

7th INTERNATIONAL CONFERENCE ON MANAGEMENT, ECONOMICS & FINANCE

03-05 November 2023 | Copenhagen, Denmark

Return and volatility spillovers between the US and Asian stock markets: Evidence from Global Financial Crisis (GFC) and Covid-19 Pandemic

Jae-Kwang Hwang

Virginia State University, USA

Abstract

The interdependencies between financial markets have long attracted considerable interest among finance academics and practitioners, especially during turbulent times. Changes in the dependence structure, particularly during market turmoil, are of great concern to market participants and policymakers. During a crisis, the correlations between equity markets intensify due to spillover effects. The COVID-19 situation has sent shock waves through the global economy due to the stringent public health measures undertaken by governments around the world. The heightened volatility of asset prices during the pandemic was transmitted across markets through the mechanism of contagion.

This paper examines and compares the impacts of the global financial crisis (GFC) and Covid-19 pandemic on the spillovers between the US stock market (S&P 500) and Asian markets – China (Shanghai Composite), Japan (Nikkei 225), Korea (KOSPI), Taiwan (SE weighted) - using daily stock market returns from July 2005 to December 2022. The dynamic conditional correlation (DCC) GARCH method is employed to analyze the degree of the return spillover transmission and the volatility spillover transmission between the US and Asian stock markets during the sample period. The results showed that that the COVID-19 pandemic induced a more severe contagious effect and risk transmission than the GFC. The study provides an extensive examination of the COVID-19 pandemic and the GFC in terms of financial contagion and volatility spillovers. The results suggest the presence of strong co-movements of world stock markets with the US equity market, especially in periods of financial turmoil. The findings of this study provide important implications for international investors to make rational decisions regarding portfolio diversification in global financial markets during periods of market turmoil.

Keywords: Return and Volatility Spillover Effects, DCC GARCH, GFC, COVID-19