Accepted Manuscript

Scaling properties of extreme price fluctuations in Bitcoin markets

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PII: S0378-4371(18)30855-0
DOI: https://doi.org/10.1016/j.physa.2018.06.131
Reference: PHYSA 19825

To appear in: *Physica A*

Please cite this article as: S. Begušić, Z. Kostanjčar, H. Eugene Stanley, B. Podobnik, Scaling properties of extreme price fluctuations in Bitcoin markets, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.06.131

Scaling properties of extreme price fluctuations in Bitcoin markets

Highlights

- Bitcoin price fluctuations across multiple exchanges and time intervals are found to exhibit heavy tails which follow a power-law
- The scaling exponents are estimated to fall within the region $2 < \alpha < 2.5$, suggesting that Bitcoin price fluctuations exhibit heavier tails than the inverse cubic law found in stocks
- The fact that $\alpha > 2$ implies the existence of a finite second moment and presents a fundamental basis for covariance-based characterization of risk