Department of Economics

Group for Economic Analysis at Reading (GEAR)

COVID-19 Cases and Stock Prices by Sector in Major Economies: What Do We Learn from the Daily Data?

By Hussein Hassan, Minko Markovski and Alexander Mihailov

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Department of Economics, University of Reading, Whiteknights, Reading, RG6 6EL, UK
https://www.reading.ac.uk/economics/

Non-Technical Summary

- This paper is the first to empirically uncover, via a recent GARCH-based estimation technique addressing the problem of dimensionality, volatility correlations and Granger causality between the daily COVID-19 cases and the share price indexes in all 11 sectors of the Global Industry Classification Standard across 11 major world economies accounting for 83.1% of the global stock market capitalization for the two full years of the current global pandemic, January 2020 – December 2021.
- We document a shift of density mass from dominantly negative correlations by sector from the first and second halves of 2020, with no vaccines to reassure human fear, to dominantly positive correlations in the first and second halves of 2021, with the population vaccinated two or three times and recovering its optimism.
- Granger causality tests reveal almost immediate news transmission, of a day or two, from the COVID-19 cases to sectoral price indexes, with some common patterns but also some heterogeneity by sector and country.
- We interpret the documented main trends and findings by the usual story of how societies learn: faced with an unexperienced danger and no cure for the virus, people panicked all over the world in 2020, influencing share prices dominantly in a negative direction; by contrast, once equipped with vaccines and feeling reassured for the longer run, optimism recovered in 2021, and stock prices, including by sector, too.

You can read the full paper here.