Did the Introduction of Bitcoin Futures Crash the Bitcoin Market at the End of 2017?

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Abstract

Since Bitcoin's largest price decline and the launch of the Bitcoin futures market coincided in December 2017, there have been heated discussions about whether the launch of the futures market crashed the Bitcoin market. Taking advantage of the intraday data from Bitcoin futures trades, our study is the first to provide statistical evidence for this discussion. The introduction of Bitcoin futures could negatively affect the Bitcoin price in the short term, but it has a neutral effect in the long term. Furthermore, we find the limit to arbitrage between Bitcoin futures market and spot market just after the Bitcoin futures market was launched, which implies the linkage between these markets did not exist during this period. Thus, this paper empirically shows that the introduction of Bitcoin futures did not crash the Bitcoin market at the end of 2017.

JEL codes: G14, G12

Keywords: cryptocurrency, Bitcoin, futures, intraday data, limit to arbitrage, vector autoregressive model

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