# THE STATA NEWS

Volume 23, Number 4

October/November/December 2008

www.stata.com





Title: Microeconometrics Using Stata

Authors: A. Colin Cameron and Pravin K.

Publisher: Stata Press Copyright: 2009

Pages: 688; paperback ISBN-10: 1-59718-048-3 ISBN-13: 978-1-59718-048-1

Price: \$65.00

Microeconometrics Using Stata, by A. Colin Cameron and Pravin K. Trivedi, is an outstanding introduction to microeconometrics and how to do microeconometric research using Stata. Aimed at students and researchers, this book covers topics left out of microeconometrics textbooks and omitted from basic introductions to Stata. Cameron and Trivedi provide the most complete and up-to-date survey of microeconometric methods available in Stata.

Early in the book, Cameron and Trivedi introduce simulation methods and then use them to illustrate features of the estimators and tests described in the rest of the book. While simulation methods are important tools for econometricians, they are not covered in standard textbooks. By introducing simulation methods, the authors arm students and researchers with techniques they can use in future work.

Cameron and Trivedi address each topic with an in-depth Stata example, and they reference their 2005 textbook, *Microeconometrics: Methods and Applications*, where appropriate.

The authors also show how to use Stata's programming features to implement methods for which Stata does not have a specific command. Although the book is not specifically about Stata programming, it does show how to solve many programming problems. These techniques are essential in applied microeconometrics because there will always be new, specialized methods beyond what has already been incorporated into a software package.

Cameron and Trivedi's choice of topics perfectly reflects the current practice of modern microeconometrics. After introducing the reader to Stata, the authors introduce linear regression, simulation, and generalized least-squares methods. The section on cross-sectional

techniques is thorough, with up-to-date treatments of instrumental-variables methods for linear models and of quantile-regression methods.

The next section of the book covers estimators for the parameters of linear panel-data models. The authors' choice of topics is unique: after addressing the standard random-effects and fixed-effects methods, the authors also discuss mixed linear models—a method used in many areas outside of econometrics.

Cameron and Trivedi not only address methods for nonlinear regression models but also show how to code new nonlinear estimators in Stata. In addition to detailing nonlinear methods, which are omitted from most econometrics textbooks, this section shows researchers and students how to easily implement new nonlinear estimators.

The authors next describe inference using analytical and bootstrap approximations to the distribution of test statistics. This section highlights Stata's power to easily obtain bootstrap approximations, and it also introduces the basic elements of statistical inference.

Cameron and Trivedi then include an extensive section about methods for different nonlinear models. They begin by detailing methods for binary dependent variables. This section is followed by sections about multinomial models, tobit and selection models, count-data models, and nonlinear panel-data models. Two appendices about Stata programming complete the book.

The unique combination of topics, intuitive introductions to methods, and detailed illustrations of Stata examples make *Microeconometrics Using Stata* an invaluable, hands-on addition to the library of anyone who uses microeconometric methods.

You can find the table of contents and online ordering information at **www.stata-press.com/books/mus.html**. You can also order by using the enclosed Bookstore Order Form.

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THE STATA NEWS is published four times a year and is free to all registered users of Stata.	



Title: The Workflow of Data Analysis

Using Stata

Author: J. Scott Long Publisher: Stata Press Copyright: 2009

Pages: 376; paperback ISBN-10: 1-59718-047-5 ISBN-13: 978-1-59718-047-4

Price: \$52.00

The Workflow of Data Analysis Using Stata, by J. Scott Long, is a productivity tool for data analysts. Long guides you toward streamlining your workflow, because a good workflow is essential for replicating your work, and replication is essential for good science.

A workflow of data analysis is a process for managing all aspects of data analysis. Planning, documenting, and organizing your work; cleaning the data; creating, renaming, and verifying variables; performing and presenting statistical analyses; producing replicable results; and archiving what you have done are all integral parts of your workflow. Long shows how to design and implement efficient workflows for both one-person projects and team projects.

An efficient workflow reduces the time you spend doing data management and lets you produce datasets that are easier to analyze. When you methodically clean your data and carefully choose names and effective labels for your variables, the time you spend doing statistical and graphical analyses will be more productive and more enjoyable.

After introducing workflows and explaining how a better workflow can make it easier to work with data, Long describes planning, organizing, and documenting your work. He then introduces how to write and debug Stata do-files and how to use local and global macros. Long presents conventions that greatly simplify data analysis—conventions for naming, labeling, documenting, and verifying variables. He also covers cleaning, analyzing, and protecting your data.

While describing effective workflows, Long also introduces the concepts of basic data management using Stata and writing Stata do-files.

Using real-world examples, Stata commands, and Stata scripts, Long illustrates effective techniques for managing your data and analyses. If you analyze data, this book is recommended for you.

You can find the table of contents and online ordering information at **www.stata-press.com/books/wdaus.html**. You can also order by using the enclosed Bookstore Order Form.

#### Did you know...

the Graph Editor has a recorder? Click on the Start Recording button, make changes to one of your graphs, then apply those edits to other graphs by clicking on the Play Recording button. To find out more, type

. help graph editor



Title: Data Analysis Using Stata, 2nd

Edition

Authors: Ulrich Kohler and Frauke Kreuter

Publisher: Stata Press

Copyright: 2009

Pages: 388; paperback ISBN-10: 1-59718-046-7 ISBN-13: 978-1-59718-046-7

Price: \$52.00

Updated to include changes to Stata over the past several years, *Data Analysis Using Stata, Second Edition*, comprehensively introduces Stata and will be useful to those who are just learning statistics and Stata, as well as to users of other statistical packages making the switch to Stata. Throughout the book, Kohler and Kreuter show examples using data from the German Socioeconomic Panel, a large survey of households containing demographic, income, employment, and other key information. The authors describe the Graph Editor and time-of-day variables, two features added in Stata 10, in this new edition.

Kohler and Kreuter's is a valuable introduction to Stata. The authors take a hands-on approach, leading you step by step through actual Stata sessions to answer practical questions commonly asked by social scientists.

They begin with an introduction to the Stata interface and then proceed with a description of Stata syntax and simple programming tools like foreach loops. The core of the book includes chapters on producing tables and graphs, performing linear regression, and using logistic regression. Kohler and Kreuter use multiple examples to illustrate all key concepts.

The rest of the book includes chapters on reading text files, writing programs and ado-files, and using Internet resources, such as the **search** command and the SSC archive.

You can find the table of contents and online ordering information at **www.stata-press.com/books/daus2.html**. You can also order by using the enclosed Bookstore Order Form.

#### **Bookmarks from the Stata Gift Shop**

Every book order includes a commemorative bookmark documenting the accomplishments of a famous statistician or mathematician—now you can order the entire collection!

Series one includes bookmarks for André-Louis Cholesky, Johann Carl Friedrich Gauss, William Sealy Gosset, Leslie Kish, and Frank Wilcoxon. Series two includes bookmarks for Ronald Aylmer Fisher, Francis Galton, Adrien-Marie Legendre, James Tobin, and Ernst Hjalmar Waloddi Weibull. Each series is just \$2.25 in North America and \$3.50 elsewhere.

Visit www.stata.com/giftshop/bookmarks.html to order.





## **Public training courses**

## Using Stata Effectively: Data Management, Graphics, and Analysis Fundamentals

Become intimately familiar with all three components of Stata: data management, analysis, and graphics. These two-day courses are taught by a senior member of the StataCorp staff and offer hands-on, individualized instruction, with each participant having access to a computer with Stata 10 installed. The courses are aimed at both new Stata users and those who would like to optimize their workflow and to pick up tips for efficient day-to-day usage of Stata. Upon completion of the course, you will be able to use Stata efficiently for basic analyses and graphics. You will be able to do this in a reproducible manner, making collaborative changes and follow-up analyses much simpler. Finally, you will be able to make your datasets self-explanatory to your co-workers and your future self.

# **Course dates and locations**

Los Angeles

December 4-5, 2008

**Houston** 

January 8-9, 2009

Seattle

February 5-6, 2009

Atlanta

March 5-6, 2009

Washington, DC

April 9–10, 2009

Whether you currently own Stata 10 or you are considering an upgrade or new purchase, these courses will unquestionably make you more proficient with Stata's wide-ranging capabilities.

#### Course topics include

- **♦** Stata basics
  - Keeping organized
  - Knowing how Stata treats data
  - Using dialog boxes efficiently
  - Using the Command window
  - Saving time and effort while working
- ◆ Data management
  - Reading in datasets of various standard formats (such as those from spreadsheets or databases)
  - Labeling variables and setting up encoded variables

- Generating new variables in an efficient fashion, including leading, lagging, generating statistics within groups, and working across variables
- Combining datasets, both by adding observations and by adding variables
- Reshaping datasets for repeated measurements

#### **♦** Workflow

- Using both menus and the Command window to work quickly
- Setting up Stata to your liking
- Keeping complete records of what is done inside Stata
- Creating a reproducible analysis, which is completely documented
- Finding, installing, and removing user-written extensions to Stata
- Customizing how Stata starts up and where it looks for files

#### **♦** Analysis

- Using basic statistical commands
- Reusing results of Stata commands
- Using common postestimation commands, such as testing hypotheses about linear or nonlinear combinations of coefficients, generating fitted values, or looking at marginal effects

#### **♦** Graphics

- Making common, simple graphs
- Building up complex graphs
- Using the Graph Editor

## **Registration and information**

Instructor: Bill Rising

Web: www.stata.com/training/enroll.html

Email: **training@stata.com**Tel: 979-696-4600 or 800-782-8272

Fax: 979-696-4601

Cost: \$950

Enrollment in each course is limited to 24 participants. Computers with Stata 10 installed are provided at all public training sessions. All training courses run from 8:30 AM to 4:30 PM each day. Participants are encouraged to bring a USB flash drive to all public training sessions; this is the safest and simplest way to save your work from the session.

For more information, visit www.stata.com/training/public.html.

## Did you know...

Statalist is an independently operated email listserver hosted at the Harvard School of Public Health, where over 2,500 Stata users from experts to neophytes maintain a lively dialogue about all things statistical and Stata. Find out more at www.stata.com/statalist/.

## Stata Journal's moving wall

Articles published at least three years ago are available for free from the Stata Journal web site, as are issues of the Stata Technical Bulletin, the predecessor to the Journal.

Newly available are articles from volume 5, issue 3 of the Journal, including the following:

Making regression tables from stored estimates B. Jann, ETH Zürich, Switzerland

Estimation of marginal effects using margeff T. Bartus, Corvinus University, Budapest, Hungary

Boosted regression (boosting): An introductory tutorial and a Stata plugin

M. Schonlau, RAND, Santa Monica, CA

Introduction to game-theory calculations

N. Orsini, Karolinska Institutet, Stockholm, Sweden

D. Rizzuto, University of Siena, Italy, and

N. Nante, University of Siena, Italy

Using density-distribution sunflower plots to explore bivariate relationships in dense data

W. D. Dupont, Vanderbilt University, Nashville, TN, and

W. D. Plummer Jr., Vanderbilt University, Nashville, TN

A simple approach to fit the beta-binomial model

P. Guimarães, Medical University of South Carolina, Charleston

Stings in the tails: Detecting and dealing with censored data R. M. Conroy, Royal College of Surgeons, Dublin, Ireland

A multivariable scatterplot smoother

P. Royston, MRC Clinical Trials, London, UK, and

N. J. Cox, Durham University, UK

Depending on conditions: A tutorial on the cond() function D. Kantor, Johns Hopkins University, Baltimore, MD, and

N. J. Cox, Durham University, UK

Mata matters: Translating Fortran

W. Gould, StataCorp, College Station, TX

Speaking Stata: The protean quantile plot N. J. Cox, Durham University, UK

Review of Statistics for Epidemiology by Jewell R. Bellocco, Karolinska Institutet, Stockholm, Sweden

Stata tip 22: Variable name abbreviation P. Ryan, University of Adelaide, Australia

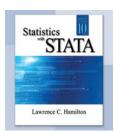
Stata tip 23: Regaining control over axis ranges N. Winter, Cornell University, NY

Stata tip 24: Axis labels on two or more levels N. J. Cox, Durham University, UK

The Stata Journal is a quarterly publication containing articles about statistics, data analysis, teaching methods, and effective use of Stata's language. The Journal publishes reviewed papers together with shorter notes and comments, regular columns, book reviews, and other material of interest to researchers applying statistics in a variety of disciplines.

Find out more at www.stata-journal.com.

### From the Stata Bookstore



Title: Statistics with Stata (Updated for

Version 10)

Author: Lawrence C. Hamilton

Publisher: Cengage

Copyright: 2009

Pages: 504; paperback ISBN-10: 0-495-55786-2 ISBN-13: 978-0-495-55786-9

Price: \$64.75

Statistics with Stata (Updated for Version 10) is the latest edition of Professor Lawrence C. Hamilton's popular Statistics with Stata series. Intended to bridge the gap between statistical texts and Stata's own documentation. Statistics with Stata demonstrates how to use Stata to perform a variety of tasks. This text is ideal as a self-study course for those new to statistics or those migrating from other statistical software to Stata and as a valuable reference for experienced Stata users wishing to explore Stata's capabilities in fields new to them.

Hamilton covers topics including getting started in Stata, data manipulation, graphics, summary statistics and tables, ANOVA, linear regression (and diagnostics), curve fitting, robust methods, regression models for limited dependent variables, panel (longitudinal) data and mixed models, survey data, survival analysis, factor analysis, cluster analysis, time series, and an introduction to programming.

Notable changes to Statistics with Stata (Updated for Version 10) include a new chapter on survey data analysis using Stata's svy: prefix command and a chapter on the multilevel and mixed model commands introduced in Stata 10. Chapter 3, covering graphics, has been updated to include a section demonstrating Stata's Graph Editor. The entire book has also been updated to reflect changes in output, syntax, and features.

You can find the table of contents and online ordering information at www.stata.com/bookstore/sws.html. You can also order by using the enclosed Bookstore Order Form.



Title: Sampling of Populations: Methods

and Applications, 4th Edition Authors: Paul S. Levy and Stanley Lemeshow

Publisher: Wiley Copyright: 2008

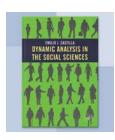
> Pages: 576; hardcover ISBN-10: 0-470-04007-6 ISBN-13: 978-0-470-04007-2

> > Price: \$94.00

The fourth edition of Sampling of Populations: Methods and Applications, by Paul S. Levy and Stanley Lemeshow, introduces the methods of survey statistics while grounding the analysis in concise empirical applications. Because many of the examples use Stata, the book is also a good introduction to survey methods using Stata. In fact, many of the updates in this edition feature Stata's increasing capabilities in survey methods.

Levy and Lemeshow begin by describing the reasons why sample surveys are used and some of the costs and benefits to different designs. One chapter introduces the basic concepts of populations, samples, sampling distribution, and characteristics of population parameter estimates. The authors then take the reader on a tour of the major sampling designs: simple random sampling, systematic sampling, stratified random sampling, and cluster sampling. For each survey design, the authors derive estimators for standard population parameters. They illustrate formulas with empirical examples, many of which use Stata. They also present accessible treatments of ratio estimation, variance estimation, and several special topics, including nonresponse and missing data. The fourth edition also includes a new chapter on constructing survey weights for various designs and reweighting scenarios.

You can find the table of contents and online ordering information at **www.stata.com/bookstore/sp.html**. You can also order by using the enclosed Bookstore Order Form.



Title: Dynamic Analysis in the Social

Sciences

Author: Emilio J. Castilla Publisher: Emerald

Copyright: 2007

Pages: 300; hardcover ISBN-10: 0-12-088485-2 ISBN-13: 978-0-12-088485-8

Price: \$74.75

*Dynamic Analysis in the Social Sciences*, by Emilio Castilla, introduces social-science students to longitudinal data analysis, cross-sectional time-series analysis, and survival analysis. Castilla assumes a minimal level of statistical knowledge and covers a broad range of topics aimed at familiarizing readers with a variety of methods. Many of the examples in the book use Stata.

After discussing the different types of data encountered by social scientists, Castilla gives a useful taxonomy of methods by data structure. A chapter on longitudinal data introduces the reader to methods for panel data, in which many individuals are observed for a few time periods, and methods for cross-sectional time series, in which some (a few or many) individuals are observed for many time periods. A chapter on event history introduces survival analysis.

A chapter on designing a research study and a chapter with applications show students how to design and implement social-science studies. Castilla is very instructive in his careful descriptions about formulating hypotheses and interpreting results. The book's annotated bibliography is a good resource for finding in-depth treatments of the covered topics.

You can find the table of contents and online ordering information at **www.stata.com/bookstore/daitss.html**. You can also order by using the enclosed Bookstore Order Form.

# **NetCourse™ schedule**

Stata NetCourses are a convenient, inexpensive, web-based way to learn how to exploit the full power of Stata. Courses are divided into a series of lectures that are posted to the web site each Friday, and participants can post questions and comments to a discussion board. We also offer NetCourseNow, a way for you to choose the time and pace of your NetCourse.

Enroll by visiting www.stata.com/netcourse, or use the enclosed order form.

#### **NC101: Introduction to Stata**

Content: An introduction to using Stata interactively

Prerequisites: Stata 10

Course leaders: Theresa Boswell, Kevin Crow, Kerry Kammire

Course length: 6 weeks (4 lectures)

Dates: January 23-March 6, 2009

Enrollment deadline: January 22, 2009

Next dates: March 27-May 8, 2009

Enrollment deadline: March 26, 2009

Price: \$95

Course syllabus: www.stata.com/netcourse/nc101.html

## **NC151: Introduction to Stata Programming**

Content: An introduction to Stata programming

dealing with what most statistical software users mean by programming, namely, the careful performance of reproducible analyses

Prerequisites: Stata 10; basic knowledge of using Stata

interactively

Course leaders: Theresa Boswell, Kevin Crow, Kerry Kammire

Course length: 6 weeks (4 lectures)

Dates: January 23-March 6, 2009

Enrollment deadline: January 22, 2009

Next dates: March 27-May 8, 2009

Enrollment deadline: March 26, 2009

Price: \$125

Course syllabus: www.stata.com/netcourse/nc151.html

#### NC152: Advanced Stata Programming

Content: This course teaches you how to create and debug

new commands that are indistinguishable from those of official Stata. It is assumed that you know why and when to program and, to some extent, how. You will learn how to parse both standard and nonstandard Stata syntax by using the intuitive syntax command, how to manage and process saved results, how to process by-

groups, and more.

Stata 10; course content of NetCourse 151 or Prerequisites:

equivalent knowledge

Course leaders: Theresa Boswell, Kevin Crow, Kerry Kammire

Course length: 7 weeks (5 lectures)

> Dates: January 23-March 13, 2009

Enrollment deadline: January 22, 2009

> Price: \$150

Course syllabus: www.stata.com/netcourse/nc152.html

#### NC461: Introduction to Univariate Time Series with Stata

Content: This course introduces univariate time-series analy-

sis, emphasizing the practical aspects most needed by practitioners and applied researchers. The course is written to appeal to a broad array of users, including economists, forecasters, financial analysts, managers, and anyone who encounters time-series

data.

Prerequisites: Stata 10; course content of NetCourse 101 or

> equivalent knowledge; familiarity with basic cross-sectional summary statistics and linear

regression

Course leaders: Brian Poi, Gustavo Sanchez

Course length: 7 weeks (4 lectures plus an overview of

multivariate methods)

January 23-March 13, 2009

Enrollment deadline: January 22, 2009

Price:

Course syllabus: www.stata.com/netcourse/nc461.html

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