Independent study title WHAT DRIVES CRYPTOCURRENCY BUBBLE?

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## **ABSTRACT**

This study intends to do the study on relationship between cryptocurrency. We find that there are both relationship that cryptocurrency drive each other's bubble and help each other's to reduce the inefficient. The data that is used is between 01 December 2017 and 28 February 2018. The interesting incident that occurs between these periods is the expiration of the first Bitcoin futures contract from CBOE market. Therefore, we segment the data into two periods, prior the expiration and post the expiration. We found that the relationship among cryptocurrency is diminished and substituted by momentum effect. Driving to bubble relationship and increasing in efficient relationship are also observed.

**Keywords:** Cryptocurrency, State Space Model, Kalman Filter, Bitcoin Futures