

ABSTRACT

In the current information era, capital markets have become increasingly complex with interconnections between global stock markets influencing investment decision-making. Changes in one market can quickly affect others, creating an ecosystem with rapid information flows that have significant impacts. The phenomenon of comovement adds both challenges and opportunities for investors, requiring a deeper understanding of stock market relationships within the fast-evolving dynamics of information. There is volatility spillover between stock markets, where price fluctuations in one market trigger volatility in another, further complicating risk management and the search for optimal investment opportunities.

This study examines the influence of Japan's Nikkei 225 (N225) index, Singapore's Straits Times Index (STI), and China's Shanghai Composite Index (SCI) on Indonesia's Jakarta Composite Index (JCI) across three time phases: pre-pandemic, pandemic, and post-pandemic COVID-19, as COVID-19 is a significant event that has had a substantial impact on stock markets. This study utilizes the Hidden Markov Model (HMM) with Regime Switching Regression. The type of research is empirical with a quantitative approach. The sampling method used in this study is non-probability sampling, specifically purposive sampling. The sample comprises the closing price indices of JCI, N225, STI, and SCI during the pre-pandemic period (January 1, 2014 – March 2, 2020), during the COVID-19 pandemic (March 3, 2020 – April 31, 2023), and the post-pandemic period (May 1, 2023 – December 31, 2023).

The results of the study show that before the COVID-19 pandemic, JCI was heavily influenced by regional stock market movements, particularly N225 and STI. During the pandemic, volatility and uncertainty caused desynchronization in the stock markets, with each market responding to the crisis differently. After the COVID-19 pandemic, the synchronization pattern strengthened again. JCI was once more frequently influenced by N225 and STI movements until December 2023, while SCI did not show significant influence in either period.

Keywords: *capital market, comovement, volatility spillover, Regime Switching Regression, Hidden Markov Model*