# REPORT ON THE MASTER THESIS

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

| Title of the thesis: | **More than Roads? A Gravity Model Analysis of the Institutional effects of Trade in the Belt and Road** |
|---|---|
| **Author of the thesis:** | **Cezary Baraniecki** |
| **Referee** *(incl. titles)*: | **Mgr. Michal Paulus** |

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

## 1) Theoretical background:

The thesis is empirically examining the economic logic behind the B&R initiative. The empirical part is well positioned in academic literature and reflect standard treatment of a gravity model of trade.

The author has also investigated sufficient amount of literature which enables the author to properly present his aims and hypotheses.

## 2) Contribution:

The thesis presents very interesting empirical contribution about the economic logic behind the B&R. I highly appreciate author's aim to connect academic tools with very relevant real-world issue and to deliver interesting policy important results.

I have some questions about the methods (explained below) however the thesis is definitely contributive from empirical perspective.

## 3) Methods:

In general, the author has chosen appropriate methodological approach to gravity modelling. However, I have several questions on some concrete steps:

- On page 30 the author presents the definition of "Bad" and "Good" governance indicators. How did he choose the threshold of 0.5 SE? Is it based on his intuition or was he inspired by other studies? Then on page 33 the author claims that the threshold is 1 standard deviation. What is then the real criterion?
- I have a question concerning the hypotheses on page 31. Is the author interested just in the significance of the correlation (that is implied by the hypotheses) or is he interested also in the coefficient sign (I would expect that)? If the coefficient signs are also relevant for the author then how would he redefine the hypotheses?
- On page 32 we can find the equations to be estimated. Usually the GM also includes distance as an explanatory or control variable even though it is wiped out if the FE is applied. Why is the distance not present in the author's equations? Is it because of the country pair dummies? If so then which other relevant control variables were skipped? I would personally include all relevant variables in those equations and then briefly mention which of them would be affected by the estimation methods. Even though the main control variables are presented in the Appendix on page 61, it would help much more to present full specifications. Also, the note "Only used in ppml regression included in Appendix" is quite confusing. Does it mean that those variables were not used in estimations whose results were presented?
- I am quite confused how the similarity index was created. I would strongly recommend to define it also via mathematics. The author also talks about the concept of institutional distance which is not properly defined at least in the literature review. Does the author mean the concept used e.g. by Kuncic (2012, Institutional determinants of bilateral trade: Taking another look)? The concept of institutional distance of e.g. Kuncic does not distinguish

between two directions of the distance. Therefore, I am quite confused what do these two indices mean, how are they constructed and how do they reflect existing research on cultural or institutional distance. That shall be therefore explained during the defense.

- The author has not found a statistically significant coefficient for governance quality for importers which may some researches seem unexpected (page 35). How would the author explain the insignificance of that coefficient?
- In the chapter 3 the author describes how many countries and years are in the dataset. To present all relevant information also the total number of observations shall be presented.

## 4) Literature:

The logic of the literature review chapter is straightforward. The author covers papers on B&R, impacts of institutions on trade and gravity models. I find the quality of the literature review good. I have just few minor comments.

- I have an impression that at the end of the page 24, where he talks about the solution to the zero problem of gravity models, that the author mixes two problems. One problem is how to estimate a gravity model with zeros in trade variable. Then PPML estimator is definitely the solution. The other problem is what the zeros really mean (no trade or missing variable?). Then PPML cannot solve it. On the other hand, the two-step procedure is quite handy way how to approximately solve that issue. I would just ask the author to more carefully describe the importance of each reference in the last paragraph in solving either of those two problems.
- Another possible but definitely imperfect solution to endogeneity issue is to simply lag institutional variables (e.g. Francois & Manchin (2013, Institutions, Infrastructure, and Trade)).
- On page 18 there is a missing year for the reference of Glyfason et al. (2nd line, first paragraph).

## 5) Manuscript form:

The manuscript form does not contain any significant error. I have no critical comment on that.

## Suggested questions for the defence are:

To properly understand the questions for the defence I highly recommend the author to read the related comments above.

1) How did the author choose the threshold of 0.5 SE for the "Bad" and "Good" governance indicators? Is it based on intuition or was he inspired by other studies?
2) I have a question concerning the hypotheses on page 31. Is the author interested just in the significance of the correlation (that is implied by the hypotheses) or is he interested also in the coefficient sign (I would expect that)? If the coefficient signs are also relevant for the author then how would he redefine the hypotheses?
3) Why is the distance together with many other standard gravity control variables not present in the author's equations? Is it because of the country pair dummies? If so then which other relevant control variables were skipped?
4) How was the similarity index created? Can the author describe the index construction step by step? Can he also explain the logic of the index and how is it related to existing literature on institutional distance?
5) The author has not found a statistically significant coefficient for governance quality for importers which may some researches seem unexpected (page 35). How would the author explain the insignificance of that coefficient?
6) The author presents a study which de facto claims that B&R project is not driven by similar economic logic as Chinese trade flows. The author presents several possible explanations for the aim of B&R creators. What is the personal opinion of the author (based on his results and literature he went through) on the real aim of the B&R initiative?

**I recommend thesis for final defence.**

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

| CATEGORY | POINTS |
|---|---|
| *Theoretical background (max. 20)* | 18 |
| *Contribution*      *(max. 20)* | 20 |
| *Methods*      *(max. 20)* | 15 |
| *Literature*      *(max. 20)* | 19 |
| *Manuscript form*      *(max. 20)* | 20 |
| **TOTAL POINTS**      *(max. 100)* | **92** |
| **The proposed grade (A-B-C-D-E-F)** | **A** |

*DATE OF EVALUATION: 13. 9. 2018*

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Referee Signature

*Overall grading scheme at FSV UK:*

| TOTAL POINTS | GRADE | Level of performance |
|---|---|---|
| 91 – 100 | **A** | = outstanding (high honour) |
| 81 – 90 | **B** | = superior (honour) |
| 71 – 80 | **C** | = good |
| 61 – 70 | **D** | = satisfactory |
| 51 – 60 | **E** | = low pass at a margin of failure |
| 50 – 0 | **F** | = failing. The thesis is not recommended for defence. |