GENERAL DESCRIPTION

The growth in financial instruments during the last decade has resulted in a significant expansion in both financial economic theory and the application of new econometric methods (financial econometrics) to financial data. This objective of this course is therefore, to offer participants a comprehensive applied and theoretical overview of the principle methodologies implemented for analysis of financial risk. More specifically, the course focuses on the modelling of univariate financial times series and the modelling and forecasting of volatility in financial time series data, before moving on to analyze cross-markets correlations and to test for volatility spillovers.

In common with TStat’s workshop philosophy, participants will obtain extensive hands-on experience of the issues under consideration, working on example financial datasets under the careful guidance of the course tutor. Although the course is to be considered primary of an applied nature, technical treatment of the analysis in hand, will however, be provided into order to allow participants to properly address real world applications.

TARGET AUDIENCE

The course is particularly useful to both researchers and professionals working in the financial sector needing to acquire the necessary statistical/econometrical toolset to independently conduct empirical analysis on financial time series data.

COURSE REQUISITES

Participants are required to have a basic knowledge of either econometrics or statistics, and the statistical software Stata.

PROGRAM

SESSION I: MODELLING AND FORECASTING THE CONDITIONAL MEAN OF FINANCIAL TIME SERIES

1. Introduction to financial time series features: normality, stationarity, autocorrelation, heteroscedasticity.
2. Application:
   • Analysis of the features of stock indexes using Stata.
4. Application:
   • Model selection and estimation in practice.

SESSION II: MODELLING AND FORECASTING THE CONDITIONAL VOLATILITY OF FINANCIAL TIME SERIES

1. Univariate ARCH and GARCH models: ARCH, GARCH, GARCH-in-mean, IGARCH. Asymmetric GARCH models, news impact curve, alternative GARCH specifications.
2. Application:
   • Fitting ARCH and GARCH models with Stata.
5. Applications:
   • Modelling cross-markets correlations and testing for volatility spillovers using Stata.
   • Value at Risk estimation of financial markets with Stata.
USEFUL TEXTS


LOCATION AND DATE

The course will be held in Frankfurt am Main on 27th and 28th April 2017.

REGISTRATION FEES

- Students*: € 540.00
- Academic: € 900.00
- Government / Nonprofit: € 1050.00
- Commercial: € 1200.00

*To be eligible for student prices, participants must provide proof of their full-time student status for the current academic year.

All fees are subject to VAT (applied at the current Italian rate of 22%).

The number of participants is limited to 8. Places will be allocated on a first come, first serve basis. The course will be officially confirmed, when at least 5 individuals are enrolled.

Course fees cover: course materials (handouts, Stata do files and datasets to be used during the course), a temporary licence of Stata (valid for 30 days from the beginning of the course), lunch and coffee breaks.

In order to maximize the usefulness of this course, we recommend that participants bring their own laptops with them, to be able to actively participate in the empirical sessions.

Individuals interested in attending this training course, must return their completed registration forms to TStat by the 12th of April 2017.

Further details regarding our registration procedures, including our commercial terms and conditions, can be found at www.tstattraining.eu/training/d-ef26.