investors to divest from high-risk investments like stocks and pursue other investment opportunities. The signal theory states that negative signals lead to pessimistic sentiments among market participants, creating a sense of uncertainty, which increases stock price volatility (Whaley, 2009). High investor sentiment can also cause stock price misvaluation, speculations, and market volatility, leading to future volatility (Wang et al., 2021). Hence, it can be predicted that global fear sentiment (VIX) will positively influence stock price volatility.

*H<sub>5</sub>: There is a positive effect of the VIX on stock return volatility.*

According to Signalling Theory, negative information and extraordinary events have an impact on reducing investments and increasing uncertainty in financial markets (Fordian et al., 2025). In this regard, boycotts can be considered socio-political events that carry negative information about the reputation of the company, its political position, and future demand. Previous studies have provided ample evidence to show that boycotts have a significant effect on stock prices, sales, financial performance, and consumer behavior at the target companies (Ahsyam et al., 2024; Alqatan, 2025; Elshaer et al., 2025; Herani & Angela, 2025; Sukmawati et al., 2025; Witro, 2024). Since Indonesia has a majority Muslim population, ethical and religious factors could play a significant role in the decision-making process of investors and consumers. As a result, information related to boycotts would cause higher uncertainty and volatility reactions.

*H<sub>6</sub>: There is a positive effect of the boycott dummy variable during the Palestine–Israel conflict on stock return volatility.*

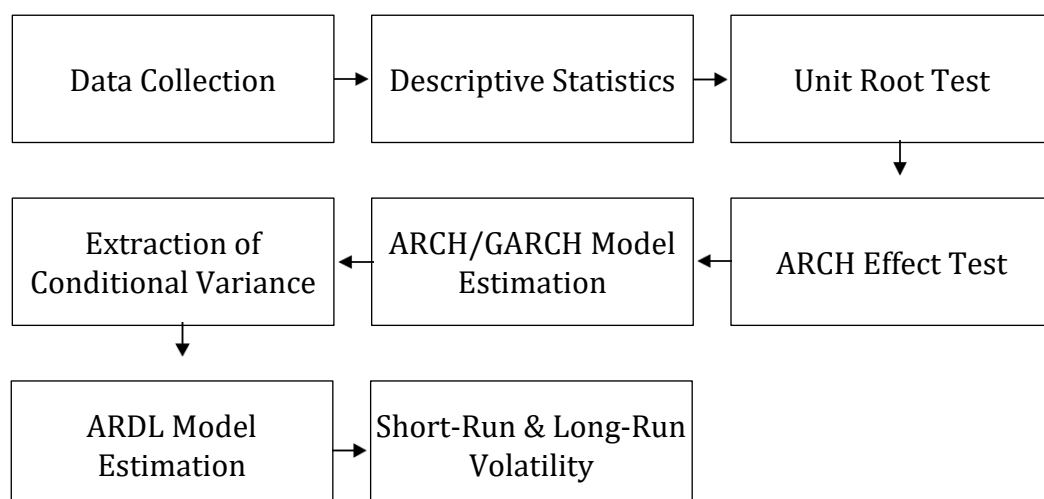
## METHOD

### Data and Sample

Daily data from January 2021 until April 2025 will be collected to measure stock volatility under various market conditions. The period considered for measurement starts from the post-pandemic recovery phase and the boycott movement in 2023. Through the measurement period that comprises both before the event and during the event, the model is expected to identify changes in stock volatility due to the boycott movement, using a similar framework proposed by Aryati et al. (2023). This research employs return stock data of Indonesian conventional stock market (IHSG) and Indonesian Islamic stock market (ISSI), as well as macroeconomic factors such as inflation, Industrial Production Index, exchange rate of rupiah and US dollar, world oil price, VIX, and a boycott dummy.

### Econometrics Model

The study employed ARCH/GARCH and ARDL techniques to examine stock market volatility from various perspectives. ARCH/GARCH models address issues related to volatility clustering and time-dependent variance (Bauwens & Lubrano, 1998; Tsay, 2005), whereas ARDL models distinguish between short-term and long-term relationships, taking into account the impact of macroeconomic variables (Pesaran & Shin, 1995; Matin, 2023). By doing so, this analysis, presented in Figure 2, became capable of providing a comprehensive assessment of how boycott movements affect market volatility.



**Figure 2. Flowchart of Empirical Analysis Procedure**  
Source: Author's Analysis (2025)



ISSI<sup>t</sup> signifies the conditional variance of stock returns of ISSI; IHSG<sup>t</sup> denotes the conditional variance of stock returns of IHSG; INF<sup>t</sup> indicates the inflation rate; IPI<sup>t</sup> indicates economic activity; EXR<sup>t</sup> indicates the Rupiah-US Dollar exchange rate; OIL<sup>t</sup> indicates the world oil price; VIX<sup>t</sup> indicates the investor sentiment; and BoycottDummy<sup>t</sup> takes the value 1 during the boycott period after October 7, 2023, and 0 otherwise. The volatility equation is defined as:

$$ISSI_t = \alpha + \beta_1 INF_t + \beta_2 IPI_t + \beta_3 EXR_t + \beta_4 OIL_t + \beta_5 VIX_t + \beta_6 BoycottDummy_t + \varepsilon_t$$

..... (1)

$$IHSG_t = \alpha + \beta_1 INF_t + \beta_2 IPI_t + \beta_3 EXR_t + \beta_4 OIL_t + \beta_5 VIX_t + \beta_6 BoycottDummy_t + \varepsilon_t$$

..... (2)

### Operational Definition and Variable Measurement

Table 1 provides the definitions of operations, measures, and sources of data used for the variables used in this paper. The dependent variables are the return volatility of the IDX Composite (IHSG) and the Indonesia Sharia Stock Index (ISSI). These two are assessed based on the conditional variance computed using the GARCH model. With the use of the above measure, the researcher is able to consider any changes in volatility that might be exhibited within a certain period in the stock returns. This ensures that an accurate assessment of investment risk and market uncertainty is provided.

The variables employed under independent variable set are composed of macroeconomic, index, and socio-political factors presumed to affect the volatility of stock returns. The inflation variable (INF) is captured using Consumer Price Index growth data collected from Bank Index, while the real activity variable is captured through Industrial Production Index growth data collected from the Central Bureau of Statistics (BPS). The changes in the exchange rate are captured using the average value of the IDR/USD exchange rate collected from Bank Index. On the other hand, the index factor is measured using Brent crude oil prices (OIL) in terms of US\$ per barrel from investing.com. The investor's sentiment factor is measured using Volatility Index (VIX) to serve as a global measure of market uncertainty. The final variable captures the effect of boycott movement using a dummy variable (BoycottDummy).

**Table 1. Operational Definition and Measurement of Variables**

Variable	Symbol	Measurement	Data Source
IHSG Return Volatility	IHSG	Conditional variance estimated from GARCH Model	
ISSI Return Volatility	ISSI	Conditional variance estimated from GARCH Model	
Inflation	INF	CPI Growth	Bank Indonesia
Industrial Production Index	IPI	IPI Growth	BPS
Exchange Rate	EXR	Average IDR/USD	Bank Indonesia
World Oil Price	OIL	Brent Crude Oil Price (USD/Barrel)	investing.com
Investor Sentiment	VIX	CBOE	investing.com
Boycott Movement	Boycott Dummy	Dummy	

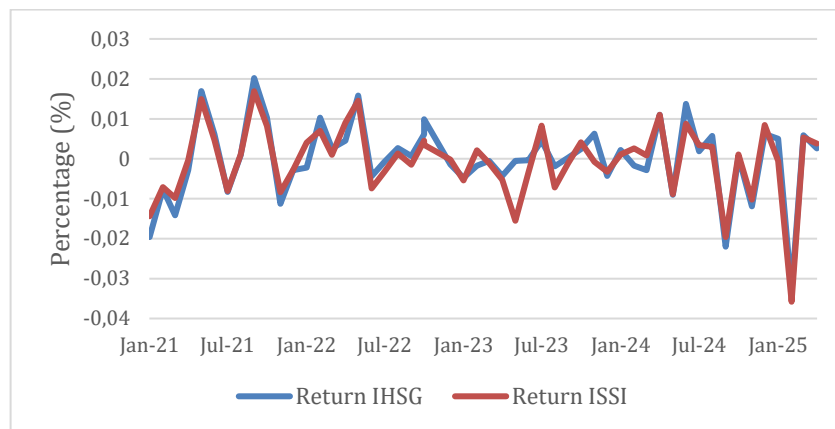
Source: Author's Analysis

## RESULTS AND DISCUSSION

### Results

In order to give a brief picture on how markets behave, this part begins with the presentation of return patterns for the IHSG (IDX Composite) and ISSI (Indonesia Sharia Stock Index) for the duration of the study. This is necessary for the succeeding descriptive and volatility analyses using ARCH/GARCH models. As seen in Figure 3, the movements in the IHSG and ISSI were also parallel. Both indices had moderate movements during the initial stage of the boycott. The volatility increased as they entered 2024, with a decline during early 2025. The movement was triggered by negative reactions from the market toward the boycotted companies (Sukmawati et al., 2025), and intensified by the impact of oil prices internationally, since the oil prices affect the risk in other markets as well (Ijaz et al., 2025).

The result displayed in Table 2 indicates that the average rate of return for both IHSG and ISSI is nearly equal, with ISSI being higher by 0.022%, whereas that of IHSG is only 0.016%. In addition, ISSI also has lower standard deviation value (0.008728) than that of IHSG (0.008929), hence less risky. This can be attributed to Sharia screening since it avoids speculation and leveraged companies (Fithriyana et al., 2025).



**Figure 3. Return of IHSG and ISSI**  
 Source: Data Processed (2025)

**Table 2. Descriptives Statistic of Return of IHSG and ISSI**

Statistics	IHSG	ISSI
Mean	0.000159	0.000223
Median	0.000500	0.000600
Max	0.047900	0.044400
Min	-0.079000	-0.075100
Std. Dev	0.008929	0.008728

Source: Data Processed (2025)

### ARCH Analysis

The outcome of the unit root test for IHSG return series and ISSI return series before ARCH/GARCH estimation is shown in Table 3 below. It can be seen from the results above that both variables are stationary in their levels, as indicated by the probability values of 0.0000, which are smaller than 0.05. Hence, it can be concluded that both the null hypotheses of the existence of a unit root in the return series of the IDX Composite index (IHSG) and the Indonesia Sharia Stock Index (ISSI) are rejected, meaning that the return series of both indices are free from any stochastic trend and are stable. Stationarity is a vital condition that should be satisfied to be able to carry out volatility estimation because otherwise, the results would have been misleading and inaccurate.

When the time series is stationary at level, then ARMA model is applied, whereas ARIMA model can be applied when stationarity is reached through differencing. As both the variables are stationary at level, therefore ARMA model is selected. The best model among the different models has been determined by using the Akaike Information Criteria (AIC), where lower values denote better results. From Table 4, it is clear that ARMA(2,3) is the optimal model for both IHSG and ISSI.



The ARMA stock return model was tested for heteroscedasticity to see if there was an ARCH effect in each model. Models containing heteroscedasticity can be resolved by performing an ARCH/GARCH test. Table 5 shows that all models contain heteroscedasticity. IHSG and ISSI return models should be extended to the ARCH/GARCH test since there is heteroscedasticity in these models. The optimal ARCH/GARCH model is chosen according to the AIC criterion with the minimum value. The results of the optimal ARCH/GARCH models are presented in Table 6 below. The optimal ARCH/GARCH model for the IHSG return volatility model is GARCH (1,2). The optimal ARCH/GARCH model for the ISSI return volatility model is GARCH (2,1). The last step of the ARCH/GARCH procedure is to test the model once again using the ARCH-LM test. The ARCH-LM test was used to check for the existence of any ARCH effect. As can be seen in Table 7 all models do not have any ARCH effect. The volatility of IHSG and ISSI returns during the boycott period of the Palestinian-Israel conflict is shown in equations 3 and 4.

$$VIHSG = 1.87E - 05 + 0.133301 e_{t-1}^2 + 0.533301 IHSG_{t-1} + 0.044412 IHSG_{t-2} \dots\dots\dots(3)$$

$$VISSI = 2.32E - 05 + 0.133304 e_{t-1}^2 + 0.044415 e_{t-2}^2 + 0.533304 ISSI_{t-1} \dots\dots\dots(4)$$

**Table 3. Unit Root Test**

Variables	Prob. Level
IHSG	0.0000
ISSI	0.0000

Source: Data Processed (2025)

**Table 4. AIC Value of ARMA/ARIMA Model**

IHSG				
AR/MA	0	1	2	3
0	-6.598044	-6.595821	-6.601100	-6.602555
1	-6.595533	-6.595789	-6.601151	-6.602171
2	-6.602143	-6.601406	-6.599497	-6.604866*
3	-6.601667	-6.600996	-6.604748	-6.604499
ISSI				
AR/MA	0	1	2	3
0	-6.643535	-6.642942	-6.647157	-6.648557
1	-6.642402	-6.643167	-6.647553	-6.647101
2	-6.648140	-6.647686	-6.645818	-6.651003*
3	-6.647496	-6.645833	-6.643921	-6.650551

Source: Data Processed (2025)

**Table 5. Heteroscedasticity Test**

Variables	ARCH-LM Test	
	F-statistic	Prob. F
IHSG	5.622881	0.0179
ISSI	5.772318	0.0165

Source: Data Processed (2025)

**Table 6. ARCH/GARCH Model**

IHSG			ISSI		
Variables	Coefficient	Prob.	Variables	Coefficient	Prob.
C	1.87E-05	0.0000	C	2.32E-05	0.0144
RESID(-1)^2	0.133301	0.0002	RESID(-1)^2	0.133304	0.0112
GARCH(-1)	0.533301	0.0044	RESID(-2)^2	0.044415	0.4949
GARCH(-2)	0.044412	0.7491	GARCH(-1)	0.533304	0.0019
Akaike info criterion	-6.758529		Akaike info criterion	-6.787493	

Source: Data Processed (2025)

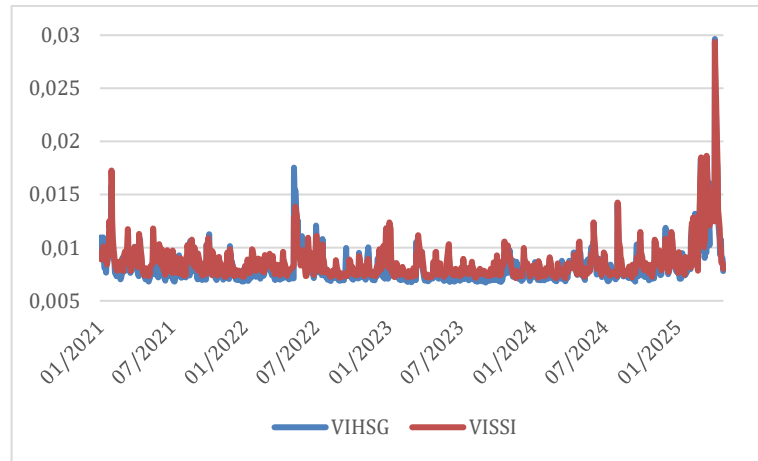
**Table 7. Heteroscedasticity Test**

Variables	ARCH-LM Test	
	F-statistic	Prob. F
IHSG	0.318976	0.5723
ISSI	1.022990	0.3120

Source: Data Processed (2025)

Estimated models for IHSG and ISSI are GARCH(1.2) and GARCH(2.1), respectively. In GARCH modeling, conditional variance represents uncertainty in returns, while volatility represents real-time volatility levels. For IHSG, the variance will be influenced by a single lagged shock and two lags of variance, suggesting high persistence. For ISSI, on the other hand, the variance will be affected by two shocks lags and one lag of variance. Such results support previous studies that have shown the existence of volatility generated by new shocks as well as the persistence in variance in normal and Islamic markets (Almansour, 2021; Matin, 2023). Sari et al. (2017) also indicate that stock market return fluctuations are associated with volatility fluctuations.

From Figure 4, it is evident that both IHSG and ISSI have similar patterns of volatility. The reason for both having high volatility early in 2021 was the disruption caused by the continuing pandemic to the economy (Almansour, 2021). Volatility increased for both in the boycott era compared to the volatility before the boycott era, which was seasonal. The global boycott of firms associated with Israel created volatile prices leading to volatile returns.



**Figure 4. Volatility of IHSG and ISSI**  
 Source: Data Processed (2025)

**ARDL Analysis**

As can be seen in Table 8 below, the data about the volatility of returns of IHSG, ISSI, and IPI are stationary in the level form. On the other hand, those which are stationary in the first-difference form are inflation, exchange rate, oil price, sentiment index, and boycott movement. For the optimum lag test which is performed using the AIC criteria, the appropriate lags for each variable are determined. In the case of the IHSG volatility equation, Figure 5 shows optimum lags of (2.3.1.2.2.0.4), that is to say, volatility is lagged up to two periods; inflation, three; IPI, one; exchange rates and oil prices are lagged up to two periods; investor sentiment, zero; and the boycott indicator up to four periods. In the ISSI equation, the optimum lags are (2.4.4.4.0.4.4).

Table 9 depicts that both models were cointegrated at the 99% level and showed short-term and long-term equilibrium in the IHSG and ISSI return volatility models across all variables. Table 10 shows that both models fulfilled normality, autocorrelation, and heteroscedasticity tests, while Table 11 presents that all variables exhibit no multicollinearity.

**Table 8. Unit Root Test**

Variables	Prob. Level	Prob. 1 <sup>st</sup> Difference
VIHSG	0.0000*	-
VISSI	0.0000*	-
INF	0.6661	0.0000*
IPI	0.0336*	-
KURS	0.6892	0.0000*
OIL	0.1511	0.0000*
VIX	0.1610	0.0000*
BoycottDummy	0.8283	0.0000*

Source: Data Processed (2025)

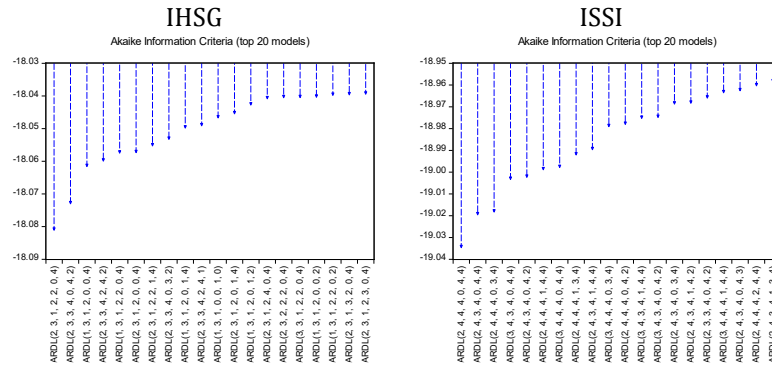


Figure 5. Optimum Lag

Source: Data Processed (2025)

Table 9. Bound Test

Test Statistic	Value	K
F-Statistic IHS	6.483740	7
F-Statistic ISSI	6.620933	7
Critical value bond		
Significance	I(0)	I(1)
10%	1.75	2.87
5%	2.04	3.24
2.5%	2.32	3.59
1%	2.66	4.05

Source: Data Processed (2025)

Table 10. Normality. Autocorrelation. And Heteroscedasticity Test

Model	Normality	Autocorrelation	Heteroscedasticity
IHS	0.6563	0.6585	0.3560
ISSI	0.8289	0.3705	0.9628

Source: Data Processed (2025)

Table 11. Multicollinearity Test

Variables	VIF
INF	1.865715
KURS	1.443903
IPI	3.468912
OIL	1.335672
VIX	1.329095
DUMMY	3.835787

Source: Data Processed (2025)

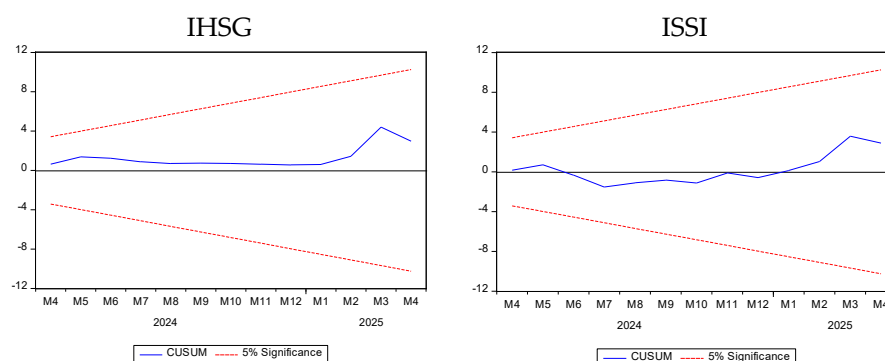
A model is considered stable if the CUSUM plot for each model does not exceed the 5% significance line or the red line. The CUSUM plot results from the recursive estimation in Figure 6 indicate that the variables in the tested models. both the IHS and ISSI volatility models. are stable.



The next step is to estimate the ARDL model to determine the variables that affect the volatility of the IHSG and ISSI returns. The effect of independent variables on dependent variables is analyzed in the short and long term. Independent variables are considered to have an effect on dependent variables if their probability values are below the 5% level.

Table 12 provides an account of the impacts of the variables used on the volatility of returns in the short run and the long run. As seen above, the IHSG model provides an R-square of 0.762395, meaning about 76% of the volatility in returns is explained by the model. On the other hand, the ISSI model has a much higher R-Square of 0.886969, meaning almost 89% of its volatility is explained by the model. The Error Correction Term (ECT) shows how quickly short run disequilibrium is restored to long run equilibrium. From the CointEq coefficient in Table 12, it can be seen that the correction to long run equilibrium happens at a rate of 143% and 159% for the IHSG and ISSI models, respectively.

In terms of the long-run estimates of ARDL, there exist clear variations with respect to the effects of macroeconomic variables and boycott factors on the volatility of the IHSG and the ISSI. The effect of inflation on the two indices is highly negative, meaning that inflation is predictable and hence leads to reduced uncertainty. However, there is a more pronounced stabilizing influence for the IHSG than the ISSI. The same applies to the Industrial Production Index (IPI). It negatively affects volatility for both markets, and its impact on the IHSG is comparatively higher. Depreciation of the exchange rate positively affects the volatility in both markets, with a higher influence on the IHSG, implying higher sensitivity to foreign exchange risk among the secular equities. Finally, the price of oil and investor confidence in the world markets have no significant effect on stock return volatility.



**Figure 6. CUSUM Test**  
**Source: Data Processed (2025)**



Table 12. ARDL Model

IHSG		ISSI			
Variables	Coefficient	Prob.	Variables	Coefficient	Prob.
<b>Short Term</b>					
D(IHSG(-1))	0.354546	0.0373*	D(ISSI(-1))	-0.001750	0.0047*
D(INF)	0.000128	0.7047	D(INF)	-0.001750	0.5236
D(INF(-1))	-0.001171	0.0017*	D(INF(-1))	-0.001750	0.0002*
D(INF(-2))	-0.001475	0.0019*	D(INF(-2))	-0.001750	0.0089*
D(IPI)	-0.013556	0.0000*	D(INF(-3))	-0.001750	0.0088*
D(KURS)	0.008463	0.3595	D(IPI)	-0.001750	0.0000*
D(KURS(-1))	0.029444	0.0029*	D(IPI(-1))	-0.001750	0.6505
D(OIL)	0.000226	0.0373*	D(IPI(-2))	-0.001750	0.3028
D(OIL(-1))	-0.005362	0.7047	D(IPI(-3))	-0.001750	0.0961
D(VIX)	0.001825	0.0751	D(KURS)	-0.001750	0.1514
D(DUMMY)	-0.001568	0.1906	D(KURS(-1))	-0.001750	0.0756
D(DUMMY(-1))	0.001210	0.2864	D(KURS(-2))	-0.001750	0.5362
D(DUMMY(-2))	-0.001220	0.2671	D(KURS(-3))	-0.001750	0.0177*
D(DUMMY(-3))	-0.002581	0.0244*	D(OIL)	-0.001750	0.2256
CointEq(-1)*	-1.416270	0.0000*	D(VIX)	0.000181	0.8251
			D(VIX(-1))	0.001672	0.0570
			D(VIX(-2))	0.003059	0.0022*
			D(VIX(-3))	0.000945	0.1383
			D(DUMMY)	-0.002399	0.0151*
			D(DUMMY(-1))	0.001682	0.0741
			D(DUMMY(-2))	-0.001064	0.2009
			D(DUMMY(-3))	-0.002248	0.0132*
			CointEq(-1)*	-1.559002	0.0000*
<b>Long Term</b>					
Variables	Coefficient	Prob.	Variables	Coefficient	Prob.
INF	-0.000306	0.0021*	INF	-0.000125	0.0269*
IPI	-0.015707	0.0002*	IPI	-0.009568	0.0135*
KURS	0.007521	0.0000*	KURS	0.006336	0.0013*
OIL	0.002537	0.0879	OIL	-0.001123	0.0840
VIX	0.001289	0.1026	VIX	0.000239	0.7428
DUMMY	0.000815	0.0344*	DUMMY	-0.000102	0.7409
R-squared	0.762395		R-squared	0.886969	
Adjusted R-squared	0.671545		Adjusted R-squared	0.795675	

Source: Data Processed (2025)

Table 13. ARDL Estimation for IHSG Before and After the Boycott

Variables	Before Boycott		After Boycott	
	Coefficient	Prob.	Coefficient	Prob.
INF	-0.000209	0.0000*	-0.002135	0.0223*
IPI	-0.004529	0.0572	-0.031131	0.0010*
KURS	0.002738	0.0352*	0.011092	0.0086*
OIL	0.000341	0.2863	0.013224	0.0736
VIX	0.001056	0.0019*	0.002001	0.4849
INF	-0.000209	0.0000*	-0.002135	0.0223*

Source: Data Processed (2025)



The sub-period ARDL results show clear shifts in the determinants of IHSG volatility before and after the boycott, indicating structural changes in market dynamics. Before the boycott, volatility was driven by inflation, exchange rate movements, and global investor sentiment. Inflation reduced volatility, while exchange rate fluctuations increased uncertainty, and global sentiment amplified market reactions consistent with evidence that boycott episodes in Indonesia can heighten volatility when financial and socio-political factors interact (Isa et al., 2025).

After the boycott, the determinants changed markedly. IPI became the dominant factor, suggesting investors shifted their focus toward domestic economic fundamentals amid rising geopolitical and ethical concerns. Exchange rate risk remained a major source of volatility, while the influence of inflation strengthened, reflecting increased sensitivity to macroeconomic instability. Meanwhile, investor sentiment and oil prices lost significance, indicating that post-boycott volatility was driven more by domestic conditions and structural adjustments than by global risk perceptions.

## Discussion

### Inflation and Stock Return Volatility

In theory, the rise in inflation will increase stock return volatility due to an increase in uncertainty and higher costs of firms. On the contrary, the empirical results obtained using ARDL modeling indicate otherwise since inflation decreases volatility in the long run for both IHSG and ISSI. Considering APT, the implication is that inflation is an anticipated macro variable instead of a surprise. Post-COVID inflation in Indonesia has been stable and consistent with the economic recovery in the country, hence becoming easy to predict for investors, reducing uncertainty. The increased stabilizing influence on IHSG implies that traditional stocks react more to the expected changes in inflation compared to Sharia-compliant stocks. This is consistent with previous studies (Aziz et al., 2020; Fordian et al., 2025) indicating that inflation reduces volatility under conditions of economic stabilization.

This finding corroborates the estimates on the ARCH and GARCH models' volatility, which have found volatility clustering and persistence for both indices. However, according to the ARDL results, inflation will bring down volatility in the long run since it is accounted for in investors' expectations. The more stabilizing influence exerted by the ARDL model on the IHSG index implies that regular stocks are more sensitive to expected inflation than the conservative ISSI. Indeed, previous research has shown that the effects of



inflation on stock markets are regime dependent. and inflation volatility tends to increase during periods of unexpected inflation (Ayadi et al., 2026).

### **Industrial Production and Stock Return Volatility**

There is a substantial negative impact of the IPI on volatility in both the IHSG and the ISSI, consistent with the theory of business cycles. The higher the level of production activity, the lower the volatility in the returns of stocks because there is an increase in expectations about future income streams and reduced riskiness in the market. Hence, the ARDL results support this claim since IPI is seen as a stabilizing force in the long run. Based on the APT, industrial production is a systematic factor that affects asset pricing.

Moreover, the volatility estimates in ARCH/GARCH framework support the above interpretation in the sense that there is volatility persistence and reaction to shocks. But the negative sign of the IPI coefficient in the ARDL model reveals that more active real sector will lower such a persistence effect. This effect occurs even more in the IHSG index implying that the conventional market index is more influenced by the economic cycle changes, whereas the ISSI index which consists only of selected stocks shows some stability due to Shariah screening. These findings agree with empirical literature on the positive effect of real economic activity on volatility in all types of markets (Khalil & Chaisrisawatsuk, 2018; Salamah, 2023), and new literature emphasizing the influence of narratives on equity market in the long run (Malliaris & Malliaris, 2026). Furthermore, in the IHSG sub-period analysis, there is greater significance of the effect after the boycott implying increased ethical and geopolitical uncertainties; thus, domestic fundamentals become more important for conventional investors.

### **Exchange Rate and Stock Return Volatility**

The findings indicate that fluctuations in exchange rates have significant and positive influences on return volatilities in both the IHSG and ISSI indices, based on goods market and capital flow theories. A decline in the exchange rate increases the expenses of imported materials, affects corporate balance sheets, increases uncertainty concerning foreign investment flows, and ultimately causes increased stock market volatility (Dornbusch & Fischer, 1980; Fordian et al., 2025). The ARDL outcomes demonstrate that such an effect is significant in the long term, meaning that exchange rate depreciation leads to short-run price changes and sustained volatility. As a macroeconomic financial measure, the exchange rate directly influences business costs, capital inflows from foreign sources, and investor sentiment, factors that become especially important for countries with a high degree of external vulnerability



such as Indonesia. This conclusion is supported by the ARCH/GARCH results indicating sustained volatility, meaning that exchange rate shocks persist rather than dissipate immediately. In terms of APT, the exchange rate serves as a systemic risk factor affecting various assets.

This is because exchange rates affect the conventional stocks in a much higher extent compared to the Islamic stocks due to the fact that the sectors covered by conventional stocks tend to be more exposed to foreign transactions, while foreign exchange financing would also be a more common occurrence among conventional firms compared to shariah-compliant companies. Based on the results obtained above, it can be confirmed that changes in exchange rates are still highly influential on the risks faced by stock markets in developing countries. Existing literature has actually pointed out exchange rate instability as an equally influential factor of financial market volatility, which serves as a critical mechanism in the transmission of global shocks in the financial market. According to Sanusi and Dickason-Koekemoer (2026), exchange rate instability plays a significant role in determining volatility, and tends to last longer than other macro-financial variables as well. This is in line with the findings obtained above regarding the influence of exchange rates on volatility.

### **World Oil Prices and Stock Return Volatility**

The empirical findings of this paper reveal that the influence of oil prices on stock return volatility is minimal and inconsistent between indices. For the IHSG, the ARDL analysis suggests a marginal positive long-run impact on volatility, whereas the ISSI exhibits a negative association, implying that fluctuations in oil prices do not necessarily lead to increased volatility. In other words, changes in oil prices might be interpreted in various ways based on the construction of each index and its respective components' sensitivity to costs. This assertion corroborates the ARCH/GARCH model's earlier findings regarding the presence of persistent volatility due to past shocks, but not the unconditional nature of oil price risk propagation indicated by the ARDL analysis.

These different outcomes can be traced back to differences in the sectoral make-up. The IHSG is characterized by a more diverse range of sectors including energy-sensitive non-energy companies whereas the ISSI is more shielded due to the Shariah-screening process and sector coverage. As for the APT, the oil price serves as a systemic risk factor but the extent of its influence will depend on whether the index is dominated by industries which consume or benefit from higher oil prices. This conclusion is compatible with previous research which demonstrated that oil price shocks exhibit heterogeneous



volatility responses based on sector composition (Istamar et al., 2019) as well as contemporary findings by Almutawa et al. (2025) that there are heterogeneous oil price-stock volatility relationships across countries and through systemic crisis periods. In summary, the outcomes have provided an insight into the grand theory by validating the importance of oil prices, with an added emphasis on the conditions under which they influence stock volatility.

### **Investor Sentiment and Stock Return Volatility**

From the above empirical findings, one would find that the influence of VIX on the returns of stocks will be effective in the short run because the sentiments of the global fear impact the volatility of stock return based on temporary effects of the markets rather than permanent. This implies that when there is a change in uncertainty globally, the market will have an immediate reaction of the rebalance of portfolios, defensive trading, and risk aversion until when the information is gradually assimilated into the system, thus the volatility impact fading. This can be explained by the fact that stock return volatility of both indices, as indicated by the ARCH/GARCH results, is persistent and reacts to recent shocks, while the ARDL results indicate that VIX is not a persistent determinant in the stock market. In practice, therefore, VIX accounts for temporary disturbances driven by sentiments, while the volatility of the long run will depend on the fundamental factors and the adjustment process. The conventional market or the Islamic market that has been exposed to the increase in global risk will have the impact of volatility from fear trading and portfolio behavior movement (Chakraborty & Subramaniam, 2020; Whaley, 2009).

However, after absorption, sentiment-induced fluctuations cease, and the markets again become driven by fundamental factors. Concerning Indonesia, global sentiment can transfer quickly through capital movements; however, the importance of such a factor hinges on which uncertainty prevails. As shown by the IHSG sub-period outcomes, the VIX is important prior to the boycott but not after the boycott period. This implies that during times of ethical and geopolitical uncertainties, investors do not look at the global measures of fear any longer but consider instead domestic factors as well as adjustments within the market. Following the APT approach, it may be said that the macro-financial factors play importance if they are considered important for the economy. Recent evidence suggests that both behavioral as well as macro-factors help in predicting volatility, albeit differently depending on the time horizon and type of prevailing uncertainty (Salisu et al., 2023). Therefore, it may be concluded that the VIX serves as a behaviorally important variable for the short run but not in the case of the long run.



## Boycott Movement and Stock Return Volatility

In the long term, the dummy variable contributes substantially to volatility of the IHSG, which proves that the boycott campaign works as a non-fundamental shock causing increased volatility for the market. Signaling and reputational risk theory explain such an outcome, as the boycott campaign creates negative signals in terms of ethical, political, and demand risks, and hence causes reassessment of risk regardless of worsening fundamentals. This finding is also applicable to Indonesia because of the socio-religious composition of its Muslim-dominated economy. Another contribution of this finding lies in extending signaling and APT theories, which indicate that geopolitical boycott campaigns could increase volatility via external perception channels.

On the contrary, the boycott does not appear to have an effect in the long run on ISSI volatility, implying that stocks that are screened by sharia are relatively resistant to such a crisis due to their ethical approach and less involvement in boycott-hit corporations. Indeed, such a scenario fits into the trend observed for the conventional market, which shows a negative response during a boycott to the stock market (Ahsyam et al., 2024; Alqatan, 2025; Elshaer et al., 2025; Sukmawati et al., 2025), as well as for the resilience of Islamic finance in response to other types of economic shocks (Achsani et al., 2025). As the sub-period analysis suggests, pre-boycott IHSG volatility is mostly determined by inflation, exchange rate changes, and global sentiment, while post-boycott IHSG volatility is caused by real sector developments and exchange rate fluctuations.

## CONCLUSION

This study investigates the effects of boycott movements and macroeconomic factors on the volatility of conventional and Islamic stock returns in Indonesia by employing ARCH/GARCH and ARDL approaches. These findings suggest that the impact of boycotts on the volatility of the IDX Composite (IHSG) is substantial, whereas the volatility of ISSI remains unchanged during these events, meaning that the resilience of Islamic stocks is much higher than that of conventional stocks when there is socio-political and geopolitical instability. Furthermore, it can be seen that inflation and IPI lead to a decrease in volatility in both markets, implying that the presence of macroeconomic stability and a strong real sector decreases volatility of returns. However, on the contrary, depreciation of the exchange rate contributes substantially to volatility of returns, while changes in oil prices and investor sentiment have mixed results, most often being short-term in nature. In particular, these findings may suggest that investing in the Islamic capital



market might be considered a better choice during times of geopolitical instability. Therefore, investors should consider allocating additional funds into Islamic stocks as a means of risk management, while OJK and IDX should promote their development further through broadening of the Sharia Securities List and strict screening processes.

However, despite the strengths of the model, this study has some limitations worth noting. To start with, the boycott campaign is operationalized as a dummy variable, which might not completely reflect the degree and nature of activities carried out by the boycotters. Secondly, the time span of the study might have limited the scope for detecting structural shifts in the long run and market reactions to geopolitical events. Thirdly, the interplay of macroeconomic factors might pose complexities that cannot be easily handled within the existing framework. As such, it is advised that future studies use finer measurements of boycott activities and investigate any asymmetries between the targeted sectors and other sectors. Furthermore, it is suggested that other volatility models, such as the exponential GARCH (EGARCH) and threshold GARCH (TGARCH) models, be used. Comparative analyses of different countries can also offer valuable insights on how ethical investments and Islamic finance can mitigate geopolitical and socio-political risks.

## REFERENCES

- Achsani, M. N. F. F., & Kassim, S. (2021). The Determinants of Credit Risk Under Dual Banking System: Indonesian Experience Based on Bank Specific Variables. *AL-MUZARA'AH*, 9(2), 215–229. <https://doi.org/10.29244/jam.9.2.215-229>
- Achsani, M. N. F. F., Kassim, S., & Haron, R. (2025). Does The Covid-19 Pandemic Affect Financing of Islamic Banks in Indonesia? *Malia: Jurnal Ekonomi Islam*, 16(2), 327–347. <https://jurnal.yudharta.ac.id/v2/index.php/malia/article/view/6252>
- Ahsyam, F., Syaharana, S., Alfira, M., Sudarmi, S., & Muchran, M. (2024). The Impact Of The Pro-Israel Product Boycott On Stock Prices Companies Registered On BEI. *International Social Sciences and Humanities*, 3(1), 75–80. <https://doi.org/10.32528/issh.v3i1.453>
- Akhtar, S., & Jahromi, M. (2017). Impact of the global financial crisis on Islamic and conventional stocks and bonds. *Accounting & Finance*, 57(3), 623–655. <https://doi.org/10.1111/acfi.12136>
- Almansour, B. (2021). The volatility of Dow Jones conventional and Islamic indices: Does covid-19 pandemic matter? *Industrial Engineering & Management Systems*, 20(4), 795–807. <https://doi.org/10.7232/iems.2021.20.4.795>



- Almutawa. S., Hassan. H., & Sankar. J. (2025). Stock Market Returns and Crude Oil Price Volatility: A Comparative Study Between Oil-Exporting and Oil-Importing Countries. *Journal of Risk and Financial Management*. 18(12). 713. <https://doi.org/10.3390/jrfm18120713>
- Alqatan. A. (2025). Corporate Responses to Boycott Movements: Impact on Accounting and Financial Performance in the Middle East. *International Journal of Islamic and Middle Eastern Finance and Management*. 18(2). 360–380. <https://doi.org/10.1108/IMEFM-06-2024-0316>
- Aryati. A., Junaidi. J., Palopo Muhammadiyah University, & Putra. R. A. (2023). Financial Development and Economic Growth: Evidence from Indonesia Before and After the COVID-19 Pandemic. *Economy of Regions*. 19(4). 1263–1274. <https://doi.org/10.17059/ekon.reg.2023-4-23>
- Ayadi. E., Ben Jedidia. L., & Ben Mbarek. N. (2026). Inflation Shocks and Equity Vulnerability: Regime, Sign, and Cross-Country Asymmetries in the G7. *Economies*. 14(2). 55. <https://doi.org/10.3390/economies14020055>
- Azeez. A., & Yonezawa. Y. (2006). Macroeconomic factors and the empirical content of the arbitrage pricing theory in the Japanese stock market. *Japan and the World Economy*. 18(4). 568–591. <https://doi.org/10.1016/j.japwor.2005.05.001>
- Aziz. T., Marwat. J., Mustafa. S., & Kumar. V. (2020). Impact of economic policy uncertainty and macroeconomic factors on stock market volatility: Evidence from Islamic indices. *The Journal of Asian Finance, Economics and Business*. 7(12). 683–692. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.683>
- Bauwens. L., & Lubrano. M. (1998). Bayesian inference on GARCH models using the gibbs sampler. *The Econometrics Journal*. 1(1). C23–C46. <https://doi.org/10.1111/1368-423X.11003>
- Chakraborty. M., & Subramaniam. S. (2020). Asymmetric relationship of investor sentiment with stock return and volatility: Evidence from India. *Review of Behavioral Finance*. 12(4). 435–454. <https://doi.org/10.1108/RBF-07-2019-0094>
- Crespo. R. A., Hoyos. I. U., Crespo. R. A., & Hoyos. I. U. (2025). Economic Interdependence and Its Role in the Propagation of Financial Crises: A Theoretical Synthesis. In *Applied and Theoretical Econometrics and Financial Crises*. IntechOpen. <https://doi.org/10.5772/intechopen.1008150>
- Daariy. A., Djamaluddin. S., & Sumarto. A. H. (2023). Macroeconomic Factors and Stock Returns: An Approach of Arbitrage Pricing Theory in the Food and Beverage Industry. *Journal of Economics, Finance and Management Studies*. 06(01). <https://doi.org/10.47191/jefms/v6-i01-47>
- Dornbusch. R., & Fischer. S. (1980). Exchange rates and the current account. *The American Economic Review*. 70(5). 960–971. <http://www.jstor.org/stable/1805775>
- Elshaer. I. A., Azazz. A. M. S., Fayyad. S., Kooli. C., Fouad. A. M., Hamdy. A., & Fathy. E. A. (2025). Consumer boycotts and fast-food chains: Economic



- consequences and reputational damage. *Societies*. 15(5). <https://doi.org/10.3390/soc15050114>
- Essayem, A., Gormus, S., Guven, M., Erdal, F., & Uygun, U. (2024). The global risk trinity of hydrocarbon economies: Evidence from the method of moments quantile regression. *Energy Reports*. 12. 3412–3421. <https://doi.org/10.1016/j.egy.2024.09.022>
- Fithriyana, R., Irfan, A., & Sudirman, W. F. R. (2025). Firm fundamentals and sectoral heterogeneity in Sharia-compliant stock return volatility: Evidence from Indonesia. *Journal of Islamic Economics Lariba*. 11(2). 969–994. <https://doi.org/10.20885/jielariba.vol11.iss2.art12>
- Fordian, D., Alexandri, M. B., Suryanto, S., & Kusairi, S. (2025). Pengaruh variabel makroekonomi dan covid-19 terhadap volatilitas return saham di Bursa Efek Indonesia periode Maret 2017 – april 2023. *AdBispreneur*. 9(1). 13–29. <https://doi.org/10.24198/adbispreneur.v9i1.50743>
- Habibah, U. K., Zuhroh, I., & Sangadah, D. (2022). Fluktuasi Harga Saham Batu Bara: Peran Faktor Spesifik dan Makroekonomi. *Jurnal Akademi Akuntansi*. 5(3). Article 3. <https://doi.org/10.22219/jaa.v5i3.21065>
- Heijnen, P., & Van Der Made, A. (2012). A Signaling Theory of Consumer Boycotts. *Journal of Environmental Economics and Management*. 63(3). 404–418. <https://doi.org/10.1016/j.jeem.2012.01.004>
- Herani, R., & Angela, J. (2025). For Palestine or for us too? Examining Indonesian youth's willingness to buy local products amid the Israel boycott. *Journal of Islamic Marketing*. 16(7). 1880–1903. <https://doi.org/10.1108/JIMA-05-2024-0205>
- Hidayat, W. W. (2019). *Konsep dasar investasi dan pasar modal*. Uwais Inspirasi Indonesia.
- Huka, C. K. Y., & Kelen, L. H. S. (2022). Dampak Invasi Rusia Ke Ukraina Terhadap Average Abnormal Return Perusahaan Industri Energi Yang Terdaftar Di Bursa Efek Indonesia. *Juremi: Jurnal Riset Ekonomi*. 2(1). 73–82. <https://doi.org/10.53625/juremi.v2i1.2234>
- Ijaz, M. S., Ali, S., Du, A. M., & Khurram, M. (2025). Analyzing financial market reactions to the Palestine-Israel conflict: An event study perspective. *International Review of Economics & Finance*. 98. 103864. <https://doi.org/10.1016/j.iref.2025.103864>
- Indarwati, S. (2021). Benarkah suku bunga memengaruhi volatilitas pasar saham syariah? *Journal of Islamic Economics and Finance Studies*. 2(1). 56. <https://doi.org/10.47700/jiefes.v2i1.2780>
- Isa, M. Y., Bahaman, M. A., Ahmad, Z., Islamkulov, A., & Ahmed, M. (2025). Impact of global boycotts on Israeli goods: Evidence from Islamic and non-Islamic countries using an event study approach. *Asian Economic and Financial Review*. 15(7). 1111–1124. <https://doi.org/10.55493/5002.v15i7.5491>
- Istamar, I., Sarfiah, S. N., & Rusmijati, R. (2019). Analisis pengaruh harga minyak dunia, harga emas, dan nilai kurs rupiah terhadap Indeks Harga Saham Gabungan di Bursa Efek Indonesia tahun 1998-2018. *Dinamic*. 1(4). 433–442. <https://doi.org/10.31002/dinamic.v1i4.805>



- Khalil. M. A.. & Chaisrisawatsuk. S. (2018). Relationship Between Financial and Real Sectors: Implications for Stable Economic Development (Evidence from Thailand). *International Journal of Economics and Finance*. 10(6). 204–217. <https://doi.org/10.5539/ijef.v10n6p204>
- Kholil. Md. I.. Tahrim. F.. Esquivias. M. A.. Al Mamun. M. A.. & Rahmawati. Y. (2025). ASEAN's environmental consequences: Tourism, globalization, and FDI under the pollution haven hypothesis. *Discover Sustainability*. 6(1). 386. <https://doi.org/10.1007/s43621-025-01240-7>
- Malliaris. A. G.. & Malliaris. M. (2026). Do Shiller Macro and Micro Narratives Characterize the S&P 500 Index Returns? New Insights. *Journal of Risk and Financial Management*. 19(2). 115. <https://doi.org/10.3390/jrfm19020115>
- Matin. Md. R. (2023). Impact of Macroeconomic Volatility on Stock Market Volatility in Bangladesh. *Journal of Financial Risk Management*. 12(03). 238–261. <https://doi.org/10.4236/jfrm.2023.123013>
- Morrison. S. (2022). Border-crossing repertoires of contention: Palestine activism in a global justice context. *Globalizations*. 19(1). 17–33. <https://doi.org/10.1080/14747731.2020.1844973>
- Mulyono. H.. & Rolando. B. (2025). Consumer boycott movements: Impact on brand reputation and business performance in the digital age. *Multidisciplinary Reviews*. 8(9). 2025291–2025291. <https://doi.org/10.31893/multirev.2025291>
- Munawarah. M.. Muslimin. M.. Kasim. M. Y.. Zainuddin. F.. & Kadang. J. (2025). Comparison of Trading Volume Activity and Abnormal Return Before and After Boycott, Divestment and Sanction Movement. *International Journal of Social Science and Business*. 9(2). 269–275. <https://doi.org/10.23887/ijssb.v9i2.92578>
- Nafkha. R.. & Suchodolska. D. Ž. (2024). Modelling and estimating volatility using conditional variance-type models. *Procedia Computer Science*. 246. 2655–2664. <https://doi.org/10.1016/j.procs.2024.09.422>
- Pesaran. M. H.. & Shin. Y. (1995). *An autoregressive distributed lag modelling approach to cointegration analysis* (Vol. 9514). Department of Applied Economics, University of Cambridge Cambridge. UK.
- Rindika. S. M. (2024). The impacts of macroeconomic variables on the movement of Somposite Stock Price Index (CSPI) during Covid-19 pandemic in Indonesia. *Berkala Akuntansi dan Keuangan Indonesia*. 9(2). 220–240. <https://doi.org/10.20473/baki.v9i2.58835>
- Ross. S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*. 8(1). 23. <https://doi.org/10.2307/3003485>
- Salamah. N. F. (2023). *Analisis volatilitas return saham konvensional dan syariah sebelum dan saat Pandemi Covid-19* [Skripsi]. Institut Pertanian Bogor.
- Salisu. A. A.. Demirer. R.. & Gupta. R. (2023). Policy uncertainty and stock market volatility revisited: The predictive role of signal quality. *Journal of Forecasting*. 42(8). 2307–2321. <https://doi.org/10.1002/for.3016>



- Sanusi. K. A.. & Dickason-Koekemoer. Z. (2026). Rand. Rates. and Returns: Unravelling the Volatility Nexus in South Africa's Financial Markets. *Journal of Risk and Financial Management*. 19(3). 230. <https://doi.org/10.3390/jrfm19030230>
- Sari. L. K.. Achsani. N. A.. & Sartono. B. (2017). Pemodelan volatilitas return saham: Studi kasus pasar saham Asia modelling volatility of return stock index: Evidence from Asian countries. *Jurnal Ekonomi dan Pembangunan Indonesia*. 18(1). 35–52. <https://doi.org/10.21002/jepi.2018.03>
- Schlüter. B.-S.. Masquelier. B.. & Jamaludine. Z. (2025). A demographic assessment of the impact of the war in the Gaza Strip on the mortality of children and their parents in 2023. *Population Health Metrics*. 23(1). 8. <https://doi.org/10.1186/s12963-025-00369-x>
- Simanjorang. F.. Fattahillah. A.. Irfan. D. S.. Firjatullah. G.. Pangaribuan. I. M.. & Baga. M. (2023). Globalisasi Dan Lingkungan Ekonomi Di Indonesia: Sebuah Analisis Tentang Dampak Dan Tren. *Jurnal Riset Manajemen*. 1(2). 30–40. <https://doi.org/10.54066/jurma.v1i2.261>
- Spence. M. (1973). Job market signaling. *The Quarterly Journal of Economics*. 87(3). 355. <https://doi.org/10.2307/1882010>
- Sukmawati. S.. Assih. P.. & Subiyantoro. E. (2025). Comparison of Capital Market Reactions Before and After the Boycott of Products Due to War. *Jurnal Manajemen Dan Kewirausahaan*. 13(1). 131–143. <https://doi.org/10.26905/jmdk.v13i1.15586>
- Tsay. R. S. (2005). *Analysis of financial time series*. John wiley & sons.
- Wahyuni. I.. & Djamaludin. S. (2016). Pengaruh Kinerja Keuangan Terhadap Capital Gain Pada Industri Properti Di Bursa Efek Indonesia (Periode Tahun 2008 – 2013). *Jurnal Ilmiah Manajemen Dan Bisnis*. 2(1). 111–128.
- Wang. W.. Su. C.. & Duxbury. D. (2021). Investor sentiment and stock returns: Global evidence. *Journal of Empirical Finance*. 63. 365–391. <https://doi.org/10.1016/j.jempfin.2021.07.010>
- Whaley. R. E. (2009). Understanding the VIX. *The Journal of Portfolio Management*. 35(3). 98–105. <https://doi.org/10.3905/JPM.2009.35.3.098>
- Witro. D. (2024). State Islamic University Students' Perceptions of IsraelAffiliated Products: A Study After the Fatwa of Indonesian Ulema Council No. 83 of 2023 Concerning the Law on Support for the Palestinian Struggle. *Al-Manahij: Jurnal Kajian Hukum Islam*. 18(1). 145–160. <https://doi.org/10.24090/mnh.v18i1.10554>
- Worldometers. (2025). *Oil Production by Country—Worldometer*. <https://www.worldometers.info/oil/oil-production-by-country/>
- Yanti. R. Y.. & Ermawati. L. (2025). Analisis harga saham sebelum dan sesudah pemboikotan produk terhadap harga saham pada perusahaan yang terafiliasi oleh Israel yang terdaftar di Bursa Efek Indonesia. *ProBisnis : Jurnal Manajemen*. 16(01). 12-21. <https://www.ejournal.joninstitute.org/index.php/ProBisnis/article/view/877>