Social-insurance Undergraduate Research Fellowship (SURF)

Stata Lecture 1

05/15/2023





Outline

- Stata Learning Resources
- Stata Interface
- Run Commands
- Stata File Types
- Make Notes in a Do File
- Operators in Stata
- Remarks

Stata Learning Resources

Free Webinar: Ready. Set. Go Stata.

```
https://www.stata.com/training/webinar/ready-set-go-stata/
This free, one-hour webinar will introduce you to the basics of using Stata. It is not required, but I highly encourage you to register and attend. The first session is on Tuesday, May 23rd at 2:00 PM. The registration deadline is Sunday, May 21st
```

Stata Learning Modules

```
https://stats.idre.ucla.edu/stata/modules/
http://data.princeton.edu/stata/
```

- Stata Video Tutorials

```
https://www.stata.com/links/video-tutorials/
```

- Statalist: Official Stata Help Forum

https://www.statalist.org/forums/help

- Stata Visual Overview for Creating Graphs

```
https://www.stata.com/support/faqs/graphics/gph/stata-graphs/
```

- Google

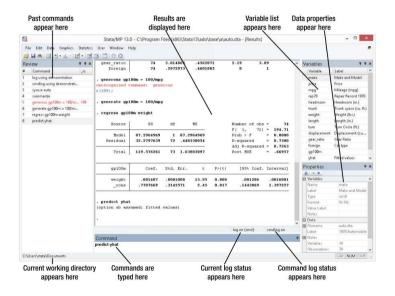
Simply google your questions

Stata Help Files

Stata help files can be hard to understand, but examples towards bottom are often very useful

Learning by doing (repeatedly) is really the primary way to learn well.

Stata Interface



Run Commands

Three ways to run commands:

- Uses dropdown menus to implement commands (almost never recommended except for first time implementing some tasks)
- Command window: Type code directly to enter simple data exploration commands while working (not usually recommended)
- Do-file editor: Type code and save it as you go. Can run code line-by-line from too (almost always recommended, allows for complete replicability)

Stata File Types

- Data file
 Stata saves data in its own format, which ends with a ".dta" suffix
 Data in excel, CSV or other formats must be imported into Stata and saved as a ".dta" file
- Do file
 Text files ending in ".do" where code is written to execute commands
- Log file
 A file Stata generates while you are working that captures everything happening in the command window (like a transcript of your session). You must open and close this with commands, we usually put these in a do file at the beginning and end

Make Notes in a Do File

"Commenting out" text in a do file is a way to make notes to yourself or others who may need to make sense of your code later

- "Comment out" a single line of text by starting it with *
- "Comment out" a section by starting with "/*" and ending with "*/" (this is also how you can put a comment "in line" with a command, for example sysuse auto.dta /* this line opens up a data file stored in the software */
- "Comment out" notes and put them "in line" with a command with " // ", for example sysuse auto.dta // this line opens up a data file stored in the software

Commenting at the top of your do file saying what it accomplishes, what data it uses, etc. is good practice

Operators in Stata

Arithmetic		Relational		Logical	
+	plus	==	equal	&	and
-	minus	!=	not equal		or
*	multiply	\sim =	not equal	!	not
/	divide	>	greater than	\sim	not
\wedge	power/root	<	less than		
		>=	greater than or equal to		
		<=	less than or equal to		

A double equal sign (==) is used for equality testing

Remarks

- Stata does not capitalize its commands
- However, variables are case sensitive, i.e. "wage" and "Wage" are two different variables