International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)

International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS Journal) | ISSN (e): 2808-4713
Volume 6 No. 6 (2026)

US TRADE POLICY UNCERTAINTY AND INDONESIAN SYARIAH STOCK VOLATILITY: A COMPARISON OF ISSI AND IHSG

Eddo Nanda Oktarici[1], Winda Dwi Yanthi[2]
Politeknik Negeri Batam[1], Sekolah Tinggi Ilmu Ekonomi Cirebon[2]
Penulis Korespondensi: Eddonanda@polibatam.ac.id

Received: 04//08/2026 | **Revised:** 15/08/2026 | **Accepted:** 02/09/2026 | **Published:**29/10/2026

Abstract

This study examines whether uncertainty surrounding United States trade policy contributes to stock market volatility in Indonesia and whether the Indonesia Sharia Stock Index (ISSI) responds differently from the broader Jakarta Composite Index (IHSG). The study uses monthly data from January 2021 to December 2025, providing 60 observations for each index. Monthly volatility is measured as the standard deviation of daily logarithmic returns within each month. The analysis employs dynamic regressions with heteroskedasticity- and autocorrelation-consistent (HAC) standard errors, supplemented by a paired moving-block bootstrap, while controlling for volatility persistence, the VIX, S&P 500 returns, and movements in the Indonesian rupiah exchange rate. In the level specification, trade policy uncertainty has a positive coefficient for both indices. However, this finding is not robust: the uncertainty proxy does not satisfy the stationarity diagnostics, and the bootstrap confidence intervals include zero. When the model is estimated in first differences, the uncertainty coefficients are statistically insignificant. A direct comparison of the ISSI and IHSG coefficients also reveals no convincing difference in their sensitivity. These findings challenge the assumption that Sharia-screened equities provide investors with greater protection against trade policy uncertainty than the overall market. The study contributes a side-by-side assessment that combines volatility measures constructed from daily data, explicit time-series diagnostics, and a direct test of the coefficient difference. For portfolio management, the findings highlight the need to consider the shared international risk exposures of both indices rather than assuming that Sharia screening alone insulates equities from trade policy uncertainty.

Keywords: *trade policy uncertainty* ; stock volatility; Islamic equities; international financial markets.

INTRODUCTION

Changes in the direction of US trade policy can impact the Indonesian stock market through several interrelated channels. Shifting expectations regarding tariffs and trade barriers have the potential to alter export demand, import input costs, exchange rate movements, and the discount rates used by investors to value companies. In an integrated market, external shocks extend beyond trade flows to influence asset pricing through changes in risk perceptions. Endri et al. (2024) place the interconnectedness of the Indonesian market with partner markets as a crucial context for stock price dynamics, while Liu et al. (2025) demonstrate that the impact of trade uncertainty can vary depending on the characteristics and exposure of individual companies. Therefore, trade policy uncertainty (TPU) is relevant to study as a source of external risk contributing to Indonesian stock market volatility.

This relevance applies not only to the stock market as a whole, but also to stocks that have undergone Sharia screening. Compliance screening limits certain business activities and financial structures, but does not automatically eliminate an issuer's dependence on export sales, imported raw materials, international financing, or foreign exchange transactions. Therefore, investors in the Indonesia Sharia Stock Index (ISSI) remain exposed to global risk channels that also impact the Jakarta Composite Index (JCI). The practical issue is not simply whether TPU is related to the volatility of the two indices, but rather whether the characteristics of Sharia screening produce significantly different sensitivities. Answering this question is crucial to ensure that diversification and risk management decisions are not based on the assumption that Sharia status automatically provides stronger protection against trade policy shocks.

The literature comparing Islamic and conventional stock markets has not yet produced consistent conclusions. Some studies identify differences in the performance and movement patterns of the two index groups during periods of market stress, but these differences are highly dependent on the type of shock and the observation period. Alamgir and Cheng (2023), for example, compared the dynamics of Islamic and conventional indices during the pandemic, while Aslam et al. (2023) showed that the relationship between economic policy uncertainty and the two market groups is complex. In the Indonesian context, Indarwati and Widarjono (2021) also found that volatility responses to macroeconomic conditions have different characteristics. These findings suggest that the resilience of Islamic stocks cannot be treated as a universal property; conclusions are influenced by uncertainty proxies, index coverage, model specifications, and the study period.

Studies more closely related to this research context have also directly compared the Islamic market and the Indonesian stock market. Indarta and Setiawan (2025) used the GARCH-X model for the 2019–2025 period and reported the resilience of Islamic stocks in the face of global uncertainty. Mashilal et al. (2023), using the VECM approach, examined the relationship between global economic policy uncertainty and the Indonesian Islamic stock market. At the international level, Tabash et al. (2024, 2025) showed that the transmission and linkage patterns of uncertainty in the Islamic markets of the Gulf countries vary by market and analysis conditions. Taken together, this literature confirms that the impact of uncertainty is not homogeneous. However, results obtained from global uncertainty in general, the Gulf markets, or models focusing on long-term relationships cannot directly explain the differences in the average monthly coefficients of the ISSI and the IHSG on TPU in Indonesia.

Based on this mapping, the research gap lies in the lack of conclusive evidence regarding whether the ISSI and the JCI exhibit statistically different sensitivities to trade policy uncertainty in particular. Previous research has provided important insights into the resilience of Islamic stocks, economic policy uncertainty, and intermarket connectivity, but sensitivity comparisons can be misleading if based solely on the significance of coefficients in two separate models. Furthermore, volatility persistence, time series stationarity, and interdependence between the two indices need to be considered to ensure that differences in response do not simply reflect data characteristics or specification choices. The limited number of monthly observations also necessitates the use of parameter-efficient models and robustness tests that avoid introducing moderators or mediators without empirical measures that directly represent their mechanisms.

This study aims to examine the relationship between TPU and ISSI and JCI volatility during 2021–2025 and directly assess whether the sensitivity of the two indices differs. The novelty of the study lies in combining three analytical elements: constructing monthly volatility from daily logarithmic returns, testing coefficient differences using paired moving-block bootstrapping, which preserves intermarket dependencies, and evaluating the consistency of the results after checking for stationarity. Theoretically, this study clarifies the limits of the argument regarding the resilience of Islamic stocks by subjecting them to specific trade policy shocks, rather than to general global uncertainty. Methodologically, this study distinguishes between exploratory evidence from level models and evidence derived from changes in uncertainty to ensure that conclusions are not dependent on a single, seemingly significant specification. Practically, the results are expected to help investors assess whether Sharia screening actually changes exposure to international trade risk, or whether the two indices still require comparable external risk management strategies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Uncertainty mechanisms and risk premiums

The political uncertainty and risk premium framework explains that asset prices can change when investors face uncertainty about future cash flows and discount rates. Pástor and Veronesi (2013) show that uncertain government decisions encourage investors to incorporate policy risk into the risk premium. In international trade, policy uncertainty widens the range of expected revenues, costs, and timing of corporate investments. Consistent with this argument, Caldara et al. (2020) link trade uncertainty to changes in economic activity, while Bretscher et al. (2023) assert that the risk premium is one channel that shapes the economic response to uncertainty shocks.

Stock price adjustments can occur before earnings changes are fully reflected in company reports. Uncertainty about tariffs and market access not only affects the magnitude of expected earnings but also widens the distribution of investor expectations. When valuations differ across investors and portfolios are adjusted simultaneously, the variation in returns within a single month can potentially increase. However, if the market reacts strongly at the onset of an event, the effect observed one month later may appear weaker. This framework thus provides a basis for inferring a positive relationship, without requiring that every proxy, timeframe, and index produce a uniform coefficient.

In this study, the framework is used to explain the possible mechanisms at work, not to suggest that all transmission channels have been identified. Index-level data do not capture changes in export orders, import contract structures, or individual firm risk premiums. Therefore, the regression results should be read as conditional associations between variables, not as separate measures of the contribution of each business channel.

2.2. Trading uncertainty and stock volatility

Trade uncertainty can drive volatility as investors reassess the prospects of companies exposed to international markets. For exporters, uncertainty primarily stems from changes in demand and market access; for importers, pressures can arise through input costs and exchange rate fluctuations. These changes then translate into a company's cash flow forecasts and financing needs. Liu et al. (2025) show that firm-level exposure contributes to the relationship between trade uncertainty and volatility. Meanwhile, Tabash et al. (2024, 2025) show a similar relationship in the Islamic stock market.

The magnitude of this relationship may change once global financial conditions are taken into account. Trade uncertainty often coexists with changes in risk perception, commodity prices, and capital flows, making the influence of each factor difficult to separate without adequate controls. Sheikh et al. (2024), Bouri et al. (2024), and Hoque et al. (2024) show that risk correlations are not always consistent across markets, across quantiles, or across crisis periods. Therefore, the research model includes the VIX, S&P 500 returns, and exchange rate changes to limit the confounding of observable risk sources. Oil prices are used in additional tests to maintain parameter parsimony in the main specification.

H_1: Uncertainty about United States trade policy has a positive relationship with the volatility of ISSI and IHSG.

2.3. Differences in sensitivity of the sharia index and the aggregate market

The Sharia screening process results in a composition of issuers that differs from the aggregate market. Restrictions on business sectors and financial ratios can alter the sectoral weightings and funding characteristics of companies included in the index. However, these differences in composition do not necessarily determine the direction of sensitivity to trade policy. Sharia issuers may still generate revenue from exports, use imported inputs, or be dependent on commodity prices. Therefore, Sharia screening may mitigate certain types of risks but does not necessarily eliminate exposure to others.

The evidence regarding the resilience of Islamic stocks presented by Indarta and Setiawan (2025) does not necessarily mean that the TPU coefficient on the ISSI is necessarily smaller than the coefficient on the JCI. Variance persistence, average volatility, and sensitivity to certain factors measure different aspects. The findings of Indarwati and Widarjono (2021) and Aslam et al. (2023) also suggest that the comparison between Islamic and aggregate markets is highly dependent on the context of the observation. Therefore, this study uses a two-way difference hypothesis to prevent the analysis from initially assuming that one index is superior.

As an aggregate market index, the JCI also includes stocks that meet Sharia criteria. Due to overlapping constituents, the comparison of the ISSI and the JCI is not a comparison of two completely independent portfolios. This similarity can strengthen the volatility correlation while narrowing the response differences between the two indices. Therefore, testing the coefficient differences requires maintaining the correlation between the ISSI and the JCI in the same month. Simply comparing the p-values of two separately estimated regressions is insufficient to test for such differences.

H_2: The sensitivity of volatility to trade policy uncertainty differs between ISSI and IHSG.

RESEARCH METHODS

3.1. Research design, object selection, and observation period

This study uses a quantitative explanatory design based on secondary time-series data to examine the dynamic relationship between US trade policy uncertainty and Indonesian stock volatility. The ISSI was purposively selected to represent the Islamic stock market, while the JCI represents the aggregate market. The unit of observation is the trading month. All data from January 2021–December 2025 that met the measurement requirements were used without random sampling between months.

Each equation uses 60 monthly observations. The ISSI and JCI models are not treated as 120 independent observations because they are compiled from the same month and the two markets are interconnected. Data from November–December 2020 are used only to generate initial values for returns, lagged volatility, and variable changes. The main model still covers 60 months, while specifications requiring additional lags use 59 observations.

The closing prices of the ISSI, JCI, and S&P 500 are obtained from Investing.com. The VIXCLS and DCOILBRENTEU are sourced from FRED, the TPU uses the Caldara et al. (2020) index, and the rupiah exchange rate per US dollar uses JISDOR. The analysis is limited to December 2025 and uses one historical version of each series. Replication archives must include the version and download date of the file [DATA NEEDED: version and download date].

3.2. Variable construction and data examination

Before merging, all series were standardized based on date format, decimal separator, chronological order, and units. Duplicate and consistent ISSI–IHSG dates were checked, resulting in 1,207 daily returns for each index. Missing prices were not interpolated, while valid extreme observations were retained without winsorization. The official trading calendar was used as a verification reference.

Daily returns are calculated as 100 times the natural logarithm of the ratio of the closing price to the previous trading day. Monthly volatility is the sample standard deviation of all daily returns for the month, expressed as a daily percentage and not annualized. The natural logarithm of volatility is used as the dependent variable to reduce the skewness of the distribution.

$$r_{i,d} = 100 \ln(P_{i,d} / P_{i,d-1}); \sigma_{i,t} = SD(r_{i,d} : d \in t); Y_{i,t} = \ln(\sigma_{i,t}) \quad (1)$$

TPU is transformed into ln(1 + TPU) and then standardized using the mean and standard deviation for January 2021–December 2025. The same parameters are applied to the underlying data before the main period. The zTPU coefficient indicates the log change in volatility associated with a one-standard-deviation increase in the TPU transformation. This index measures the intensity of trade uncertainty news coverage, not actual tariffs.

Table 1. Operational definitions of variables

Variables	Proxy or formula	References and sources
Volatility (σ; Y)	σ = SD daily return; Y = ln σ	Construction research; Investing.com price
Trade uncertainty	zTPU = [ln(1 + TPU) − μ] / s; μ and s from 2021–2025	Caldara et al. (2020); TPU file
Global risks	ln VIX; VIX = daily average per month	FRED VIXCLS; context Bouri et al. (2024)
US market yields	$RSP = 100 \ln(SP_t / SP_{t-1})$	Investing.com; context Endri et al. (2024)
Exchange rate changes	$RFX = 100 \ln(FX_t / FX_{t-1})$; FX in IDR/USD	JISDOR files; Danila's context (2023)
Oil changes	$ROIL = 100 \ln(Brent_t / Brent_{t-1})$	FRED DCOILBRENTEU; context Bouri et al. (2024)

Source: Processed Data (2026)

The monthly VIX is calculated from the average of daily observations and transformed by the natural logarithm. S&P 500 returns, Brent changes, and JISDOR are calculated using 100 times the log difference of the end-of-month values. A positive RFX indicates rupiah depreciation. All external variables are entered with a one-month lag to capture delayed relationships, although differences in trading calendars may affect the uniformity of end-of-month information.

3.3. Econometric specifications

The ISSI and IHSG equations are estimated separately using ordinary least squares (OLS). M1 includes lagged log volatility and zTPU; M2 adds ln VIX; M3 includes S&P 500 returns and exchange rate changes; and M4 adds Brent changes. M3 is the primary specification because it controls for global and exchange rate risks without using too many parameters.

$$Y_{i,t} = \alpha_i + \rho_i \varepsilon_{i,t} \quad (2)$$

In Equation (2), i denotes the index and t denotes the month. The parameter ρ measures the log volatility persistence, while β measures the lagged conditional association of zTPU. Inference uses the Newey–West HAC covariance with a Bartlett kernel, three lags, n/(n − k) correction, and a t-distribution with n − k degrees of freedom (Newey & West, 1987). The HAC does not address nonstationarity or endogeneity.

Stationarity is checked using augmented Dickey–Fuller (ADF) and KPSS using constants. The ADF lag is selected through AIC with a maximum of four lags, while the KPSS uses 11 lags. Because the TPU level exhibits stationarity issues, the additional specification S1 retains the log volatility at the level, but uses the first change in zTPU and ln VIX. S1 is set after diagnostics and is not pre-registered.

$$Y_{i,t} = \alpha_i + \rho_i \varepsilon_{i,t} \quad (3)$$

The β coefficient in S1 measures the relationship of lagged TPU changes to log volatility, so its estimate differs from M3. Given the short sample size, the ADF and KPSS results should not be used to definitively assert that TPU has a unit root.

3.4. Hypothesis testing and robustness of results

H_1 is evaluated based on the direction of β and confidence intervals at a 5% significance level, while H_2 is tested through the difference between βISSI and βIHSG. Time and intermarket dependencies are maintained using paired moving-block bootstrapping with 2,000 iterations. The length of the six-month main block is re-examined with three- and twelve-month blocks. The 95% percentile interval is calculated following the Künsch (1989) principle, with a seed of 20261017 for replication.

Diagnostics include three-lag Breusch–Godfrey, Koenker–Breusch–Pagan, CUSUM, variance inflation factor, and Cook's distance. The robustness of the results is checked through alternative TPU transformations, lag changes, 2025 expenditures, and differencing of the level variables. All fixed specifications are reported to reduce selection of results based on significance. The analysis was performed using [DATA NEED: software, version, and main package].

3.5. Research ethics and data traceability

The study uses secondary index- and market-level data without involving human participants, personal information, or intervention; therefore, informed consent is not required. Traceability is maintained through source documentation, data cleaning, variable transformation, model specification, and bootstrap parameters. Shareable code and data should be archived along with source metadata [DATA NEEDED: ethical clearance status or institutional exemption statement, if required by the journal].

RESULTS AND DISCUSSION

4.1. Characteristics of volatility and uncertainty

Descriptive statistics in Table 2 show that the ISSI's average monthly volatility (0.835%) is nearly identical to the JCI's (0.839%). The JCI's standard deviation is slightly larger, but the difference is too small to suggest that one index is consistently more resilient to market pressures. Both distributions are also skewed to the right, indicating that the average is influenced by several highly volatile months. Therefore, risk comparisons cannot be made solely based on average values; time patterns and extreme observations must also be considered.

Table 2. Descriptive statistics for the period 2021–2025

Variables	Average	Elementary School	Minimum	Maximum
σ ISSI (%)	0.835	0.352	0.460	2,413
σ IHSG (%)	0.839	0.384	0.386	2,579
TPU	165,674	217,598	33,893	1151,356
zTPU	0,000	1,000	-1,088	2,636
ln VIX	2,935	0.232	2,539	3,465
RSP (%)	1,000	4,361	-9,805	8,720
RFX (%)	0.283	1,625	-5,170	3,637
ROIL (%)	0.301	7,985	-19,780	17,867

Source: Processed Data (2026)

TPU exhibits a very wide range, from 33.893 to 1,151.356, with a standard deviation exceeding the mean. This pattern indicates that trade uncertainty during 2021–2025 is concentrated in a few specific episodes, rather than evenly distributed across the sample. The ln(1 + TPU) transformation helps reduce the significant value dominance, but does

not eliminate the possibility of regime change. At the same time, the correlation between the raw volatility of the ISSI and the JCI reached 0.948. This closeness is reasonable given that both indices operate in the same domestic macroeconomic environment and some Islamic stocks are also constituents of the JCI. These descriptive findings provide a reason not to assume that Islamic screening produces entirely separate risk patterns.

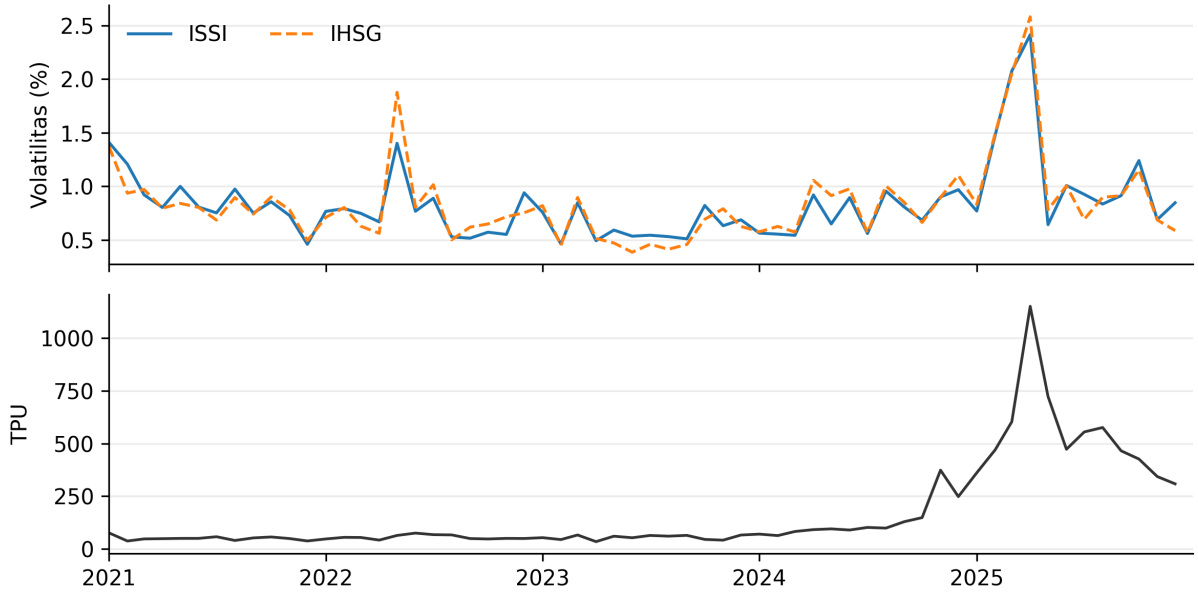


Figure 1. Monthly volatility and TPU during 2021–2025

Source: processed data (2026)

Figure 1 places April 2025 as the peak for TPU, VIX, and volatility for both indexes in the sample. This temporal similarity is descriptively interesting, but cannot be directly used to explain the model coefficients because the main specification uses TPU lagged by one month. Consistent with this lag structure, May 2025 actually has the largest Cook distance on M3 for both the ISSI and the JCI. This observation is retained because it represents a market episode that actually occurred. However, the magnitude of the effect of a single episode suggests that the conclusions need to be examined with alternative specifications and samples that are less dependent on 2025.

4.2. Time series characteristics and model diagnostics

Before interpreting the regression coefficients, the characteristics of the time series need to be examined. Table 3 shows relatively consistent results for log volatility: the ADF rejects the unit root hypothesis for the ISSI (p = 0.0090) and the JCI (p = 0.0233), while the KPSS does not reject stationarity. A different picture emerges for zTPU. The ADF does not reject the unit root (p = 0.8729), while the KPSS rejects stationarity at the 5% level (p = 0.0480). For ln VIX, the results of the two tests are not completely aligned. With only 60 observations, the combined results are more appropriately read as a warning against the level model than as a final diagnosis of the data-generating process.

Table 3. Stationarity check

Level variables	ADF (p)	ADF Lag	KPSS (stat.)	KPSS (p)
ln σ ISSI	0.0090	1	0.1721	>0.10
ln σ IHSG	0.0233	1	0.1589	>0.10
zTPU	0.8729	1	0.4718	0.0480
ln VIX	0.0620	0	0.2474	>0.10
RSP	<0.0001	0	0.1442	>0.10
RFX	<0.0001	3	0.0835	>0.10
ROIL	<0.0001	0	0.3908	0.0811

Source: Processed Data (2026)

The non-stationarity of zTPU leaves open the possibility that the rate model coefficients capture long-lasting shifts or concerted trends, rather than stable short-term relationships. HAC standard errors can improve inference when residuals are heteroscedastic or autocorrelated, but do not eliminate pseudo-regression due to the nature of the series. On that basis, M3 is retained as an economically relevant preliminary result, while S1 is used to assess whether the conclusions hold when uncertainty is expressed in changes. This strategy does not establish the change model as the only correct model; its function is to test how sensitive the findings are to the way the variables are formed.

Table 4. Regression diagnostics

Model / index	BG (p)	BP (p)	CUSUM (p)	Max VIF
M3 / ISSI	0.6165	0.0081	0.2635	1,629
M3 / IHSG	0.4947	0.1889	0.4727	1,700
S1 / ISSI	0.5771	0.0929	0.1245	1,419
S1 / IHSG	0.6963	0.2238	0.1866	1,418

Source: Processed Data (2026)

Note: BG = Breusch–Godfrey three lags; BP = Koenker–Breusch–Pagan. VIF does not include constants.

The diagnostic results in Table 4 show no detectable residual autocorrelation at the 5% level for M3 or S1. The maximum VIF is below 2, and CUSUM does not reject parameter stability. However, Koenker–Breusch–Pagan rejects homoscedasticity in M3 ISSI (p = 0.0081), thus requiring the use of HAC covariance. In S1 ISSI, the p-value of the same test increases to 0.0929. Overall, the diagnostics do not reveal a complete breakdown of the model, but they also do not eliminate limitations due to the short sample size, heteroscedasticity in one of the equations, and influential observations.

4.3. Relationship between TPU and volatility and H_1 evaluation

In the main M3 specification, lagged zTPU has a coefficient of 0.1058 for the ISSI (p HAC = 0.0153) and 0.0907 for the JCI (p HAC = 0.0347). After regressing from logarithmic form, a one standard deviation increase in ln(1 + TPU) is associated with approximately 11.16% higher volatility for the ISSI and 9.49% higher volatility for the JCI, holding other variables constant. The model's apparent power is limited: adjusted R^2 is 0.2291 and 0.2937, respectively. Thus, M3 provides initial evidence in the direction of H_1, but most of the variation in volatility still comes from factors not captured in the model. These magnitudes should also be understood as conditional associations, not causal effects.

Table 5. Model estimates of levels and changes in uncertainty

Variables	M3 ISSI	M3 IHSG	S1 ISSI	S1 IHSG
Constant	0.0624 (0.9228)	0.2228 (0.6775)	-0.1086 (0.0754)	-0.1038 (0.0679)
Lag ln σ	0.2798 (0.0912)	0.3617 (0.0205)	0.5083 (0.0005)	0.5228 (0.0010)
TPU / ΔTPU	0.1058 (0.0153)	0.0907 (0.0347)	0.0092 (0.9385)	0.0501 (0.7212)
ln VIX / Δln VIX	-0.0758 (0.7189)	-0.1235 (0.4851)	-0.7072 (0.0255)	-0.6185 (0.0843)
RSP pending	-0.0154 (0.1673)	-0.0255 (0.0590)	-0.0212 (0.0503)	-0.0311 (0.0229)
RFX delayed	0.0015 (0.9465)	0.0167 (0.4759)	0.0131 (0.6491)	0.0259 (0.3815)
Adj. R^2	0.2291	0.2937	0.2212	0.2828
Observation	60	60	60	60

Source: Processed Data (2026)

Note: cells containing HAC coefficients and p-values are in parentheses. TPU in M3 = zTPU; TPU in S1 = ΔzTPU. All explanatory variables use a one-month lag. S1 is an additional specification after the diagnostics.

Economically, this positive trend can be explained by revisions in cash flow expectations and risk premiums. When the direction of trade policy becomes less certain, investors face a wider range of expectations regarding export demand, imported input costs, exchange rates, and investment timing. This mechanism aligns with Pástor and Veronesi (2013),

Caldara et al. (2020), and Bretscher et al. (2023), who posit uncertainty and risk premiums as channels for valuation changes. Evidence from Liu et al. (2025) on the importance of corporate exposure and Septiara et al.'s (2026) discussion of issuer financial characteristics also suggest that the aggregate impact is likely heterogeneous. However, because this study uses an index, the relative contributions of the cost, revenue, financing, and sector composition channels cannot be separated.

The agreement between the coefficient signs and the theory is not sufficient to assert that H_1 has strong support. The bootstrap interval of M3 encompasses zero, namely −0.0983 to 0.3009 for the ISSI and −0.1260 to 0.2777 for the JCI. The discrepancy between the HAC and bootstrap results suggests that inferences depend on how time dependence and intermarket linkages are accounted for. This finding aligns with studies by Sheikh et al. (2024), Bouri et al. (2024), and Hoque et al. (2024), which emphasize that the relationship between uncertainty and financial markets can vary across time periods, market conditions, and estimation methods. In the Indonesian context, extreme episodes and the limited number of months appear to widen estimation uncertainty.

The evidence for H_1 weakens further in S1. The coefficients for TPU changes are only 0.0092 for the ISSI ($p = 0.9385$) and 0.0501 for the JCI ($p = 0.7212$), making them not statistically different from zero. Based on the overall test, the decision is to reject H_1 because the positive relationship is not consistently supported across specifications and inference methods. This decision does not imply that trade uncertainty is economically irrelevant. Insignificant results may arise because the response occurs over a shorter time horizon, the relationship is nonlinear, or TPU changes do not adequately capture episodes of persistent uncertainty. However, the available data do not support the claim that a steady increase in TPU is followed by an increase in volatility one month later.

This distinction helps place the results in relation to prior literature. Tabash et al. (2024, 2025) found a correlation between uncertainty and Islamic markets at specific quantiles and horizons, while Mashilal et al. (2023) used a broader measure of economic policy uncertainty. This study estimated the average monthly response with delayed TPU, so the estimates are not identical. The positive direction of M3 suggests that the mechanisms discussed in prior studies may still be present, but instability in the bootstrap and change specifications suggests that their strength depends on the proxy, horizon, and market conditions. Thus, the differences in results are more likely to reflect variations in research design than a direct contradiction between studies.

4.4. Differences in sensitivity between ISSI and IHSG and H_2 evaluation

The H_2 test is not based on a comparison of the p-values of the two equations, but rather on the direct difference between the ISSI and IHSG coefficients. In M3, the difference between βISSI and βIHSG is only 0.0151, with a 95% bootstrap interval of −0.0657 to 0.0919. In S1, the difference changes to −0.0409, and the interval widens to −0.1493 to 0.1483. Since the entire interval encompasses zero and the sign of the estimate changes after the transformation, the data do not provide a strong basis for ranking the sensitivity of the two indices.

Table 6. Comparison of the sensitivity of the two indexes

Model	β ISSI	β IHSG	Difference β	IK 95% difference
M1	0.1045	0.0974	0.0072	-0.0879; 0.0561
M2	0.1059	0.1029	0.0030	-0.1149; 0.0610
M3	0.1058	0.0907	0.0151	-0.0657; 0.0919
M4	0.1327	0.1057	0.0270	-0.0605; 0.0938
S1	0.0092	0.0501	-0.0409	-0.1493; 0.1483

Source: Processed Data (2026)

Note: difference = β ISSI − β IHSG. IK is the pairwise *bootstrap percentile interval* , six-month blocks, 2,000 iterations. M1–M4 use the zTPU level; S1 uses its change.

This conclusion remains unchanged when the length of the bootstrap block is changed. For S1, the three-month block yields an interval of −0.1416 to 0.1237, while the twelve-month block yields an interval of −0.1374 to 0.1701. Therefore, the test decision is to reject H_2 because the sample and specifications used do not convincingly show a difference in the sensitivity of the ISSI and the JCI. However, this result is not an equivalence test; the absence of a detectable difference does not prove that the sensitivity of the ISSI and the JCI is identical. A more accurate statement is that the study has not been able to convincingly distinguish the responses of the two.

OPEN ACCESS

The closeness of the two indexes' responses can be interpreted as a consequence of shared risk sources. The ISSI and the JCI have overlapping constituents and are both influenced by domestic liquidity conditions, foreign capital flows, exchange rates, and global sentiment. Danila (2023) demonstrated the importance of cross-instrument volatility correlations, while Muzaffar and Malik (2024) identified liquidity as one pathway between uncertainty and volatility. This study did not test liquidity as a mediator, but the high volatility correlation and wide spread intervals are consistent with the assumption that shared factors outweigh differences in index labels.

These findings narrow the way in which the resilience of Islamic stocks should be understood. Indarta and Setiawan (2025) discuss resilience through different indicators and models, while Indarwati and Widarjono (2021) and Aslam et al. (2023) note that the relative advantage of Islamic markets depends on the context and risk scale. In this study, sharia screening did not result in demonstrably lower TPU sensitivity. These results do not negate the specific characteristics of Islamic stocks, but rather suggest that restrictions on business activities and financial ratios can coexist with exposure to the same macroeconomic shocks. Therefore, claims of resilience should always specify the indicators, horizon, and comparator used.

4.5. Persistence, control variables, and robustness of conclusions

Compared to TPU changes, volatility persistence appears more consistent. In S1, the lag log volatility coefficient reaches 0.5083 for the ISSI ($p = 0.0005$) and 0.5228 for the JCI ($p = 0.0010$). These results indicate that high-risk months tend to be followed by relatively volatile conditions in the following month. This pattern aligns with volatility clustering commonly found in financial markets. For investors, historical information regarding the volatility of both indices appears more stable than a single indicator of trade policy news when risk is assessed on a monthly basis.

The coefficients on the control variables should be interpreted with caution. The lagged ln VIX change has a negative and significant coefficient on the ISSI, but is not significant at the 5% level for the JCI. This negative sign should not be interpreted as evidence that global anxiety reduces Indonesia's risk; the model controls for prior volatility and uses a monthly lag, so rapid adjustments or reversals after the global spike could affect the partial sign. The lagged S&P 500 return is also negative on both indices, but only the JCI coefficient is below the 5% threshold, while the ISSI is just around the limit ($p = 0.0503$). Exchange rate changes are insignificant in both equations. These results suggest that the control relationships are model-specific and should not be interpreted as stand-alone structural effects.

Table 7. Selected resistance checks

Inspection	n	β ISSI (p)	β IHSG (p)
Alternative volatility	60	0.1083 (0.0186)	0.0864 (0.0377)
raw TPU	60	0.0646 (0.2228)	0.0599 (0.1930)
TPU lag two months	60	0.1024 (0.0033)	0.0830 (0.0253)
Two volatility lags	59	0.0846 (0.0602)	0.0605 (0.2152)
Without 2025	48	0.1013 (0.1244)	0.1446 (0.0425)
First difference	59	0.0003 (0.9987)	0.0320 (0.8473)

Source: Processed Data (2026)

Note: p-values use HAC. Alternative volatility follows the root sum of squares of daily returns. First-difference transforms the level variable, including the log of volatility. Intertransformation coefficients do not have exactly the same units.

Table 7 shows that the conclusions regarding TPU are sensitive to analytical decisions. Using alternative volatility measures and a two-month TPU lag still yield positive coefficients in the level model. In contrast, the standardized raw TPU is insignificant for both indices, and the addition of a second volatility lag weakens the evidence, particularly for the JCI. When 2025 is excluded, the ISSI coefficient is no longer significant, while the JCI remains significant according to the HAC. This heterogeneous pattern suggests that a single specification is insufficient to fully represent the relationship over the study period. Differentiating all level variables again yields insignificant TPU coefficients for both the ISSI and the JCI. Because this transformation converts the dependent variable to log changes in volatility, the results are not fully comparable to those for M3, but nevertheless provide important information regarding the robustness of the

conclusions. Substantively, the most consistent evidence is not a stable TPU effect, but rather three things: the volatility of both indices moves closely together, volatility persistence is quite strong, and differences in TPU sensitivity have not been identified. These findings support the use of the risk premium framework as a possible explanation, but also limit its empirical claims to aggregate Indonesian data. For portfolio managers, Sharia screening should be complemented by monitoring sector exposure, liquidity, exchange rates, and volatility dynamics. The limitations of the five-year sample, monthly aggregation, constituent overlap, and potential endogeneity remain major limitations in interpreting these results.

CONCLUSION AND SUGGESTIONS

A positive relationship between US trade policy uncertainty and the volatility of the ISSI and the JCI was found only in the initial specification. This relationship did not persist consistently after accounting for time-series characteristics and estimation robustness. This study, in general, due to data limitations, did not consistently find that changes in trade uncertainty were followed by increases in the volatility of both indices. Comparative testing also did not show a convincing difference in sensitivity between the ISSI and the JCI. These findings suggest that the ISSI cannot be considered more resilient to trade policy risk than the Indonesian stock market as a whole. However, these results do not exclude the possibility that TPU remains relevant under certain market horizons or conditions. The contribution of this study lies in the side-by-side examination of the ISSI and the JCI, which maintains the interconnectedness of the two markets, along with an examination of time-series characteristics and robustness of the results. Theoretically, the findings clarify that the robustness of Islamic stocks should be assessed based on the type of shock, risk measure, and observation horizon, rather than being assumed as an inherent property of the Islamic screening process. Practically, the study demonstrates that Islamic status cannot be used as the sole basis for assessing portfolio protection from international trade risk.

Investors and portfolio managers should complement sharia screening with an assessment of sector composition, issuer concentration, liquidity, export-import exposure, foreign exchange liabilities, and volatility persistence. Companies dependent on international markets or inputs should map their revenue sources, cost structures, foreign exchange needs, and liability maturities under various scenarios of trade policy changes before establishing hedging measures. Index managers and market participants should also consider the strong correlation between the ISSI and the JCI when assessing the diversification benefits between sharia portfolios and the aggregate market.

To obtain more comprehensive empirical results, future research needs to use a longer observation period to better and more consistently distinguish regime changes and episodes of market stress. Comparisons can be strengthened through non-sharia portfolios that do not overlap with the ISSI and issuer-level data measuring export revenues, use of imported inputs, liquidity, and foreign exchange liabilities. Analysis at different frequencies and time horizons, including nonlinear or market-condition-based models, is needed to test the possibility that the TPU response only occurs under certain circumstances. Further research should also verify trading calendars through official sources and document revisions to historical data to facilitate replication of the results.

REFERENCES

Alamgir, M., & Cheng, M.-C. (2023). Co-Movement and Performance Comparison of Conventional and Islamic Stock Indices during the Pre- and Post-COVID-19 Pandemic Era. *Risks, 11*(8), 146. https://doi.org/10.3390/risks11080146

Aslam, F., Ferreira, P., Ali, H., Arifa, & Oliveira, M. (2023). Islamic vs. Conventional Equity Markets: A Multifractal Cross-Correlation Analysis with Economic Policy Uncertainty. *Economies, 11*(1), 16. https://doi.org/10.3390/economies11010016

Bouri, E., Gök, R., Gemici, E., & Kara, E. (2024). Do geopolitical risk, economic policy uncertainty, and oil implied volatility drive assets across quantiles and time-horizons? *The Quarterly Review of Economics and Finance, 93*, 137–154. https://doi.org/10.1016/j.qref.2023.12.004

Bretscher, L., Hsu, A., & Tamoni, A. (2023). The real response to uncertainty shocks: The risk premium channel. *Management Science, 69*(1), 119–140. https://doi.org/10.1287/mnsc.2022.4335

Caldara, D., Iacoviello, M., Molligo, P., Prestipino, A., & Raffo, A. (2020). The economic effects of trade policy uncertainty. *Journal of Monetary Economics, 109*, 38–59. https://doi.org/10.1016/j.jmoneco.2019.11.002

OPEN ACCESS

Danila, N. (2023). Spillover of volatility among financial instruments: ASEAN-5 and GCC market study. *PLOS ONE, 18*(10), e0292958. https://doi.org/10.1371/journal.pone.0292958

Endri, E., Fauzi, F., & Effendi, M. S. (2024). Integration of the Indonesian stock market with eight major trading partners' stock markets. *Economies, 12*(12), 350. https://doi.org/10.3390/economies12120350

Hoque, M. E., Sahabuddin, M., & Bilgili, F. (2024). Volatility interconnectedness among financial and geopolitical markets: Evidence from COVID-19 and Ukraine-Russia crises. *Economic Analysis and Policy, 82*, 303–320. https://doi.org/10.1016/j.eap.2024.03.015

Indarta, A., & Setiawan, A. (2025). Comparative analysis of sharia and conventional stock resilience to global uncertainty: Evidence from ISSI and IHSG during 2019–2025. *Among Makarti, 18*(2), 223–239. https://doi.org/10.52353/ama.v18i2.892

Indarwati, S., & Widarjono, A. (2021). The determinant of Indonesian stock returns' volatility: Evidence from Islamic and conventional stock market. *Shirkah: Journal of Economics and Business, 6*(3), 277–296. https://doi.org/10.22515/shirkah.v6i3.431

Künsch, H. R. (1989). The jackknife and the bootstrap for general stationary observations. *The Annals of Statistics, 17*(3), 1217–1241. https://doi.org/10.1214/aos/1176347265

Liu, H., Yu, J., Tang, G., & Chen, J. (2025). External trade policy uncertainty, corporate risk exposure, and stock market volatility. *China Economic Review, 89*, 102331. https://doi.org/10.1016/j.chieco.2024.102331

Mashilal, Amalia, F., & Visita, L. (2023). Global economic policy uncertainty and Islamic stock market in Indonesia. *Muqtasid: Jurnal Ekonomi dan Perbankan Syariah, 14*(2), 115–132. https://doi.org/10.18326/muqtasid.v14i2.115-132

Muzaffar, Z., & Malik, I. R. (2024). Market liquidity and volatility: Does economic policy uncertainty matter? Evidence from Asian emerging economies. *PLOS ONE, 19*(6), e0301597. https://doi.org/10.1371/journal.pone.0301597

Newey, W. K., & West, K. D. (1987). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica, 55*(3), 703–708. https://doi.org/10.2307/1913610

Pástor, Ľ., & Veronesi, P. (2013). Political uncertainty and risk premia. *Journal of Financial Economics, 110*(3), 520–545. https://doi.org/10.1016/j.jfineco.2013.08.007

Septiara, D., Zainal Ridho, S. L., & Purnamasari, K. (2026). Kebijakan dividen, struktur modal, dan profitabilitas sebagai determinan harga saham perusahaan teknologi di Bursa Efek Indonesia. *Jurnal Aplikasi Manajemen dan Bisnis, 7*(1), 12–29. https://doi.org/10.36257/jamb.v7i1.12229

Sheikh, U. A., Asadi, M., Roubaud, D., & Hammoudeh, S. (2024). Global uncertainties and Australian financial markets: Quantile time-frequency connectedness. *International Review of Financial Analysis, 92*, 103098. https://doi.org/10.1016/j.irfa.2024.103098

Tabash, M. I., Sheikh, U. A., Mensi, W., & Kang, S. H. (2024). Quantile-based extended joint connectedness between trade policy uncertainty and GCC Islamic stock sectoral volatility. *Borsa Istanbul Review, 24*(6), 1146–1165. https://doi.org/10.1016/j.bir.2024.07.004

Tabash, M. I., Issa, S. S., Mansour, M., Saleh, M. W. A., Rahrouh, M., AlQeisi, K., & Al-Absy, M. S. M. (2025). Dynamic shock-transmission mechanism between U.S. trade policy uncertainty and Sharia-compliant stock market volatility of GCC economies. *Risks, 13*(3), 56. https://doi.org/10.3390/risks13030056

OPEN ACCESS