Report on Bachelor Thesis

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

Student:	**Martin Pátek**
Advisor:	**PhDr. Ladislav Krištoufek, Ph.D.**
Title of the thesis:	**Variance structure of the Bitcoin currency**

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

The bachelor's thesis analyzes a variance structure of the Bitcoin currency. To do so, it utilizes the realized volatility framework based on high-frequency data. Together with the standard realized volatility, the bipower variation is used for separating possible jumps. Comparison to other types of assets forms an essential part of the thesis. This has not been done in the literature yet.

The thesis is very well written and it reads well. All necessary statistical methods are well described and easy to follow. Results are presented in an intelligible manner. These can be labeled as partially surprising. Bitcoin is shown to be much more volatile than other types of assets, which is quite expected. However, a frequency of jumps in Bitcoin volatility is very close to the one of the other assets (at least for the second part of the examined period), which is rather surprising.

I have no objections here, the thesis is of a very high quality and its topic and execution goes well beyond the bachelor's level. **I gladly grade the thesis as a strong A.**

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

CATEGORY		**POINTS**
Literature	*(max. 20 points)*	20
Methods	*(max. 30 points)*	30
Contribution	*(max. 30 points)*	30
Manuscript Form	*(max. 20 points)*	20
TOTAL POINTS	*(max. 100 points)*	**100**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE: PhDr. Ladislav Krištoufek, Ph.D.

DATE OF EVALUATION: 5.6.2015

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