



Effects of COVID-19 on Investor Sentiment: Evidence from Commodity Futures Using Google Search Volume Index

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Abstract

This work investigates the nexus between Covid-19 induced investor sentiment and daily futures volatility for six commodities listed in New York Mercantile Exchange, using the Google search volume index. Further, this work also examines the conditional volatility spillovers among commodity futures and investor sentiment during Covid-19. The evidence from nexus analysis suggest that Covid-19 has adversely affected the emotions of market participants leading to excess volatility in the commodity futures market. Among the six selected commodities, the nexus between negative sentiment of market participants and gasoline futures volatility was found to be more pronounced. Further, it was also observed that exchange rate volatility increases commodity futures volatility for gasoline, gold, natural gas and silver. The empirical analysis of conditional volatility spillovers among commodity futures and investor sentiment exhibited cyclical trends in volatility transmission suggesting Covid-19 induced economic and financial shock leads to abrupt fluctuations in the commodity futures market. The study also observed that 43.2% of total forecast error variance in futures volatility was due to contagion from Covid-19.

Keywords Covid-19 · Investor sentiment · Google search volume index · Commodity futures · Volatility spillovers

1 Introduction

Novel coronavirus (Covid-19) primarily identified from China's Hubei province has spread across the globe adversely affecting all the economies resulting into a global crisis. The World Health Organization (WHO), considering transmission severity and its life-threatening infections declared the outbreak a public health emergency of international concern on 30 January 2020, and a global pandemic on 11 March 2020. Accordingly, popular governments across the globe adopted several measures (social distancing, closure of public places, quarantine and

Extended author information available on the last page of the article

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