Opponent's Report on Dissertation Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University in Prague
Opletalova 26, 110 00 Praha 1, Czech Republic
Phone: +420 222 112 330, Fax: +420 222 112 304

Author:	Mgr. Diana Žigraiová
Advisor:	Doc. PhDr. Ing. Ing. Petr Jakubík Ph.D. Ph.D.
Title of the Thesis:	Essays in Empirical Financial Economics
Type of Defense:	DEFENSE
Date of Pre-Defense:	February 21, 2018
Opponent:	Doc. PhDr. Petr Teplý, Ph.D.

Address the following questions in your report, please:

- a) Can you recognize an original contribution of the author?
- b) Is the thesis based on relevant references?
- c) Is the thesis defendable at your home institution or another respected institution where you gave lectures?
- d) Do the results of the thesis allow their publication in a respected economic journal?
- e) Are there any additional major comments on what should be improved?
- f) What is your overall assessment of the thesis? (a) I recommend the thesis for defense without substantial changes, (b) the thesis can be defended after revision indicated in my comments, (c) not-defendable in this form.

(Note: The report should be at least 2 pages long.)

(Note: The report should be at least 2 pages long.)

The 2007-2009 global crisis has changed the view of both academics and practitioners on world financial markets. Diana has chosen an interesting topic for her dissertation and all four essays deal with issues that are highly relevant for economic theory and its application. The first essay deals with an early warning framework for assessing systemic risks and predicting systemic events, the second one analyzes variables with predictive power for financial stress. The third essay investigates the competition-stability nexus, while the fourth one discusses how bank's corporate governance affects bank risk.

I have reviewed the final version of the thesis of Diana Žigraiová, and respond to the specific questions as follows:

Ad a) YES, each of the essays represents an original empirical contribution to the literature as supported by evidence of their publications: since three of them have been already published in journals with impact factor (Economic Systems, Journal of Economic Surveys, Journal of Financial Stability) and the fourth has been submitted to The Economics of Transition.

Ad b) YES, the thesis is based on relevant references.

Adc) YES

Ad d) YES. As already mentioned, the main results (three papers) of the dissertation thesis have been published. I would like to highlight that the Journal of Financial Stability, where Essay 2 was circulated, ranks to TOP journals in the field of financial stability.

Ad e) I had minor comments specified in my prdefense report that have been addressed as indicated below.

Ad f) I recommend the thesis for defense without substantial changes.

More detailed comments

Essay 1 - Systemic Event Prediction by an Aggregate Early Warning System: An Application to the Czech Republic

In the first essay the author prepossess Early Warning System (EWS) framework for predicting systemic events for the Czech Republic. Specifically, she develops two models on the panel of 14 countries. Diana's results show, among others, that a suitable EWS framework derived from a panel approach for the Czech Republic should incorporate in addition to transition countries also advanced economies that provide longer time series to avoid computational challenges.

My comments and questions to this essay have been addressed.

Essay 2 - Leading Indicators of Financial Stress: New Evidence

In the second essay the author proposes have examined which variables have predictive power for financial stress in a sample of 25 OECD countries (using the Financial Stress Index (FSI)). Diana's results show that policymakers will face difficulties when trying to proactively avoid potential stress in financial markets. Not surprisingly, she claims that it is a challenging task for models to predict the abrupt changes in financial stress.

My comments and questions to this essay have been addressed.

Essay 3 - Bank Competition and Financial Stability: Much Ado about Nothing? In the third essay a meta-regression analysis of 598 estimates of the relationship between bank competition and financial stability reported in 31 studies. The meta-regression analysis has become one of the most favourite methods in the past years as documented by a number of works by our IES colleagues Tomáš Havránek and Zuzana Iršová-Havránková.

My comments and questions to this essay have been addressed.

Essay 4 - Management Board Composition of Czech Banking Institutions and Bank Risk: The Random Forest Approach

In fourth essay Diana collected a unique data set and investigated how the management board composition of banking institutions affects their risk in the Czech Republic. She applied a machine learning technique – the random forest – to identify the best predictors of bank risk. This paper has not been published yet. However, I appreciate that was included to the thesis

since it demonstrates Diana's knowledge in the field of bank's corporate governance, which is often neglected by researchers because of the lack of data.

My comments and questions to this essay have been addressed.

To summarize, the studies composed by Diana Žigraiová show that she has developed a solid academic approach, namely to review the existing literature and to identify and investigate open questions and to draw relevant conclusions from that. The topics chosen are highly attractive subjects which makes her contributions valuable, in particular also to the financial industry and policy-makers.

Overall evaluation: I consider this doctoral thesis as a good academic work and appreciate that Diana have reflected my previous comments to the final version. <u>I recommend the thesis for the final defense without substantial changes.</u>

Date:	September 27, 2018
Opponent's Signature:	the Consequency solding held verse fill add of the Consequence of the Alleger of the Consequence of the Alleger
Opponent's Affiliation:	Doc. PhDr. Petr Teplý, Ph.D. IES FSV UK

since it demonstrates Diana's knowledge in the field of bank's corporate governance, which is often neglected by researchers because of the lack of data.

My comments and questions to this essay have been addressed.

To summarize, the studies composed by Diana Žigraiová show that she has developed a solid academic approach, namely to review the existing literature and to identify and investigate open questions and to draw relevant conclusions from that. The topics chosen are highly attractive subjects which makes her contributions valuable, in particular also to the financial industry and policy-makers.

Overall evaluation: I consider this doctoral thesis as a good academic work and appreciate that Diana have reflected my previous comments to the final version. <u>I recommend the thesis for the final defense without substantial changes.</u>

Date:	September 27, 2018
Opponent's Signature:	Terly
Opponent's Affiliation:	Doc. PhDr. Petr Teplý, Ph.D. IES FSV UK