

REPORT ON THE MASTER THESIS

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

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| Title of the thesis: | Analysis of Changes in Comparative Advantages of the Manufacturing in Vietnam and Comparison with China |
| Author of the thesis: | Yijia Wang |
| Referee (incl. titles): | Vilém Semerák, Ph.D. |

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

The author describes the objective of the paper using the following words “this paper analyzes the advantages and disadvantages of Vietnam’s manufacturing industry from the perspective of economic scale, trade level, foreign investment, policy environment, history and culture”. While this suggests a paper of a rather descriptive nature, the author actually poses a clear research question - “whether made in Vietnam will replace made in China” (p. 10). In fact, most of the paper rather describes selected features of Vietnamese economic development; it deals with the afore-mentioned research question only relatively informally (chapter 7).

1) Theoretical background:

The thesis attempts to combine several theoretical and methodological approaches:

- Simple description of observed trade flows (and rather speculative attempt at explanation of the trade flows) and patterns of development of both economies.
- Historical approaches: brief and relatively shallow excursions into the (economic) history of both countries
- Analysis based on traditional simple quantitative indicators (RCA indices – indices of revealed comparative advantages) for Viet Nam
- Econometric analysis – which consists in an attempt to apply the gravity model of trade (chapter 4).

On the other hand, the author avoided any explicit attempt to rely on input-output methodology, which might be seen as an omission given the focus on value chains and the role of IO methods in the analysis of structural changes in value chains and national economic structures.

This combination of descriptive approach and gravity-based economic analysis is not unusual; the gravity model can be in general be considered a generally-accepted and appropriate framework for analysis of bilateral trade flows and trade patterns. However, the form of implementation of the framework (more details on that in section 3) as well as the decision not to include modern advances in input-output methods weakens the quality of the theoretical background.

2) Contribution:

Quite a substantial potential contribution existed in the case of this topic, the issue of the relative position of Viet Nam in global supply chains and the ability to provide an alternative to Chinese-based sourcing is currently discussed by many economists and diplomats around the world. The author claims to have been able to provide a clear outcome (“manufacturing in Vietnam will not replace manufacturing in China”, p. 60) and this conclusion is most probably correct, but the thesis provides only relatively soft evidence in support of the claim. In other words, the level of treatment and reasoning remains closer to the level typical for non-academic texts, deeper treatment is expected in a Master thesis.

All in all, the relative weakness of the analytical part as well as problems in the implementation of the gravity model contribute to the fact, that the contribution is relatively general and shallow – pretty much just a relatively organized overview of the development of the role of Vietnamese economy in international trade complemented with the presentation of some opinions on the structural development of Chinese economy and supply chains.

3) Methods:

The most advanced method used in the paper is the econometric model based on the gravity framework. If applied correctly, this is definitely a sound and often-used methodology. Unfortunately, the author's own application of the method is a bit disappointing:

- The application of gravity model seems to be inspired by a very traditional "old-style" form of implementation, in fact, Ms Wang only cites Tinbergen (1962) in the methodology section. This might be acceptable at a bachelor level, but master level student should be aware of the existence of a significant body of new literature on this topic, especially if the newer literature has some rather strong implications for the reliability of the traditional approaches. I would have expected that a microfounded model with an adequate structure of dummies be used by the author. It is true that the author uses a fixed effects model (country dummies which simultaneously play the role of pair-dummies and country dummies), but e.g. time or time-varying dummies recommended by many authors (e.g. Baldwin & Taglioni, 2006) do not seem to be included (the description of the dummies used in the specification as well as the notation used are both a rather vague).
- Furthermore, the author uses a log of the sum of imports and exports as its explained variable, analyzing exports and imports separately might have been a significantly better option.
- The gravity model only uses only data on trade of Vietnam with 26 leading partners (p. 44). Again, this is a rather simple approach to gravity models, most current applications would be based on a panel which describes the interaction of many exporters and importers. The problem is that this simplified one-way panel cannot be really used for the tests of some relevant hypotheses and the omitted part of trade may lead to significant biases.
- The author also apparently did not attempt full post-estimation diagnostics, as suggested by a strange sentence on p. 46: "Note: The tests used for data analysis above only *about which I know how they function*".
- Interpretation of the results is troublesome too - the author argues that the elasticity of exports to both its own and other countries GDP is very high. In fact, she does not explain how high it should be (micro-founded models would probably expect something like 1, which is not so far from the calculated numbers), nor does she provide a statistical test that could reject the hypothesis that the coefficient is indeed equal to some expected number. Such a test would have been easy to implement with the indicators reported on p. 45, I believe that the software used by the author (Gretl) even provides similar tests in a rather convenient and easy-to-use form.
- The interpretation of country dummies is also rather superficial (esp. in light of the discussion of the role of China and of the unusual result for the contiguity dummy).
- Last but not least - the reader is left to wonder why the author used the gravity model. She does not really use it to test some hypothesis directly relevant to the topic, she only uses it more or less as a descriptive instrument (showing that the pattern of Vietnamese foreign trade is consistent with the gravity relationship).

4) Literature:

The bibliography is relatively long and the literature review provides a reasonable, albeit simplified, description of most of the influential ideas on structural change during development. It might have been interesting to include some literature (and applied empirical research) on the effect of EU-Vietnam FTAs and the discussions that European economists had on the viability of possible agreements with China. While the author presents long bibliography, she at the same time often does not attempt to support claims made in the paper with direct references. This can be exemplified by many claims on the logic of functioning of supply chains both in China and in general made in chapter 7 (p. 57-58): it is not clear whether they are based on facts gathered by other authors or on Ms Wang's observations or intuition, or perhaps some other source (only one general reference appears on the whole page of many such claims (p. 58)). Similarly, the author presents interesting data on the dependence of Vietnam on Samsung (p. 28). However, it would be nice to see some additional independent confirmation and especially details on the methodology behind the numbers (the 28% of GDP are likely to include indirect multiplier effects).

The biggest omissions – the absence of the literature on modern gravity models and especially on the quantitative analysis of GVCs. The thesis mentions the role of global value chains and suppliers repeatedly, but interestingly enough it avoids using data from available global IO tables or even published indicators on GVC-participation (forward and backward participation). Especially chapter 7 could really benefit from the inclusion of e.g. indicators comparing GVC positions of China and Viet Nam respectively. Some of author's

claims and ideas almost beg for this kind of additional evidence or for the discussion of issues such as the “smiling curve”.

5) Manuscript form:

The manuscript form is acceptable and more or less meets formal criteria, the author even provides separate lists of tables, figures, and abbreviations. Still, formatting of the results of the regression or of some of the tables leaves some space for improvement, the text contains some grammar errors and typos too – and unfortunately also some problems and artifacts possibly caused by translation-related issues. There is also no appendix – I would have expected an appendix with some additional econometric results or charts, most texts discussion value chains analysis include voluminous appendices with charts and tables.

The outline of the text reveals a fairly logical structure at first which unfortunately gets subsequently more cluttered as the student attempted to include too many subtopics. In fact, e.g. chapters 5, 6, 7 probably should precede the analysis done in chapter 4, alternatively they might have been omitted (at least partially) and replaced by deeper quantitative analysis as they appear to be too shallow anyway. In general, a more detailed and closer focus might have been useful.

In general, I see the style of the paper as an issue. In some sections it is written in a bit too popular style, similarly the contribution of other authors is often described in a rather simplified way. Even more importantly, the author found it a bit difficult to not to take sides, in some sections the tone used reveals patriotic admiration for Chinese economy and slightly lofty opinions on the history of Viet Nam or its ambitions to take over some sections of global value chains from China (e.g. in sections 5, 6, 7). I do not mind attempts to make theses more readable, but I would much rather see such claims and conclusions supported by more rigorous evidence.

Additional errors and mistakes found in the text:

- The author claims that the USA established the TPP and that Vietnam has been profiting from that already during 2002-2012 (p. 22). In fact, the TPP was only signed in 2016 and never implemented. Vietnam was not fully participating in older arrangement TPSEP (Trans-Pacific Strategic Economic Partnership Agreement, P4) either, the TPESEP also did not include the USA. What Vietnam and the USA had, was a bilateral trade agreement (BTA) which entered in force in 2001. Given the topic and many of the arguments used in the thesis, this is an issue that I would have expected to be described more carefully.
- The author describes intra-industry trade as a theory (p. 20). Well, it is rather an empirical fact the presence of which theories have been trying to explain.

Suggested questions for the defence are:

1. What are normalized RCA indices and how do they differ from the RCA concept used in your text? Do they have any advantages?
2. What is a “smiling curve“ and how is it related to the position of a country in a global value chain?
3. How did you come to the conclusion that the economies of Thailand and Malaysia are too mature (p. 53)?
4. It seems that you suggest that will be difficult for other countries to replace Chinese manufacturing (rather they will be absorbed in the relevant value chains as suppliers, chapter 7). Does this mean that the “flying geese” pattern no longer functions? Or has it been modified because of the sheer size of Chinese economy?

I recommend the thesis for final defence.

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

| CATEGORY | POINTS |
|--|---------------|
| <i>Theoretical background (max. 20 points)</i> | 12 |
| <i>Contribution (max. 20 points)</i> | 11 |
| <i>Methods (max. 20 points)</i> | 11 |
| <i>Literature (max. 20 points)</i> | 12 |
| <i>Manuscript form (max. 20 points)</i> | 15 |
| TOTAL POINTS (max. 100 points) | 61 |
| The proposed grade (A-B-C-D-E-F) | D |

DATE OF EVALUATION: January 28th, 2022

Referee Signature

Overall grading scheme at FSV UK:

| TOTAL POINTS | GRADE | Quality standard |
|---------------------|--------------|---|
| 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 |
| 0 – 50 | F | = failing. The thesis is not recommended for defence. |

The referee should give comments to the following requirements:

1) THEORETICAL BACKGROUND: Can you recognize that the thesis was guided by some **theoretical fundamentals** relevant to this thesis topic? Were some important theoretical concepts **omitted**? Was the theory used in the thesis consistently **incorporated with the topic** and hypotheses tested? Has the author demonstrated a genuine **understanding** of the theories addressed?

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| Strong | Average | Weak | |
| 20 | 15 | < 10 | points |

2) CONTRIBUTION: Evaluate if the author presents **original ideas** on the topic and aims at demonstrating **critical thinking** and the ability to draw **conclusions** based on the knowledge of relevant theory and relevant empirical material. Is there a distinct **value added** of the thesis (relative to knowledge of a university-educated person interested in given topic)? Did the author explain **why** the observed phenomena occurred? Were the **policy implications** well founded?

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| Strong | Average | Weak | |
| 20 | 15 | < 10 | points |

3) METHODS: Are the **hypotheses** for this study clearly stated, allowing their further **verification and testing**? Are the theoretical explanations, empirical material and **analytical tools** used in the thesis relevant to the research question being investigated, and adequate to the aspiration level of the study? Is the thesis **topic comprehensively analyzed** and does the thesis not make trivial or **irrelevant detours** off the main body stated in the thesis proposal? More than 12 points signal an exceptional work, **which requires your explanation "why" it is so**.

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| Strong | Average | Weak | |
| 20 | 15 | < 10 | points |

4) LITERATURE REVIEW: The thesis demonstrates the author's full understanding and **command of recent literature**. The author **quotes** relevant literature in a **proper way** and works with a **representative bibliography**. (Remarks: references to Wikipedia, websites and newspaper articles are a sign of **poor research**. If they dominate, you cannot give more than 8 points. References to books published by prestigious publishers and articles in renowned journals give a much better impression. Any sort of **plagiarism** disqualifies the thesis from admission to defence.)

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| Strong | Average | Weak | |
| 20 | 15 | < 10 | points |

5) MANUSCRIPT FORM: The thesis is **clear and well structured**. The author uses appropriate **language and style**, including the academic **format for quotations**, graphs and tables. The text effectively refers to graphs and tables, is easily readable and **stimulates thinking**. The text is free from typos and easy to comprehend.

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| Strong | Average | Weak | |
| 20 | 15 | < 10 | points |

Remarks for the referees:

- 1) Download the thesis from the SIS. If you have no access to SIS, please ask the secretary of IPS (katerina.bubnova@fsv.cuni.cz, tel. 296 824 641) for sending you the thesis by e-mail.
- 2) Use the IEPS Thesis Report form only for your comments. **It is a standard at the FSV UK that the Referee's Report is at least 400 words.** In case you assess the thesis as "non-defendable", please explain the concrete reasons for that in detail.
- 3) Retain your critical stance. You cannot confer more than 80 points upon a thesis that does not satisfy research standards in top European universities.
- 4) Upload the Report as PDF/A file into the SIS. Instructions on how to convert .DOCx to PDF/A): „Save as“ – select „PDF“ – check-in „Options or Možnosti“ that „PDF options“ tick „ISO 19005-1 compliant /kompatibilní s/ (PDF/A)“ – „Save“. If you have no access to SIS, please send the unsigned PDF file to the secretary of IPS (katerina.bubnova@fsv.cuni.cz).
- 5) Please deliver to the IPS Secretariat, Pekařská 16, 158 00 Praha 5- Nové Butovice, **two hand-signed originals**. Unfortunately, a photocopied report with signature does not suffice. Sorry.
- 6) Your Report will be remunerated, so we need also your account information (separate from this form).