# Report on Bachelor / Master Thesis

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

Student:	Bc. Michael Bílý
Advisor:	Petr Janský, Ph.D.
Title of the thesis:	Estimating the quadratic almost ideal demand system and the effects of population ageing in the Czech Republic

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

The aim of this thesis was to estimate the Quadratic Almost Ideal Demand System (QUAIDS) of non-durable goods on the Czech Republic's data in two distinct models, both of which have important policy implications. Michael Bílý fulfilled this objective well and wrote an excellent bachelor thesis. The first model evaluated the impact of the 2015 Value Added Tax (VAT) reform in the Czech Republic, which introduced 10% reduced rate on medicaments and books. Michael's model implied that the VAT revenue should decrease by around one billion Czech crowns. The second model is used to predict the effects of the population ageing on the household demand. He finds, for example, that if the population ageing is accompanied by an increase in income, this would increase consumption of eating out, clothing and leisure goods and services in most scenarios.

Michael made good use of the existing relevant literature and applied empirical models carefully, using the most suitable methods and data. The use of English language is at a very good level, although especially the description of the second model's results could be clearer and would benefit from more details and a rewriting.

I would like to note that Michael made use of existing Stata do files that I prepared for an earlier research project and this might be one of the factors that enabled him to write such an advanced thesis. I shared do files with him and he updated and adjusted them accordingly, which was a substantial workload in itself. For example, the previous versions did not deal with ageing at all. Let me also note that better time management on Michael's side might lead to an even better thesis, which would make it suitable even more for a graduate rather than a undergraduate thesis. Some potential improvements include more attention to various robustness checks and an application of various data sources on ageing in the Czech Republic.

The practical contributions of Michael's thesis are extraordinary for a bachelor thesis. Except for the ministry of finance, the 2015 reform has not been evaluated before. No similar model has focused on ageing in the Czech Republic before and Michael carefully applied the Melanie Lührmann's (2008) model to the Czech data and circumstances for the first time.

Overall, I am content with the results of Michael's work and I think that he should consider pursuing the publication of parts of the thesis in an academic journal such as the Prague Economic Papers or the Czech Journal of Economics and Finance. Michael Bílý did an excellent job of writing a thesis and I recommend a grade of **excellent (výborně).** 

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

CATEGORY		POINTS
Literature	(max. 20 points)	20
Methods	(max. 30 points)	28
Contribution	(max. 30 points)	30
Manuscript Form	(max. 20 points)	20
TOTAL POINTS	(max. 100 points)	98
GRADE	(1 - 2 - 3 - 4)	1

NAME OF THE REFEREE: Petr Janský, Ph.D.

DATE OF EVALUATION: 21st January, 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