COMPARATIVE ANALYSIS OF SHARIA AND CONVENTIONAL STOCK RESILIENCE TO GLOBAL UNCERTAINTY: EVIDENCE FROM ISSI AND IHSG DURING 2019–2025

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ABSTRACT

This study examines the comparative resilience of Islamic and conventional stock markets in Indonesia under global uncertainty. Using monthly data for the Indonesian Sharia Stock Index (ISSI) and the Jakarta Composite Index (IHSG) from February 2019 to July 2025, the GARCH-X model is employed to capture volatility clustering and the exogenous effects of uncertainty shocks. Global uncertainty is proxied by three major events: the COVID-19 pandemic, the Russia–Ukraine conflict, and the Trump-era trade tariffs. The results show that both indices are significantly affected by global shocks, with the VIX serving as a key driver of volatility. However, ISSI demonstrates greater resilience, reflected in lower volatility persistence and faster stabilization aftershocks. Trade-related protectionist measures and commodity price increases provide additional support to Sharia-compliant firms, while IHSG remains more sensitive to U.S. monetary policy and global capital flow volatility. These findings highlight the role of Islamic equities as a stabilizing component in emerging markets and a viable tool for portfolio diversification and risk management during periods of global turbulence.

Keywords : *Islamic equities, ISSI, IHSG, volatility, GARCH-X*

ABSTRAK

Penelitian ini mengkaji daya tahan komparatif pasar saham syariah dan konvensional di Indonesia terhadap ketidakpastian global. Data bulanan Indeks Saham Syariah Indonesia (ISSI) dan Indeks Harga Saham Gabungan (IHSG) periode Februari 2019–Juli 2025 dianalisis menggunakan model GARCH-X untuk menangkap volatility clustering serta pengaruh eksogen dari guncangan global. Ketidakpastian global diproksikan melalui tiga peristiwa utama, yaitu pandemi COVID-19, konflik Rusia–Ukraina, dan kebijakan tarif era Trump. Hasil penelitian menunjukkan bahwa kedua indeks signifikan dipengaruhi oleh guncangan global, dengan VIX sebagai pendorong utama volatilitas. Namun, ISSI terbukti lebih tangguh, ditunjukkan oleh persistensi volatilitas yang lebih rendah dan stabilisasi yang lebih cepat pascaguncangan. Kebijakan proteksionis berbasis perdagangan dan kenaikan harga komoditas memberikan dukungan tambahan bagi emiten syariah, sementara IHSG lebih sensitif terhadap kebijakan moneter Amerika Serikat dan volatilitas arus modal global. Temuan ini menegaskan peran saham syariah sebagai komponen penstabil di pasar negara berkembang sekaligus instrumen yang efektif untuk diversifikasi portofolio dan manajemen risiko pada periode ketidakpastian global.

Kata kunci : *saham syariah, ISSI, IHSG, volatilitas, GARCH-X*

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1. INTRODUCTION

Whether sharia stocks can withstand global market turmoil better than their conventional counterparts remains an open and important question. Over the past five years, the world has witnessed three major shocks that severely tested financial market resilience, the COVID-19 pandemic in 2020, the Russia–Ukraine war in 2022, and the announcement of large-scale protectionist trade policies by President Donald Trump in April 2025 (Liberation Day Tariffs). These shocks, spanning health, geopolitical, and trade policy domains, differ not only in their origins but also in the mechanisms through which they transmit risk to the global economy. Their diversity highlights that modern crises are increasingly overlapping, persistent, and nonlinear, making it essential to understand how different segments of the market respond to escalating global uncertainty.

The urgency of this inquiry is amplified by Indonesia's position as one of the largest emerging markets with a rapidly growing Islamic finance ecosystem. Indonesia's capital market offers a compelling setting, with the Jakarta Composite Index (IHSG) representing conventional equities and the Indonesian Sharia Stock Index (ISSI) representing Islamic equities. Sharia stocks operate under screening principles that exclude highly leveraged and non-compliant sectors such as interest-based finance, alcohol, and gambling (Anwer et al., 2023; Kafou, 2025; Qoyum et al., 2024). These structural distinctions may shape volatility and resilience during crises. Prior studies suggest that sharia equities sometimes exhibit greater stability during extreme stress, such as the COVID-19 pandemic (Alam et al., 2021; Ashraf, 2020), while others find mixed or inconsistent results (Hasyim et al., 2025; Hasyim, Qomar, et al., 2024; Hasyim, Rusgianto, et al., 2024; Rizvi & Arshad, 2018; Setianingsih et al., 2024). These inconsistencies strengthen the urgency of reassessing whether Islamic equities genuinely offer superior resilience, especially as global shocks become more frequent and more complex.

Global market conditions are simultaneously shaped by external risk drivers such as the Volatility Index (VIX), Economic Policy Uncertainty (EPU), oil prices, and global interest rates (Hong et al., 2024; Nguyen et al., 2025; Shambaugh & Zhou, 2024; Valadkhani & O'Mahony, 2024). VIX reflects shifts in global risk sentiment, EPU influences investment decisions, oil price dynamics affect energy-linked sectors differently across markets, and global interest rate changes alter capital flow directions (Bhat et al., 2024; Dumrul & Kiliçarslan, 2020; Goldberg & Krogstrup, 2023; Valadkhani & O'Mahony, 2024). Yet, comparative evidence on how sharia and conventional stocks respond to these macro-level forces across distinct crisis types remains limited. For emerging markets like Indonesia, where retail dominance, liquidity conditions, and market structure differ sharply from developed economies, this knowledge gap becomes increasingly critical in designing more resilient investment and policy strategies.

Three key gaps emerge from the literature. First, most studies focus on a single type of shock, rarely contrasting responses to health crises, geopolitical conflicts, and trade disruptions in one integrated framework. Second, multi-event studies in the Indonesian context remain limited, leaving the resilience of Islamic equities underexplored. Third, the role of global risk factors in explaining volatility differences between Islamic and conventional stocks has not been sufficiently incorporated into

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empirical models. Addressing these gaps, this study examines: (1) whether sharia stocks in Indonesia weather these three shocks better than conventional stocks, (2) how each index responds to global risk factors across different crises, and (3) whether any resilience advantage of Islamic equities is consistent across shock types.

This study contributes in three ways. Academically, it enriches the Islamic finance literature by employing a multi-event framework across distinct global shock typologies. Practically, it offers insights for investors, portfolio managers, and policymakers on designing diversification and hedging strategies based on crisis sensitivity. Methodologically, it applies a GARCH-X multi-event approach to Indonesia's market, integrating both event-specific and global risk factors into volatility modeling. Through this lens, the research seeks to answer the central question: Do sharia stocks truly weather global turmoil better, or is their resilience advantage bound to the nature of the crisis?

2. THEORETICAL FRAMEWORK

Risk, Return, and Resilience in Islamic and Conventional Stocks

The fundamental difference between Islamic and conventional stocks lies in the Shariah screening criteria regulated by Islamic financial authorities. Sharia stocks, as represented by the Indonesian Sharia Stock Index (ISSI), are selected based on Shariah principles that prohibit *riba* (interest), *maysir* (gambling), and excessive *gharar* (uncertainty), while excluding sectors considered non-*halal* such as interest-based banking, alcohol, and gambling (Anwer et al., 2023; Qoyum et al., 2024). In contrast, conventional stocks listed in the Jakarta Composite Index (IHSG) include all sectors without ethical restrictions. From the perspective of Modern Portfolio Theory (Markowitz), these sectoral exclusions may reduce diversification opportunities (Yaman & Tuncel, 2025). Yet, Arbitrage Pricing Theory (Ross) suggests that systematic risk dominates idiosyncratic risk in shaping long-term returns, implying that avoiding high-risk sectors may actually strengthen the risk-return profile of Islamic equities (Lone et al., 2024).

The flight-to-quality phenomenon is also relevant during periods of market turmoil. In times of crisis, investors tend to reallocate funds toward assets perceived as safer, including stocks with lower volatility and stronger fundamentals, attributes often associated with Islamic equities (Alam et al., 2021; Hasyim, Rusgianto, et al., 2024). From a behavioral finance viewpoint (Shiller, 2020), Islamic investors typically adopt long-term, values-driven portfolio strategies, making them less reactive to short-term noise and speculation. This psychological stability can enhance the price resilience of sharia stocks during episodes of global uncertainty, even though their sectoral diversification may be more limited than that of conventional stocks.

Despite these theoretical foundations, existing research provides mixed and fragmented evidence regarding the comparative resilience of Islamic and conventional stocks. Many studies examine only specific crises, most commonly the COVID-19 pandemic, without comparing how both markets respond across different types of global shocks (Bhutto et al., 2024; Modjo et al., 2025). Other studies focus narrowly on geopolitical or economic policy disturbances, and the results remain inconsistent regarding the relative stability of Islamic equities in periods of heightened uncertainty (Hasan et al., 2023; Salari et al., 2025).

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In addition, a large portion of the literature does not incorporate global uncertainty indicators such as VIX, EPU, oil prices, or global interest rates into volatility modelling, even though these variables significantly influence market behavior in emerging economies (Li et al., 2023; Valadkhani & O'Mahony, 2024). This situation creates an important gap in understanding whether the observed resilience of sharia stocks is consistent across health-related shocks, geopolitical conflicts, and trade policy disruptions, or whether such resilience is highly dependent on the specific type of crisis. By positioning these theoretical insights within a multi-event and multi-factor framework, the present study directly addresses this research gap by comparing the volatility dynamics of ISSI and IHSG under three major global shocks while integrating key global risk variables. Through this approach, the study provides clearer evidence on whether the structural characteristics of Islamic equities translate into measurable resilience across different categories of global uncertainty.

Market Responses to Health, Geopolitical, and Trade Policy Shocks

Within the Asset Pricing under Uncertainty framework by Merton, external shocks affect the risk premium demanded by investors, with the type of shock determining the magnitude and direction of market responses (Bretscher et al., 2023). Health crises such as the COVID-19 pandemic generate systemic demand shocks and supply chain disruptions, leading to a global economic downturn (Ginn & Saadaoui, 2025). In such contexts, sharia stocks may exhibit relative resilience due to their lower exposure to heavily affected sectors such as tourism, hospitality, and conventional banking.

Geopolitical shocks, such as the Russia–Ukraine war, have broad implications for global energy prices, inflation, and market uncertainty (Fang & Shao, 2022; Ullah et al., 2023). According to the Geopolitical Risk Transmission Theory (Caldara & Lacoviello, 2022), these effects are transmitted through trade channels, energy price fluctuations, and political risk, ultimately influencing capital markets. Similarly, trade policy shocks, such as the Trump tariff announcements, can be explained by International Trade Theory (Krugman & Obstfeld, 2009), which highlights how tariffs affect import costs, resource allocation, and growth expectations. In the context of Efficient Market Hypothesis (Fama, 1970), stock prices should react quickly to such events. However, in emerging markets like Indonesia, structural factors such as liquidity constraints and retail investor dominance can influence the speed and magnitude of market reactions (Ginn & Saadaoui, 2025; Nazlioglu et al., 2024).

Global Risk Factors and Volatility Transmission

The integration of the Indonesian stock market with global markets can be understood through Global Market Integration Theory, which explains how cross-border capital flows, international trade, and financial innovation strengthen linkages across markets (Endri et al., 2024). Global risk factors such as the Volatility Index (VIX), Economic Policy Uncertainty (EPU), oil prices, and global interest rates are critical determinants of stock price volatility (Hong et al., 2024; Nguyen et al., 2025; Shambaugh & Zhou, 2024; Valadkhani & O'Mahony, 2024). The VIX reflects expectations of U.S. equity market volatility as a global benchmark for risk, while the EPU index measures uncertainty in economic policy that shapes capital flow dynamics and investment decisions (Baker et al., 2020).

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Oil prices play a strategic role in shaping competitiveness and trade balances for oil-importing countries such as Indonesia (Dumrul & Kiliçarslan, 2020). U.S. Federal Reserve interest rate policies also influence global capital flows and exchange rates, which subsequently affect domestic stock markets (Goldberg & Krogstrup, 2023). Within the Conditional Volatility Theory framework (Bollerslev, 1986; Engle, 1982; Engle & Ng, 1993), GARCH-type models such as EGARCH or GARCH-X are widely employed to estimate volatility dynamics while incorporating these external variables. Integrating global risk factors into such models allows for examining whether Islamic and conventional stocks respond differently to global uncertainty, particularly during health crises, geopolitical tensions, and trade policy disruptions.

The notion of safe haven assets is crucial in this context. A safe haven is defined as an asset that either maintains or increases in value during periods of extreme market stress (D. Baur & Lucey, 2007). Gold is the most traditional example, but recent studies indicate that certain equity segments can also display safe haven characteristics under specific conditions (D. G. Baur & McDermott, 2010; Shahzad et al., 2019). In the Islamic finance literature, sharia-compliant equities are sometimes identified as partial safe havens due to their lower leverage, stronger balance sheet quality, and exclusion of speculative sectors (Hasan et al., 2023). However, empirical evidence on whether Islamic stocks consistently behave as safe havens across different shock types remains inconclusive. This makes the comparative assessment of ISSI and IHSG under multiple global shocks particularly relevant.

3. METHOD

This study analyzes the volatility dynamics of Islamic and conventional stocks in Indonesia using daily closing prices of the Indonesian Sharia Stock Index (ISSI) and the Jakarta Composite Index (IHSG). The sample period spans February 2019 to July 2025, providing a comprehensive window to observe both pre-event and post-event market behavior. The analysis focuses on three major global shocks, namely the COVID-19 pandemic on March 11, 2020, the Russia Ukraine war on February 24, 2022, and the Liberation Day Tariffs announced by President Donald Trump on April 5, 2025. These events represent distinct sources of global uncertainty arising from health crises, geopolitical conflict, and trade policy disruptions.

Given the substantial influence of such disturbances on emerging markets, the study employs the GARCH-X model to capture how volatility evolves over time while also responding to key global risk indicators. Unlike the standard GARCH framework, which relies solely on past shocks and previous volatility levels, this extended specification allows volatility to adjust to broader global conditions such as shifts in risk sentiment, policy uncertainty, energy prices, and international interest rates. This provides a more suitable framework for understanding market behavior during turbulent periods. When compared with ARIMA, which cannot represent time-varying volatility, and EGARCH, which focuses mainly on asymmetric responses, the GARCH-X approach offers clearer insight into how external shocks shape the volatility of Islamic and conventional stock markets.

Building on this framework, monthly returns are calculated as continuously compounded log returns$r_t = \ln(P_t) - \ln((P_{t-1})$, where P_t denotes the index closing price. To capture the influence of external shocks beyond local market movements, four global risk factors are included, namely the Chicago Board Options Exchange Volatility Index (VIX), the Global Economic Policy Uncertainty Index (EPU), Brent crude oil

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prices (OIL), and the U.S. Federal Funds Rate (FFR). These variables are selected because previous studies consistently show that they affect international capital flows, investor risk appetite, and volatility transmission in emerging markets (Bhat et al., 2024; Nguyen et al., 2025).

The econometric framework applies the GARCH-X(1,1) model, which extends the conventional GARCH process by incorporating these global risk variables directly into the variance equation (Bollerslev, 1986). The model specification for each index and crisis period is:

$$r_t = \mu + \sum_{i-1}^{p} \phi_i r_{t-i} + \varepsilon_t, \qquad \varepsilon_t \mid F_{t-1} \sim N(0, h_t)$$

$$h_t = \omega + \alpha\varepsilon_{t-1}^2 + \beta_1 h_{t-1}^2 + \delta_1 VIX_t + \delta_2 EPU_t + + \delta_3 Oil_t + \delta_4 FFR_t + \theta_5 D_{cov,t} + \theta_6 D_{rusukr,t} + \theta_6 D_{tariff,t}$$

where h_t is the conditional variance at time t; ω, α, and β are the constant, ARCH, and GARCH parameters, respectively; $\delta_1 - \delta_5$ capture the effects of global risk factors; $\theta_5 D_{cov,t}$, $\theta_6 D_{rusukr,t}$ and $\theta_7 D_{tariff,t}$ are event dummies equal to 1 during the respective shock periods and 0 otherwise. This setup allows the model to isolate both the immediate volatility shifts due to each crisis and the broader influence of external macro-financial variables.

Separate estimations are conducted for ISSI and IHSG for each of the three shocks, enabling direct comparison of volatility persistence $(\alpha + \beta)$ and exogenous shock sensitivities $(\delta_j, + \theta_k)$. The approach provides a robust platform to determine whether Islamic equities systematically demonstrate superior volatility resilience across different types of global turmoil.

4. RESULT AND DISCUSSION

Stationarity Test

A stationarity test was conducted to ensure that the time series data used in this study satisfy the fundamental assumptions of econometric analysis, particularly for volatility modeling based on the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) framework. The Augmented Dickey-Fuller (ADF) method was employed at both the level and first-difference forms. According to Gujarati & Porter (2009), non-stationary data may lead to spurious regression, producing biased coefficients and misleading test statistics.

As presented in Table 1, the results indicate that the ISSI and IHSG variables have probability values of 0.9087 and 0.6416, respectively, at the level form, suggesting non-stationarity at the 5% significance level. After applying first differencing, both become statistically significant (Prob. = 0.0000), implying that these indices are integrated of order one, I(1). A similar pattern is observed for OIL (Prob. level = 0.5049; Prob. first difference = 0.0000) and FFR (Prob. level = 0.7849; Prob. first difference = 0.0051), classifying them as I(1) processes. In contrast, VIX (Prob. = 0.0017) and EPU (Prob. = 0.0327) are already significant at the level form, indicating stationarity or I(0).

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Table 1 : Augmented Dickey-Fuller test statistic

	Level		1st Difference	
	t-Statistic	Prob.*	t-Statistic	Prob.*
ISSI	-0.3669	0.9087	-7.3025	0.0000
IHSG	-1.2658	0.6416	-8.2165	0.0000
d(IHSG)	-8.2165	0.0000	-8.9006	0.0000
d(ISSI)	-7.3025	0.0000	-8.3718	0.0000
VIX	-4.0937	0.0017	-10.9989	0.0001
EPU	-3.0742	0.0327	-4.7380	0.0002
OIL	-1.5465	0.5049	-7.7307	0.0000
FFR	-0.8948	0.7849	-3.7494	0.0051

These findings are consistent with Enders (2014), who noted that most financial market variables tend to be I(1) and therefore require transformation into returns or first differences before estimation in a volatility model. The difference in integration orders implies that I(1) variables must be differenced to avoid non-stationary variance issues, while I(0) variables can be directly included in the GARCH specification. In this study, ISSI, IHSG, OIL, and FFR will be used in return/first-differenced form, whereas VIX and EPU will remain in their original forms.

ARCH Effect Test

Following the stationarity test, the presence of autoregressive conditional heteroskedasticity (ARCH) effects was examined to determine the suitability of applying GARCH-type models. The Engle (1982) ARCH-LM test was employed on the residuals of the mean equation for both ISSI and IHSG, as reported in Table 2. The results show that for the ISSI model, the F-statistic (0.000332) and ObsR-squared statistic (0.000341) yield probability values of 0.9855 and 0.9853, respectively, well above the 5% significance threshold. Similarly, for the IHSG model, the F-statistic (0.090591) and ObsR-squared statistic (0.092926) also produce probability values of 0.7643 and 0.7605, indicating no statistically significant ARCH effects in either series.

Table 2 : Heteroskedasticity Test: ARCH

D(ISSI)			
F-statistic	0.000332	Prob. F(1,74)	0.9855
Obs*R-squared	0.000341	Prob. Chi-Square(1)	0.9853
D(IHSG)			
F-statistic	0.090591	Prob. F(1,74)	0.7643
Obs*R-squared	0.092926	Prob. Chi-Square(1)	0.7605

According to Brooks (2019), the absence of significant ARCH effects implies that volatility clustering is not present in the residuals, and a standard GARCH specification may not be strictly necessary. Nevertheless, in financial econometrics, GARCH-type models are often still applied for robustness and to capture potential time-varying volatility patterns, especially when dealing with return series in high-frequency or crisis periods (Bollerslev, 1986). In this study, despite the absence of strong ARCH effects, the GARCH framework will be retained to maintain methodological consistency and allow for volatility dynamics analysis.

GARCH Model Estimation Results

To examine the impact of global uncertainty and event-specific shocks on the volatility of Islamic equities, the GARCH(1,1) model was estimated for the Indonesian Sharia Stock Index (ISSI). This approach captures both short-term innovations (ARCH effects) and long-term persistence (GARCH effects) in volatility, while incorporating

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global risk factors and crisis dummies in the mean equation (Bollerslev, 1986; Engle, 1982). The results are summarized in Table 3.

Table 3 : GARCH(1,1) Estimation Results for ISSI (Model 1)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	132.8113	16.2805	8.1577	0.0000
VIX	-0.3067	0.1726	-1.7773	0.0755
EPU	0.0088	0.0196	0.4486	0.6537
OIL	0.7284	0.1234	5.9051	0.0000
FFR	4.5542	1.5092	3.0176	0.0025
COV	-2.7394	3.1019	-0.8832	0.3772
RUSUKR	0.4051	7.9311	0.0511	0.9593
TARIFF	35.9728	5.0276	7.1551	0.0000
Variance Equation				
C	9.1196	8.5163	1.0708	0.2842
RESID(-1)^2	0.2697	0.1451	1.8588	0.0631
GARCH(-1)	0.6072	0.1854	3.2759	0.0011
R-squared	0.8819	Mean dependent var		194.1695
Adjusted R-squared	0.8701	S.D. dependent var		23.9466
S.E. of regression	8.6298	Akaike info criterion		7.0822
Log likelihood	-265.2063	Schwarz criterion		7.4146
Durbin-Watson stat	0.7299	Hannan-Quinn criter.		7.2153

The results indicate that global and policy-related factors significantly influence ISSI returns. Oil prices (OIL) have a strong positive effect ($\beta = 0.7284$; $p < 0.01$), reflecting the resource-sensitive nature of the Sharia index, which benefits from rising commodity prices (Kot et al., 2024). Similarly, the Federal Funds Rate (FFR) exerts a significant positive influence ($\beta = 4.5542$; $p < 0.01$). This finding suggests that Sharia-compliant firms, characterized by low leverage and stronger reliance on domestic financing, are less vulnerable to U.S. monetary tightening, aligning with arguments in Lastauskas & Nguyen (2024).

Trade tariff shocks (TARIFF) also show a highly significant and positive effect ($\beta = 35.9728$; $p < 0.01$), confirming that protectionist measures provide a shield for domestically oriented sectors in the ISSI, consistent with Delener & Scheuing (2015) and Modjo et al. (2025). By contrast, the VIX exerts a negative but only marginally significant effect ($\beta = -0.3067$; $p = 0.0755$), which reflects the global flight-to-quality phenomenon during periods of heightened uncertainty (Hasan et al., 2023). Other variables, including EPU, COVID-19, and the Russia–Ukraine conflict dummy, are not statistically significant.

In the variance equation, both the ARCH effect ($\beta = 0.2697$; $p < 0.10$) and the GARCH effect ($\beta = 0.6072$; $p < 0.01$) are positive, indicating volatility clustering within the ISSI. This means that while short-term shocks contribute to fluctuations, long-term persistence plays a more dominant role in sustaining volatility over time, consistent with Brooks (2019). The relatively high adjusted R^2 (0.87) suggests strong explanatory power, validating the robustness of the model. Overall, these findings highlight the dual sensitivity of ISSI to commodity prices and trade policy, while also demonstrating structural resilience against global volatility shocks, reinforcing the view that Islamic equities may function as a partial safe haven under global uncertainty (Alam et al., 2021; Hasan et al., 2022).

Following the estimation of the ISSI model, a similar GARCH(1,1) specification was applied to the Jakarta Composite Index (IHSG) to assess the dynamics of the conventional equity market. This approach allows for direct comparison between Sharia-compliant and conventional stocks under the same global risk factors and crisis

events, thereby highlighting whether structural differences between the two markets influence their resilience to uncertainty (Bollerslev, 1986; Engle, 1982). The results are reported in Table 4.

Table 4 : GARCH(1,1) Estimation Results for IHSG (Model 2)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	4604.9630	228.1524	20.1837	0.0000
VIX	-9.1579	3.8208	-2.3969	0.0165
EPU	-0.1343	0.3494	-0.3845	0.7006
OIL	26.6745	2.1286	12.5314	0.0000
FFR	61.4173	20.6275	2.9775	0.0029
COV	-364.6143	55.5011	-6.5695	0.0000
RUSUKR	260.7317	116.8023	2.2322	0.0256
TARIFF	746.5667	126.5288	5.9004	0.0000
Variance Equation				
C	15866.5800	7645.4100	2.0753	0.0380
RESID(-1)^2	1.2347	0.3533	3.4945	0.0005
GARCH(-1)	-0.1939	0.0857	-2.2616	0.0237
R-squared	0.7997	Mean dependent var		6514.6120
Adjusted R-squared	0.7797	S.D. dependent var		729.0471
S.E. of regression	342.1872	Akaike info criterion		13.7418
Log likelihood	-524.9286	Schwarz criterion		14.0741
Durbin-Watson stat	0.4671	Hannan-Quinn criter.		13.8748

The estimation results reveal that IHSG returns are highly sensitive to global financial and geopolitical variables. Oil prices ($\beta = 26.6745$; $p < 0.01$) exert a strong positive impact, underlining the dependence of the conventional index on commodity market dynamics (Kot et al., 2024). The Federal Funds Rate ($\beta = 61.4173$; $p < 0.01$) also has a significant positive effect, suggesting that shifts in U.S. monetary policy strongly affect capital flows into Indonesian equities, consistent with the findings of Lastauskas & Nguyen (2024).

Meanwhile, global volatility measured by the VIX ($\beta = -9.1579$; $p < 0.05$) negatively influences IHSG returns, reflecting the vulnerability of conventional markets to heightened global risk sentiment (Sadat & Gormus, 2025). Event-specific shocks are also relevant: the COVID-19 dummy exerts a large and negative effect ($\beta = -364.6143$; $p < 0.01$), while the Russia–Ukraine conflict ($\beta = 260.7317$; $p < 0.05$) and trade tariff shocks ($\beta = 746.5667$; $p < 0.01$) show significant positive coefficients, indicating heterogeneous responses to geopolitical and trade-related uncertainty.

In the variance equation, both the ARCH effect ($\beta = 1.2347$; $p < 0.01$) and the GARCH effect ($\beta = -0.1939$; $p < 0.05$) are significant. The positive ARCH term indicates strong short-term volatility clustering, while the negative GARCH coefficient suggests that volatility persistence is less dominant in IHSG, implying rapid adjustments following market shocks (Brooks, 2019). The adjusted R^2 of 0.78 confirms that the model explains a substantial portion of variation in IHSG returns. Overall, these results underscore that IHSG is more exposed to global risk sentiment, monetary tightening, and health-related crises, making it less resilient to uncertainty compared to the structurally shielded ISSI (Alam et al., 2021; Hasan et al., 2022).

Research Findings

The GARCH(1,1) estimation results for the Indonesian Sharia Stock Index (ISSI) and the Jakarta Composite Index (IHSG) demonstrate that both Sharia-based and conventional segments of the Indonesian capital market are strongly influenced by global external factors, particularly market volatility as captured by the CBOE Volatility

Index (VIX). An increase in the VIX, reflecting heightened global uncertainty, significantly depresses the performance of both indices. This result is consistent with Sadat & Gormus (2025) and Li et al. (2023), who confirm the VIX as a primary proxy for global risk sentiment in emerging markets. Such a pattern reflects the flight-to-quality phenomenon, where global investors reallocate portfolios toward perceived safe assets when uncertainty rises, thereby exerting downward pressure on domestic equities (Ngono, 2022).

For ISSI, however, trade tariff policies produced a positive effect on market performance. This was particularly evident during the protectionist era of President Donald Trump, when import restrictions acted as a shield for domestic-oriented sectors prominent in the ISSI, such as consumer staples and energy firms with low reliance on global supply chains. This finding resonates with Delener & Scheuing (2015), who argue that protectionism can, under certain circumstances, enhance the resilience of domestic industries, as well as with Modjo et al. (2025), who note that Sharia-compliant markets rooted in domestic production and consumption bases are more robust to external shocks. For IHSG, the Federal Funds Rate (FFR) exerted a significant positive effect, underscoring the sensitivity of conventional equities to shifts in global monetary policy that affect capital flows and exchange rate dynamics, consistent with Lastauskas & Nguyen (2024).

From a volatility perspective, both indices exhibit persistence, meaning that volatility tends to endure after shocks, with stronger intensity observed in IHSG compared to ISSI. This divergence likely reflects differences in sectoral structures and investor bases: ISSI's exclusion of interest-based banking, alcohol, and tobacco (Wahyono, 2023), combined with its more long-term-oriented investor profile, supports faster shock absorption. In contrast, IHSG's greater sectoral diversification is coupled with heavier exposure to foreign capital flows, which prolongs volatility cycles (Salari et al., 2025).

The inclusion of event dummies provides further insights into crisis-specific impacts. The COVID-19 pandemic exerted a highly significant negative effect on both indices, consistent with Bhutto et al. (2024) and Hasan et al. (2022), who identify it as a systemic global shock driven by supply chain disruptions, collapsing demand, and prolonged uncertainty. However, the decline in ISSI was relatively milder, attributable to Sharia screening that limits exposure to sectors most affected by the pandemic, such as tourism, conventional banking, and air transportation. The Russia–Ukraine conflict imposed strong downward pressure on IHSG through surging energy prices, imported inflation, and tighter monetary policy responses, while its impact on ISSI was more contained due to domestic energy sector gains from higher commodity prices (Kot et al., 2024). Trade tariffs, meanwhile, showed a positive and significant influence on both indices, but the effect was far stronger for IHSG, reflecting its greater exposure to globally integrated industries and its sensitivity to protectionist measures (Salari et al., 2025).

Overall, the findings confirm that global uncertainty, monetary policy, and major external shocks, ranging from pandemics to geopolitical conflicts and trade disruptions, remain central determinants of Indonesian equity market dynamics. Nonetheless, ISSI demonstrates unique structural attributes that provide relative resilience, particularly in absorbing volatility linked to trade policy and commodity price shifts, and in recovering more rapidly than IHSG. These characteristics hold important strategic implications, suggesting that Sharia equities can serve as a stabilizing component within portfolio risk

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management during episodes of global turbulence, consistent with the literature positioning Sharia-compliant assets as a partial safe haven (Hasan et al., 2023).

The conditional variance (CV) estimated from the GARCH(1,1) models provides further insights into the volatility dynamics of ISSI and IHSG under major global shocks.

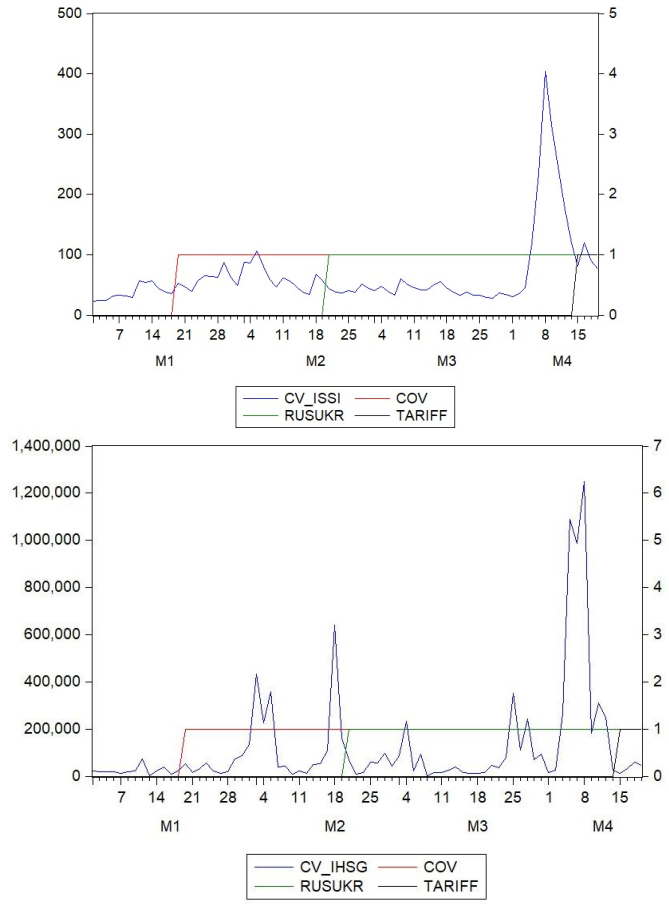

Figure1. Conditional Variance with COV, RUSUKR, and TARIFF dummies

For ISSI, the conditional variance remains relatively contained throughout most of the sample, with notable spikes during the onset of the COVID-19 pandemic (COV) and the announcement of trade tariff policies (TARIFF). Although these shocks triggered visible increases in volatility, the spikes quickly dissipated, reflecting the Sharia market's faster mean reversion and stronger capacity to absorb external disturbances. This pattern is consistent with the structural features of Sharia-compliant equities, which exclude sectors most vulnerable to global crises, such as conventional banking, tourism, and alcohol, thereby reducing prolonged exposure to systemic risk (Modjo et al., 2025; Wahyono, 2023).

In contrast, the conditional variance of IHSG displays much larger and more recurrent fluctuations. Volatility surged sharply during the COVID-19 pandemic and spiked again following the Russia–Ukraine conflict (RUSUKR). Furthermore, IHSG reacted more strongly to trade tariff announcements compared to ISSI, highlighting its greater sensitivity to global policy shifts. This heightened sensitivity can be explained by the composition of IHSG, which includes sectors that are highly leveraged, heavily exposed to global supply chains, and dependent on foreign capital flows. These sectors transmit global shocks more directly into domestic volatility because changes in global interest rates, commodity prices, or geopolitical risk quickly affect their financing costs,

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production structures, and export performance. As a result, external shocks tend to persist longer in the volatility dynamics of IHSG (Salari et al., 2025).

Taken together, these conditional variance patterns confirm the comparative resilience of ISSI relative to IHSG. While ISSI exhibits quicker mean reversion and less prolonged volatility clustering, IHSG is more exposed to repeated and extended fluctuations during global crises. The implication is that conventional equities carry a higher degree of vulnerability to international turbulence, which can complicate risk management strategies for investors and policymakers. For portfolio managers, this means that IHSG-linked assets may require more frequent hedging or rebalancing during periods of elevated global risk. For regulators, the greater susceptibility of IHSG underscores the importance of strengthening macroprudential frameworks that can stabilize capital flows and mitigate spillover effects from external shocks. This visual evidence strengthens the earlier findings that Sharia equities can serve as a partial safe haven in times of heightened uncertainty (Hasan et al., 2023).

Limitations and Future Research Directions

This study is subject to several limitations that should be acknowledged. First, the analysis focuses exclusively on two representative indices of the Indonesian equity market (ISSI and IHSG) over a specific sample period. While this approach yields valuable insights into the comparative dynamics of Sharia-compliant and conventional markets, it does not fully capture sectoral or firm-level heterogeneity. Future studies could adopt a disaggregated approach, incorporating sectoral or firm-level data to identify differences in sensitivity to global shocks across industries.

Second, the modeling framework relies on the standard GARCH(1,1) specification. Although this model effectively captures volatility persistence (Bollerslev, 1986), it does not account for potential asymmetries in market responses to positive versus negative shocks. Incorporating asymmetric volatility models such as EGARCH or TGARCH would allow for a deeper understanding of volatility transmission, particularly in differentiating leverage effects from risk-aversion-driven volatility spikes (Okpara & Henry, 2025).

Third, while the inclusion of dummy variables for major global events (COVID-19, the Russia–Ukraine conflict, and Trump-era tariffs) enriches the analysis, the study does not explicitly address cross-asset spillovers from bonds, commodities, or currencies. Given the interconnectedness of global financial markets, future research could integrate multi-asset spillover and connectedness models, such as the Diebold–Yilmaz framework, to examine contagion effects between Sharia-compliant and conventional equity segments (Diebold & Yilmaz, 2012).

Fourth, the analysis adopts a domestic market perspective, emphasizing the influence of global macroeconomic and geopolitical factors on Indonesia's capital market. However, it does not explicitly test for feedback loops whereby domestic shocks may propagate into global markets. Future studies could employ bidirectional causality tests or global vector autoregression (GVAR) models to assess Indonesia's dual role as both a recipient and transmitter of financial shocks (Hendrati et al., 2023). Finally, the study does not incorporate behavioral finance dimensions, such as investor sentiment and herding behavior, which may amplify volatility under global uncertainty. Combining econometric volatility models with sentiment indices derived from news or social media analytics could provide richer insights into the behavioral underpinnings of market fluctuations.

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5. CONCLUSION

This study provides comparative evidence on the resilience of Sharia and conventional stock markets in Indonesia to global uncertainty during the period 2019–2025. The results confirm that both the Indonesian Sharia Stock Index (ISSI) and the Jakarta Composite Index (IHSG) are significantly influenced by global shocks, with uncertainty captured by the VIX emerging as a dominant driver of price fluctuations. The analysis of three major episodes (the COVID-19 pandemic, the Russia–Ukraine conflict, and the Trump-era tariff policy) shows that although both markets were adversely affected, they exhibited distinct adjustment patterns.

The ISSI demonstrated relatively stronger resilience, characterized by lower volatility persistence and faster stabilization aftershocks. This resilience reflects its structural features, including the exclusion of highly leveraged and interest-sensitive sectors, which provide a degree of insulation during turbulent periods. Trade-related protectionist measures were found to positively influence both indices, but the effect was particularly beneficial for the ISSI, as its composition is dominated by domestically oriented firms with limited reliance on global supply chains. In contrast, the IHSG displayed greater sensitivity to global monetary policy, particularly changes in the U.S. Federal Funds Rate, which amplify capital flow volatility and exchange rate pressures. Although tariffs also boosted IHSG, the index remained more exposed to prolonged volatility triggered by global monetary and geopolitical shocks.

Overall, the findings highlight that while Islamic equities are not immune to global crises, their underlying principles and structural characteristics enable more effective adjustment to prolonged uncertainty compared to conventional equities. This comparative evidence underscores the strategic role of Sharia capital markets as a stabilizing component in emerging economies. Policymakers are therefore encouraged to promote the development of Sharia-compliant sectors with low debt dependency and strong domestic linkages, while investors may consider Islamic equities as a valuable complement for portfolio diversification. Furthermore, aligning macroprudential regulation with Islamic finance principles could enhance systemic resilience in the face of escalating global uncertainty.

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