Report on Bachelor / Master Thesis

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

Student:	**Štefan Lipták**
Advisor:	**PhDr. Jozef Baruník, PhD.**
Title of the thesis:	**Forecasting realized volatility: Do jumps in prices matter?**

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

The submitted thesis well exceeds the level of master theses at out school. It deals with modern topic of realized volatility (RV) assuming that underlying process has a jump component. Although well established in the theoretical literature, practitioners and some scientists have not concluded whether jumps „exist" or are just an extreme realizations of continuous price processes.

The author begins with profound theoretical overview and presents very demanding topics with easy. The methodology is well beyond any course taught at the IES, yet the author shows good understanding and obviously has background in stochastic calculus.

The thesis reviews and applies RV models without and with jump component; HAR-RV and HAR-RV-J (and HAR-RV-CJ) respectively. The model comparison is carried out on the bases of forecast performance, which is very relevant for financial institution practitioners. Each model is estimated for each time series and time span. The empirical results are fully presented with very accurate comments and discussion.

The author finds that decomposing the assumed underlying process improves the fit; in other words the simple HAR-RV is inferior to models assuming jump component. Also due to instability of the parameter estimates, the author suggests using shorter time spans to improve volatility forecast (old observation have little information about current volatility).

In conclusion, this is an excellent thesis deserving grade 1.

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

CATEGORY		POINTS
Literature	*(max. 20 points)*	17
Methods	*(max. 30 points)*	29
Contribution	*(max. 30 points)*	27
Manuscript Form	*(max. 20 points)*	18
TOTAL POINTS	*(max. 100 points)*	**91**
GRADE	**(1 – 2 – 3 – 4)**	**1**

NAME OF THE REFEREE: PhDr. BorilŠopov, MSc., LL.M.

DATE OF EVALUATION: 4th September 2012

Referee Signature