Report on Bachelor / Master Thesis

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

Student:	Matej Novotny
Advisor:	Karel Janda
Title of the thesis:	Estimating the Relationship between Food, Fuel and Biofuel Prices

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
This bachelor thesis is a follow-up on a part of IES master thesis of Ondrej Filip defended in summer of 2015 and on subsequent publications based on that thesis which were published during 2016, 2017.
The major new contribution of this paper is an extension of the Filip's data set both in time and in the coverage of data (adding new time series). The improvement of the data set is a main step forward as compared to Filip (2015).

Methods
The thesis is using minimum spanning tree and hierarchical tree methodology which is not covered in IES classes. So it required additional work from the student. To take the IES class covering programming in R would be helpfull for this thesis, however as far as I know, the student did not take this R- programming class.
I appreciate that the student started to work on the thesis well in advance and that he consulted with me a lot. However despite starting to work on thesis early, he still left some important work for too late. So for example the Minimum Spanning Trees are missing the analysis of stability of connections, since the student left this for too late and suddently discovered that he has problems with this procedure.

Literature The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way. This was actually relatively easy since the author has available a recent review paper (which he quotes in his thesis) Janda, K. and Kristoufek, L. (2019), `The relationship between fuel and food prices: Methods, outcomes, and lessons for commodity price risk management'. – this is a copied entry from the Bibliography – source of this paper is missing (it is CAMA WP) Similarly for some other Bibliography items like Du and Hayes (2012). Also some bibtex formating is still wrong, like EIA (2019), `U.s. energy information administration - eia - independent statistics and analysis', Monthly Biodiesel Production Report - Energy Information Administration .
URL: https://www.eia.gov/biofuels/biodiesel/production/
FAO (2018), `Oecd-fao agricultural outlook 2018-2027'.
URL: http://www.fao.org/publications/oecd-fao-agricultural-outlook/2018-2027/en/
I read the manuscript of this Bachelor Thesis several times and I provided comments on it and I told the student how to deal with capital letters in bibtex file.

Manuscript form
The thesis is well written. It benefited from several rounds of my comments and corrections.

Summary and suggested questions for the discussion during the defense

During the preparation of this thesis, the student took care with work on the thesis, consulted with me the progress on the thesis etc. He made sure to finish thesis on time so that we were able to go through several readings and several rounds of corrections. This is a well done IES bachelor thesis. It is not a path-breaking work, however it is professionally well done extension of a previous IES master thesis (Filip, 2015). During the defence the student should focus on the economic interpretation of his minimum spanning trees (MST) and hierarchical trees (HT) analytical results. In particular, he should

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justify the use of both MST and HT – what additional information HT provides? An obvious question would be a question dealing with comparison of MST/HT approaches with other graphical clustering methods. However since I never really raised this topic during the preparation of the thesis, it would be rather unfair and too demanding question. Therefore the student should rather concentrate on actual results of his thesis – for example on question how much are MST/HT for particular periods different from the MST/HT for the whole 2013-2019 period. This is also a question about robustness and stability of MST/HT: how much are the MST/HT dependent on particular time window, how do they change when different time periods are considered? Which results are stable/consistent over longer periods ?

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

CATEGORY	POINTS
Contribution (max. 30 points)	17
Methods (max. 30 points)	25
Literature (max. 20 points)	19
Manuscript Form (max. 20 points)	20
TOTAL POINTS (max. 100 points)	**81**
GRADE (A – B – C – D – E – F)	**B**

NAME OF THE REFEREE: *Karel Janda (thesis advisor)*

DATE OF EVALUATION: *May 17, 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.*

Strong	*Average*	*Weak*
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.*

Strong	*Average*	*Weak*
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.*

Strong	*Average*	*Weak*
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.*

Strong	*Average*	*Weak*
20	*10*	*0*

Overall grading:

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