

# Report on Master Thesis

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

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<b>Advisor:</b>	<b>Jozef Barunik</b>
<b>Title of the thesis:</b>	<b>Measuring systemic risk in time-frequency domain</b>

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

The thesis is a methodological as well as empirical contribution to the recent literature focusing on proper measurement of systemic risk. The main hypothesis that the risk is distributed over various frequencies (or in other words changes in the short-, medium-, and long-run) is tested with application of frequency domain econometric techniques to the current measures. As a result, Author proposes new framework of time-frequency measurement for systemic risk, and concludes that riskometers should be adjusted to capture the rich dynamics between economic agents operating on different investment horizons. With this respect, the thesis is very interesting, novel contribution with important implications for the risk measurement. While economic intuitions has been explored previously, mainly disentangling between long-run risk and short-run risk, the discussion in this thesis focuses on empirical testing.

During the course of the research, we have discussed closely the issues, as the topic is not covered by any course at IES, hence more demanding to understand for our Master student. Author has incorporated all the issues into the text, and I have no other comments to the defence.

In conclusion, I believe the work is an original application of modern econometric tools, which is done rigorously enough to guarantee author grade 1.

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

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

**NAME OF THE REFEREE:** Jozef Barunik

**DATE OF EVALUATION:** September 11, 2015

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**Referee Signature**