Flip-flop seminar #3
(revised and expanded summary)

26 November 2009

Upcoming event: you MUST email enyedizs@ceu.hu to register in advance

Sat, 5 December 2009, Korona Hotel (Kalvin square):

An international workshop organized by the Hungarian Election Study

The morning program can be quite interesting for you (see agenda on next slide)

There is one silly thing about the venue (sorry!): you must not consume the little snacks and the coffee provided at the spot (or must volunteer to pay for them right away) because of the silly rules and charges of the hotel

The morning program on 5 December

9:00-9:30 Oddbjorn Knutsen: Comparative studies of determinants of party choice

9:30-10:00 Hermann Schmitt: The changing content of left-right identification

10:00-10:15 Coffee break

10:15-10:45 Kenneth Benoit: The trajectory of Hungarian political parties: Analysis of expert surveys

10:45-11:15 Nick Sitter: Hungarian politics in comparative perspective

11:15-11:45 Kristjan Vassil: The Impact of Voting Advice Applications on Political Behavior

11:45-12:15 Atle Alvheim and Trond Kvamme: Social research infrastructure services by NSD and the NESSTAR data publication tool

1 December: ECPR deadline

- This is the deadline for submitting paper proposals for the 2010 Joint Sessions of Workshops of the European Consortium for Political Research (ECPR)
- For the full list of workshops on offer, follow the menu on www.ecprnet.eu to get to: http://www.ecprnet.eu/joint_sessions/munster/workshops.asp
- A handy shortlist of workshops on voting behavior/public opinion is provided at: http://povb-ecpr.org/node/24
- Paul & Sebi plz note “The Dilemma of Political Sophistication and Political Equality” (workshop 13) organized by Martin Elff

BTW

- If you have not heard of it yet, then do check out the ECPR Standing Group on ***Public opinion and voting behaviour in a comparative perspective***
- Website: http://povb-ecpr.org
- Consider becoming a member; e.g. this will give you full access to the club goods provided on the Standing Group's webpage and put you on the mailing list for the monthly newsletter

Back to STATA macros

First a quick rerun of a few things already covered last week

Help on macros in STATA

- Try “Help / Contents / Programming and matrices / Programming / Macros, scalars, and system parameters” through the pull-down menu to learn about local and global macros
- Also run “`help return`” for information on the macros, scalars and matrices left in the memory by STATA’s statistics commands
- Christopher Baum has a book on the topic; free download from www.stata.com the do-files for the book

An Introduction to Stata Programming

Author: Christopher F. Baum
Publisher: Stata Press
Copyright: 2009
ISBN-10: 1-59718-045-9
ISBN-13: 978-1-59718-045-0
Pages: 362; paperback
Price: $54.00

ADD TO CART

See a large photo of the front cover
See the back cover
Table of contents
Preface (pdf)
Author index (pdf)
Subject index (pdf)
Errata (from www.stata-press.com)
Download the do-files and datasets used in this book (from www.stata-press.com)

Comment from the Stata technical group

Christopher F. Baum's *An Introduction to Stata Programming* is worthwhile for anyone wanting to learn about programming in Stata. For the beginner, Baum assumes only that the user is familiar with Stata, and so he builds up accordingly. For the more advanced Stata programmer, the book introduces Stata's Mata programming language and provides optimization tips for day-to-day work. All readers will find better, new ways to approach old tasks.

Baum steps the reader through the three levels of Stata programming. First up are do-files. Though often thought of as simple batch files, do-files support both loops and conditional execution, and hence can be used for automation as well as reproducibility. While giving examples of do-file programming, Baum introduces useful but often-overlooked Stata

Bookstore
Overview
Books on statistic
Books on Stata
All books on St
Top-selling boo
Web books on Stata
Books by Stata Press
Stata documenta
Stata Journal
STB Reprints
Author support
Editor support
Request a quote

Products
Stata 11
Order Stata
Upgrade
Training
Bookstore
Stata Journal
Stata Press
Stata News
STB
Stat/Transfer
Gift Shop

Support materials for
An Introduction to Stata Programming

You can download the do-files and datasets for *An Introduction to Stata Programming* from within Stata using the **net** command. At the Stat prompt, type

```
. net from http://www.stata-press.com/data/itsp
. net install itsp-ado
. net get itsp-do
. net get itsp-data
```

After installing the files, type **spinst_itsp** to obtain all the user-written commands used in the book's examples. You should check the message produced by the **spinst_itsp** command. If there are any error messages, follow the instructions at the bottom of the output to complete the download.

If you do not have an Internet connection from within Stata, you can download one of the following files:

itsp.zip PKZIP format, 6.9M
itsp.tar.Z Unix tar.Z format 13M

We suggest that you create a new directory and copy the materials there.

One of the files included within **.zip** and **.tar.Z**, **spinst_itsp**, will install all the user-written commands used in the book's examples when you typ **spinst_itsp**. However, you must be connected to the Internet for this command to work.

Loops in STATA

- Loop: “a programmed sequence of instructions that is repeated until or while a particular condition is satisfied” (Concise Oxford English Dictionary)
- See STATA commands `forvalues, each, while`
- Note too the command `if` (similar to `DO IF` in SPSS and `if` in R) that assists conditional processing (branching)
- Please look up the help on these STATA commands yourself before the next event. Run also “`help macro`” and “`help quotes`”
- Recall that local macros are referenced as `*macname*’ while global macros as $*macname* (where *macname* is the name of the macro)

Local and global macros: they differ in how long they stay in memory

Local macros vanish after the execution of the ‘do-file’ that creates them; global macros persist until you drop them from memory with a:

```
macro drop list of macros to be dropped
```

or

```
macro drop _all
```

or

```
clear all
```

command, or exit STATA.

See a demonstration of this point on the next slide.

Run this STATA code first from the Command window and then again from the Do-file editor

```
* Delete all existing macros from memory (except defaults)
clear all
* List all macros remaining in memory after the above
macro list
* Create local macro i (subsequent macro commands will
*      reference it as _i; other commands as `i’)
local i=1
* Create global macro i (afterwards referenced
*      as i in macro commands and elsewhere as $i)
global i=2
* List the two newly created macros
macro list _i i
* Create a new variable using local macro `i‘:
*  NB first you need to open a data set; e.g. "set obs 5" below
*      creates a data set with 5 cases and no variables as yet
set obs 5
gen v`i'=0
summ v`i'
```

The exercise in the previous slide …

- … demonstrates a little flaw of STATA: the local macro only vanishes from the memory automatically if the command creating it (`local i=1`) was run from the Do-file editor (e.g. by highlighting one or more command lines and then executing them by pressing Ctrl-D or clicking Tools / Do or Tools / Do Selection in the pull-down menu), but not if you copy-paste the same command(s) in the Command window and press Enter to execute them from there

For this reason I prefer to avoid local macros and use global macros wherever possible

Local macros cannot be avoided when you create loops with the `while`, `foreach`, or `forvalues` command. But then, the local macros created by these commands (see `` `i' `` below) vanish after the execution of the loop no matter how you run your commands. Example (cf. the error message that you get at the end of this):

```
clear all
global NofCases=5
set obs $NofCases
gen IdentityNumber=.
forvalues i = 1/$NofCases {
      replace IdentityNumber = `i' in `i'
  }
macro list _i
```

The entirely new material that we discussed this week are lines 1-199 of the `Multilevel_Analysis_for_MI_Data_with_STATA.do` file included in `STATAfiles_FF3-4.ZIP` in the Readings\STATA folder of the POLBERG website. This code automates the estimation of two-step multilevel models (for any set of dependent and independent variables) in a particular cross-national data set. The remaining lines (200-373) of the same code will be reviewed next week.

The `STATAfiles_FF3-4.ZIP` file in the Readings folder of our website also contains:

- the data sets (*.dta) that you need to copy in your STATE work directory for this code to run
- the output files (*.smcl) obtained with this code, and
- two articles (*.pdf) on two-step multilevel models that the comments in the do-file refer to.
- The do-file has extensive comments in it that should help you understand what the code really does. If something is unclear, check the section on help above or just ask.

Next flip-flop event

- Time: 5:30 pm, 3 December 2009, FT809
- Topic: completing the overview of STATA macros and the code on two-step multilevel analysis distributed at this seminar
- NB: the data set and the STATA code for two-step multilevel analysis that was distributed at this seminar is available in the Readings\STATA folder of the POLBERG website (see previous emails about how you can access the members-only sections of the website)