New time-series features

Stata 8’s time-series capabilities have been extended to include commands for fitting and analyzing cointegrated vector-error correction models (VECMs), and several postestimation commands for use after estimating vector autoregressions (VARs) and structural VARs have been renamed to reflect their wider applicability. Stata 8 users can grab these new commands by doing a simple update all; there is no additional cost for these commands.

Many economic time series are cointegrated and require specialized statistical methods to analyze them. Economic variables, such as consumption, investment, and income, tend to grow over time, while the differences between any two of those variables never deviate too far from a constant equilibrium value. VECMs are used to model such relationships.

As with a VAR or structural VAR (SVAR), the first step in testing for cointegration and fitting VECMs is to determine the appropriate lag order of the model, for which Stata’s existing varsoc command can be used. The new vecrank command uses Johansen’s method to determine the number of cointegrating relationships, and the new vec command estimates the parameters of the VECM. After fitting the model, the new vecstable command can be used to check if it is stable, and the new veclmar and vecnorm commands test whether the residuals are serially correlated and normally distributed, respectively.

As with all of Stata’s estimation commands, the new and revised time-series commands can be accessed from the command line or the graphical user interface.

Accompanying the new commands for cointegration and VECMs is a revised version of the Stata 8 Time-Series Reference Manual. Nearly seventy pages of new material on VECMs and associated commands have been added, and many other commands’ entries have been revamped and improved. Anyone interested in using Stata for VECMs and time-series analysis in general will find the updated manual indispensable.

The table of contents and online ordering information can be found at www.stata.com/bookstore/ts.html. You can also order the manual using the enclosed bookstore order form.
The North American Stata Users Group meeting is less than a month away, so do not let an opportunity to visit Boston in the summer pass you by. This year’s program has an exceptionally wide variety of topics. From data management to data integration, from sample-size calculations in the health sciences to sensitivity analysis in transportation research, from sunflower plots to metagraphiti, there are sure to be topics that interest you. The training sessions cover two hot topics: mixed models and graphics. This is also your opportunity to talk directly to the developers of Stata, to tell us what kind of work you do and how we can make Stata a better tool for you.

Program

Presentations (Day 1)

Session 1: 8:30–9:45   Statistical Methods

Use of Gaussian integration in Stata
Alan Feiveson, NASA - Johnson Space Center

Generating random variables from the N/I distributions
Peter A. Lachenbruch, U.S. FDA

Econometric techniques for estimating treatment effects
Zhehui Luo, Dept. of Epidemiology, Michigan State University

Sample-size calculation for longitudinal studies
Phil Schumm, Dept. of Health Studies, University of Chicago

Break: 9:45–10:15

Session 2: 10:15–11:45   Data Management Using Stata

Using Stata for questionnaire development
Theodore Pollari & Phil Schumm, Dept. of Health Studies, University of Chicago

Translating data between MySQL and Stata
Michael Johnson & Phil Schumm, Dept. of Health Studies, University of Chicago

Working with ODBC data sources in Stata: tips and techniques
Joseph Coveney, Cobridge Co., Ltd., Tokyo

Using Stata with large datasets in corporate America: lessons learned
Ed Bassin, ProfSoft, Inc.

Lunch: 11:45–1:00
(Buffet lunch at conference center is included with registration.)

Session 3: 1:00–2:15   Stata Graphics

Graphics for categories and compositions
Nicholas J. Cox, Dept. of Geography, University of Durham, UK

Metagraphiti by Stata: Visuographical exploration and presentation of meta-analytic data using Stata
Ben Dwamena, University of Michigan Medical School

Density-distribution sunflower plots in Stata 8
William D. Dupont, Dept. of Biostatistics, Vanderbilt University School of Medicine

Break: 2:15–2:40

Session 4: 2:40–4:00   Data Analysis Using Stata

Replication methods for complex survey analysis in Stata
Nicholas Winter, Dept. of Government, Cornell University

Rolling regressions with Stata
Kit Baum, Dept. of Economics, Boston College and RePEc

Implementation of quasi-least squares using xtgee in Stata
Justine Shults, Dept. of Biostatistics, University of Pennsylvania

To help others in teaching statistics using the Stata software
Susan Halpenny, Albert Einstein College of Medicine

Sensitivity analysis on traffic crash prediction models by using Stata
Deo Chimba, Dept. of Civil Engineering, Florida State University

Break: 4:00–4:15

Session 5: 4:15–5:30   StataCorp on Stata

Report to users/Wishes and grumbles
William Gould, President, StataCorp

Registration and information

Web: www.stata.com/boston04
Email: stata@stata.com
Tel: 979-696-4600 or 800-782-8272
Fax: 979-696-4601
Cost: $85.00 ($45.00 students); includes lunch and refreshments (optional dinner extra)

Featured training courses (Day 2)

Training course 1: 8:30–12:00 (includes 30-minute break)

Generalized linear latent and mixed models (GLLAMMs)
Sophia Rabe-Hesketh, University of California, Berkeley;

Lunch: 12:00–1:30
(Buffet lunch at conference center is included with registration.)

Training course 2: 1:30–5:00 (includes 30-minute break)

Stata graphics
Vince Wiggins, Vice President of Scientific Development, StataCorp

This course will cover in detail the basic commands and concepts for building high-quality Stata graphs from scratch. You will learn new approaches to creating graphs, including organizing and managing your data and creating custom schemes.

Program Committee

Elizabeth Allred, Harvard School of Public Health
Kit Baum, Dept. of Economics, Boston College and RePEc
Nicholas J. Cox, University of Durham
Rich Goldstein, consultant
Peter A. Lachenbruch, OBE/CBER of the FDA
Marcello Pagano, Harvard School of Public Health
INTERNATIONAL STATA USERS GROUP MEETINGS

1st Australasian Stata Users Group meeting

Date: October 10, 2004
Venue: Adelaide, South Australia
       Holiday Inn
       65 Hindley Street
Program information can be found at www.stata.com/adelaide04.

Registration and information
   Web: www.sapmea.asn.au/conventions/stata04/
   Email: stata@sapmea.asn.au
   Tel: +61 (08) 8274 6060
   Fax: +61 (08) 8274 6000
   Cost: $A150; includes GST, lunch, and refreshments

1st Italian Stata Users Group meeting

Date: October 25, 2004
Venue: Rome, Italy
       Hotel Artemide
       via Nazionale, 22
Program information can be found at www.stata.com/italy04.

Registration and information
   Web: www.stata.com/italy04
   Email: lorena@tstat.it
   Tel: +39 0864 210101
   Fax: +39 0864 206014
   Cost: 30 Euros; includes lunch and refreshments

FROM THE STATA BOOKSTORE

Title: Generalized Latent Variable Modeling
Authors: A. Skrondal, S. Rabe-Hesketh
Publisher: Chapman & Hall/CRC
Copyright: 2004
Pages: 508; hardcover
ISBN: 1-58488-000-7
Price: $89.75

Generalized Latent Variable Modeling

Generalized Latent Variable Modeling: Multilevel, Longitudinal, and Structural Equation Models by Anders Skrondal and Sophia Rabe-Hesketh unifies the principles behind latent variable modeling, which includes multilevel, longitudinal, and structural-equation models, as well as generalized mixed models, random-coefficient models, item-response models, factor models, panel models, repeated-measures models, latent-class models, and frailty models. Since latent variable models are utilized by researchers from various disciplines with little or no cross-referencing from other disciplines, unifying these models allows readers to separate what the authors refer to as “local” jargon from the fundamental elements of these models. As such, this text allows readers to gain quick and easy access to models and estimation schemes that have long existed in other disciplines but perhaps are not widely utilized in their own.

The book consists of two main parts: methodology and applications. Chapters 1–4 provide background information and generalized development of latent variable models. Chapters 5–8 are concerned with techniques of estimation, prediction, and inference. Chapters 9–14 comprise the applications portion of the text, and here the unification that took place in chapters 1–4 is applied to case studies from various fields, including biostatistics, political science, social science, and econometrics.

The models demonstrated in the applications section are fitted using the Stata program gllamm, written by the authors of this text and available from www.gllamm.org.

A complete table of contents and online ordering information can be found at www.stata.com/bookstore/glvm.html. You can also order the book using the enclosed bookstore order form.

LATEST NETCOURSE™ SCHEDULE

Stata NetCourses™ teach you how to exploit the full power of Stata. They are web-based training courses for Stata users of all experience levels, from beginner to advanced. The courses cover topics ranging from getting started and data management to bootstrapping and simulation. A brief summary of upcoming NetCourses is listed below. For more details on how NetCourses work and for course syllabi, visit www.stata.com/netcourse/.

An enrollment form for upcoming NetCourses has been enclosed with the Stata News. You can also enroll online at www.stata.com/netcourse/enrollment.html.

NC-101. Introduction to Stata

NC-101 is designed to take smart, knowledgeable people and turn them into proficient interactive Stata users. The course covers not just the obvious, such as getting data into Stata, but also covers detailed techniques and tricks to make you a powerful Stata user. Many of Stata’s key concepts are explored, from web update features and matching to using by groups and explicit subscripting.

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Stata 8</th>
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</thead>
<tbody>
<tr>
<td>Dates offered</td>
<td>September 10 – October 22</td>
</tr>
<tr>
<td>Course Leaders</td>
<td>Kevin Crow, Kerry Kammire, and Derek Wagner</td>
</tr>
<tr>
<td>Enrollment Deadline</td>
<td>September 9</td>
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<tr>
<td>Price</td>
<td>$95</td>
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NC-151. Introduction to Stata programming

NC-151 is intended for all Stata users. Through a combination of lectures, example applications, and carefully chosen exercises, the course addresses the full range of methods and techniques necessary for you to be most productive in the Stata environment. Beginning with effective ways to organize both simple and complicated analyses can be used to help you work more efficiently. Key programming topics include macro processing, program flow of control, using do-files, Monte Carlo simulations, and bootstrapped standard errors.

NC-152. Advanced Stata programming

The goal of NC-152 is to turn knowledgeable Stata programmers into Stata programming masters. The course assumes that you know what you need to program and, to some extent, how to do it. Now, you want to add your own commands to Stata and learn to produce professional-level tools that you and others can use.

NC-152 teaches you how to create and debug new commands that work the same way as the commands in Stata. You will learn how to parse both standard and nonstandard Stata syntax using the intuitive syntax command, how to manage and process saved results, how to process by groups, and more.