Report on Bachelor / Master Thesis

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

| Student: | Bc. HaEun Kim |
|----------------------|---|
| Advisor: | Vilém Semerák, Ph.D. |
| Title of the thesis: | Measuring the Welfare Effects of the US-China Trade War Using a Computable General Equilibrium Model |

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

Please provide a short summary of the thesis, your assessment of each of the four key categories, and an overall evaluation and suggested questions for the discussion. The minimum length of the report is 300 words.

Short summary

HaEun Kim explores the macroeconomic effects of the US-China trade war that started in 2017. The computable general equilibrium model developed by Thomas Hertel and his colleagues at Purdue University was used to analyse effects of tariff increases, quantitative intervention and a decrease in trade efficiency. The analysis is based on the latest GTAP (Global Trade Analysis Project) 10A version database. The key finding is that both the US and China's consumer welfare and GDP decreases across all scenarios, with a larger decrease in China.

Contribution

I am not clear on contribution of the thesis. According to my reading, the author does not say anything about her value added in chapters 1 to 5. Only in the conclusion, on a penultimate page (page 52) the authors states that:

"When comparing the results with other literature studies using the GTAP CGE model shown in Table 2.1 of Chapter 2, this study used relatively recent data and used a slightly different model specification. The results were similar to other related studies in showing that China's losses would be greater than those of the US, that China's manufacturing industry would suffer, and that the trade diversion effect would be felt in Asia. This paper contributes to the larger discussion by using more current and detailed GTAP data compared to other papers. In addition, it is different from other papers in that a potential decoupling is analyzed by assuming three different situations: tariff increase, trade volume decrease, and trade efficiency decrease."

This short vague explanation is not certainly sufficient. The author mentions that she used a slightly different model specification. What are the differences specifically? Why are they important? How was the change in the model implemented? A clear explanation of the value added of the thesis should be immediately included in the introduction. Also, in the literature review part, one should clearly compare his or her work with the existing studies.

The lack of explanation of value added is even more pressing in the situation when the author used modeling framework and software for manipulating the data and implementing the model developed by Thomas Hertel and his colleagues at Purdue University and used a global database built from data contributions by its users around the world.

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Methods

As stated above, the author utilizes the Global Trade Analysis Project (GTAP) computable general equilibrium model developed by Thomas Hertel and his colleagues at Purdue University. This seems to be a widely used model for assessing macroeconomic effects of various trade policies.

Literature

HaEun Kim relies on the CGE model to analyse the current US-China trade war. There are many scholars that explore the same topic using the same model. Therefore, the author should focus specifically on reviewing this literature that is closest to her own research instead of e.g. describing well-known concept of gravity models on page 7. Each time the author should compare her work with the existing studies.

Manuscript form

The thesis is well structured and nicely formated. The tables are well-arranged. The thesis reads well and I have not even noticed a single typo.

On several occasions the author mentions Trump, it would be more appropriate to name him "President Trump".

The author sometimes uses sentences that are hard to understand, e.g. on page 1: *"The aim of this paper is to analyze the effects of the US-China trade war from a decoupling point of view."* What does the decoupling point of view actually mean?

The author many times includes either very general statements or unclear statements that could (and should) be omitted or rewritten, e.g. on page 2: *"Trade and policy literature using analysis techniques such as econometric estimation, gravity model, partial equilibrium model, general equilibrium model is reviewed."* This formulation sounds strange to me since e.g. gravity models are also econometrically estimated ...

Or again on page 2: "To understand the United States' large trade deficit with China, not only the trade balance but also the current account and the global value chain must be considered." It does not need to be clear immediately what is meant by the effect of the global value chain.

Overall evaluation and suggested questions for the discussion during the defense

The thesis is like a black box for me. I am not clear about what exactly the author had to do on her own to get her results. I do not claim that there is not a reasonable value added in the thesis, maybe there is considerable, however the author did not do for sure a good job at explaining her contribution. In my opinion the committee should focus on an evaluation of the value added of the thesis. What did it entail specifically to use the developed model and data? Did the author have to conduct difficult data manipulation on her own? Did the author have to understand the existing code and did she make some changes in it? The author should explain in detail what it means that she used a slightly different model specification.

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On page 39, the author states:

"The welfare decline was greatest in Scenario 2, when both countries were shocked by a 45% tariff hike. It is interesting to note that in Scenario 4 and Scenario 5, the welfare of China decreased by a similar amount, while the welfare decline of the United States was more than doubled in Scenario 5. Also, in Scenario 5, the difference of welfare effects between the United States and China is not that great compared to other scenarios. It can be seen that the US consumer welfare responded more sensitively to the decrease in trade efficiency than to the decrease in trade volume."

I wonder whether there may be provided some intution for these results?

In my view, the thesis fulfills the requirements for a master thesis at IES, Faculty of Social Sciences, Charles University, I recommend it for the defense and suggest a grade C. My recommendation of this grade assumes that the author has actually made a contribution expected for a master thesis at IES FSV UK.

The results of the Urkund analysis do not indicate significant text similarity with other available sources.

| CATEGORY | | POINTS |
|-------------------------------|-------------------|--------|
| Contribution | (max. 30 points) | 19 |
| Methods | (max. 30 points) | 28 |
| Literature | (max. 20 points) | 12 |
| Manuscript Form | (max. 20 points) | 19 |
| TOTAL POINTS | (max. 100 points) | 78 |
| GRADE (A – B – C – D – E – F) | | С |

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

NAME OF THE REFEREE: PhDr. Pavel Vacek, Ph.D.

DATE OF EVALUATION: 28 August 2021

Digitally signed by Pavel Vacek Date: 28 August 2021

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

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.

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.

LITERATURE REVIEW: The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.

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.

Overall grading:

| TOTAL | GRADE |
|----------|-------|
| 91 – 100 | A |
| 81 - 90 | В |
| 71 - 80 | С |
| 61 – 70 | D |
| 51 – 60 | E |
| 0 - 50 | F |