

# An introduction to Stata

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# Introduction

- Stata has broad statistical and econometric capabilities
  - ▶ Linear models; ANOVA
  - ▶ Limited dependent variables (logit, tobit etc)
  - ▶ Panel data and time series
  - ▶ Survival analysis
  - ▶ etc. . .
- Good graphical capabilities (publication quality)
- Data Management

# Getting started

- Point-and-Click via the menu
  - Type directly into command-box
  - (Better) alternative: Stata .do files
    - ▶ Organise your do-files
    - ▶ **Reproduce** what you've done
    - ▶ Easily checked and changed
    - ▶ You can more easily split your work into blocks: one do for cleaning data, one for generating variables, one for analysis etc
- ⇒ `doedit` opens a new do-file

# The .do file

The do file. . .

- . . . works as if you would type each line into the command box
- . . . can be run line by line, or all at once.

## Describe your do file!

What does (should. . . ) it do,  
when was it made,  
by whom,  
why?

# The structure of Stata commands

A Stata command generally looks like:

```
[(optional by, xi, etc)[, options]:]  
command (and what to do the command on)  
[restrictions: if, in]  
[, options]
```

Example:

```
by firm, sort: reg wage educ tenure if male==0, vce(robust)
```

⇒ **Most commands (and variables) can be abbreviated:**

handy but dangerous! Use `set varabbrev off`.

# Notes on notation

- Lists of variables (`varlists`)
  - ▶ wildcard `*`: `var*` gives all variables starting with `var` (including `var`)
  - ▶ single character wildcard `?`: `var?` gives all four character variables starting with `var` (*excluding* `var`!)
  - ▶ Can be used in the middle of a name
  - ▶ `var1-var6` gives all variables from `var1` to `var6`. **NB!** depends on sort order of your data set!
- Comments (generally within `do-files`)
  - ▶ asterisk `*` at the beginning of a line
  - ▶ `//` at the end of a line
  - ▶ anything between `/*` comment `*/`

# Need help?

- Check the help file!  
(`help [command]`)
- Check the manuals!
- Check the internet!  
<http://www.ats.ucla.edu/stat/stata/> is a good resource. See also the Stata list.

Stata at work...

Let's get to work!