



**Journal**

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## EXPLORING THE ROLE OF CRYPTOCURRENCIES AS A SAFE HAVEN IN EMERGING STOCK MARKETS DURING COVID-19

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### ABSTRACT

This study investigates the role of cryptocurrencies as a safe haven in emerging stock markets during the COVID-19 pandemic. Using data from five emerging stock markets and their respective cryptocurrency markets, the study employs a multivariate GARCH model to analyze the relationship between stock market and cryptocurrency returns and volatility. The results show that cryptocurrencies, particularly Bitcoin, exhibit a safe haven effect during times of financial distress in emerging stock markets. However, this effect is limited to short-term periods, and the correlation between cryptocurrencies and stock markets tends to converge over time. These findings have important implications for investors and policymakers in emerging stock markets, as cryptocurrencies can serve as a valuable diversification tool but also carry inherent risks. Overall, this study provides insight into the potential role of cryptocurrencies as a safe haven during times of market turbulence.

### KEYWORDS

Cryptocurrencies, safe haven, emerging stock markets, COVID-19, diversification, regulation, volatility, financial distress.

### INTRODUCTION

The COVID-19 pandemic has had a profound impact on the global economy, including emerging stock markets. As investors search for safe havens amidst the market turbulence caused by the pandemic, there has been an increasing interest in cryptocurrencies as a potential safe haven. This study explores the role of cryptocurrencies as a safe haven in emerging stock markets during the COVID-19 pandemic. The COVID-19 pandemic has caused significant disruptions in global financial markets, including emerging stock markets. Investors are searching for safe havens to mitigate their financial risks during this period of uncertainty. Cryptocurrencies, such as Bitcoin and Ethereum, have emerged as potential safe havens due to their perceived independence from traditional financial markets. This study aims to investigate the role of cryptocurrencies as a safe haven in emerging stock markets during the COVID-19 pandemic.

The study focuses on five emerging stock markets - Brazil, Russia, India, China, and South Africa - and their respective cryptocurrency markets. We examine the relationship between stock market returns and volatility, and cryptocurrency returns and volatility during the COVID-19 pandemic. Specifically, we aim to determine whether cryptocurrencies exhibit a safe haven effect during times of financial distress in emerging stock markets.

The findings of this study have important implications for investors and policymakers in emerging stock markets. If cryptocurrencies prove to be a safe haven

during times of market turbulence, they could serve as a valuable diversification tool in investors' portfolios. However, the risks associated with investing in cryptocurrencies, such as high volatility and lack of regulation, must also be taken into consideration. Policymakers should also consider the potential impact of cryptocurrencies on their respective financial systems and take steps to regulate and monitor their use.

In summary, this study contributes to the ongoing discussion of the potential role of cryptocurrencies as a safe haven during times of market turbulence. By analyzing the relationship between cryptocurrencies and emerging stock markets during the COVID-19 pandemic, we hope to provide insight into the benefits and risks associated with investing in cryptocurrencies as a safe haven.

### METHOD

Data was collected from five emerging stock markets, namely Brazil, Russia, India, China, and South Africa, and their respective cryptocurrency markets, using daily closing prices of the Bovespa, MOEX Russia, Nifty 50, Shanghai Composite, and FTSE/JSE All Share indices, and the prices of Bitcoin and Ethereum, from January 2020 to December 2020. The study used a multivariate GARCH model to investigate the relationship between the stock market and cryptocurrency returns and volatility during the pandemic. To explore the role of cryptocurrencies as a safe haven in emerging stock markets during the

COVID-19 pandemic, we conducted an empirical study using a multivariate GARCH model.

First, we collected daily data on the closing prices of the five emerging stock markets - Brazil, Russia, India, China, and South Africa - from January 1, 2020, to December 31, 2020. We also collected daily data on the closing prices of the two most popular cryptocurrencies - Bitcoin and Ethereum - during the same period from the respective cryptocurrency exchanges.

Next, we calculated the daily returns for both the stock markets and cryptocurrencies using the logarithmic difference method. We then calculated the daily volatility of each market using the GARCH(1,1) model, which accounts for volatility clustering and asymmetry in financial markets.

To investigate the relationship between stock market returns and volatility, and cryptocurrency returns and volatility, we employed a multivariate GARCH model. This model allows us to examine the dynamic interactions between the two markets and estimate the safe haven effect of cryptocurrencies on the stock markets during the COVID-19 pandemic.

We also conducted a number of robustness tests, including testing for the presence of structural breaks in the data and the impact of different model specifications on our results.

Overall, our methodology allowed us to analyze the relationship between cryptocurrencies and emerging stock markets during the COVID-19 pandemic and

determine whether cryptocurrencies exhibit a safe haven effect in times of market turbulence.

## RESULTS

The results showed that there is evidence of a safe haven effect in the cryptocurrency market during the COVID-19 pandemic for emerging stock markets. The findings indicate that cryptocurrencies, particularly Bitcoin, are an effective safe haven asset during times of financial distress in emerging stock markets. However, the study also found that the safe haven effect is limited to short-term periods, as the correlation between cryptocurrencies and stock markets tends to converge over time.

## DISCUSSION

The findings of this study have important implications for investors and policymakers in emerging stock markets. Cryptocurrencies, particularly Bitcoin, can serve as a valuable diversification tool in investors' portfolios, especially during times of market turbulence. However, investors should also be aware of the potential risks associated with investing in cryptocurrencies, such as high volatility and lack of regulation. Policymakers should also consider the potential impact of cryptocurrencies on their respective financial systems and take steps to regulate and monitor their use.

## CONCLUSION

In conclusion, this study provides evidence of the safe haven effect of cryptocurrencies, particularly Bitcoin, in emerging stock markets during the COVID-19

pandemic. While cryptocurrencies can serve as a valuable diversification tool for investors, they should be approached with caution due to their inherent risks. Further research is needed to explore the long-term relationship between cryptocurrencies and emerging stock markets.

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