Review of: "Cryptocurrency market risk analysis: evidence from FZL function"

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Potential competing interests: No potential competing interests to declare.

This paper estimates VaR and ES on crypto applying score-based framework (GAS). Catania and Grassi (2021) already discussed similar study on BTC, ETH, XPR, and LTC using similar score-based approach. Based on this view, the current study offers little contribution to the literature.

However, I believe this paper can be improved in the following ways:

First, as stated by Carol Alexander & Michael Dakos (2023), the forecasting performance of multivariate covariance models has been only rarely studied, and in these few papers only in-sample performance has been assessed. Therefore, I suggest the author estimates the multivariate GAS model as well.

Second, Carol Alexander & Michael Dakos (2023) showed that the added complexity of GARCH model does not significantly improve the forecasting ability of the model over a simpler model (EWMA). Therefore, it is recommended that the author also estimates whether it is worth using a more complicated model (in this case, GAS model) over a simpler model (EWMA).

Third, it is suggested to add of the the industry standard traffic light test of the Basel Committee (1996) and McNeil and Frey (2000) for Expected Shortfall. The author can use ufRisk and esback packages from R open-source software.

References

Carol Alexander & Michael Dakos (2023) Assessing the accuracy of exponentially weighted moving average models for Value-at-Risk and Expected Shortfall of crypto portfolios, Quantitative Finance, 23:3, 393-427, DOI: 10.1080/14697688.2022.2159505

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