Report on Bachelor Thesis

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

Student:	**Jana Vavřičková**
Advisor:	**RNDr. Michal Červinka, Ph.D.**
Title of the thesis:	**Power Spot Market of the European Energy Exchange and its Influence on the Czech Power Market**

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

The thesis "Power Spot Market of the European Energy Exchange and its Influence on the Czech Power Market" focuses on the price-forming process based on COSMOS system and proposes a social cost minimization approach to the solution of the market clearing compared to the social welfare maximization approach, which is now used. By doing so, Jana arrives at the Mixed Integer Quadratic Problem (MIQP). Further description of this approach is the core of the thesis which is expanded by an empirical part utilizing the vector autoregression (VAR) methodology to uncover connections between the Czech and German/Austrian electricity markets.

The thesis is very nicely written, describes the basic issues of electricity pricing, and is quite readable. Obviously, the author has worked hard and the result is surely worth it. However, I have found several issues (formal and methodological), most of which are above the scope of the bachelor's thesis so that these should be understood mainly as propositions to further research:

- LaTeX commands \cite{} and \citep{} should be used more effectively.
- Headline of Chapter 3 is misplaced.
- Possibility of negative prices could have been described in more detail.
- In Section 4.1.2, the author states that non-stationary series have long-memory. However, long-memory (or long-range dependent) processes are stationary.
- The original references to ADF and KPSS tests should have been given.
- The question of stationarity/non-stationarity of detrended and deseasonalized series still remains because the critical values of ADF and KPSS tests are different for these types of series. However, this topic would be nice for a dissertation thesis not a bachelor's one.
- Copy/pasted tables and outputs from software do not look nice.
- Some discussion of potential conditional heteroskedasticity could have been provided.

In summary, the thesis is interesting and nicely written while using methods which are advanced for the bachelor level. The mathematical part of the thesis is also well presented. There are no formal or methodological problems in the thesis and the results are well described. If successfully defended, **I recommend grade A.**

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

CATEGORY		**POINTS**
Literature	*(max. 20 points)*	18
Methods	*(max. 30 points)*	27
Contribution	*(max. 30 points)*	28
Manuscript Form	*(max. 20 points)*	15
TOTAL POINTS	*(max. 100 points)*	**88**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE:

DATE OF EVALUATION:

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Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

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*

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*

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*

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 POINTS	**GRADE**		
81 – 100	**1**	= excellent	= výborně
61 – 80	**2**	= good	= velmi dobře
41 – 60	**3**	= satisfactory	= dobře
0 – 40	**4**	= fail	= nedoporučuji k obhajobě