

Introduction to Stata
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Office Hours: By appointment

Description of the Course¹

The goal of the course is introducing Stata, and describing its main use in Economics. Since we do not require previous knowledge of Stata nor Econometrics, the focus of the course will be on data management and descriptive statistics. Throughout the course one is expected to learn how to import Excel data to Stata, how to read microdata with a *dictionary* file, how the *help menu* works, and how to get descriptive statistics and plot different kinds of graphs using Stata. Moreover, we will also cover how to estimate and make inference on linear regression models. At the end of every class, the material covered will be uploaded at the webpage of the course, together with the necessary material needed to replicate the results found during the lectures.

Program of the Course

1. Why are we studying Stata?
 - (a) What are the features of Stata that make it popular?
 - (b) A demonstration on the power of Stata
 - (c) What Stata looks like?
 - (d) Where we can get help, installing new commands
 - (e) Do-files and log-files
2. Imputing data on Stata
 - (a) Finding data
 - (b) How to change the working directory?
 - (c) Reading Excel, .csv and txt files
 - (d) Reshape
3. Imputing data on Stata - continued
 - (a) Importing microdata using dictionary files
 - (b) Renaming and labelling data
4. Data manipulation

¹This course benefited from previous notes by Pedro Sant'Anna and Ursula Mattioli Mello.

- (a) Creating new variables (gen, egen, replace, recode)
 - (b) By-processing
 - (c) Collapse
5. Describing the data
- (a) Examining the data (list, browse/edit , describe, codebook, summarize, tabulate, inspect)
 - (b) Missing values (mvdecode)
 - (c) Basic statistics
6. Maneuvering around multiple data
- (a) Merge different data sets
 - (b) Appending data
7. Graphs
- (a) Scatter
 - (b) Density plots
 - (c) General Plots
8. Regressions
- (a) Cross section, time series and panel data
 - (b) reg command
 - (c) Standard errors
 - (d) plotting the residuals
9. Post estimation
- (a) Hypothesis testing (test, testparm)
 - (b) Predict
 - (c) Exporting your results: esttab and outreg2
10. Advanced
- (a) Global and local macros

(b) Loops and if clauses

(c) Multiple do-files: How to organize your project?

References

Books

- Cameron and Trivedi, “Microeconometrics using Stata”
- Baum, “An Introduction to Modern Econometrics Using Stata”

Some Useful Lecture Notes

- Alexander Lembcke, “Introduction to Stata”
- German Rodriguez, “Stata Tutorial”
- Emmanuel Milet “The Do’s and Don’ts of a Do-file”
- Tobias Pfaff, “A Brief Introduction to Stata with 50+ Basic Commands”