# **Report on Diploma Thesis**

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

Student:	Bc. Monika Zsigraiov a	
Advisor:	PhDr. Jakub Seidler, Ph.D.	
Title of the thesis:	Probability of default modelling using macroeconomic factors	

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

The thesis evaluates relationship between probabilities of default of different borrowers' segments and macroeconomic developments. Thus, this is an important topic as it enables to quantify the intensity of credit risk in the financial sector based on the different macroeconomic scenarios, both for the non-financial corporations and households. The latent factor model and FAVAR are used for estimates using the Czech data. Also backtesting of the abovementioned models was performed with the conclusion that the latent factor model seems more appropriate for this type of modelling.

The thesis is competently written, it has a logical structure and neat form. Standard theory is appropriately described and explained with references to the relevant literature. Also empirical background is strong as the thesis employs advanced latent factor model and FAVAR. The results are compared to the previous studies and possible differences are explained.

All relevant comments given by the supervisor were incorporated into the text during the process of writing. Possible defense questions could be concerned with:

- a) Why the latent factor models are supposed to be better than the VAR-class of models for PD modelling?
- b) Where any latent non-observable factors estimated for non-fin corporations or households

I recommend accepting the thesis for the defense with the evaluation **excellent**.

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

CATEGORY		POINTS
Literature	(max. 20 points)	20
Methods	(max. 30 points)	29
Contribution	(max. 30 points)	27
Manuscript Form	(max. 20 points)	20
TOTAL POINTS	(max. 100 points)	96
GRADE	(1 - 2 - 3 - 4)	1

NAME OF THE REFEREE: PhDr. Jakub Seidler, Ph.D.

DATE OF EVALUATION: September 17, 2014

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## **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