# **Report on Bachelor Thesis**

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

Student:	Lucie Davidová  Doc. Ing. Vladimír Benáček, CSc.	
Advisor:		
Title of the thesis:	Determinants of Austrian International Trade: Econometric Analysis Based on the Gravity Model	

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

The thesis examines Austrian foreign trade and estimates this country's export function based on the gravity model. Thesis is written in English, has 50 pages (excluding References and Appendix), author quotes 69 references and uses tables and figures for illustrative purposes.

In the first part of the thesis (Chapter 1) the author introduces the main concept of gravity model in trade, describes its development, comments on advantages and potential drawback. Estimation methods and their crucial assumptions, usual usage, and possible difficulties are mentioned in Chapter 2. Chapter 3 analyzes foreign trade of Austria using a panel dataset over the period of 1995-2011. Chapter 4 describes data and variables. The last part of the thesis (Chapter 5) tests for any assumption violation and presents estimation results.

I have the following comments and questions to the thesis that should be answered during the defense:

- In the Introduction the author says that Austria's export and import accounted together for more than 100% of Austria's GDP in 2011 and that it indicates that foreign trade plays an important in the Austrian economy. Is this the reason/motivation why Austria was chosen for author's analysis? I would like to read a little bit more in the main body of the thesis about author's motivation why and based on what criteria she selects Austria in particular. Is there any other author who deals with the same analysis or is this thesis a contribution to the literature of international trade? In subsection 1.6 the author references Batra (2004), Christie (2001), Dotrelova (2004). Do they deal with Austria? This subsection is the first time the author mentions Austria then it is in subsection 2.2 and then there is the whole Chapter 3 International trade of Austria. The thesis is rather confusing without proper explanation why the author deals with Austria. I would suggest including the motivation of why the author chooses Austria in the main body of the thesis.
- The author slightly mentions advantages and critiques of the gravity model in the subsection 1.6. I would like to know about the critiques of the model a little bit more in detail and why the author believes that it is not, as she states, a purpose-built concept achieving seemingly reliable results? Also, according to Ciuriak and Kinjo (2006) one criticism of the gravity model of international trade is that it takes no account of comparative advantage. Has the author thought about including this variable into the model? It would be interesting to see what the trade potential would be after including this variable. I would suggest including comparable advantage variable into the model.

Furthermore, I have a number of minor comments (which should serve rather for further improvements if Lucie decides to deal with the subject matter in the future too).

- Numbers. When writing thousands as number use separator for '000. For example 3,396 observations.
- Abbreviations. When using abbreviations write the whole name for the first time and also what
  it is. For example a reader would not know what SITC is because you do not write/explain it
  anywhere.
- References. On page 5 you write Some economists I would include the footnote in the text. On the contrary on page 19 I would have the paragraph starting Although Austria... in the footnote.
- Labels. Label to Table 2 is incorrect. You should write Main Austria's export partners 1995, 2000, 2005, 2010.

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- References to tables and figures. I would suggest labeling tables and figures in the Appendix differently. You start with the first reference to Figure 2 on page 19 and to Figure 1 later on page 36. Also I would suggest having tables after you reference them in the text. (for example Table 3 on page 22.)
- References to different parts in the thesis. When writing ...is checked in the No Perfect Collinearity part... on page 31, give the number of the part.
- Variables. In Table 7 you show the column NAME. I believe it is not necessary to show it and
  to use these names in the text to refer to the name of the variables. I would suggest using only
  the names you have in the first column. There is a command label in STATA for renaming
  variables. (This would make it easier and less confusing for the reader when you are jumping
  from one to another.)
- Typos. There are couple of typos throughout the thesis. (for example: page 8: once again, page 9 and 41: on one hand, page 27: I would have full stop after why and start new sentence. Page 32: ... about which variables we have to leave...)
- Fixed effects assumption number 2. Is it an assumption or a statement?
- No need to write about STATA commands. In the first paragraph in the subsubsection 5.1.2 the reader does not need to know about these commands in STATA.
- Why do not you write about the tests for heteroscedasticity? On page 36 you write some common tests were applied. Give the names even though they are in the Table 8 later on.
- Deleted Germany. I would suggest including results of regression after deleting Germany in the appendix.
- Czech vs. English. The alphabetical order in Czech and English language is different. English
  does not know the Czech letter "CH". Your references should be reordered since you write in
  English.
- Colored graphs. The reader can easily get lost in colored graphs when printing the work in black and white.

To sum it up, the work does a good job analyzing determinants of Austrian export of goods and services and estimating the Austria's export function. However, there are minor imperfections in the form the thesis is written and a couple of things which should be reconsidered in further research. The author knows how to benefit from literature and the thesis might represent a good start of further fruitful research in this direction. For the Bachelor defense, only the two points above are essential. The rest can be skipped.

I recommend grade 1 (excellent) for the thesis defense.

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

CATEGORY		POINTS
Literature	(max. 20 points)	18
Methods	(max. 30 points)	25
Contribution	(max. 30 points)	23
Manuscript Form	(max. 20 points)	18

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TOTAL POINTS	(max. 100 points)	84
GRADE	(1 – 2 – 3 – 4)	1

NAME OF THE RE	FEREE: Pa	vel Hrbek
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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