This is a very interesting paper, well and clearly written. I think the authors should extend the discussions of the existing literature and also work on but be very careful the Bitcoin – gold relationship/ comparison. The two assets are very different in many respects (tangibility, counterparty risk etc.) and these issues should be carefully acknowledged and discussed. The following paper may also be useful:

Baur, Dirk G. and Lee, Adrian D. and Hong, Kihoon, Bitcoin: Currency or Investment? (February 6, 2015). Available at SSRN: https://ssrn.com/abstract=2561183 or http://dx.doi.org/10.2139/ssrn.2561183

Major issues:

Bitcoin returns may exhibit strong serial correlation. The authors should account for this and include a lagged return in equation (1).

The Table 2 coefficient estimates look as if the coefficients summed up to more than one which would lead to explosive volatility. The authors should check and discuss this issue.

Figures 3 and 4 look strange (especially negative shock part) and wrong. The authors should check and discuss this issue.

The "lack of liquidity" as mentioned in the Conclusions (for the first time) should be further investigated earlier in the paper and related to serial correlation.

I find the robustness section contains interesting additional analyses that would deserve a more prominent place (e.g. the EGARCH or the S&P500 estimations). In contrast, Table 2 and the different currency denominations do not seem to add similar value.

Other issues:

- Provide reference to CFTC swap statement (e.g. footnote)

- Explain "digital gold", i.e. elaborate on Popper (2015)

- Change "American dollar" to "US dollar"

- Figure 1 appears to show the same series six times. The authors should try to highlight differences due to currency denominations. Figure 1 doesn't do the job.

- Figure 2 same issue as Figure 1.

- Table 1 suggests that Bitcoin prices are very similar in different currencies (are the authors sure about that?) so perhaps change Figures 1 and 2 and report only one time-series and variations across currencies in another graph.