

# Review of: "Unpacking the Complexities of Bitcoin Volatility: 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.

1. To make a fair comparison with other periods, I propose shortening the pre-covid period, as it appears longer. Additionally, the author notes other crises during this period, such as the 2014 Rubble crisis, the 2015 Chinese stock market crash, and the 2018 Turkish Lira crisis. Which suggests that this period can still be divided into more sub periods.
2. The standard deviation is a reliable measure of volatility, and in Table 2, the values are quite similar the the 4 sub periods. The values of the standard deviation would suggest that the period between the pre-covid-19 crisis and the Russo-Ukrainian war had the highest level of volatility. Why is this the case when we know that volatility increase during the crisis period? This also seems to contradict what is mentioned in the last paragraph of section 2 (Data and summary statistics)
3. The author mentioned the negative Beta 2 but did not explain the implications. In the results for Covid period in table 2 (FIEGARCH) the sum of Beta 1 and beta 2 are negative. This means that the volatility of the series is more mean-reverting and less persistent.
4. A lot of emphasis was done on diagnostic test such as normality test, the Q-Statistics on Standardized Residuals test, and the ARCH-LM test and this should be not be the focus of the study.