

# Report on Bachelor Thesis

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

<b>Student:</b>	<b>Vojtěch Jurka</b>
<b>Advisor:</b>	<b>Doc. PhDr. Jozef Baruník, Ph.D.</b>
<b>Title of the thesis:</b>	<b>Commodity Connectedness: Short-run Versus Long-run</b>

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

### **Contribution**

The bachelor thesis investigates volatility spillovers between equity and commodity markets. This topic has been covered by many preceding papers. The main findings of other authors in this field are briefly summarized in Chapter 2. The contribution of the author is that he uses different methodological approach than his predecessors. To be specific, approach co-developed by his advisor. The direction of the application is new – volatility transmission among most widely traded commodities and S&P 500 index is studied.

### **Methods**

Methods used by the author are definitely on a more advanced level than expected from a bachelor thesis. It is based on a vector autoregressive model used for an impulse response functions construction. Author then defines general forecast error variance decomposition to see how connectedness measures are defined and uses a new methodology by application of Fourier transform of impulse response functions to analyse frequency dynamics of volatility spillovers.

### **Literature**

The thesis is based on one main source (Baruník and Křehlík, 2018) which presents the method, so I assume that the methodological part is mostly taken from this article. Author then applies the methodology of this paper on selected data. Literature overview and overall work with citations is adequate, findings of other authors are explained sufficiently.

### **Manuscript form**

The thesis is very well structured, written in a good English and understandable given the complexity of the model.

### **Summary and suggested questions for the discussion during the defense**

Overall impression of the thesis is very good. Its scope especially in terms of modelling would be perfectly sufficient for a master thesis.

Potential questions:

- As author mentions in the literature overview volatility spillovers are mostly modelled by GARCH family of models. Could the author compare the advantages and drawbacks of both approaches?
- Author claims that the findings of the paper are crucial for risk management and regulators. Could author be more specific what should be the application of the findings? How exactly should risk managers' decisions change knowing the outcomes of the thesis?

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

<b>CATEGORY</b>	<b>POINTS</b>
<i>Contribution</i> (max. 30 points)	21
<i>Methods</i> (max. 30 points)	30
<i>Literature</i> (max. 20 points)	20
<i>Manuscript Form</i> (max. 20 points)	20

# Report on Bachelor Thesis

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

Student:	Vojtěch Jurka
Advisor:	Doc. PhDr. Jozef Baruník, Ph.D.
Title of the thesis:	Commodity Connectedness: Short-run Versus Long-run

TOTAL POINTS	(max. 100 points)	91
GRADE	(A - B - C - D - E - F)	A

NAME OF THE REFEREE: PETRA BUZKOVÁ

DATE OF EVALUATION: 4.6.2018

  
\_\_\_\_\_  
Referee Signature