

Bitcoin Intraday Time-Series Momentum

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Abstract

This study examines intraday time-series momentum in Bitcoin. Unlike traditional markets, Bitcoin trades 24 hours a day and therefore has not got a clear opening and closing period. Therefore, we use trading volume as a proxy for the opening and closing and show that the first half-hour positively predicts the last half hour. We find that the first trading sessions with the highest volume or volatility are associated with the greatest predictability for intraday time-series momentum. We also show that intraday momentum-based trading yields substantial economic gains in terms of market timing and asset allocation, especially in periods of a market downturn in Bitcoin. Consistent with Gao et al (2018), we also show that the intraday momentum is higher on days when past returns are positive rather than negative.