

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:	Zuzana Havránková
Advisor:	Prof. Ing. Oldřich Dědek, CSc.
Title of the Thesis:	Six Essays on Meta-Regression Analysis
Type of Defense:	DEFENSE
Date of Pre-Defense:	December 3, 2014
Opponent:	Prof. Jarko Fidrmuc

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 defensible at your home institution?
- 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) Were your comments raised at the pre-defense, addressed in the dissertation submitted to the regular defense? (The pre-defense report is enclosed below)
- g) What is your overall assessment of the thesis? (a) I recommend the thesis to be defended without major changes; (b) The thesis is not defensible.

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

Content of the Report:

The PhD thesis presented by Zuzana Havrankova (Irsova) represents an extraordinary work. First, the dissertation is surprisingly long. It includes 6 individual papers, which are presented on nearly 300 pages. Moreover, these papers represent only a small part of the total research portfolio of Zuzana Havrankova, who, according to her introduction coauthored 13 papers, with 10 of them being already published. Although the dissertation represents only a part of author's research, it answers clearly one of the questions which my report has to answer. The results of the dissertation work are clearly publishable in really top journals. I would wish that more dissertations like this are available.

Despite the broad area of authors research, the thesis represents a highly consistent work which is unified both by its methodology and focus. The individual chapters use and further develop the application of meta analyses in economics. First, one of the main contributions was the creation and focus on large samples of indicators used for meta analysis. Several analyses presented in the thesis review a high number of studies and present more than 1000 estimated of analyzed coefficient. Second, Ms Havrankova together with her coauthors further improved the methodology of meta analyses. In particular, they introduce Bayesian methods to meta analyses. This was a significant methodological improvement of meta analyses, which

makes also a difference between meta analyses as used in economics and in other scientific fields (e.g. medicine).

Ms Havrankova participated in an intensive stream of research work especially together with Tomas Havranek, Roman Horvath, and Marek Rusnak. Nevertheless, the thesis documents very well the individual contribution of the author, which generally ranges from 30% (chapter 6 and 7) to 50% (e.g. chapter 2, 3, and 5). In general, the share of her work contributes more than the average contribution of an individual author would be. This shows also that Ms Havrankova is integrated very well into international academic networks. The individual chapters include numerous references to recent works on the analyzed issues which proves the author's extraordinary knowledge of the literature.

The second unifying feature of the presented thesis is the selection of the topics. The majority of the papers are related to international economics (border effects and FDI). Also the remaining chapters are working on issues of global importance (carbon missions, gasoline demand). All chapters present detailed international comparisons.

The dissertation thesis is nicely summarized in chapter 1, which provides not only a summary of the work, but also a nice introduction of the meta analyses in recent macroeconomic research. Chapter 2 discusses the estimation of border effects. It reviews 61 studies which followed the work started by McCallum. The chapter confirms that the border effects remain significant also if different methodological innovations of the last years are considered. Moreover, it finds only a low border effect in OECD countries but high border effects in the developing countries and emerging economies. The contribution has a high potential for a publication in a top journal. Indeed, it is under review in Economic Journal.

Chapter 3 and chapter 5 analyze FDI. The former chapter reviews more than 60 studies and shows that there is a pattern influencing the results of publications, but it has weakened in the time. Moreover, the publication bias is not significant. The publication bias has been the main focus in the latter chapter. By contrast to the earlier results, this chapter finds a significant publication bias. The comparison of these two studies and the differences would be highly interesting. This issue should be addressed during the presentation. Both papers have been already published in the Czech Journal of Economics and Finance and in Journal of Development Studies.

Chapter 4 addresses the price elasticity of the gasoline demand. Standard view is that the price elasticity is rather high. The chapter shows that this is not confirmed by a meta analysis, moreover, the authors find a significant publication bias in the literature. This finding should have important implications for formulation of tax policy in different countries and also for formulation of environmental policy, e.g. targets for carbon emissions. The results of this research have been published in Energy Economics.

The questions of the environmental protection are addressed also in chapter 7 on carbon emissions. The chapter reviews more than 100 studies with nearly 1000 estimates of social costs of carbon. Despite general wisdom, the analysis reveals significant publication bias favoring publication of high estimates of the costs. The corrected mean estimator is correspondingly lower and no longer significant from zero. The paper is under review in Journal of Environmental Economics and Management.

Finally, chapter 7 reviews the literature on the elasticity of intertemporal substitution in consumption. It uses Bayesian analysis of nearly 3000 estimates of intertemporal substitution from nearly 200 studies on more than 100 countries. The results confirm significant differences in consumer behavior in developed and developing economies. It discusses the possible factors for the differences between developed and developing countries. The paper is revised and resubmitted to in Journal of International Economics

Comments to Revised Version

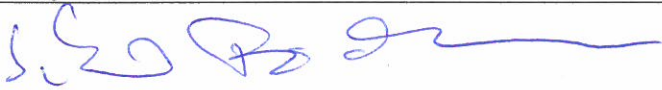
I appreciate the outcome of the preliminary defense of the PhD thesis. I have no further comments to the final version of the PhD thesis and wish the authors much success at the final defense.

Overall Assessment

In sum, I recommend the thesis for defense without substantial changes. It represents an extraordinary good example of dissertation thesis, which stands very well above international standards. The thesis would clearly fulfill the criteria for a dissertation at the institutions where I am working or where I was working at the past. Several parts of the paper have been already published in highly recognized journals, including e.g. Journal of Development Studies or Czech Journal of Economics and Finance. Other parts of the thesis are under review, or even resubmitted, to top journals (e.g. Journal of International Economics).

**Zeppelin Universität
gemeinnützige GmbH**

Department for Corporate
Management & Economics
Am Seemooser Horn 20
88045 Friedrichshafen | Germany

Date:	February 15, 2015
Opponent's Signature:	
Opponent's Affiliation:	Prof. Jarko Fidrmuc Zeppelin University Friedrichshafen, Germany