

## Volatility Dynamics of Crypto-Assets\*

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### Abstract

Research literature on analyzing crypto market focuses especially on Bitcoin. The objective of this paper is to select the optimum model or set of models useful for modeling five of the most popular crypto-currencies associated volatility. The assessment is based on GARCH models and the best-fitted model is selected through maximizing the likelihood and minimizing the AIC and BIC information criteria. Conclusions are drawn regarding performance of the models in terms of investing on the crypto market. Our results show that all crypto-assets, especially Bitcoin, are characterized by extreme volatility, even more if we look at their inter-daily prices but also that become more evident that crypto-assets require further sophisticated tools in order to estimate their volatility.

**Keywords:** crypto-currencies, virtual currencies, Bitcoin, Ethereum, GARCH, crypto-currencies volatility