Report on Rigorous Thesis

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

| Student: | Mgr. Viktória Tesárová |
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| Advisor: | PhDr. Petr Gapko |
| Title of the thesis: | Value-at-risk: GARCH vs. Stochastic Volatility Models: Empirical Study |

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

The thesis deals with technically demanding topic and compares different time-varying volatility concepts – GARCH (with extensions EGARCH, TGARCH, APARCH) and Stochastic Volatility (SV). Their performance is compared using them as an input parameter in Value-at-Risk (VaR) specification on selected stock-indices. The theoretical background of the thesis is strong, standard theory is appropriately described and explained. Thesis is competently written, has logical structure and neat form of the typeset.

Thesis demonstrates author's good understanding of the abovementioned volatility concepts and technical skills to use advanced empirical methods. The most important comments from the defense of diploma thesis were incorporated into the final version of the rigorous thesis. Still, some challenges remains for further research.

Overall, I recommend the thesis for the defense.

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

| CATEGORY | | POINTS |
|-----------------|-------------------|--------|
| Literature | (max. 20 points) | 19 |
| Methods | (max. 30 points) | 28 |
| Contribution | (max. 30 points) | 28 |
| Manuscript Form | (max. 20 points) | 20 |
| TOTAL POINTS | (max. 100 points) | 95 |
| GRADE | (1 - 2 - 3 - 4) | 1 |

NAME OF THE REFEREE: PhDr. Jakub Seidler, Ph.D.

DATE OF EVALUATION: March 10, 2013

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 |