#### REPORT ON THE MASTER THESIS

IEPS – International Economic and Political Studies, Faculty of Social Sciences, Charles University

Title of the thesis:	Observing the Effects of CAFTA on Trade using the Gravity Model		
Author of the thesis:	Jan Škreb		
Referee (incl. titles):	Michal Paulus		

Comments of the referee on the thesis highlights and shortcomings (following the 5 numbered aspects of your assessment indicated below).

## 1) Theoretical background:

The thesis covers necessary theoretical concepts concerning gravity models of trade and regional trade agreements. The estimated model is based on micro-founded gravity models which have solid theoretical foundations. The theoretical background is thus sufficient for a master thesis.

#### 2) Contribution:

The main contribution of the thesis is empirical. The author offers an in-depth estimation of the impacts of CAFTA on mutual trade of signatory countries utilizing a gravity model of trade. The author thus contributes to the existing literature via deliver more detailed and up-to-date results. I find this contribution as a sufficient for a master thesis.

### 3) Methods:

The methods are following standard treatment of gravity models of trade. The author chooses dummy variable approach to approximate multilateral resistance terms and estimate the model via OLS and PPML while controlling for panel nature of the dataset.

I have several comments concerning the methods and methodology:

- 1) On page 30 you wrote?
- "Keeping in mind possible selection bias, the dropped countries were distributed quite randomly and had no importance for the trade relationships I examine.L
  - How did you evaluate whether the dropped countries were distributed randomly?
  - 2) It should be clearly stated whether you are working with bilateral or unilateral gravity dataset. You state that in one of your sentence "I ... created all possible country pair combinations," (page 30) but the term "bilateral" would make it clear.
  - 3) Dummy variables approximating MRT should have been properly coded in the equation (4). Term  $\beta_{16}D$  makes an impression that the author included one variable and one regression coefficient. However, form the text it is clear that the author has in mind a matrix of dummy variables with a coefficient vector. Similar problem can be found in equations (5) and (6).
  - 4) The correlation matrix is in Appendix 3 and not Appendix 4 (p.34).
  - 5) Why did not you include time-varying country dummies if you were working with a bilateral panel dataset?
  - 6) How did you treat missing trade observations? Did you replace them with zero or did you drop them?
  - 7) You are commenting expected value of distance and GDPs. You could have also mentioned that the usual finding should be around |1|.

- 8) On page 43 you comment just the results of the OLS estimate because PPML estimate provides insignificant results for your variable. It is a signal that the results for that dummy are less robust than the results for other dummies. I miss here this discussion (short note) that would inform a reader about lower robustness of those results.
- 9) You can say that hypothesis is rejected instead of disproved. It is more convenient.
- 10) What I miss is a clear statement of the author in the introduction and methodology chapters that the empirical part is composed of two approaches: general effects (chapter 5.1) and effects on individual countries (chapter 5.2). The chapter 5.2. comes as a surprise... The methodology for that subchapter belongs to the methodology chapter that should have been organized accordingly.

#### 4) Literature:

The author covered large amount of relevant literature. The main topics such as gravity models and regional trade agreements are sufficiently analyzed.

### 5) Manuscript form:

The manuscript form would demand another round of proof-reading (several minor typos). I would also improve a structure of the thesis (see my comment 3.10).

I have few additional comments:

- 1) I would recommend to structure the text into more paragraphs. Some of them are simply too long (e.g., introduction).
- 2) Decimal points should be corrected ("." instead of ",") e.g., Table 1.
- 3) I would recommend rounding all numbers to two decimal points. Level of rounding should be consistent across the whole thesis.

**Box for the thesis supervisor only.** Please characterize the progress in the working out of thesis (e.g. steady and gradual versus discontinuous and abrupt) and the level (intensity) of communication/cooperation with the author:

Jan Skreb was gradually elaborating his thesis. We were in touch regularly and the cooperation was very good. I have no complaints about his work effort.

## Suggested questions for the defence are:

- 1) On page 30 you wrote?
- "Keeping in mind possible selection bias, the dropped countries were distributed quite randomly and had no importance for the trade relationships I examine.L
  - How did you evaluate whether the dropped countries were distributed randomly?
  - 2) Why did not you include time-varying country dummies if you were working with a bilateral panel dataset?
  - 3) How did you treat missing trade observations? Did you replace them with zero or did you drop them?

I recommend the thesis for final defence. I recommend the following grade: "B".

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

CATEGORY		POINTS
Theoretical background (n	20	
Contribution (m	ax. 20) points)	19
Methods (n	ax. 20) points)	14
Literature (n	nax. 20) points)	20
Manuscript form (m	ax. 20) points)	17
TOTAL POINTS (ma	ax. 100) points)	90
The proposed grade (A-I	В	

# DATE OF EVALUATION: January 26, 2018

Referee Signature

Overall grading scheme at FSV UK:

<u> </u>				
TOTAL POINTS	GRADE	Quality standard		
91 – 100	Α	= outstanding (high honour)		
81 – 90	В	= superior (honour)		
71 – 80	C	= good		
61 – 70	D	= satisfactory		
51 – 60	E	= low pass at a margin of failure		
0 – 50	F	= failing is recommended		