Report on Bachelor / ~~Master~~ Thesis

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

Student:	**Tomas Kvasnicka**
Advisor:	**PhDr. Ladislav Kristoufek**
Title of the thesis:	**Volume - volatility relation across different volatility estimators**

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

In this work the author studies whether the volume trading improves the volatility forecast. The volatility estimators used are the Garman-Klass and the benchmark GARCH(p,q). The analysis is conducted on four indices where different univariate and multivariate forecasting models are employed. Finally, for determining the best forecasting model, different error statistics are estimated by comparing the forecasted volatility with the realized one.
The research is inconclusive whether the volume trading improves the volatility forecast because for two indices there is evidence of improvement, whereas for the other two the forecast is worse. Within the bunch of the forecasting models the Heterogeneous Autoregressive model turns out to be the best.
Comments and questions:

- Some of the methods used in the work are beyond the level of studies of the author
- In page 31 the author assumes that there is no autocorrelation in the returns series, and to support this assumption refers to Cont (2001). This does not satisfy me; the tests for autocorrelation should have been run. The presence of autocorrelation can seriously affect the results!
- Minor grammatical mistakes.

In case of successful defense I recommend grade 1 (very good).

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

CATEGORY		**POINTS**
Literature	*(max. 20 points)*	18
Methods	*(max. 30 points)*	25
Contribution	*(max. 30 points)*	25
Manuscript Form	*(max. 20 points)*	17
TOTAL POINTS	*(max. 100 points)*	**85**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE: Mgr. Krenar Avdulaj

DATE OF EVALUATION: 10.06.2013

Digitally signed by Krenar Avdulaj
DN: c=CZ, o=Univerzita Karlova v Praze, cn=Krenar Avdulaj, 1.2.840.113549.1.9.2=100000169341
Date: 2013.06.10 08:08:29 +02'00'

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