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The day of the week effect in the cryptocurrency market

Abstract

This paper examines the day of the week effect in the cryptocurrency market using a variety of statistical techniques (average analysis, Student's t-test, ANOVA, the Kruskal–Wallis test, and regression analysis with dummy variables) as well as a trading simulation approach. Most crypto currencies (LiteCoin, Ripple, Dash) are found not to exhibit this anomaly. The only exception is BitCoin, for which returns on Mondays are significantly higher than those on the other days of the week. In this case the trading simulation analysis shows that there exist exploitable profit opportunities; however, most of these results are not significantly different from the random ones and therefore cannot be seen as conclusive evidence against market efficiency.

Keywords

Efficient Market Hypothesis, Day of the week effect, Cryptocurrency, Bitcoin, Anomaly, Trading strategy