

# Report on Bachelor Thesis

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

<b>Student:</b>	<b>Matúš Pravda</b>
<b>Advisor:</b>	<b>Vilém Semerák, Ph.D.</b>
<b>Title of the thesis:</b>	<b>Value Added in the Global Value Chains in the Automotive Industry in Slovakia</b>

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

*Please provide your assessment of each of the following four categories, summary and suggested questions for the discussion. The minimum length of the report is 300 words.*

### **Contribution**

The thesis maps the value chains, resp. the origins and destinations of value-added in products produced and traded by Slovak companies. The role of value chains, as well as evaluation of complex networks of relationships related to them, are a very hot topic – with policy implications in many areas such as evaluation of possible effects of Brexit or of the US-led trade wars. The author's contribution consists mainly in providing results of calculations of many recently designed indicators (they were proposed in Borin & Mancini, 2017) which allow for less ambiguous measurement of the structure of value-added. The calculations are based on relevant data (WIOD), use recently developed methodology, and their results can, therefore, be considered as reasonably reliable.

Another potential contribution, i.e. the fact that the author attempts to map the literature on global value chains and related empirical methodology, is rather less convincing, mainly because of the style of the literature review, which is often more similar to less rigorous texts. However, the author also compiled a potentially useful list of sources of softer data on the automotive industry in the V4 (Table 1, p. 5) and provides also a brief overview of the history of the automotive sector in Slovakia (section 3).

### **Methods**

The thesis' methodology differs from typical theses submitted at the IES. While it is empirical and although the calculations were largely done in econometric software (Stata), it is not based on traditional econometrics. Instead, the author calculated a plethora of indicators from a time series of world input-output tables and attempted to identify possible trends present in the results. The calculations were simplified substantially thanks to the fact that the authors of the methodology (Borin, Mancini, and Belotti) also programmed and published a special module for Stata (ICIO) recently which includes procedures for calculating all the indicators. On the other hand, the level of difficulty (and especially the time needed for the calculation) are definitely comparable with attempts to run many regressions based on standard estimators.

It might have been interesting go a bit further and to use the calculated indicators in further analysis – e.g. regression analysis might have been useful in analyzing and testing some of the discussed trends.

### **Literature**

The literature gathered and presented by the author can be divided into three main categories:

- General literature on global value chains
- Literature on the role of the automotive sector in Slovakia and other V4 countries.
- Very specific papers focused on empirical analysis of WIOD and WIOD-like data

In general, the author covers relevant contributions in each category. The first two categories include many "softer" texts which include reports by organizations of automotive producers or consulting agencies, or even general press (esp. section 3). This contributes to the fact that the relevant sections of the thesis appear to be written in a more popular style which differs from the more rigorous and

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positivistic style usually expected in theses. However, it is not so easy to avoid this impression in the case of this particular topic and the author also attempts to rely on more rigorous sources (e.g. papers by Pavlínek) wherever possible.

The overview of the methodology includes a brief intro into the history of input-output methods (p. 12), its main part then builds on Koopman, Wang and Wei (2011 – although a newer 2014 version is often referred to) and Borin & Mancini (2017) (section 4). The latter part focuses on the logic and “bigger picture” rather than on detailed derivation of the underlying equations which appears to be appropriate for a bachelor thesis.

## **Manuscript form**

The text has a reasonable formatted and structured, tables and charts are clearly described. Additional (and quite detailed) results, as well as details on Borin & Mancini decomposition, were moved to the appendix, this was a good decision as the text would have been too cluttered otherwise.

Style-wise the text deviates occasionally from usual academic texts, it even includes some conclusions and recommendations (e.g. concerning the education system, p. 31) which are not fully based on data analyzed in the thesis.

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## Summary and suggested questions for the discussion during the defense

The author built his thesis on a newly available set of methods combine with so far underutilized dataset (WIOD) and obtained credible results. I, therefore, recommend his thesis for the defense.

Questions:

1. Borin & Mancini (2017) suggest that the previously proposed and used methodology (based on Koopman, Wang and Wei (2014) and Nagengast and Stehrer (2014) were not quite adequate. Please explain the main issues.
2. Please outline the main differences between the sink-based and source-based decompositions.
3. Based on your results, does it seem that Slovakia is rather vulnerable to possible trade shocks caused by Brexit?

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

<b>CATEGORY</b>	<b>POINTS</b>
<i>Contribution</i> (max. 30 points)	25
<i>Methods</i> (max. 30 points)	25
<i>Literature</i> (max. 20 points)	16
<i>Manuscript Form</i> (max. 20 points)	15
<b>TOTAL POINTS</b> (max. 100 points)	<b>81</b>
<b>GRADE</b> (A – B – C – D – E – F)	<b>B</b>

**NAME OF THE REFEREE:**

**Vilém Semerák**

**DATE OF EVALUATION:**

**September 2nd, 2019**

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**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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
30	15	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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
30	15	0

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

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
20	10	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.*

<i>Strong</i>	<i>Average</i>	<i>Weak</i>
20	10	0

**Overall grading:**

TOTAL	GRADE
91 – 100	<b>A</b>
81 - 90	<b>B</b>
71 - 80	<b>C</b>
61 – 70	<b>D</b>
51 – 60	<b>E</b>
0 – 50	<b>F</b>