

ECON 4848

STATA HANDOUT 1

1 Introduction

Start \Rightarrow All programs \Rightarrow Stata. After you open Stata you will see four windows.

1. Results - Displays the results of commands
2. Review - Displays a history of commands
3. Variables - Variable names and labels for data in memory
4. Command - Where you enter your commands

Commands.

1. **display**: displays strings and values of scalar expressions. **display** produces output from the programs that you write. Interactively, **display** can be used as a calculator. Example: `display log(10)`.
2. **help**: followed by a command provides syntax, options, description and additional information on the command. Example: `help reg`
3. **memory**: change memory allocated to Stata. Type `help memory` to learn about syntax. Example: `set mem 100 m, permanently`.
4. **query**: displays system parameters. Example: `query memory`.
5. **update query**: will determine whether Stata executables and ado-files are updated (`adoupdate` does the same for user-written commands).
6. **use**: loads a Stata-format dataset previously saved into memory. If filename is specified without an extension, `.dta` is assumed. If the filename contains embedded spaces, it must be enclosed in double quotes. Examples: a) `use http://www.stata-press.com/data/imeustablef7-1.dta, clear`. The option `clear` specifies that it is okay to replace the data in memory, even though the current data have not been saved to disk; b) `use census2c.dta, clear`
7. **list**: lists the variables in the active Stata data set. Example: `list`. Note that Stata is case sensitive, e.g., the variable `State` is different from the variable `state`. Type `help data types` to see a description of the type of variables Stata supports. Try the following commands: `browse`, `describe`, `tabulate`.

8. `generate`: creates or changes the contents of a variable. Example: `generate urbanized = popurb/pop.`
9. `replace`: Example: `replace urbanized = 100*urbanized.`
10. `summarize`: provides summary statistics. Examples: a) `summarize`; b) `summarize urbanized`; c) `summarize, d`; d) `summarize [variable name], d`
11. `tabstat`: displays table of summary statistics. Examples: a) `tabstat wage by (educ)`; b) `tabstat wage, by(educ) statistics(N mean sd min max)`
12. `sort`, `gsort`: arranges the observations of the current data into ascending order based on the values of listed variables. Example: `sort urbanized`. `gsort` sorts in ascending or descending order. Example: `gsort region -pop.`
13. At times we need to generate indicator variables. Example:


```
generate smallpop = (pop <= 5000)
generate largepop = (pop >= 5000)
generate smallpop=0
replace smallpop=1 if pop<=5000
summarize urbanized if smallpop==1
```
14. `label`: attaches a label (up to 80 characters) to the dataset in memory. Example: `label variable urbanized "Population in Urban Areas, %"`
15. `rename`: changes the name of an existing variable *old name* to *new name* . The contents of the variable are unchanged. Example: `rename urbanized urbanization`

2 Programs/codes

In Stata, a collection of commands saved in an executable file is called a `do` file. A basic template is given by,

```
/* What project this is, What this do-file does, Who wrote it, When it was written, Where it
is */
capture log close
set logtype text, permanently
log using "path/do-filename.txt", replace
set memory 100m
```

```
set more off
use "path/datafilename.dta"
**commands go here **
log close
exit
Example:
/*Author: Carlos Martins-Filho
When: 8 aug 2009
What: summarizes grunfeld.dta*/
capture log close
set logtype text, permanently
log using grunfeld.txt, replace
clear
set memory 100m
set more off
use http://www.stata-press.com/data/imeus/grunfeld, clear
describe
log close
exit
```