

The Effect Of Rupiah Exchange Rate Fluctuations And Inflation On Stock Index Volatility In Indonesia: A Comparative Study Of Sharia Vs. Conventional

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Abstract

This study aims to analyze the impact of exchange rate fluctuation (JISDOR) and inflation on the volatility of stock indices in Indonesia using the Panel Autoregressive Distributed Lag (Panel ARDL) approach with the Pooled Mean Group (PMG) estimation method. The research focuses on the Composite Stock Price Index (IHSG) and the Indonesia Sharia Stock Index (ISSI) from January 2020 to March 2025 using monthly data. The results show that JISDOR fluctuations have a significant positive effect on index volatility in both the short and long run. Inflation has a positive effect in the short run but reveals a negative long-run relationship. IHSG is more sensitive to exchange rate movements, while ISSI exhibits a stronger response to inflation. The significant error correction term confirms a robust adjustment mechanism toward long-run equilibrium. These findings underline the importance of macroeconomic stability for a resilient capital market and emphasize the role of sharia indices as a relatively stable investment alternative, albeit still responsive to macroeconomic shifts. This study provides practical implications for investors and policymakers in formulating strategies to strengthen the stock market amid global economic uncertainties.

Keywords: *Exchange Rate, Inflation, IHSG, ISSI, Panel ARDL.*

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INTRODUCTION

Capital market stability is a central element in maintaining a balance in the financial system and long-term economic growth. A healthy capital market reflects the optimism of economic actors, the sustainability of business activities, and a consistent economic policy direction. In Indonesia, the capital market is reflected in two main indices, namely the Composite Stock Price Index (IHSG) as a representation of all stocks listed on the Indonesia Stock Exchange, and the Indonesian Sharia Stock Index (ISSI) which contains stocks that meet Islamic financial principles. Both are a reflection of the dynamics of the national economy which are influenced by various factors, both internal and external (Agung & Santoso, 2022). The phenomenon of stock index fluctuations is a major concern, especially when index values experience high volatility that not only reflects market instability, but also affects the investment decisions of market participants. This volatility is often triggered by changes in macroeconomic variables, especially exchange rates and inflation. When the rupiah depreciates against the United States dollar, many business sectors are affected,

especially those that depend on raw material imports or have debt in foreign currencies (Z. Alam & Kabir, 2019). On the other hand, the strengthening of the rupiah can provide a breath of fresh air for domestic investors but has the potential to reduce export competitiveness. One of the important instruments for measuring the exchange rate in Indonesia is the Jakarta Interbank Spot Dollar Rate (JISDOR), which reflects the daily official exchange rate issued by Bank Indonesia. Significant fluctuations in JISDOR can put pressure on the capital market, both in the context of IHSG and ISSI (Economics, 2025)(Fama, 2021). On the other hand, inflation also plays an important role. High inflation suppresses people's purchasing power, increases the cost of living, and in many cases negatively impacts a company's profits. Uncertainty over inflation rates makes investors tend to be cautious in making investment decisions, which ultimately increases volatility in the stock market (Z. Alam & Kabir, 2019).

Stock market volatility is one of the main indicators that reflects the level of uncertainty in the financial markets. In developing countries such as Indonesia, such volatility is not only influenced by market sentiment, but also highly sensitive to changes in macroeconomic variables, such as exchange rates and inflation (B. Indonesia, 2023). Fluctuations in the exchange rate of the Rupiah against the United States Dollar (USD), represented through the Jakarta Interbank Spot Dollar Rate (JISDOR), often trigger pressure on the stock market, either directly through changes in the company's input costs, or indirectly through investors' responses to external exposures. This condition becomes particularly relevant in the 2020–2025 period, when Indonesia's capital market experienced major turmoil due to the COVID-19 pandemic, global monetary policy adjustments, and increasing geopolitical instability (N. Alam & Rizvi, 2021). IHSG once plummeted by 5% in one day in March 2025, coinciding with the weakening of the Rupiah which had broken through Rp16,968/USD. This turmoil raises concerns about the stability of the national stock market in the face of increasing exchange rate pressures. In the midst of these challenges, it is important to understand how both conventional and sharia stock indices respond differently to macroeconomic dynamics (Bodie et al., 2020). Sharia stock indices, which avoid *riba*, *gharar* (excessive uncertainty), and sectors that are not in accordance with Islamic principles, have a different composition of sectors from IHSG. Some literature states that ISSI tends to be more stable than IHSG in the face of global crises or uncertainties (Setiawan & Ayuningtyas, 2022). However, these claims still need to be empirically proven through the right methodological approach and representative data. In this context, this study raises important questions about the influence of rupiah exchange rate fluctuations (JISDOR) and inflation rates on the volatility of IHSG and ISSI. Using the Autoregressive Distributed Lag Panel (ARDL Panel) approach through the Pooled Mean Group (PMG) method, this study attempts to explore both the short-term and long-term relationships between macroeconomic variables and stock index volatility (Huda & Zahro, 2021). This approach was chosen because it is able to capture simultaneous dynamics between cross-section data (IHSG and ISSI) and take into account short-term heterogeneity and long-term homogeneity. Although prior studies have examined the relationship between exchange rates, inflation, and stock market movements, relatively few studies compare the response of conventional and sharia indices within a unified dynamic specification. In addition, evidence on whether Islamic indices are consistently more stable than conventional indices remains mixed. This gap motivates the present study to investigate whether IHSG and ISSI exhibit different sensitivity patterns toward JISDOR fluctuations and inflation..

Inflation as another macro variable also has significant implications for the stock market. Rising inflation rates can reduce consumer purchasing power and increase production costs, which in turn negatively impact company performance and investor perception (Karim & Wahab, 2020). However, inflation can also be interpreted positively in the context of moderate economic growth. Therefore, the relationship between inflation and

stock volatility becomes complex and contextual. Meanwhile, the development of the sharia capital market in Indonesia opens up interesting research space in comparing the dynamics of the sharia and conventional markets. The Indonesian Sharia Stock Index (ISSI) represents stocks that meet Islamic sharia principles, such as the prohibition of *riba*, *maysir*, and *gharar*, as well as a focus on the real sector (Ardiansyah & Pratama, 2020). Some studies state that Islamic stock indices tend to be more stable in the face of economic pressure, due to their conservative and real asset-based characteristics. However, to date, there have not been many studies that directly compare the sensitivity of sharia indices and conventional indices to key macroeconomic variables such as exchange rates and inflation in a single dynamic panel analysis framework (Rahman & Wulandari, 2020). In addition to being driven by the practical urgency of exchange rate dynamics and inflation on the Indonesian capital market, the relationship between the three main variables in this study exchange rate fluctuations, inflation, and stock index volatility also has a strong theoretical foundation in the macroeconomic and financial literature (Economics, 2025). Theoretically, the Flow-Oriented Model by Dornbusch & Fischer states that changes in exchange rates affect a company's profitability through trade flows. The appreciation of the domestic currency generally has a negative impact on the export sector, while depreciation can increase the competitiveness of export prices and the profits of exporting companies, thereby driving up stock prices. Meanwhile, in the context of inflation, the Fisher Effect explained that the increase in inflation will be followed by an increase in nominal interest rates, which has an impact on increasing the cost of capital and decreasing the present value of future cash flows, thereby depressing stock prices.

This research is very important considering that the observation period includes crucial moments such as the COVID-19 pandemic and the post-pandemic recovery period, as well as global geopolitical dynamics that affect foreign investment flows and domestic economic conditions. With a data range from January 2020 to March 2025, this study is expected to be able to provide a comprehensive picture of the sensitivity of the stock market to macroeconomic pressures. In addition, the results of this study have high practical value. Investors can use this information as a basis for consideration in compiling an investment portfolio, especially in choosing a type of index that is more resistant to external shocks (FSA, 2024). The government and monetary authorities such as Bank Indonesia can also use the results of this study to develop policies that are responsive and anticipatory to the impact of exchange rate fluctuations and inflation on the capital market. From the academic side, this study also contributes empirical evidence that distinguishes the response of sharia and conventional indices to macroeconomic variables in Indonesia (Pesaran et al., 1999). This enriches the literature that has been dominated by studies on the conventional stock market. By integrating the data panel and ARDL approaches, the study also shows that the methodology used is able to capture the nuances of complex economic relationships in an ever-evolving financial system (Bank, 2024)(Fama, 2021). Finally, the limitations of this study also need to be underlined. Focusing on the two main macro variables (JISDOR exchange rate and inflation) and two stock indices (IHSG and ISSI) means that the results of this study do not reflect all factors that may affect stock market volatility. However, with a strong econometric approach and relevant data, the findings of this study still have significant weight to be used as a reference in policy and investment making (Islami & Yuliana, 2022).

This study aims to comparatively examine the effect of exchange rate fluctuations and inflation rates on the volatility of Islamic stock indices (ISSI) and conventional stock indices (IHSG) in Indonesia, using the Autoregressive Distributed Lag (Pooled Mean Group/PMG) Panel approach. This approach was chosen because it is able to estimate short-term and long-term relationships simultaneously in the panel structure, as well as accommodate differences in dynamics between units (in this case, IHSG and ISSI) but still assume similarities in long-term relationships. Using monthly data from January 2020 to

March 2025, this study targets two main questions to find the relationship between exchange rates and inflation that significantly affect stock index volatility in the short and long term. This study contributes to the literature in three ways. First, it provides a direct comparison between conventional and Islamic stock market volatility under the same macroeconomic environment. Second, it examines both short-run and long-run dynamics of exchange rate fluctuations and inflation using a dynamic panel framework. Third, it extends the discussion on Islamic capital market resilience during a period characterized by pandemic recovery, monetary tightening, and external uncertainty. In addition, it also examines the differences in response characteristics between sharia stock indices and conventional stock indices to the two variables. This study contributes to the macrofinance literature and the Islamic capital market by integrating three analytical domains: macroeconomic stability, stock market dynamics, and Islamic investment principles. The findings of this study are expected to provide insight for investors, regulators, and monetary policymakers in formulating market risk mitigation strategies, as well as encouraging the use of Islamic stock indices as a more stable alternative instrument amid global uncertainty.

METHODS

This study uses an explanatory quantitative research design to test the causality relationship between Rupiah exchange rate fluctuations and stock index performance inflation in Indonesia. The approach used is empirical and deductive, by testing pre-formulated hypotheses based on economic theories such as Exchange Rate Risk Theory and Efficient Market Hypothesis (EMH) (Sugiyono, 2020) (Huda & Zahro, 2021). This study uses a model through the Pooled Mean Group-Autoregressive Distributed Lag Approach to analyze data compared simultaneously. The research sample consists of monthly data from January 2020 to March 2025 which includes the Sharia index: ISSI, and the Conventional index: IHSG. Stock index data was obtained from the Indonesia Stock Exchange (IDX), while exchange rate data (IDR/USD) is sourced from Bank Indonesia. Data were selected based on availability, consistency, and relevance to the research objectives. All statistical analysis is done through using EViews 13. The PMG estimator is selected because it allows short-run heterogeneity while constraining the long-run coefficients to be homogeneous across cross-sections. In this study, IHSG and ISSI are treated as two market entities that share the same macroeconomic environment but may differ in their short-run adjustment speeds. This specification is intended to identify whether both indices converge to a common long-run equilibrium despite their structural differences..

In analyzing the relationship between exchange rate fluctuations, inflation, and stock index volatility, this study uses the Autoregressive Distributed Lag Panel (ARDL Panel) econometric model with the Pooled Mean Group (PMG) estimation approach developed by Pesaran, Shin, and Smith (1999). This approach was chosen because it is able to accommodate short-term heterogeneity between cross-section units (IHSG and ISSI), while assuming a homogeneous long-term relationship between the two. The ARDL/PMG Panel model is very appropriate for this study for two main reasons: first, the data structure is a dynamic panel, and second, the existence of variables that are stationary at the level (I(0)) or at the first level of difference (I(1)), without involving the variable that is I(2). The analysis stage begins with a descriptive statistical test to understand the basic character of each variable, followed by a stationariness test using root test units, including Levin-Lin-Chu, Im-Pesaran-Shin, and Fisher-ADF to identify the degree of integration of each variable. The test results showed that the volatility of the index and JISDOR fluctuations were stationary at the level, while inflation was only stationary after the first differentiation was carried out.

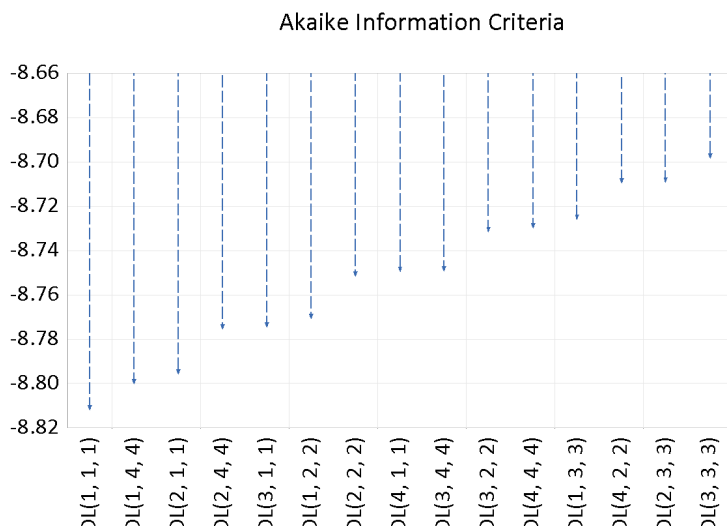


Figure 1 Akaike Information Criteria

The next step is the determination of the optimal lag to ensure the most accurate model dynamic structure. Through the Akaike Information Criterion (AIC) criteria, the ARDL(1,1,1) model was selected which showed the best combination of model accuracy and parameter efficiency. After the optimal lag was determined, a cointegration test between variables was carried out with the residual-based cointegration test method developed by Pedroni. The test results show that there is a significant long-term relationship between stock index volatility, JISDOR exchange rate fluctuations, and inflation, both in the within-dimension and between-dimension approaches. After confirmation of cointegration, the ARDL/PMG Panel model is run to estimate short-term and long-term relationships. Short-term estimates include the change of each independent variable to changes in the volatility of the index, as well as the value of the term correction coefficient (ECT) which indicates the speed of adjustment towards a long-term equilibrium. Meanwhile, long-term estimates describe the permanent impact of JISDOR fluctuations and inflation on stock market volatility (Bank, 2024; Economics, 2025).

The entire model was evaluated through a variety of classical assumption tests to ensure the validity of the results, including residual normality, heteroscedasticity, and autocorrelation tests. The test results show that the model is free from serious violations of classical assumptions. Thus, the estimated ARDL/PMG Panel model can be said to be robust and feasible to be used as a basis for drawing scientific conclusions. In addition, the model was also evaluated in terms of goodness-of-fit through the Akaike Criterion, root mean square error (RMSE) value, and log-likelihood, all of which support the model's consistency and accuracy. With this approach, this study is able to capture the complexity of the relationship between macroeconomic fluctuations and the dynamics of the Indonesian capital market, as well as provide an empirical basis for comparisons between sharia and conventional stock indices in responding to economic turmoil.

RESULTS AND DISCUSSION

Cointegration Test

Table 1. Pedroni Residual Cointegration Test
Pedroni Residual Cointegration Test

Series: VOLATILITY OF INFLATION				
Date: 06/10/25 Time: 06:13				
Sample: 2020M01 2025M03				
Included observations: 126				
Cross-sections included: 2				
Null Hypothesis: No cointegration				
Trend assumption: No deterministic trend				
User-specified lag length: 1				
Newey-West automatic bandwidth selection and Bartlett kernel				
Alternative hypothesis: common AR coefs. (within-dimension)				
			Weighted	
	<u>Statistic</u>	<u>Prob.</u>	<u>Statistic</u>	<u>Prob.</u>
Panel v-Statistic	1.060293	0.1445	0.722686	0.2349
Panel rho-Statistic	8.231644	0.0000	-8.401602	0.0000
Panel PP-Statistic	5.613813	0.0000	-5.723446	0.0000
Panel ADF-Statistic	2.509965	0.0060	-2.494272	0.0063
Alternative hypothesis: individual AR coefs. (between-dimension)				
	<u>Statistic</u>	<u>Prob.</u>		
Group rho-Statistic	8.015976	0.0000		
Group PP-Statistic	6.500929	0.0000		
Group ADF-Statistic	2.639763	0.0041		

Cross section specific results

Phillips-Peron results (non-parametric)						
Cross ID	AR(1)	Variance	HAC	Bandwidth	obs	
DADDY	0.204	1.25E-05	1.28E-05	2.00	62	
IHSG	0.172	1.27E-05	1.41E-05	3.00	62	

Augmented Dickey-Fuller results (parametric)						
Cross ID	AR(1)	Variance	Lag	Max lay	obs	
DADDY	0.271	1.27E-05	1	--	61	
IHSG	0.303	1.26E-05	1	--	61	

After the stationarity test, it was shown that the index volatility variable and the fluctuation of the JISDOR exchange rate were stationary at the level (I(0)), while the inflation variable was only stationary after the first differentiation (I(1)). This confirms that none of the variables in the model have an integration above I(1), so the use of the ARDL Panel model can be legally applied. To identify whether there is a stable long-term relationship between stock index volatility, rupiah exchange rate fluctuations (JISDOR), and inflation rate, a cointegration test was conducted using the Pedroni Residual Cointegration Test. This method was chosen because it is able to accommodate a heterogeneous panel structure consisting of two cross-sections namely the Composite Stock Price Index (IHSG) and the Indonesian Sharia Stock Index (ISSI) in the period from January 2020 to March 2025. The test was performed against three main variables in the ARDL model (1,1,1), using automatic bandwidth and Bartlett kernel as heteroscedasticity and autocorrelation adjustments, and without deterministic trends to avoid bias towards non-stationary processes (M. of F. of the R. of Indonesia, 2023; Mankiw, 2021).

The test results show that most of the cointegration statistics of the Pedroni method provide strong evidence of the existence of long-term relationships between variables. In the within-dimensional approach, three of the four main tests showed significant results. The rho-statistic panel recorded a value of -8.23 with a probability of 0.0000, the PP-statistic panel of -5.61 (p-value 0.0000), and the ADF-statistic panel of -2.51 (p-value 0.0060). Only the v-statistic panel showed insignificant results (value 1.06 with a p-value of 0.1445), which is common in the case of small samples or when there is no very dominant leading variable. These results indicate that there is a strong long-term residual correlation between the variables in the model. Meanwhile, in the between-dimension approach (which assumes individual autoregressive coefficients between entities), the results are consistent and even more convincing. The rho-statistic group recorded a value of -8.02 (p-value 0.0000), the PP-statistic group of -6.50 (p-value 0.0000), and the ADF-statistic group of -2.64 (p-value 0.0041). The three statistical values reject the null (H_0) hypothesis that there is no cointegration at the significance levels of 1% and 5%. These findings confirm that the model used has a strong

basis for estimating long-term relationships through the ARDL Panel approach. Furthermore, the results of cointegration were also strengthened by specific cross-section analysis with Phillips-Perron and Augmented Dickey-Fuller methods. For ISSI, an AR(1) value of 0.204 was obtained with a residual variance of 1.25E-05, while IHSG recorded an AR(1) value of 0.172 with a residual variance of 1.27E-05. These results indicate that residual processes tend to be stationary in each index, which is a key requirement for the existence of valid long-term relationships in a panel-based ARDL approach.

Short-Run Estimation

Table 2. Short Run Equation

Short Run Equation				
COINTEQ01	-0.812574	0.025462	-31.91308	0.0000
D(JISDOR)	0.007206	0.000219	32.84133	0.0000
D(INFLATION)	0.000769	0.000150	5.138194	0.0000
C	0.003121	0.000123	25.39566	0.0000
Root MSE	0.003384	Mean dependent var		0.000197
S.D. dependent var	0.006198	S.E. of regression		0.003527
Akaike info criterion	-8.229830	Sum squared resid		0.001443
Schwarz criterion	-8.004728	Log likelihood		528.4793
Hannan-Quinn criter.	-8.138378			

*Note: p-values and any subsequent tests do not account for model specification

The results of short-term estimates from the ARDL Panel model reveal that fluctuations in the JISDOR exchange rate and inflation have a significant influence on changes in stock index volatility over the monthly time horizon. In the aggregate model, the JISDOR coefficient of 0.007206 (p-value 0.0000) and inflation of 0.000769 (p-value 0.0000), indicate that every 1% increase in JISDOR fluctuations will increase the volatility of the stock index by 0.72 basis points. Similarly, inflation that increased by 1% contributed to an increase in volatility by 0.07 basis points. Both variables have proven to be sensitive to the short-term dynamics of the stock market, and their significance suggests that changes in macroeconomic conditions are directly reflected in market volatility [19].

An Error Correction Term (ECT) coefficient of -0.812574 with a p-value of 0.0000 indicates that there is a strong adjustment mechanism towards long-term equilibrium whenever a deviation occurs in the short term. The negative and significant value of ECT proves that there is a process of recovery to stock market stability in the event of external disruptions. It also shows that around 81% of imbalances in index volatility due to exchange rate shocks and inflation can be corrected in a single period (one month), which means that the pace of market adjustment is quite high in the context of the Indonesian economy (Gujarati & Porter, 2020).

When the model was run separately for each index, it was found that the sensitivity of ISSI and IHSG to macro variables had differences in intensity even though the direction of influence was the same. For the ISSI index, the JISDOR fluctuation has a coefficient of 0.006987 with a very high significance level (p-value 0.0000), while inflation has a coefficient of 0.000919, also with a p-value of 0.0000. This means that sharia stock indices are quite vulnerable to exchange rate changes and inflation in the short term. However, when compared to the IHSG, the value of the JISDOR coefficient for IHSG is slightly higher (0.007426) and lower inflation (0.000620). This shows that IHSG is more sensitive to exchange rates, while ISSI is more responsive to inflation. These findings show a differentiation in the structure of the sectors in the two indices, where stocks in ISSI are likely to come more from the real sector that is directly affected by price pressures and people's living costs (Putra & Sari, 2023).

Long-Run Estimation

Table 3. Long-Run Estimation

Dependent Variable: D(VOLATILITAS)

Method: ARDL

Date: 06/10/25 Time: 06:15

Sample: 2020M02 2025M03

Included observations: 124

Maximum dependent lags: 4 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (4 lags, automatic): JISDOR INFLASI

Fixed regressors: C

Number of models evaluated: 16

Selected Model: ARDL(1, 1, 1)

Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
JISDOR	0.017053	0.002315	7.366639	0.0000
INFLATION	-0.001002	0.000328	-3.051574	0.0028

The results of the long-term estimation of the ARDL Panel model show interesting dynamics. In the long term, JISDOR fluctuations still have a positive and significant effect on the volatility of stock indices, with a coefficient value of 0.017053 (p-value 0.0000). This confirms that the consistent depreciation or appreciation of the rupiah over a long period of time will have a considerable impact on capital market instability. This mechanism occurs because long-term investor expectations are influenced by overall macroeconomic stability,

including the exchange rate as the main indicator of country risk. On the other hand, a rather surprising result is that inflation shows a negative coefficient of -0.001002 (p-value 0.0028), which means that in the long run, the increase in inflation is actually associated with a decrease in the volatility of stock indices.

These findings can be interpreted as a form of market adaptation to long-term inflationary pressures. When inflation increases regularly in the long term and has been anticipated by the market, companies and investors have enough time to adjust production strategies, pricing, and portfolio allocation, so that the market becomes relatively more stable [19], [20]. This is also supported by the anticipatory monetary policy of Bank Indonesia which actively controls inflation with interest rate instruments and open market operations. Therefore, although inflation increases volatility in the short term, markets tend to stabilize in the long term if macro policy manages to control expectations (Hasan & Dridi, 2020).

Interpretation of Results

The difference in behavior between ISSI and IHSG in the long term can be seen from the estimated results. Although the aggregate coefficients tend to be the same, the sectoral characteristics and strict stock selection principles of sharia indices make the impact more concentrated in companies with high exposure to certain macro factors. This explains why the sharia index, although more stable in theory, still shows a high sensitivity to exchange rates and inflation in these empirical estimates (FSA, 2024; Agung & Santoso, 2022; N. Alam & Rizvi, 2021; Z. Alam & Kabir, 2019; Ardiansyah & Pratama, 2020; Bank, 2024; Bodie et al., 2020; Dewi & Ferdian, 2019; Economics, 2025; Fama, 2021; Gujarati & Porter, 2020; Hasan & Dridi, 2020; Huda & Zahro, 2021; IMF, 2024; B. Indonesia, 2023; M. of F. of the R. of Indonesia, 2023; Islami & Yuliana, 2022; Karim & Wahab, 2020; Mankiw, 2021; Nasution & Zulkarnain, 2021; Pesaran et al., 1999; Putra & Sari, 2023; Rahman & Wulandari, 2020; Sari & Lubis, 2022; Setiawan & Ayuningtyas, 2022; Sugiyono, 2020). The influence of exchange rates greater than inflation shows that the integration of domestic financial markets with international capital flows is still a major source of volatility, especially since Indonesia is a country that is still quite dependent on foreign funds in its capital market.

The results of this study have several important implications from both the perspective of investors and policymakers. First, investors need to be aware that the Indonesian stock market is very sensitive to fluctuations in the rupiah exchange rate, both in the short and long term. Therefore, in compiling a portfolio, it is necessary to diversify that takes into account exposure to exchange rate risk, especially in stocks that are import-based or have high foreign debt. Second, for Islamic investors, these results show that Islamic indices are not necessarily free from the risk of volatility due to macroeconomic variables. Although Islamic stocks are expected to be more stable, the reality is that they are also affected by exchange rate pressures and inflation, so risk management still needs to be done in a disciplined manner.

From a policy perspective, Bank Indonesia and the Financial Services Authority (OJK) need to strengthen coordination to maintain macroeconomic and financial market stability simultaneously. Exchange rate interventions, price stability, and coordinated fiscal policies will greatly determine the direction of stock market movements in the near and future future. These results also underscore the importance of developing sharia indices as an alternative investment that is not only based on religious principles, but also has advantages in terms of stability if supported by adequate market policies and education. Governments can also consider sharia-based hedging instruments to help companies and investors deal with exchange rate volatility and inflation in a more structured manner.

CONCLUSION

This study aims to examine the effect of rupiah exchange rate fluctuations (JISDOR) and inflation on the volatility of stock indices in Indonesia, focusing on the comparison

between conventional indices (IHSG) and sharia indices (ISSI). Through the Autoregressive Distributed Lag Panel (ARDL Panel) approach with the Pooled Mean Group (PMG) estimation method, this study not only evaluates the dynamics of the relationship in the short term, but also empirically explains the relationship between these variables in the long term. The results provide a rich and relevant picture of the interaction between key macroeconomic variables and stock market volatility, as well as show the complexity of differentiation between conventional and sharia indices in Indonesia. In general, the results of this study conclude that both in the short and long term, fluctuations in the rupiah exchange rate have a significant and positive influence on the volatility of stock indices. This means that the greater the instability in the movement of the rupiah exchange rate, the higher the uncertainty and price fluctuations in the stock market, both in IHSG and ISSI. This indicates that the exchange rate is still one of the main sources of systemic risk in the Indonesian capital market. The high correlation between exchange rate movements and stock performance reflects the market's dependence on global sentiment and foreign capital flows, where rupiah depreciation is often accompanied by capital outflows that exacerbate stock price volatility.

Meanwhile, the influence of inflation shows two different characters. In the short term, inflation has a positive and significant effect on the volatility of stock indices. The rapid increase in the price of goods and services will reduce the company's profit margins, increase economic uncertainty, and reduce investor confidence in domestic macroeconomic conditions. However, in the long run, inflation has a negative effect on index volatility. These findings suggest that the Indonesian stock market tends to be able to adapt to stable and predictable inflation rates, so volatility pressures tend to decrease over a longer period of time. It also indicates that the effectiveness of monetary policy in controlling long-term inflation expectations contributes to stock market stability. The difference between IHSG and ISSI lies in the degree of sensitivity to each variable. IHSG is proven to be more sensitive to exchange rate fluctuations than ISSI, which may be due to the composition of the dominant sectors in the IHSG which has higher exposure to international trade and foreign fund flows. In contrast, ISSIs tend to be more sensitive to changes in inflation, likely because the index is dominated by real sectors such as consumer goods, infrastructure, and energy, which are directly affected by changes in the price of goods and the cost of living of people. Nevertheless, both indices show a significant relationship with these macroeconomic variables, both in the short and long term. These findings provide several implications for investment policies and strategies. From the investor side, there is an urgency to consider macroeconomic conditions, especially exchange rates and inflation in compiling investment portfolios, both in conventional and sharia indices. High exchange rate risk can be mitigated by diversifying assets or using hedging, while inflation risk can be managed through the selection of stocks from inflation-resilient sectors. For Islamic investors, this result is a note that even sharia instruments are not completely free from the impact of macroeconomic turmoil, so caution is still needed.

For policymakers, especially Bank Indonesia and the Financial Services Authority (OJK), the results of this study confirm the importance of maintaining exchange rate stability and managing inflation expectations as part of efforts to maintain capital market resilience. Exchange rate intervention and inflation control are not only relevant to maintain the stability of goods prices, but also have a direct impact on the stability of the stock market, which is the heart of domestic investment. The government also needs to support the strengthening of the Islamic capital market as an inclusive and potential alternative, considering that ISSI shows a competitive response to external pressures and has the opportunity to become a more stable market foundation in the long term. Within the limitations of this study, it should be noted that the model used only considers two main macroeconomic variables, namely exchange rates and inflation, without taking into account other variables such as interest rates, economic growth, the global volatility index (VIX), and

national fiscal conditions. Therefore, for further research, it is recommended that the model be extended to include additional factors that also affect stock market volatility directly or indirectly. In addition, a dynamic panel approach with wider cross-section dimensions can enrich the analysis and improve the robustness of the findings. In closing, this study has succeeded in showing that both conventional and sharia stock indices in Indonesia are closely related to macroeconomic dynamics, especially exchange rates and inflation. The ARDL Panel approach with Pooled Mean Group estimation has proven to be effective in capturing short-term and long-term dynamics simultaneously, as well as providing theoretically and practically relevant results. These findings underscore that macroeconomic stability is a key prerequisite for sustainable and inclusive capital market resilience. This study is limited to two macroeconomic variables, namely exchange rates and inflation. Future research should incorporate additional determinants such as policy interest rates, oil prices, GDP growth, and global risk indicators such as VIX. A broader cross-sectional framework or alternative volatility measures may also improve external validity and strengthen inference.

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