Co-movement of covid-19, the S&P 500 and stock markets in ASEAN: A wavelet coherence analysis

ABSTRACT

This study examined the co-movement of ASEAN stock markets, COVID-19 cases/deaths, and the United States (US) stock market using wavelet coherence analysis. The findings revealed that the US stock market remained significantly dominant and was more influential to the ASEAN market. Nevertheless, coherence between the ASEAN stock markets and COVID-19 cases/deaths were also found but was limited during the crisis, and the impact of the number of deaths was lower than the number of cases. The results presented a significant disparity in the co-movements of each country. Such a phenomenon is expected as individual countries' economies tend to be more divergent during crises. Through wavelet analysis, the irregularity and uncertainty of co-movements can be detected more clearly and accurately with the interpretation of a heatmap.