

27 Commands everyone should know

Contents

- 27.1 41 commands
- 27.2 The by construct

27.1 41 commands

Putting aside the statistical commands that might particularly interest you, here are 41 commands that everyone should know:

Getting help help, net search, search	[U] 4 Stata's help and search facilities
Keeping Stata up to date ado, net, update adoupdate	[U] 28 Using the Internet to keep up to date [R] adoupdate
Operating system interface pwd, cd	[D] cd
Using and saving data from disk save use append, merge compress	[D] save [D] use [U] 22 Combining datasets [D] compress
Inputting data into Stata import edit	[U] 21 Entering and importing data [D] import [D] edit
Basic data reporting describe codebook list browse count inspect table tabulate summarize	[D] describe [D] codebook [D] list [D] edit [D] count [D] inspect [R] table [R] tabulate oneway and [R] tabulate twoway [R] summarize

Data manipulation	[U] 13 Functions and expressions
generate, replace	[D] generate
egen	[D] egen
rename	[D] rename , [D] rename group
clear	[D] clear
drop, keep	[D] drop
sort	[D] sort
encode, decode	[D] encode
order	[D] order
by	[U] 11.5 by varlist: construct
reshape	[D] reshape
Keeping track of your work	
log	[U] 15 Saving and printing output—log files
notes	[D] notes
Convenience	
display	[R] display

27.2 The by construct

If you do not understand the *by varlist:* construct, `_n`, and `_N`, and their interaction, and if you process data where observations are related, you are missing out on something. See

[U] **13.7 Explicit subscripting**

[U] **11.5 by varlist: construct**

Say that you have a dataset with multiple observations per person, and you want the average value of each person's blood pressure (`bp`) for the day. You could

```
. egen avgbp = mean(bp), by(person)
```

but you could also

```
. by person, sort: generate avgbp = sum(bp)/_N  
. by person: replace avgbp = avgbp[_N]
```

Yes, typing two commands is more work than typing just one, but understanding the two-command construct is the key to generating more complicated things that no one ever thought about adding to `egen`.

Say that your dataset also contains `time` recording when each observation was made. If you want to add the total time the person is under observation (last time minus first time) to each observation, type

```
. by person (time), sort: generate ttl = time[_N]-time[1]
```

Or, suppose you want to add how long it has been since the person was last observed to each observation:

```
. by person (time), sort: generate howlong = time - time[_n-1]
```

If instead you wanted how long it would be until the next observation, type

```
. by person (time), sort: generate whennext = time[_n+1] - time
```

by varlist:, `_n`, and `_N` are often the solution to difficult calculations.