

IMESS DISSERTATION

Note: Please email the completed mark sheet to Year 2 coordinator (cc Chiara Amini chiara.amini@ucl.ac.uk and fiona.rushworth@ucl.ac.uk)

Please note that IMESS students are not required to use a particular set of methods (e.g. qualitative, quantitative, or comparative) in their dissertation.

Student:	Zihua Rao
Dissertation title:	The Supply and Demand Shocks in Central and Eastern European Countries – A Study in the Automotive Industry

	70+	69-65	60-61	59-55	54-50	<50
	A	B	C	D	E	F
Knowledge <i>Knowledge of problems involved, e.g. historical and social context, specialist literature on the topic. Evidence of capacity to gather information through a wide and appropriate range of reading, and to digest and process knowledge.</i>	92					
Analysis & Interpretation <i>Demonstrates a clear grasp of concepts. Application of appropriate methodology and understanding; willingness to apply an independent approach or interpretation recognition of alternative interpretations; Use of precise terminology and avoidance of ambiguity; avoidance of excessive generalisations or gross oversimplifications.</i>	87					
Structure & Argument <i>Demonstrates ability to structure work with clarity, relevance and coherence. Ability to argue a case; clear evidence of analysis and logical thought; recognition of an argument's limitation or alternative views; Ability to use other evidence to support arguments and structure appropriately.</i>	90					
Presentation & Documentation <i>Accurate and consistently presented footnotes and bibliographic references; accuracy of grammar and spelling; correct and clear presentation of charts/graphs/tables or other data. Appropriate and correct referencing throughout. Correct and contextually correct handling of quotations.</i>	90					
Methodology <i>Understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.</i>	86					

ECTS Mark:	89	Charles Mark:	89 (B)	Marker:	Vilém Semerák, Ph.D.
<i>Deducted for late submission:</i>			<i>No</i>	Signed:	Vilém Semerák
<i>Deducted for inadequate referencing:</i>				Date:	September 11 th , 2022

MARKING GUIDELINES

A (UCL mark 70+) = A (Charles mark 91-100 - excellent): *Note: marks of over 80 are given rarely and only for truly exceptional pieces of work.*
Distinctively sophisticated and focused analysis, critical use of sources and insightful interpretation. Comprehensive understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.

B (UCL mark 69-65) = B (Charles mark 81-90 – very good)
C (UCL mark 64-60) = C (Charles mark 71-80 – good): A high level of analysis, critical use of sources and insightful interpretation. Good understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research. 65 or over equates to a B grade.

D (UCL mark 59-55) = D (Charles mark 61-70 – satisfactory)
E (UCL mark 54-50) = E (Charles mark 51-60 – sufficient): Demonstration of a critical use of sources and ability to engage in systematic inquiry. An ability to engage in sustained research work, demonstrating methodological awareness. 55 or over equates to a D grade.

F (UCL mark less than 50) = F (Charles mark 0-50 - insufficient): Demonstrates failure to use sources and an inadequate ability to engage in systematic inquiry. Inadequate evidence of ability to engage in sustained research work and poor understanding of appropriate research techniques.

Please provide substantive and detailed feedback!

Comments, explaining strengths and weaknesses (at least 300 words):

Ms Rao has opted for a type of analysis focused on questions similar to those that tortured many analysts and economists around the world during the last few years. She attempted ex post evaluation of shocks (and especially Covid-19-related shocks) which influenced the development of the automotive sector in Central and Eastern European countries (7 countries during 2007-2021) based on a proposed mapping of possible shocks into demand- and supply-related shocks, the effects of which she tested with the use of vector autoregressive models (complemented with Granger causality tests and impulse response functions). One of the more interesting features of her data is the inclusion of information from Google Trends (a variable that should measure the “Fear of Contagion”) and a variable that should account for the availability of micro-chips. On the other hand, she was forced to accept a number of compromises, some of the variables used in the regressions were broader and less directly linked to the specification than planned.

As far as the literature review is concerned, the bibliography is voluminous and the author, in general, provides a decent overview (and where necessary also background details) for issues relevant to the topic. If I were to name omissions, I would probably mention a few additional sources on the role of automotive Global Value Chains in the region (and on possible spatial effects related to international linkages mediated by the supply chains). However, it might be a bit excessive to demand that the students add such effects into the empirical part too – the already very long series of results would become even more bloated. Another unusual feature of the literature review (and of the bibliography) is the treatment of some reports. Perhaps it is related to the type of software used to organize citations, but there are altogether 9 reports which are referred to as e.g. Anonymous (2019), which is quite unusual. The reports are still identified sufficiently (i.e. the reader can find the original source if necessary).

Ms Rao worked diligently and she had done quite a lot of work, perhaps more than a casual reader would realize when reading even the fairly long tables with results provided in the thesis. Even her final results include two VAR systems for each of the seven countries (+ additional analysis and tests for each of them). Given the nature of the analyzed problems, one should not be surprised that the results do not tell an easy-to-interpret and coherent story (p. 57, p.63, p. 66). The author herself describes as the information provided directly by the results of VAR models as limited at country levels (p. 46), generalization was found to be complicated because of inter-country variation (p. 50, p. 52) of the results. The fear of contagion variable did not seem to bring any major improvement to the explanatory power of the models (for most countries) either, perhaps more surprisingly, the performance of the variable describing microchips was not much better either. Besides the complexity of the situation and possible instability of the underlying relationships, the fact that the author relied on first differences contributed to the weaker (in terms of statistical significance) overall results. Furthermore, some of the peculiarities and ambiguities are also likely to be due to the fact that the author had to rely on proxies as the first-best alternatives for some of the variables were not available.

The style of the paper is mostly appropriate, with occasional inclusions of remarks (e.g. on the implementation in Stata) which are not so typical for more advanced academic texts. The thesis is relatively logically organized. Although the lengthy results were logically partly moved to the appendix, some readers can still find the space taken up by tables rather large. Finally, the Urkund analysis did not indicate any suspicion of plagiarism.

Using the Charles University scale, I would evaluate the thesis with a grade B (high B, about 89 points on the CU scale).

Specific questions you would like addressing at the oral defence (at least 2 questions):

1. On p. 27 you discuss whether to use seasonally and calendar adjusted or non-adjusted data. What are the advantages and disadvantages of relying on the unadjusted data (besides the fact that you were able to get a more comprehensive dataset)? Does it seem that seasonality has a significant role in the functioning of the automotive sector?
2. How do we define the value added of a sector or of an economy? How does value added differ from wages and salaries?
3. Please briefly outline the main advantages of vector autoregressive models. Do they require the stationarity of the time series used in the models?
4. The sales variable shows some rather unusual fluctuations (Figure 9, page 38) which you explain by missing values. But at the same time, the number of observations (Figure 8, page 37) appears to be the same as for most of the remaining series. How would you explain this situation?
5. On p. 46 you describe a rather specific relationship between current and lagged variables (for Bulgaria), they are negatively correlated. How would you interpret and explain such a result?