

# Report on Bachelor Thesis

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

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<b>Advisor:</b>	<b>PhDr. Ladislav Krištofuk, Ph.D.</b>
<b>Title of the thesis:</b>	<b>Bitcoin as a leader of crypto-currencies: A predictability study</b>

## **OVERALL ASSESSMENT** (provided in English, Czech, or Slovak):

The bachelor's thesis studies the relationship between Bitcoin as the biggest and the best known crypto-currency and important alt-coins – Litecoin, Ripple, Peercoin and Dogecoin. The thesis provides a standard vector autoregression framework with an impulse-response analysis and following forecasting exercise. The results are partly the expected ones – Bitcoin leads the other currencies and the leadership is stronger when using high-frequency data (the thesis provides the analysis on daily and 2-hour data) – but the found causality is frequently bidirectional.

The motivation of the thesis is well defined. However, there are several shortcomings. Firstly, the literature review is very limited even though the empirical literature on cryptocurrencies is quite wide. Secondly, the graphical part of the thesis is lacking. Specifically, the figures are neither consistently nor carefully prepared and tables could have been given more work as well (Section 5). Thirdly, the structure of the text is unbalanced (e.g. there is section 3.1.1 but no 3.1.2). Fourthly, the methodology is sometimes sloppy, e.g. there are no error-terms in the VAR equations (Section 4.3) and there is no null hypothesis distribution of the D-M test (Section 4.6).

Overall, the topic of the thesis is very interesting and the presented results contribute strongly to the existing literature about Bitcoin and other crypto-currencies. Unfortunately, the presentation of results is sometimes sloppy and insufficient. Due to the above-mentioned reasons, **I suggest final grade B.**

## **SUMMARY OF POINTS AWARDED** (for details, see below):

<b>CATEGORY</b>	<b>POINTS</b>
<i>Literature</i> (max. 20 points)	10
<i>Methods</i> (max. 30 points)	25
<i>Contribution</i> (max. 30 points)	28
<i>Manuscript Form</i> (max. 20 points)	10
<b>TOTAL POINTS</b> (max. 100 points)	<b>73</b>
<b>GRADE</b> (1 – 2 – 3 – 4)	<b>2</b>

**NAME OF THE REFEREE: PhDr. Ladislav Krištofuk, Ph.D.**

**DATE OF EVALUATION: 8.6.2015**

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**Referee Signature**