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Volatility of the Indonesian Capital Market During the Asian and Global Financial Crisis, COVID-19 Pandemic and Trade War

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ABSTRACT
This study examines the volatility of the Indonesian stock market index across four major events: the 1998 Asian financial crisis, the 2008 global financial crisis, the 2020 COVID-19 pandemic, and the recent trade war. The findings reveal a decreasing trend in market volatility over time, indicating increased resilience within the Indonesian capital market. This trend may be attributed to improved government interventions and more effective early warning systems. However, a decline in volatility does not imply the absence of risk; rather, it suggests the presence of latent vulnerabilities that may surface during future economic shocks.

Keywords: *Volatility; Indonesian Stock Market; Financial Crisis; Trade War; Resilience*

1. INTRODUCTION

The capital market serves as a reflection of a country's economic condition (Santoso & Muharam, 2021). It is highly susceptible to various internal and external influences, often exhibiting significant fluctuations (Purwani et al., 2025). These fluctuations are shaped by both domestic and global sentiments, which are manifested in the form of stock market index volatility. Volatility refers to the degree of price fluctuation and uncertainty in the market, making future movements difficult to predict with precision (Aulia & Muharram, 2021). Analyzing the volatility of the Indonesian capital market in the context of financial crises, pandemics, and trade wars is essential, as these events, although different in nature, share a common potential to destabilize market dynamics.

Elevated market volatility directly affects investment risk (Aulia & Muharram, 2021). The greater the volatility, the higher the uncertainty surrounding investment returns. Investors in Indonesia have experienced such uncertainty during several global events, including the 1998 Asian financial crisis, the 2008 global financial crisis, and the COVID-19 pandemic in 2020 (Santoso & Muharam, 2021). In 2025, a trade war—primarily involving the United States and China—emerged, resulting in heightened geopolitical tensions and the implementation of protectionist policies, which are widely considered a source of market volatility. Unlike financial crises or pandemics, which are typically structural or exogenous in nature, trade wars generate policy-based uncertainty.

Policy shifts compel economic agents to alter their strategies to adapt to emerging conditions (Aulia & Muharram, 2021). One of the prominent examples is the U.S. import tariff policy aimed at protecting domestic industries, which has had direct consequences on strategic global sectors (Fan et al., 2022; Lin, 2019). The U.S. government introduced a baseline import tariff of 10% applicable to all countries, with provisions for higher rates targeting nations perceived to engage in unfair trade practices. These tariffs were not only applied universally but also designed to be sector-specific, focusing on key industries such as automotive, steel and aluminum, and energy commodities. The implementation of these tariffs formed part of a broader national strategy to boost domestic energy production and manufacturing. Nevertheless, the global ramifications were considerable, causing significant price fluctuations in related commodities (Afilia et al., 2024; Purwani & Santoso, 2023). Certain categories of goods, including pharmaceuticals, educational materials, and technological devices like smartphones and computers, were exempted from these tariffs due to their strategic importance for domestic consumption and innovation.

The imposition of U.S. tariffs has influenced capital market dynamics in several countries (He et al., 2021; Shafique & Bhutta, 2024), including Indonesia. Although the resulting pressure was not as severe as that experienced during major economic crises, numerous stock markets witnessed declines amid growing uncertainty over global trade policy directions (Shi & Wang, 2023; Su et al., 2019). It is crucial to emphasize, however, that the impact of trade wars cannot be equated with conventional economic crises. Market responses during trade conflicts are often driven by investor concerns regarding the potential for global economic slowdowns and disruptions to supply chains caused by protectionist measures. Understanding the dynamics of market volatility is, therefore, critical, particularly in anticipating spillover effects that may jeopardize the stability of the domestic financial system (Shi et al., 2021).

The distinct nature of economic crises, pandemics, and trade wars elicits differentiated responses from financial markets, including the Jakarta Composite Index (IHSG). Grasping the specific origins of these shocks—whether financial, public health-related, or geopolitical—is fundamental for designing effective market stabilization policies. Indonesia, as an economy embedded within the global financial system, is inherently exposed to the transmission of external shocks (Santoso et al., 2023; Santoso, Bakhtiar, et al., 2024; Santoso, Purwani, et al., 2024). In the event that a trade war persists over time, market behavior will increasingly hinge on unpredictable, non-economic political decisions, thereby amplifying the need for an adaptive model of volatility forecasting.

This study aims to examine the differences in the volatility of the Jakarta Composite Index in response to the global financial crisis, the COVID-19 pandemic, and the recent trade war. By empirically identifying the nature and magnitude of market responses to each category of external shock, more accurate risk mitigation strategies can be formulated by both market regulators and private investors. Accordingly, this research seeks to explore and compare the volatility of the Jakarta Composite Index during these three episodes of global disruption. Moreover, the study contributes to the broader body of literature on the Indonesian capital market and provides empirical insights to support evidence-based policymaking.

2. RESEARCH METHODS

This study utilizes time series data based on the daily closing prices of the Jakarta Composite Index (JCI). The dataset is obtained from the Investing website (www.investing.com), covering the period from 2 January 1995 to 29 April 2025. The primary analytical technique employed is the measurement of market volatility. To facilitate this, the price data are transformed into daily returns, from which daily volatility is subsequently calculated.

3. RESULTS AND DISCUSSIONS

The analysis of JCI volatility during four major events—the 1998 Asian financial crisis, the 2008 global financial crisis, the Covid-19 pandemic, and the 2025 trade war—yields the following results:

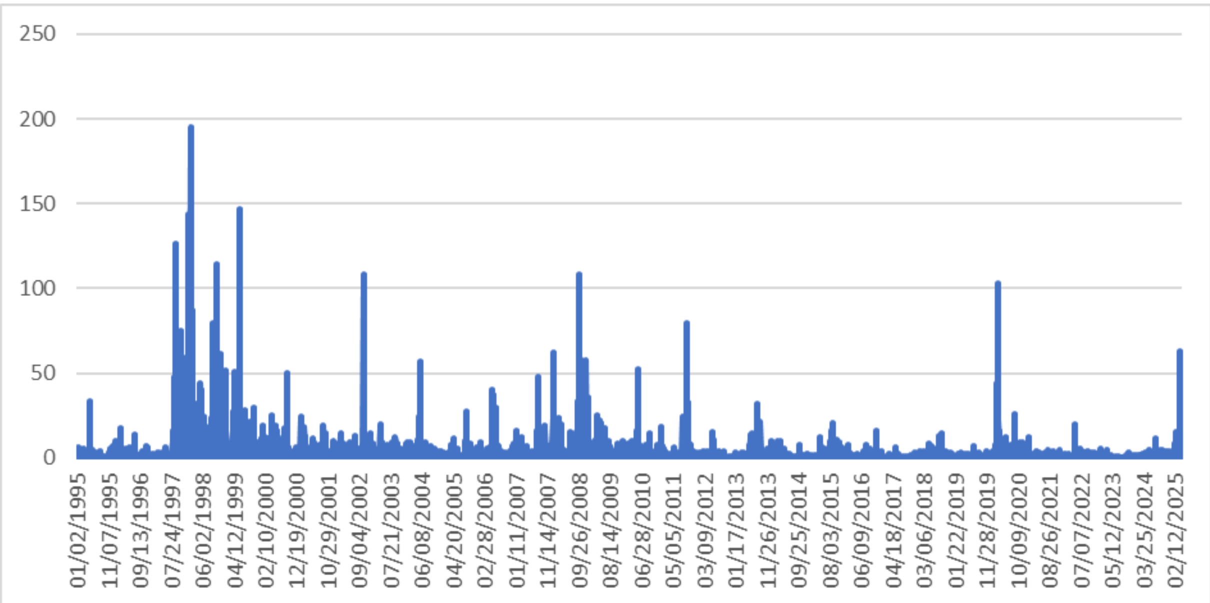

Figure 1. Volatility IHSG periode 2 Januari 1995 – 29 April 2025

Figure 1 illustrates the daily volatility of the Jakarta Composite Index. During the 1998 Asian financial crisis, the index experienced exceptionally high and prolonged volatility. A resurgence of volatility was also observed during the 2008 global financial crisis, although its magnitude and duration were notably less severe than in 1998. During the Covid-19 pandemic, the index exhibited a volatility pattern similar to that of the 2008 crisis, albeit with slightly lower intensity and a shorter duration. In contrast, the 2025 trade war induced another period of volatility, but its scale was considerably lower than in the preceding three crises.

Stock markets tend to respond more aggressively to structural crises that disrupt the foundations of the global financial system, such as those in 1998 and 2008. In comparison, crises that are temporary, sector-specific, or geopolitically contained—such as the Covid-19 pandemic and trade tensions—still elicit market reactions, but these are typically more restrained. Although the trade war triggered a degree of market instability, the resulting volatility was significantly milder. This suggests that capital markets have become increasingly resilient to limited-scope geopolitical shocks. Such resilience may be attributed to enhanced regulatory frameworks, improved institutional capacity, and technological advancements that enable faster investor adaptation to new information. Nevertheless, it is important to emphasize that a reduction in volatility does not imply the absence of risk; instead, risks may be latent and only manifest under future shocks.

4. CONCLUSION

Understanding the impact of crises and trade conflicts on stock market volatility—particularly in the context of the Indonesian capital market—is essential for informed decision-making and effective policy formulation. The findings indicate that while each crisis resulted in heightened volatility, the intensity and duration of such volatility have generally declined over time. This pattern suggests that the nature and underlying causes of crises significantly influence market responses.

It can be concluded that differences in the characteristics of triggering events produce varied impacts on market behavior. To mitigate future shocks, it is advisable for policymakers to proactively assess the potential consequences of events such as trade wars. A key limitation of this study is its focus solely on measuring the volatility of the Indonesian stock market index in response to crises and trade tensions. Future research could expand upon these findings by examining whether levels of market integration differ across various crisis periods.

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