

actual programming: adofiles

adam okulicz-kozaryn

`adam.okulicz.kozaryn@gmail.com`

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outline

misc

[*] .ado

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ps3

- ◇ cleanliness, simplicity !
- ◇ don't be afraid to delete stuff !
- ◇ you have git so you can always go back
- ◇ so delete reshape, infix, etc unless it is doing something useful; ask me questions
- ◇ i know that you can use these because that was last assignment
- ◇ but don't keep any stuff that we don't need any more
- ◇ same with files, delete everything that we don't need now
- ◇ you can always go back ...

ps3

- ◇ make you code organized in a logical order...
- ◇ renaming in one block, merging in the other block....
- ◇ as you write it, things are all over the place, naturally
 - like in a paper...
- ◇ rewrite your code and reorganize...
- ◇ maybe even print it out, mark, reorganize,
 - use scissors and glue if it helps

looking in the future...

- ◇ from now on, assignments are less of an exercise and more of a draft of a final project...
- ◇ so instead of practicing let's apply knowledge and do something more useful
- ◇ it should make sense...so don't do things that do something that is not really important
- ◇ e.g. don't save in fixed format, unless you archive for the future...
- ◇ just do things that are meaningful...
- ◇ many of you just say **des** **sum** somewhat mechanically
- ◇ or split, then merge; why??

understaning data again...

- ◇ again, it is critical that you understand your data...
- ◇ so far, you were mostly just doing `des` and `sum`
- ◇ but there is a ton of other tools that will help you understand your data better
- ◇ let's have a look `tabstat` and `table`
- ◇ let's run examples from help files for these
- ◇ can use them with macros and loops

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.ado

- ◇ writing ado-files is the most fancy thing you can do in stata
- ◇ yes, we are at the frontier !
- ◇ we will create our own programs
- ◇ it is lots of fun
 - but also hard work and lots of debugging (error fixing)
- ◇ if you use your own programs, you are an advanced Stata user !
- ◇ writing programs pays off if you use Stata a lot
- ◇ we will see some simple ado-files
- ◇ reference: <http://www.stata-press.com/books/isp.html>

.ado is a bonus

- ◇ today's class is somewhat more advanced than what we did so far
- ◇ you do not have to write ado programs to get A in this course
 - but it helps in terms of extra credit
 - if you missed points on other things
- ◇ macros and loops are essential for your applied work
 - should be in pretty much every dofile
- ◇ .ado programs help a great deal, but can manage without them
 - they especially help if you use stata a lot, say > 20 hrs a week

macro v loop v .ado

- ◇ macros: use if you repeat a string over again
- ◇ loops: use if you do a similar thing over again
- ◇ .ado: use if you have a complicated task to do over again (usually involving complicated macros and loops)

intuition

- ◇ the idea with .ado files is automation
- ◇ oftentimes, we do the same thing over and over again
 - there is a bunch of if else statements : if this do that etc...
- ◇ why not write a program for that ?
- ◇ if you do a lot of similar operations
 - it pays off to spend some time and program it
 - so that next time you can do it all with push of a button
 - just say your command and specify options that are task-specific
 - eg variables, output directory, title, etc

how do i write .adofiles

- ◇ don't try to write them at once and for all
 - first write your regular dofile and then
 - step by step make it into a program by making macros, loops and optimizing it