

Intraday liquidity and trading dynamics around extreme price movements in cryptocurrencies

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Abstract

Covering the 8 most widespread cryptocurrencies in the world across the 16 most active trading platforms from May 2015 to July 2018, we show that intraday extreme price movements (EPMs) in cryptocurrencies are accompanied by a sharp increase in trading volume, spreads and depth. This holds true whether we focus on the Bitcoin on the most active Bitfinex platform only, or extend the analysis across several cryptocurrencies and platforms. Using the logistic regression framework adapted to rare events, we show that the number of trades is the most consistent driver of EPMs, as it is often the case for traditional markets. However, the probability of an EPM varies significantly across platforms, as indicated by the high significance of time-invariant unobservable platform fixed effects. All in all, we expect further platform consolidation but we do not find evidence of obvious market dysfunction when prices move very sharply.

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