

## **IMESS DISSERTATION**

## Note: Please email the completed mark sheet to Year 2 coordinator

## (jiri.vykoukal@post.cz)

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

Student:	Shiqi Yin
Dissertation title:	The correlation between the automotive industry output cycle and the business cycle in the Czech Republic

	70+	69-65	60-61	59-55	54-50	<50
	А	В	С	D	E	F
<b>Knowledge</b> Knowledge of problems involved, e.g. historical and social context, spe- cialist literature on the topic. Evidence of capacity to gather information through a wide and appropriate range of reading, and to digest and process knowledge.	х					
Analysis & Interpretation 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 generalizations or gross oversimplifications.	x					
Structure & Argument Demonstrates ability to structure work with clarity, relevance and co- herence. 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 appro- priately.	х					
<b>Presentation &amp; Documentation</b> Accurate and consistently presented footnotes and bibliographic refer- ences; accuracy of grammar and spelling; correct and clear presentation of charts/graphs/tables or other data. Appropriate and correct referenc- ing throughout. Correct and contextually correct handling of quotations.		x				
<b>Methodology</b> Understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.	х					

ECTS Mark:	A/71	Charles Mark:	А	Marker:	František Čech
Deducted for late submission:			No	Signed:	
Deducted for inadequate referencing:				Date:	23 August 2023

#### 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):

The presented thesis examines the dependence between the production and business cycles in the Czech Republic's automotive industry. The research reveals a synchronization between the trends of automotive output and the business cycle, albeit with a lag. Utilizing a VAR model, the study delves into the connection between the industry's output and macroeconomic indicators, revealing a significant yet asymmetric relationship. The automotive sector appears more responsive to macroeconomic shocks but wields a comparatively weaker influence on the overall macroeconomy. Additionally, the paper evaluates the interaction between the automotive industry and monetary policy, highlighting the stability of monetary policy and its potential impact on the industry's progress without observing a reverse effect.

The presented thesis includes an extensive literature review focusing on the interconnectedness of the automotive industry, macroeconomics and monetary policy. From my perspective, the literature review is skillfully constructed. The author demonstrates a commendable command of the literature, skillfully integrates it into the thesis and tries to explain all the concepts used in the thesis in a reader-friendly manner.

The methods and concepts used in a thesis are standard and well-established in the literature (GARCH, vector autoregression, impulse response, ...), described in sufficient detail and applied correctly. The results of the analysis are carefully described, although, sometimes, there are too many of them, and the reader can get lost, e.g. results of the VAR, IRF and variance decomposition are mechanically described for all studied variables. I think it would be better to contrast the results to each other and elaborate on the possible differences.

The manuscript form of the thesis is adequate, and there are just minor changes I would recommend. For example, some of the figures and tables would better fit the appendix than the main text (e.g. detailed results of the VAR analysis).

Overall, I think the presented thesis is a solid piece of work. The author has chosen the actual topic and conducted the empirical analysis using adequate methodology. The results are possibly relevant for policymakers and central bankers and are in line with previous research.

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

The author should explain how the thesis analyses the correlation during the defence. The correlation is a measure of linear dependence between two variables, and the text analysis in the thesis seems to me as a bit different measure of dependence, namely (volatility) connectedness.

During the defence, the student should explain the logic of figure 3 as it is a bit misleading. For example, figures 3.1 and 3.2 seem to be identical, although they should contain different variables. Moreover, figure 3.3 and 3.4 seem to have "auto growth" and "rgdp growth" as blue lines and the red line seems identical in both figures, which does not correspond to the figures' names since we are supposed to see different variables.

The student should also clearly explain what transformation was applied to the original data - simple first differencing or percentage change calculation. The red line in subfigure 3.3 and 3.4 does not look like the typical volatility series but looks like the return series.