

Linear Regression with STATA

In Cooperation with the GRADE Center GSEFM

Objective

The GRADE Center GSEFM opens its „pre-semester courses“ , held by advanced PhD candidates, to all PhD candidates, registered at GRADE. These courses cover different topics.

Description

1. The Linear Regression Model with Multiple Regressors (Theory and Numerical Illustration in STATA)
 - Ordinary Least Squares (OLS) Estimation
 - Hypothesis Testing
 - Model Selection: Omitted and Irrelevant Variables
2. Elements of Asymptotic Modes of Convergence
 - Modes of Convergence
 - Laws of Large Numbers
 - Central Limit Theorems
 - Properties of the OLS Estimator
3. Monte Carlo Experiments in Econometrics: Key Ideas and Numerical Illustration in STATA
4. Heteroskedasticity and Serial Correlation (Theory and Numerical Illustration in STATA)
 - Detecting Heteroskedasticity and Serial Correlation
 - Robust Standard Errors
 - Generalized Least Squares Estimation

Conditions

Students are expected to have a solid undergraduate background in mathematics. Students missing some of this background are expected to have worked through the following reference prior to the beginning of the course:

Chiang, A.C. and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, Mc Graw-Hill Irwin.

On-site sessions will take place if the epidemiological situation and the prevention guidelines issued by Goethe University make it possible. Otherwise, they will be replaced by online sessions. Information on the subject will be shared by email at least one week before the beginning of the program

Organizational Information

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| Language | English |
| Target group | Doctoral Candidates at all stages from all faculties |
| Date | Friday, 23 October 2020, 9:00 – 15:00 Monday, 26 October 2020, 9:00 – 15:00 Thursday-Friday, 29-30 October 2020, 9:00 – 15:00 |
| Registration | For registration click here |

Trainer



Kar Man Tan

GSEFM, Goethe University

Graduated at the University of Nottingham with a BSc in Economics and University College London with an MSc in Economics.

Current project: How information updates can affect an individual's willingness to insure in markets where adverse events differ by severity and frequency