

# Report on Master Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University

<b>Student:</b>	<b>Jiang jinggang</b>
<b>Advisor:</b>	<b>doc. Mgr. Tomáš Holub, PhD.</b>
<b>Title of the thesis:</b>	<b>The Principle and Economic Analysis of Bitcoin</b>

## **OVERALL ASSESSMENT:**

### **Short summary**

This thesis focuses on the modern phenomenon of Bitcoin from various angles, including its history, technical infrastructure, a narrative analysis of its price formation within the demand-supply model, and a simple econometric analysis of the Bitcoin's price developments. Section 6 offers some suggestions for the future development of Bitcoin and the related markets and their regulation.

### **Contribution**

The narrative analysis of Bitcoin's price formation within the demand-supply model of section 4.2 is interesting, but quite subjective, without any convincing analysis that the demand and supply curves have the shape suggested by the author. Its usefulness for qualitative forecasts of future developments is thus likely to be limited.

The description of the technological framework of Bitcoin is a useful summary for a reader not fully familiar with its functioning (but a competent newcomer to the subject may get lost anyway). However, there is a relatively weak link of this section to the rest of the thesis, except for its brief concluding subsection.

The econometric section does not bring much insight (see below).

### **Methods**

The econometric section of the thesis is quite elementary and rather weak. Given the non-stationarity of the data, a VECM model would be a natural choice. Instead, the author relies on Granger causality test for differenced data (in the form of rates-of-return). The only significant finding is that the Bitcoin price is Granger-caused by the exchange rate of USD to RMB.

### **Literature**

The number of available academic research papers focused on the analysed topic is naturally limited. The author provides 30 references, but most of them are not academic journal articles. This probably reflects the nature of the chosen topic.

### **Manuscript form**

The manuscript form is broadly appropriate, even though some further editing would help. The structure of the thesis is logical.

### **Overall evaluation and suggested questions for the discussion during the defense**

The thesis falls short of my expectations. My suggestions would be to spend more time working on it. It is at the edge of being defensible at the IES, Faculty of Social Sciences, Charles University. I thus suggest the **grade E**.

The results of the Urkund analysis do not indicate significant text similarity with other available sources (other than draft versions of the same thesis).

At the defense, the student could focus on the following two questions:

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- (i) What is the economic interpretation of the statistically significant link between the price of Bitcoin and RMB/USD exchange rate?
- (ii) How do you interpret the recent major swings in Bitcoin's price in light of your analysis? Is the regulatory framework appropriate? Does Bitcoin pose any systemic financial stability risks?

## **SUMMARY OF POINTS AWARDED:**

<b>CATEGORY</b>	<b>POINTS</b>
<i>Contribution (max. 30 points)</i>	17
<i>Methods (max. 30 points)</i>	12
<i>Literature (max. 20 points)</i>	13
<i>Manuscript Form (max. 20 points)</i>	15
<b>TOTAL POINTS (max. 100 points)</b>	<b>57</b>
<b>GRADE (A – B – C – D – E – F)</b>	<b>E</b>

**NAME OF THE REFEREE: Doc. Mgr. Tomáš Holub, PhD.**

**DATE OF EVALUATION: 1 June 2021**

*Digitally signed by  
Tomáš Holub*

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**Referee Signature**

