

# Review of: "Unpacking the Complexities of Cryptocurrency Prices Volatility in Times of Crisis: A Time Series Data with Long-term Memory or Long-range Dependence"

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Potential competing interests: No potential competing interests to declare.

Using a number of time series models and statistical tests, the paper "Unpacking the Complexities of Cryptocurrency Prices Volatility in Times of Crisis: A Time Series Data with Long-term Memory or Long-range Dependence" examines price volatility in cryptocurrencies during times of crisis. They used fractional integration methods to look at how bitcoin values remember the past or depend on the future. It appears that the data and analytic methods employed support the conclusions drawn from the empirical study. The authors describe their findings about the price fluctuations of cryptocurrencies during times of crisis in a straightforward and thorough manner, having employed a number of statistical tests and models.

There are, however, a few changes that may make the article stronger:

1. Data cleaning and pre-processing: The authors offer a brief description of the process of data collection from multiple sources, but they do not provide a full explanation of how the data was cleaned and pre-processed before analysis. Data cleansing and pre-processing must follow a well-defined and documented procedure to provide reliable outcomes.
2. Model comparison the authors apply a number of time series models, including the GARCH and EGARCH models, to examine the volatility of bitcoin prices. Despite their widespread usage in the field of financial analysis, there may be other models that are more appropriate or that yield better results when applied to the data. The validity and applicability of the results might be strengthened via testing more models.
3. State your research question more precisely. The article's research question might require some fine-tuning in order to be more effective. In order to assist the reader, comprehend the study's goal and to guide the analysis, it may be useful to clarify the objectives and hypotheses of the research directly.
4. Improve the technique section by clarifying the statistical models employed and the assumptions made (see point #6). In addition, a detailed explanation of the steps involved in analysing the data could prove useful. The authors may have added more weight to their findings and conclusions by doing sensitivity analysis. To see how much the findings change depending on the specifics of the case or the assumptions made, you may do a sensitivity analysis.