Report on **Bachelor / Master Thesis**

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

Student:	**Bc. Jan März**
Advisor:	**Mgr. Lukáš Vácha, Ph.D.**
Title of the thesis:	**Transition Periods and Long Memory Property**

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

The thesis study how breaks and structural changes in time series influence estimation of long memory parameter. Using Monte Carlo techniques, Jan simulates variety of random processes with different degrees of structural breaks, shifts and shocks. Further, using these times series long memory parameters are estimated. Further, Jan shows how various types and combinations of shocks influence bias of long memory estimators. In general, this analysis shows that the long memory is overestimated most of the time, which is an expected result when shocks are present. However, some of the combinations of shocks in the time series are new and the analysis shows several interesting results.

This work is inspired by late ideas of Sir Clive Granger (for example Granger & Hyung (2004)) and can be seen as an extension of an interesting research in a field of structural changes in time series and spurious long memory. There is no application to real data in the thesis, but the construction of a suitable long memory estimator is beyond the scope of the master thesis. Nevertheless, some of the findings can be further used for construction of long memory estimator robust to structural changes and for further discussion about spurious long memory in economic time series.

Author uses relevant strand of literature related to the long memory estimation in presence of shocks and breaks. However, deeper explanation of some terms related to long memory and long memory estimation would be helpful for a reader. Methodology apparatus is appropriate to the research topic being investigated. It is clear that author dedicated considerable amount of time to prepare the thesis, mostly to simulate the processes and summarize vast amount of outputs.

The contribution of the thesis is above average, but as I mentioned above for proving practical utilization of these results longer research is needed. Manuscript has a clear structure and is well written.

To conclude, I recommend the thesis for defense with the grade **„výborně" (excellent, 1)**.

Report on Bachelor / Master Thesis

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

Student:	**Bc. Jan März**
Advisor:	**Mgr. Lukáš Vácha, Ph.D.**
Title of the thesis:	**Transition Periods and Long Memory Property**

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

CATEGORY		**POINTS**
Literature	*(max. 20 points)*	13
Methods	*(max. 30 points)*	25
Contribution	*(max. 30 points)*	22
Manuscript Form	*(max. 20 points)*	20
TOTAL POINTS	*(max. 100 points)*	**80**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE*: *Mgr. Lukáš Vácha, Ph.D.

DATE OF EVALUATION: 15.6.2015

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