Plenary Session VIa: Running the Microsimulations
A Short Stata Overview

Martín Cicowiez

CEDLAS-UNLP

Marco V Sánchez

UN-DESA

Outline

- An Introduction to Stata

- Stata Basic Commands
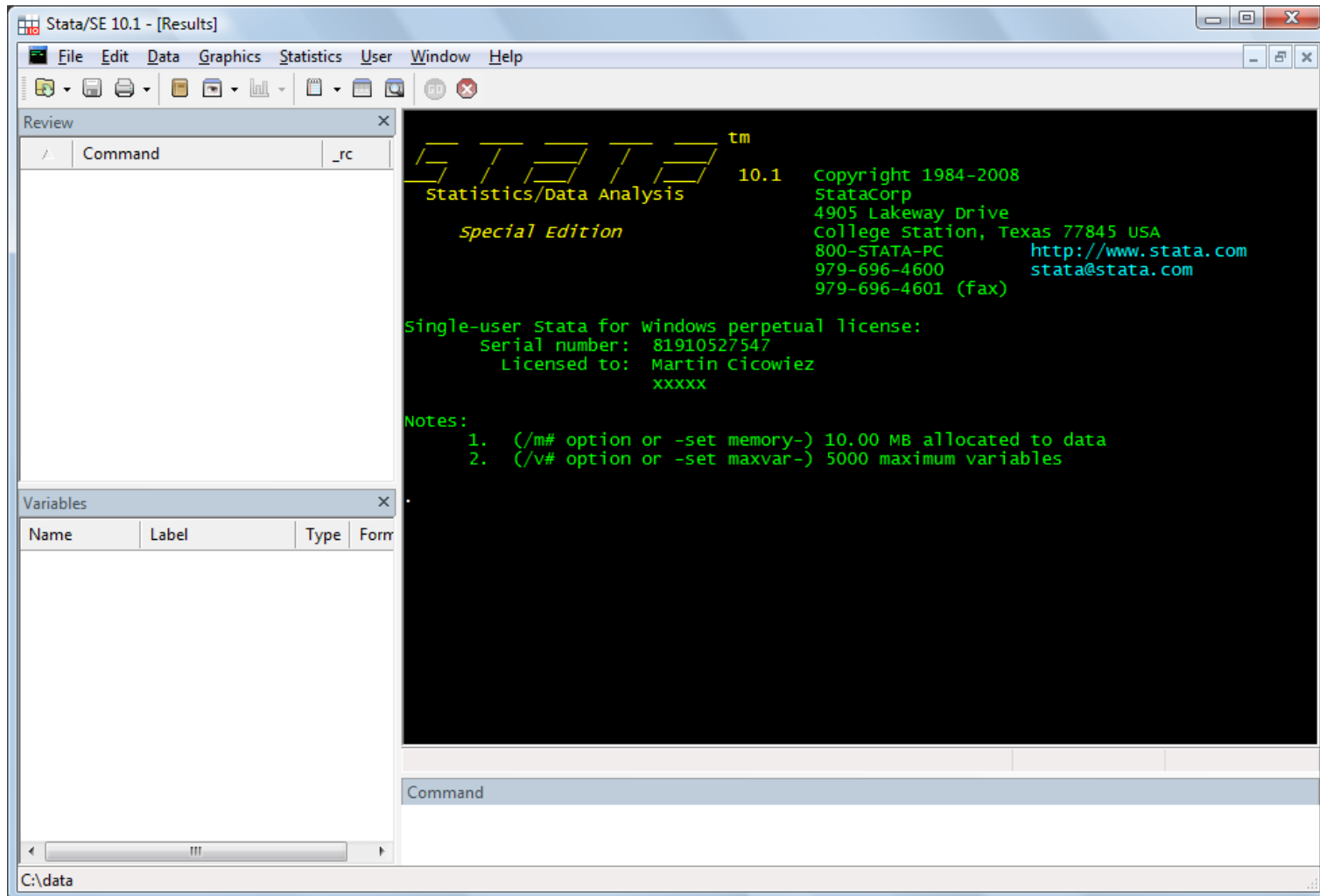 - will be used to prepare the dataset for microsimulations

Stata Basics

- Stata is a statistical package that can be used to analyze and manipulate data, econometric analysis, and programming.

- Information about Stata can be found at *<www.stata.com>*.

- Other useful internet resources are
  - *<www.ats.ucla.edu/stat/stata>*
  - *<www.cpc.unc.edu/services/computer/presentations/statatutorial>*
  - *<www.princeton.edu/~erp/stata>*

Installing STATA

- Run the setup.exe file.
- Run STATA for the first time and enter the license information.
- Suggestion. Read "Getting Started with Stata" and the "User's Guide". Read the rest of the documentation selectively, according to your needs.
- In case of a problem, use the help command.

The Stata Interface

The Stata Interface

- Stata can be used by means of menus. However, it is more flexible to use the command line.

- The Stata interface is comprised of four windows:
  - review
  - variables
  - Stata results
  - Stata command

- The commands can be introduced "immediately" trough the command line or trough text files - known as do files - that Stata executes line by line.

The Language Syntax

The basic language syntax for Stata commands is

```
[by varlist:] command [varlist] [=exp] [if exp]
                              [in range] [weight]
                              [using filename] [, options]
```

where the elements in brackets are optional.

Some Basic Commands

- clear everything
  - `clear`
- setting the memory size for the database
  - `set mem 100m`
- setting the path
  - `cd "C:\Data"`
- importing an EXCEL database
  - `insheet using "my-data.csv", comma`

Some Basic Commands – cont.

- computing basic statistics
  - `summarize ypc`
  - `summarize ypcf [w=popwt]`
  - `summarize ylab [w=popwt] if age >=25 & and age <=55`
- generate new variables
  - `generate ypc2 = ypc^2`
- tabulate data
  - `table skill [w=popwt], c(mean ylab)`

Some Basic Commands – cont.

- renaming variables
  - `rename ypc2 ypcf22`
- eliminating variables
  - `drop ypc22`
- replacing values
  - `replace male=0 if male==1`

Do Files and Log Files

- A do file is a text file with Stata code that Stata runs line by line, as if the sentences were written in the Stata command window.

- A log file is a text file with all the results that appear in the Stata results window.
  - the user selects when to start and when to stop logging to the log file