

Report on Master Thesis

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

Student:	Matěj Nevrla
Advisor:	Jozef Baruník
Title of the thesis:	Systemic Risk in the European Financial and Energy Sector: Dynamic Factor Copula Approach

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

The thesis is an empirical contribution to the recent literature focusing on proper measurement of systemic risk. Following recent literature, author applies dynamic factor copula model to daily credit default spread (CDS) rates with the main aim of estimating future values of probabilities of systemic events. Despite several attempts to understand and measure systemic risk of the institutions, there is no consensus on proper methodology. Hence the thesis is very topical, and economically important, as it brings interesting results using CDS data. To obtain such a results, author had to study literature beyond the level of Master courses, and master computationally demanding modern methodology of estimation based on the data driven criterion functions introduced only recently (generalized autoregressive score).

The thesis is well organized, during the course of the research, we have discussed many issues on frequent basis, Matej incorporated all my comment thoroughly into the text, and hence 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):

CATEGORY	POINTS
<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
TOTAL POINTS (max. 100 points)	100
GRADE (1 – 2 – 3 – 4)	1

NAME OF THE REFEREE: Jozef Baruník

DATE OF EVALUATION: June 2, 2016

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

Strong Average Weak
20 10 0

METHODS: *The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.*

Strong Average Weak
30 15 0

CONTRIBUTION: *The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.*

Strong Average Weak
30 15 0

MANUSCRIPT FORM: *The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.*

Strong Average Weak
20 10 0

Overall grading:

TOTAL POINTS	GRADE		
81 – 100	1	= excellent	= výborně
61 – 80	2	= good	= velmi dobře
41 – 60	3	= satisfactory	= dobře
0 – 40	4	= fail	= nedoporučuji k obhajobě