Exploring The Contagion Effect During The COVID-19 Pandemic Using Markov Switching Regime Var Approach

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Abstract

In seeking to enhance the understanding of financial contagion mechanisms during global crises, this paper adopts an integrative approach to examine the impact of the COVID-19 pandemic on Central and Eastern European (CEE) stock markets. Leveraging the Markov Switching Regime Vector Autoregression (MS-VAR) methodology, the study meticulously analyzes the intricate dynamics of market interrelations under varying economic conditions prompted by the pandemic. Central to my inquiry was exploring how stock markets across the United States, Germany, and four CEE countries (Hungary, Poland, Romania, and the Czech Republic) interact under distinct economic regimes identified through the MS-VAR framework. The empirical findings underscored the variable nature of contagion effects across the two regimes. Notably, the analysis revealed that during the first regime, shocks to the US stock market pronouncedly impacted the stock markets of Hungary, Poland, and the Czech Republic, while the German stock market exhibited significant influence on Romania and Hungary. Conversely, in the second regime, the contagion effect was more pervasive, with the US stock market impacting all CEE and German markets, particularly the German market affecting Hungary and Poland.

Keywords: Dynamic Market Interrelations, Financial Transmission, Economic Spillover, Coronavirus Crisis