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:	Yimo Li
Dissertation title:	Exploring the Effects of Renewable Energy consumption and Global Uncertainty on Economic Growth:
	A Global Perspective

	70+	69-65	60-64	59-55	54-50	<50
	А	В	С	D	Е	F
Knowledge 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.	95					
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 generalisations or gross oversimplifications.	85					
Structure & Argument						
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.	80					
Presentation & Documentation						
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.						
Methodology						
Understanding of techniques applicable to the chosen field of research, showing an ability to engage in sustained independent research.	80					

ECTS M	r k: A/8	82	Charles Mark:	A/95	Marker:	Vilém Semerák
Deducted for late submission:			or late submission:	No	Signed:	Electronically signed, Vilém Semerák
Deducted for inadequate referencing:			quate referencing:		Date:	September 8 th , 2024

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 author opted for a difficult topic, an empirical analysis of the relationships between global uncertainty, renewable energy consumption and economic growth. More specifically, she wanted to test whether renewable energy consumption can mitigate the negative effects of uncertainty on growth. This was a highly topical but also a very ambitious objective due to the complexity of the analysed relationships and due to the fact that it is teeming with endogeneity issues, data-availability-related issues, and additional complications such as threshold effects and the possibility of significant heterogeneity across analysed countries. I even tried to discourage her from the idea initially, but she persisted and pursued her objective with great dedication and perseverance. I particularly appreciate her willingness to learn new econometric skills and to incessantly question the plausibility and reliability of the results.

The methodology (pvar and more traditional panel models, most importantly fixed effects models) can be considered as more than adequate for the level of study (esp. pvar goes beyond typical curriculum at this stage) and adequate for the analysed topic. The methods are applied on a global sample (the size of which was only limited by the availability of key variables, i.e. 88 countries) and several subsamples. Quarterly data were used (this appeared more logical due to the emphasis on the role of uncertainty), but annual data had to be resorted to for most of the empirical work due to the unavailability of reliable quarterly data on renewable energy use. The author made an attempt to provide more solid foundations for the tested specifications (p. 34, where she suggests the inspiration by extended Cobb-Douglas production function), but this linkage is not completely convincing. The author also paid attention to stationarity and heterogeneity tests; she also experimented with replacing some of the variables with first differences and with different forms of interaction variables. The pvar results are complemented with Granger-causality tests and stability tests. The author uses more traditional panel methods to look at the relationships between the analysed variables. She mostly correctly describes their results as correlations/partial correlations and avoids causal interpretation.

All in all, the combination of the focus of the paper, data used (esp. the uncertainty measures) and relatively large sample make the focus of the resulting paper quite novel and interesting.

As far as literature is concerned, the author systematically reviews the sources relevant to the main components of the analysed relationship (section 1.2 and its subsections). She builds on a fairly extensive list of references, including many recently published works. To some extent, this was almost unavoidable due to the relative novelty of the topic, but I still appreciate that she avoids the trap that many students fall into, i.e. focusing on old and traditional literature and not paying enough attention to the latest development. The author logically explains the choice of the key variables (e.g., the WUI) as well as the implications of prior research on the relationship between uncertainty, growth, and renewable energy consumption.

As far as language and formal issues are concerned, the submitted version of the thesis is much better than the preliminary versions. The language quality is acceptable, and there are relatively few typos (e.g., in capitalisation). Still, with a little bit more time, some additional improvements in the formatting and description of the tables (e.g. the correlation matrix on p. 40 or tables with regression results on p. 44 and beyond) and in the organisation of the text (especially the text that interprets the results presented in the tables with regression output) might have been achieved. Some such pages (e.g. p. 70) look really strange. The author also presents almost too many tables – it might have been better to select and present only the main results (e.g. without the pooled regressions) or move some of the tables into the appendix and reduce the clutter. In fact, the visual appearance of some of the sections with the results is one of the weakest features of the submitted texts.

The results are interesting, although more still remains hidden in the background. Possibly, the most relevant conclusion is the fact that the relationships between the analysed variables appear to function differently for different categories of countries, which implies that one-size-fits-all types of policies are not likely to provide efficient incentives to deal with global environmental problems. This might be described as an expected result, but the author managed to generate additional quantitative supportive evidence.

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

- 1. Explain the main features and especially the main weaknesses of the available uncertainty indicators. Do you consider their relative reliability to be stable in time?
- 2. Do wars and uncertainty influence growth in the same way? Briefly discuss (and possibly provide some examples).
- 3. Would you expect that the rise of new media and of online disinformation campaigns (possibly related to activities of hostile countries) can lead to either faster transmission of uncertainty or rather to a more synchronised contagion with uncertainty in targeted territories?
- 4. Briefly outline the logic of the threshold effects (as mentioned, e.g. on p. 22). Would it be possible to implement them in your empirical model?