

# **STATA INDEX**

## **RELEASE 18**



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Getting started

|       |   |  |
|-------|---|--|
| [GSM] | <i>Getting Started with Stata for Mac</i>     | .....  |
| [GSU] | <i>Getting Started with Stata for Unix</i>    | .....  |
| [GSW] | <i>Getting Started with Stata for Windows</i> | .....  |
| [U]   | Chapter 3                                     | ..... Resources for learning and using Stata         |
| [U]   | Chapter 4                                     | ..... Stata’s help and search facilities             |
| [R]   | help  | ..... Display help in Stata                          |
| [R]   | search  | ..... Search Stata documentation and other resources |

Data manipulation and management

|                            |                                     |   |
|----------------------------|-------------------------------------|---|
| <b>Basic data commands</b> |                                     |   |
| [D]                        | Intro                               | ..... Introduction to data management reference manual      |
| [D]                        | Data management                     | ..... Introduction to data management commands              |
| [D]                        | codebook                            | ..... Describe data contents                                |
| [D]                        | Data types                          | ..... Quick reference for data types                        |
| [D]                        | Datetime                            | ..... Date and time values and variables                    |
| [D]                        | Datetime durations                  | ..... Obtaining and working with durations                  |
| [D]                        | Datetime relative dates             | ..... Obtaining dates and date information from other dates |
| [D]                        | Datetime values from other software | ..... Date and time conversion from other software          |

|     |                |   |
|-----|----------------|---|
| [D] | describe       | Describe data in memory or in a file                  |
| [D] | edit           | Browse or edit data with Data Editor                  |
| [D] | format         | Set variables' output format                          |
| [D] | frames         | Data frames   |
| [D] | frames intro   | Introduction to frames                                |
| [D] | insobs         | Add or insert observations                            |
| [D] | inspect        | Display simple summary of data's attributes           |
| [D] | label          | Manipulate labels                                     |
| [D] | list           | List values of variables                              |
| [D] | Missing values | Quick reference for missing values                    |
| [D] | rename         | Rename variable                                       |
| [D] | save           | Save Stata dataset                                    |
| [D] | sort           | Sort data   |
| [D] | use            | Load Stata dataset                                    |
| [D] | varmanage      | Manage variable labels, formats, and other properties |

### Creating and dropping variables

|      |                               |  |
|------|-------------------------------|--|
| [D]  | clear                         | Clear memory   |
| [D]  | compress                      | Compress data in memory                                    |
| [FN] | Date and time functions       |  |
| [D]  | drop                          | Drop variables or observations                             |
| [D]  | dyngen                        | Dynamically generate new values of variables               |
| [D]  | egen                          | Extensions to generate                                     |
| [D]  | frame copy                    | Make a copy of a frame                                     |
| [D]  | frame drop                    | Drop frames from memory                                    |
| [D]  | frame put                     | Copy selected variables or observations to a new frame     |
| [D]  | frames reset                  | Drop all frames from memory                                |
| [D]  | generate                      | Create or change contents of variable                      |
| [FN] | Mathematical functions        |  |
| [FN] | Matrix functions              |  |
| [R]  | orthog                        | Orthogonalize variables and compute orthogonal polynomials |
| [FN] | Programming functions         |  |
| [FN] | Random-number functions       |  |
| [FN] | Selecting time-span functions |  |
| [FN] | Statistical functions         |  |
| [FN] | String functions              |  |
| [FN] | Trigonometric functions       |  |

### Functions and expressions

|      |                               |                           |
|------|-------------------------------|---------------------------|
| [U]  | Section 12.4.2.1              | Unicode string functions  |
| [U]  | Chapter 13                    | Functions and expressions |
| [FN] | Date and time functions       |                           |
| [D]  | egen                          | Extensions to generate    |
| [FN] | Mathematical functions        |                           |
| [FN] | Matrix functions              |                           |
| [FN] | Programming functions         |                           |
| [FN] | Random-number functions       |                           |
| [FN] | Selecting time-span functions |                           |
| [FN] | Statistical functions         |                           |
| [FN] | String functions              |                           |
| [FN] | Trigonometric functions       |                           |

**Strings**

|      |                  |                                |
|------|------------------|--------------------------------|
| [U]  | Section 12.4     | Strings                        |
| [U]  | Section 12.4.2   | Handling Unicode strings       |
| [U]  | Chapter 24       | Working with strings           |
| [D]  | Data types       | Quick reference for data types |
| [FN] | String functions |                                |
| [D]  | unicode          | Unicode utilities              |

**Dates and times**

|     |                                      |   |
|-----|--------------------------------------|---|
| [U] | Section 12.5.3                       | Date and time formats                                 |
| [U] | Chapter 25                           | Working with dates and times                          |
| [D] | bcal                                 | Business calendar file manipulation                   |
| [D] | Datetime                             | Date and time values and variables                    |
| [D] | Datetime business calendars          | Business calendars                                    |
| [D] | Datetime business calendars creation | Business calendars creation                           |
| [D] | Datetime conversion                  | Converting strings to Stata dates                     |
| [D] | Datetime display formats             | Display formats for dates and times                   |
| [D] | Datetime durations                   | Obtaining and working with durations                  |
| [D] | Datetime relative dates              | Obtaining dates and date information from other dates |
| [D] | Datetime values from other software  | Date and time conversion from other software          |

**Loading, saving, importing, and exporting data**

|      |                           |   |
|------|---------------------------|---|
| [GS] | Chapter 6 (GSM, GSU, GSW) | Using the Data Editor                                     |
| [U]  | Chapter 22                | Entering and importing data                               |
| [D]  | edit                      | Browse or edit data with Data Editor                      |
| [D]  | export                    | Overview of exporting data from Stata                     |
| [D]  | frames save               | Save a set of frames on disk                              |
| [D]  | frames use                | Load a set of frames from disk                            |
| [D]  | import                    | Overview of importing data into Stata                     |
| [D]  | import dbase              | Import and export dBase files                             |
| [D]  | import delimited          | Import and export delimited text data                     |
| [D]  | import excel              | Import and export Excel files                             |
| [D]  | import fred               | Import data from Federal Reserve Economic Data            |
| [D]  | import haver              | Import data from Haver Analytics databases                |
| [D]  | import sas                | Import SAS files  |
| [D]  | import sasxport5          | Import and export data in SAS XPORT Version 5 format      |
| [D]  | import sasxport8          | Import and export data in SAS XPORT Version 8 format      |
| [D]  | import spss               | Import and export SPSS files                              |
| [D]  | infile (fixed format)     | Import text data in fixed format with a dictionary        |
| [D]  | infile (free format)      | Import unformatted text data                              |
| [D]  | infix (fixed format)      | Import text data in fixed format                          |
| [D]  | input                     | Enter data from keyboard                                  |
| [D]  | jdbc                      | Load, write, or view data from a database with a Java API |
| [D]  | odbc                      | Load, write, or view data from ODBC sources               |
| [D]  | outfile                   | Export dataset in text format                             |
| [D]  | save                      | Save Stata dataset  |
| [D]  | sysuse                    | Use shipped dataset                                       |
| [D]  | use                       | Load Stata dataset  |
| [D]  | webuse                    | Use dataset from Stata website                            |

**Combining data**

|      |            |   |
|------|------------|---|
| [U]  | Chapter 23 | Combining datasets                              |
| [D]  | append     | Append datasets                                 |
| [MI] | mi append  | Append mi data                                  |
| [D]  | cross      | Form every pairwise combination of two datasets |
| [D]  | fralias    | Alias variables from linked frames              |
| [D]  | frget      | Copy variables from linked frame                |
| [D]  | frlink     | Link frames                                     |
| [D]  | frunalias  | Change storage type of alias variables          |
| [D]  | joinby     | Form all pairwise combinations within groups    |
| [D]  | merge      | Merge datasets                                  |
| [MI] | mi merge   | Merge mi data                                   |

**Certifying data**

|     |                      |   |
|-----|----------------------|---|
| [D] | assert               | Verify truth of claim                               |
| [D] | assertnested         | Verify variables nested                             |
| [D] | checksum             | Calculate checksum of file                          |
| [P] | _datasignature       | Determine whether data have changed                 |
| [D] | datasignature        | Determine whether data have changed                 |
| [D] | notes                | Place notes in data                                 |
| [P] | signestimationsample | Determine whether the estimation sample has changed |

**Reshaping datasets**

|       |            |  |
|-------|------------|--|
| [D]   | collapse   | Make dataset of summary statistics                 |
| [D]   | contract   | Make dataset of frequencies and percentages        |
| [D]   | expand     | Duplicate observations                             |
| [D]   | expandcl   | Duplicate clustered observations                   |
| [D]   | fillin     | Rectangularize dataset                             |
| [D]   | obs        | Increase the number of observations in a dataset   |
| [D]   | reshape    | Convert data from wide to long form and vice versa |
| [MI]  | mi reshape | Reshape mi data                                    |
| [TS]  | rolling    | Rolling-window and recursive estimation            |
| [D]   | separate   | Create separate variables                          |
| [SEM] | ssd        | Making summary statistics data (sem only)          |
| [D]   | stack      | Stack data   |
| [D]   | statsby    | Collect statistics for a command across a by list  |
| [D]   | xpose      | Interchange observations and variables             |

**Labeling, display formats, and notes**

|      |                           |   |
|------|---------------------------|---|
| [GS] | Chapter 7 (GSM, GSU, GSW) | Using the Variables Manager                           |
| [U]  | Section 12.5              | Formats: Controlling how data are displayed           |
| [U]  | Section 12.6              | Dataset, variable, and value labels                   |
| [D]  | format                    | Set variables' output format                          |
| [D]  | label                     | Manipulate labels                                     |
| [D]  | label language            | Labels for variables and values in multiple languages |
| [D]  | labelbook                 | Label utilities                                       |
| [D]  | notes                     | Place notes in data                                   |
| [D]  | varmanage                 | Manage variable labels, formats, and other properties |

## Changing and renaming variables

|      |                           |  |
|------|---------------------------|--|
| [GS] | Chapter 7 (GSM, GSU, GSW) | Using the Variables Manager                                  |
| [U]  | Chapter 26                | Working with categorical data and factor variables           |
| [D]  | clonevar                  | Clone existing variable                                      |
| [D]  | destring                  | Convert string variables to numeric variables and vice versa |
| [D]  | dyngen                    | Dynamically generate new values of variables                 |
| [D]  | encode                    | Encode string into numeric and vice versa                    |
| [D]  | generate                  | Create or change contents of variable                        |
| [D]  | mvencode                  | Change missing values to numeric values and vice versa       |
| [D]  | order                     | Reorder variables in dataset                                 |
| [D]  | recode                    | Recode categorical variables                                 |
| [D]  | rename                    | Rename variable  |
| [D]  | rename group              | Rename groups of variables                                   |
| [D]  | split                     | Split string variables into parts                            |
| [D]  | varmanage                 | Manage variable labels, formats, and other properties        |

## Examining data

|       |                           |   |
|-------|---------------------------|---|
| [GS]  | Chapter 6 (GSM, GSU, GSW) | Using the Data Editor   |
| [D]   | cf                        | Compare two datasets  |
| [CM]  | cmsummarize               | Summarize variables by chosen alternatives                            |
| [D]   | codebook                  | Describe data contents  |
| [D]   | compare                   | Compare two variables   |
| [D]   | count                     | Count observations satisfying specified conditions                    |
| [D]   | describe                  | Describe data in memory or in a file                                  |
| [D]   | ds                        | Compactly list variables with specified properties                    |
| [D]   | duplicates                | Report, tag, or drop duplicate observations                           |
| [D]   | edit                      | Browse or edit data with Data Editor                                  |
| [D]   | gsort                     | Ascending and descending sort   |
| [D]   | inspect                   | Display simple summary of data's attributes                           |
| [D]   | isid                      | Check for unique identifiers  |
| [D]   | lookfor                   | Search for string in variable names and labels                        |
| [R]   | lv                        | Letter-value displays   |
| [R]   | misstable                 | Tabulate missing values   |
| [MI]  | mi describe               | Describe mi data  |
| [MI]  | mi misstable              | Tabulate pattern of missing values                                    |
| [D]   | pctile                    | Create variable containing percentiles                                |
| [ST]  | stdescribe                | Describe survival-time data   |
| [R]   | summarize                 | Summary statistics  |
| [SVY] | svy: tabulate oneway      | One-way tables for survey data  |
| [SVY] | svy: tabulate twoway      | Two-way tables for survey data  |
| [P]   | tabdisp                   | Display tables  |
| [R]   | table intro               | Introduction to tables of frequencies, summaries, and command results |
| [R]   | table                     | Table of frequencies, summaries, and command results                  |
| [R]   | table multiway            | Multiway tables   |
| [R]   | table oneway              | One-way tabulation  |
| [R]   | table summary             | Table of summary statistics   |
| [R]   | table twoway              | Two-way tabulation  |
| [R]   | tabstat                   | Compact table of summary statistics                                   |
| [R]   | tabulate oneway           | One-way table of frequencies  |
| [R]   | tabulate twoway           | Two-way table of frequencies  |

|      |  |   |
|------|--|---|
| [R]  | <code>tabulate, summarize()</code> ..... | One- and two-way tables of summary statistics |
| [XT] | <code>xtdescribe</code> .....            | Describe pattern of xt data                   |

## File manipulation

|     |  |   |
|-----|--|---|
| [D] | <code>cd</code> .....                  | Change directory  |
| [D] | <code>cf</code> .....                  | Compare two datasets  |
| [D] | <code>changeeol</code> .....           | Convert end-of-line characters of text file                         |
| [D] | <code>checksum</code> .....            | Calculate checksum of file  |
| [D] | <code>copy</code> .....                | Copy file from disk or URL  |
| [D] | <code>dir</code> .....                 | Display filenames   |
| [D] | <code>erase</code> .....               | Erase a disk file   |
| [D] | <code>filefilter</code> .....          | Convert ASCII or binary patterns in a file                          |
| [D] | <code>mkdir</code> .....               | Create directory  |
| [D] | <code>rmdir</code> .....               | Remove directory  |
| [D] | <code>type</code> .....                | Display contents of a file  |
| [D] | <code>unicode convertfile</code> ..... | Low-level file conversion between encodings                         |
| [D] | <code>unicode translate</code> .....   | Translate files to Unicode  |
| [D] | <code>zipfile</code> .....             | Compress and uncompress files and directories in zip archive format |

## Miscellaneous data commands

|     |                                 |   |
|-----|---------------------------------|---|
| [D] | <code>corr2data</code> .....    | Create dataset with specified correlation structure |
| [D] | <code>drawnorm</code> .....     | Draw sample from multivariate normal distribution   |
| [R] | <code>dydx</code> .....         | Calculate numeric derivatives and integrals         |
| [D] | <code>frame change</code> ..... | Change identity of current (working) frame          |
| [D] | <code>frame create</code> ..... | Create a new frame                                  |
| [D] | <code>frame prefix</code> ..... | The frame prefix command                            |
| [D] | <code>frame pwf</code> .....    | Display name of current (working) frame             |
| [D] | <code>frame rename</code> ..... | Rename existing frame                               |
| [D] | <code>frames dir</code> .....   | Display names of all frames in memory               |
| [D] | <code>icd</code> .....          | Introduction to ICD commands                        |
| [D] | <code>icd10</code> .....        | ICD-10 diagnosis codes                              |
| [D] | <code>icd10cm</code> .....      | ICD-10-CM diagnosis codes                           |
| [D] | <code>icd10pcs</code> .....     | ICD-10-PCS procedure codes                          |
| [D] | <code>icd9</code> .....         | ICD-9-CM diagnosis codes                            |
| [D] | <code>icd9p</code> .....        | ICD-9-CM procedure codes                            |
| [D] | <code>ipolate</code> .....      | Linearly interpolate (extrapolate) values           |
| [D] | <code>range</code> .....        | Generate numerical range                            |
| [D] | <code>sample</code> .....       | Draw random sample                                  |
| [D] | <code>splitsample</code> .....  | Split data into random samples                      |

## Multiple datasets in memory

|     |                                 |  |
|-----|---------------------------------|--|
| [D] | <code>fralias</code> .....      | Alias variables from linked frames                     |
| [D] | <code>frame change</code> ..... | Change identity of current (working) frame             |
| [D] | <code>frame copy</code> .....   | Make a copy of a frame                                 |
| [D] | <code>frame create</code> ..... | Create a new frame                                     |
| [D] | <code>frame drop</code> .....   | Drop frames from memory                                |
| [D] | <code>frame prefix</code> ..... | The frame prefix command                               |
| [D] | <code>frame put</code> .....    | Copy selected variables or observations to a new frame |
| [D] | <code>frame pwf</code> .....    | Display name of current (working) frame                |

|     |                                 |  |
|-----|---------------------------------|--|
| [D] | <a href="#">frame rename</a>    | Rename existing frame                  |
| [D] | <a href="#">frames</a>          | Data frames                            |
| [D] | <a href="#">frames describe</a> | Describe frames in memory or in a file |
| [D] | <a href="#">frames dir</a>      | Display names of all frames in memory  |
| [D] | <a href="#">frames intro</a>    | Introduction to frames                 |
| [D] | <a href="#">frames reset</a>    | Drop all frames from memory            |
| [D] | <a href="#">frames save</a>     | Save a set of frames on disk           |
| [D] | <a href="#">frames use</a>      | Load a set of frames from disk         |
| [D] | <a href="#">frget</a>           | Copy variables from linked frame       |
| [D] | <a href="#">frlink</a>          | Link frames                            |
| [D] | <a href="#">frunalias</a>       | Change storage type of alias variables |

## Multiple imputation

|      |                                    |   |
|------|------------------------------------|---|
| [MI] | <a href="#">mi add</a>             | Add imputations from another mi dataset         |
| [MI] | <a href="#">mi append</a>          | Append mi data                                  |
| [MI] | <a href="#">mi convert</a>         | Change style of mi data                         |
| [MI] | <a href="#">mi copy</a>            | Copy mi flongsep data                           |
| [MI] | <a href="#">mi describe</a>        | Describe mi data                                |
| [MI] | <a href="#">mi erase</a>           | Erase mi datasets                               |
| [MI] | <a href="#">mi expand</a>          | Expand mi data                                  |
| [MI] | <a href="#">mi export</a>          | Export mi data                                  |
| [MI] | <a href="#">mi export ice</a>      | Export mi data to ice format                    |
| [MI] | <a href="#">mi export nhanes1</a>  | Export mi data to NHANES format                 |
| [MI] | <a href="#">mi extract</a>         | Extract original or imputed data from mi data   |
| [MI] | <a href="#">mi import</a>          | Import data into mi                             |
| [MI] | <a href="#">mi import flong</a>    | Import flong-like data into mi                  |
| [MI] | <a href="#">mi import flongsep</a> | Import flongsep-like data into mi               |
| [MI] | <a href="#">mi import ice</a>      | Import ice-format data into mi                  |
| [MI] | <a href="#">mi import nhanes1</a>  | Import NHANES-format data into mi               |
| [MI] | <a href="#">mi import wide</a>     | Import wide-like data into mi                   |
| [MI] | <a href="#">mi merge</a>           | Merge mi data                                   |
| [MI] | <a href="#">mi misstable</a>       | Tabulate pattern of missing values              |
| [MI] | <a href="#">mi passive</a>         | Generate/replace and register passive variables |
| [MI] | <a href="#">mi ptrace</a>          | Load parameter-trace file into Stata            |
| [MI] | <a href="#">mi rename</a>          | Rename variable                                 |
| [MI] | <a href="#">mi replace0</a>        | Replace original data                           |
| [MI] | <a href="#">mi reset</a>           | Reset imputed or passive variables              |
| [MI] | <a href="#">mi reshape</a>         | Reshape mi data                                 |
| [MI] | <a href="#">mi set</a>             | Declare multiple-imputation data                |
| [MI] | <a href="#">mi stsplot</a>         | Split and join time-span records for mi data    |
| [MI] | <a href="#">mi update</a>          | Ensure that mi data are consistent              |
| [MI] | <a href="#">mi varying</a>         | Identify variables that vary across imputations |
| [MI] | <a href="#">mi xeq</a>             | Execute command(s) on individual imputations    |
| [MI] | <a href="#">mi XXXset</a>          | Declare mi data to be svy, st, ts, xt, etc.     |
| [MI] | <a href="#">noupdate option</a>    | The noupdate option                             |
| [MI] | <a href="#">Styles</a>             | Dataset styles                                  |
| [MI] | <a href="#">Workflow</a>           | Suggested workflow                              |

## Utilities

### Basic utilities

|         |                            |   |
|---------|----------------------------|---|
| [GS]    | Chapter 13 (GSM, GSU, GSW) | Using the Do-file Editor—automating Stata                           |
| [U]     | Chapter 4                  | Stata's help and search facilities                                  |
| [U]     | Chapter 15                 | Saving and printing output—log files                                |
| [U]     | Chapter 16                 | Do-files  |
| [R]     | about                      | Display information about your Stata                                |
| [D]     | by                         | Repeat Stata command on subsets of the data                         |
| [R]     | cls                        | Clear Results window  |
| [R]     | copyright                  | Display copyright information                                       |
| [R]     | do                         | Execute commands from a file  |
| [R]     | doedit                     | Edit do-files and other text files                                  |
| [R]     | exit                       | Exit Stata  |
| [R]     | help                       | Display help in Stata   |
| [R]     | level                      | Set default confidence level  |
| [R]     | log                        | Echo copy of session to file  |
| [D]     | obs                        | Increase the number of observations in a dataset                    |
| [R]     | postest                    | Postestimation Selector   |
| [R]     | #review                    | Review previous commands  |
| [R]     | search                     | Search Stata documentation and other resources                      |
| [BAYES] | set clevel                 | Set default credible level  |
| [R]     | translate                  | Print and translate logs  |
| [D]     | unicode translate          | Translate files to Unicode  |
| [R]     | view                       | View files and logs   |
| [D]     | zipfile                    | Compress and uncompress files and directories in zip archive format |

### Error messages

|     |                |  |
|-----|----------------|--|
| [U] | Chapter 8      | Error messages and return codes        |
| [P] | error          | Display generic error message and exit |
| [R] | Error messages | Error messages and return codes        |
| [P] | rmsg           | Return messages                        |

### Stored results

|     |                    |   |
|-----|--------------------|---|
| [U] | Section 13.5       | Accessing coefficients and standard errors          |
| [U] | Section 18.8       | Accessing results calculated by other programs      |
| [U] | Section 18.9       | Accessing results calculated by estimation commands |
| [U] | Section 18.10      | Storing results                                     |
| [P] | creturn            | Return c-class values                               |
| [P] | ereturn            | Post the estimation results                         |
| [R] | estimates          | Save and manipulate estimation results              |
| [R] | estimates describe | Describe estimation results                         |
| [R] | estimates for      | Repeat postestimation command across models         |
| [R] | estimates notes    | Add notes to estimation results                     |
| [R] | estimates replay   | Redisplay estimation results                        |
| [R] | estimates save     | Save and use estimation results                     |
| [R] | estimates selected | Show selected coefficients                          |
| [R] | estimates stats    | Model-selection statistics                          |
| [R] | estimates store    | Store and restore estimation results                |
| [R] | estimates table    | Compare estimation results                          |
| [R] | estimates title    | Set title for estimation results                    |



|     |                                |                         |
|-----|--------------------------------|-------------------------|
| [P] | <a href="#">_return</a>        | Preserve stored results |
| [P] | <a href="#">return</a>         | Return stored results   |
| [R] | <a href="#">Stored results</a> | Stored results          |

## Internet

|     |                            |  |
|-----|----------------------------|--|
| [U] | <a href="#">Chapter 29</a> | Using the Internet to keep up to date                                |
| [R] | <a href="#">ado update</a> | Update community-contributed packages                                |
| [D] | <a href="#">checksum</a>   | Calculate checksum of file   |
| [D] | <a href="#">copy</a>       | Copy file from disk or URL   |
| [R] | <a href="#">net</a>        | Install and manage community-contributed additions from the Internet |
| [R] | <a href="#">net search</a> | Search the Internet for installable packages                         |
| [R] | <a href="#">netio</a>      | Control Internet connections   |
| [R] | <a href="#">sj</a>         | Stata Journal installation instructions                              |
| [R] | <a href="#">ssc</a>        | Install and uninstall packages from SSC                              |
| [R] | <a href="#">update</a>     | Check for official updates   |
| [D] | <a href="#">use</a>        | Load Stata dataset   |

## Data types and memory

|     |                                |                                    |
|-----|--------------------------------|------------------------------------|
| [U] | <a href="#">Chapter 6</a>      | Managing memory                    |
| [U] | <a href="#">Section 12.2.2</a> | Numeric storage types              |
| [U] | <a href="#">Section 12.4</a>   | Strings                            |
| [U] | <a href="#">Section 12.4.2</a> | Handling Unicode strings           |
| [U] | <a href="#">Section 13.12</a>  | Precision and problems therein     |
| [U] | <a href="#">Chapter 24</a>     | Working with strings               |
| [D] | <a href="#">compress</a>       | Compress data in memory            |
| [D] | <a href="#">Data types</a>     | Quick reference for data types     |
| [D] | <a href="#">memory</a>         | Memory management                  |
| [D] | <a href="#">Missing values</a> | Quick reference for missing values |
| [D] | <a href="#">recast</a>         | Change storage type of variable    |

## Advanced utilities

|     |                                    |   |
|-----|------------------------------------|---|
| [D] | <a href="#">assert</a>             | Verify truth of claim                       |
| [D] | <a href="#">assertnested</a>       | Verify variables nested                     |
| [D] | <a href="#">cd</a>                 | Change directory                            |
| [D] | <a href="#">changeool</a>          | Convert end-of-line characters of text file |
| [D] | <a href="#">checksum</a>           | Calculate checksum of file                  |
| [D] | <a href="#">copy</a>               | Copy file from disk or URL                  |
| [P] | <a href="#">_datasignature</a>     | Determine whether data have changed         |
| [D] | <a href="#">datasignature</a>      | Determine whether data have changed         |
| [R] | <a href="#">db</a>                 | Launch dialog                               |
| [P] | <a href="#">Dialog programming</a> | Dialog programming                          |
| [D] | <a href="#">dir</a>                | Display filenames                           |
| [P] | <a href="#">discard</a>            | Drop automatically loaded programs          |
| [D] | <a href="#">erase</a>              | Erase a disk file                           |
| [P] | <a href="#">file</a>               | Read and write text and binary files        |
| [D] | <a href="#">filefilter</a>         | Convert ASCII or binary patterns in a file  |
| [D] | <a href="#">hexdump</a>            | Display hexadecimal report on file          |
| [D] | <a href="#">mkdir</a>              | Create directory                            |
| [R] | <a href="#">more</a>               | The —more— message                          |
| [R] | <a href="#">query</a>              | Display system parameters                   |
| [P] | <a href="#">quietly</a>            | Quietly and noisily perform Stata command   |

|     |                                   |   |
|-----|-----------------------------------|---|
| [D] | <code>rmdir</code>                | Remove directory  |
| [R] | <code>set</code>                  | Overview of system parameters                             |
| [R] | <code>set cformat</code>          | Format settings for coefficient tables                    |
| [R] | <code>set_defaults</code>         | Reset system parameters to original Stata defaults        |
| [R] | <code>set emptycells</code>       | Set what to do with empty cells in interactions           |
| [R] | <code>set iter</code>             | Control iteration settings                                |
| [P] | <code>set locale_functions</code> | Specify default locale for functions                      |
| [P] | <code>set locale_ui</code>        | Specify a localization package for the user interface     |
| [R] | <code>set rng</code>              | Set which random-number generator (RNG) to use            |
| [R] | <code>set rngstream</code>        | Specify the stream for the stream random-number generator |
| [R] | <code>set seed</code>             | Specify random-number seed and state                      |
| [R] | <code>set showbaselevels</code>   | Display settings for coefficient tables                   |
| [P] | <code>set sortmethod</code>       | Specify a sort method                                     |
| [P] | <code>set sortrngstate</code>     | Set the state of sort's randomizer                        |
| [D] | <code>shell</code>                | Temporarily invoke operating system                       |
| [P] | <code>signestimationsample</code> | Determine whether the estimation sample has changed       |
| [P] | <code>smcl</code>                 | Stata Markup and Control Language                         |
| [P] | <code>sysdir</code>               | Query and set system directories                          |
| [D] | <code>type</code>                 | Display contents of a file                                |
| [D] | <code>unicode collator</code>     | Language-specific Unicode collators                       |
| [D] | <code>unicode convertfile</code>  | Low-level file conversion between encodings               |
| [D] | <code>unicode encoding</code>     | Unicode encoding utilities                                |
| [D] | <code>unicode locale</code>       | Unicode locale utilities                                  |
| [D] | <code>vl</code>                   | Manage variable lists                                     |
| [D] | <code>vl create</code>            | Create and modify user-defined variable lists             |
| [D] | <code>vl drop</code>              | Drop variable lists or variables from variable lists      |
| [D] | <code>vl list</code>              | List contents of variable lists                           |
| [D] | <code>vl rebuild</code>           | Rebuild variable lists                                    |
| [D] | <code>vl set</code>               | Set system-defined variable lists                         |
| [R] | <code>which</code>                | Display location of an ado-file                           |

## Graphics

### Bayesian analysis graphs

|         |                               |  |
|---------|-------------------------------|--|
| [BAYES] | <code>bayesfcast graph</code> | Graphs of Bayesian dynamic forecasts                             |
| [BAYES] | <code>bayesgraph</code>       | Graphical summaries and convergence diagnostics                  |
| [BAYES] | <code>bayesirf cgraph</code>  | Combined graphs of Bayesian IRF results                          |
| [BAYES] | <code>bayesirf graph</code>   | Graphs of Bayesian IRFs, dynamic-multiplier functions, and FEVDs |
| [BAYES] | <code>bayesirf ograph</code>  | Overlaid graphs of Bayesian IRF results                          |

### Bayesian model averaging graphs

|       |                                   |  |
|-------|-----------------------------------|--|
| [BMA] | <code>bmagraph</code>             | Graphical summary for models and predictors after BMA regression |
| [BMA] | <code>bmagraph coefdensity</code> | Regression coefficient density plots after BMA regression        |
| [BMA] | <code>bmagraph msize</code>       | Model-size distribution plots after BMA regression               |
| [BMA] | <code>bmagraph pmp</code>         | Model-probability plots after BMA regression                     |
| [BMA] | <code>bmagraph varmap</code>      | Variable-inclusion map after BMA regression                      |

### Common graphs

|       |                          |                          |
|-------|--------------------------|--------------------------|
| [G-1] | <code>Graph intro</code> | Introduction to graphics |
| [G-2] | <code>graph</code>       | The graph command        |

|       |                          |  |
|-------|--------------------------|--|
| [G-2] | graph bar                | Bar charts   |
| [G-2] | graph box                | Box plots  |
| [G-2] | graph close              | Close Graph windows                                    |
| [G-2] | graph combine            | Combine multiple graphs                                |
| [G-2] | graph copy               | Copy graph in memory                                   |
| [G-2] | graph describe           | Describe contents of graph in memory or on disk        |
| [G-2] | graph dir                | List names of graphs in memory and on disk             |
| [G-2] | graph display            | Display graph stored in memory                         |
| [G-2] | graph dot                | Dot charts (summary statistics)                        |
| [G-2] | graph drop               | Drop graphs from memory                                |
| [G-2] | graph export             | Export current graph                                   |
| [G-2] | graph manipulation       | Graph manipulation commands                            |
| [G-2] | graph matrix             | Matrix graphs  |
| [G-2] | graph other              | Other graphics commands                                |
| [G-2] | graph pie                | Pie charts   |
| [G-2] | graph play               | Apply edits from a recording on current graph          |
| [G-2] | graph print              | Print a graph  |
| [G-2] | graph query              | List available schemes and styles                      |
| [G-2] | graph rename             | Rename graph in memory                                 |
| [G-2] | graph replay             | Replay multiple graphs                                 |
| [G-2] | graph save               | Save graph to disk                                     |
| [G-2] | graph set                | Set graphics options                                   |
| [G-2] | graph twoway             | Twoway graphs  |
| [G-2] | graph twoway area        | Twoway line plot with area shading                     |
| [G-2] | graph twoway bar         | Twoway bar plots                                       |
| [G-2] | graph twoway connected   | Twoway connected plots                                 |
| [G-2] | graph twoway contour     | Twoway contour plot with area shading                  |
| [G-2] | graph twoway contourline | Twoway contour-line plot                               |
| [G-2] | graph twoway dot         | Twoway dot plots                                       |
| [G-2] | graph twoway dropline    | Twoway dropped-line plots                              |
| [G-2] | graph twoway ffit        | Twoway fractional-polynomial prediction plots          |
| [G-2] | graph twoway ffitci      | Twoway fractional-polynomial prediction plots with CIs |
| [G-2] | graph twoway function    | Twoway line plot of function                           |
| [G-2] | graph twoway histogram   | Histogram plots  |
| [G-2] | graph twoway kdensity    | Kernel density plots                                   |
| [G-2] | graph twoway lfit        | Twoway linear prediction plots                         |
| [G-2] | graph twoway lfitci      | Twoway linear prediction plots with CIs                |
| [G-2] | graph twoway line        | Twoway line plots                                      |
| [G-2] | graph twoway lowess      | Local linear smooth plots                              |
| [G-2] | graph twoway lpoly       | Local polynomial smooth plots                          |
| [G-2] | graph twoway lpolyci     | Local polynomial smooth plots with CIs                 |
| [G-2] | graph twoway mband       | Twoway median-band plots                               |
| [G-2] | graph twoway mspline     | Twoway median-spline plots                             |
| [G-2] | graph twoway pcarrow     | Paired-coordinate plot with arrows                     |
| [G-2] | graph twoway pcarrowi    | Twoway pcarrow with immediate arguments                |
| [G-2] | graph twoway pccapsym    | Paired-coordinate plot with spikes and marker symbols  |
| [G-2] | graph twoway pci         | Twoway paired-coordinate plot with immediate arguments |
| [G-2] | graph twoway pcscatter   | Paired-coordinate plot with markers                    |
| [G-2] | graph twoway pcspike     | Paired-coordinate plot with spikes                     |
| [G-2] | graph twoway qfit        | Twoway quadratic prediction plots                      |
| [G-2] | graph twoway qfitci      | Twoway quadratic prediction plots with CIs             |

|       |   |   |
|-------|---|---|
| [G-2] | <a href="#">graph twoway rarea</a>      | Range plot with area shading                        |
| [G-2] | <a href="#">graph twoway rbar</a>       | Range plot with bars                                |
| [G-2] | <a href="#">graph twoway rcap</a>       | Range plot with capped spikes                       |
| [G-2] | <a href="#">graph twoway rcapsym</a>    | Range plot with spikes capped with marker symbols   |
| [G-2] | <a href="#">graph twoway rconnected</a> | Range plot with connected lines                     |
| [G-2] | <a href="#">graph twoway rline</a>      | Range plot with lines                               |
| [G-2] | <a href="#">graph twoway rscatter</a>   | Range plot with markers                             |
| [G-2] | <a href="#">graph twoway rspike</a>     | Range plot with spikes                              |
| [G-2] | <a href="#">graph twoway scatter</a>    | Two-way scatterplots                                |
| [G-2] | <a href="#">graph twoway scatteri</a>   | Scatter with immediate arguments                    |
| [G-2] | <a href="#">graph twoway spike</a>      | Two-way spike plots                                 |
| [G-2] | <a href="#">graph twoway tline</a>      | Two-way line plots                                  |
| [G-2] | <a href="#">graph use</a>               | Display graph stored on disk                        |
| [R]   | <a href="#">histogram</a>               | Histograms for continuous and categorical variables |
| [R]   | <a href="#">marginsplot</a>             | Graph results from margins (profile plots, etc.)    |
| [G-2] | <a href="#">palette</a>                 | Display palettes of available selections            |

## Distributional graphs

|     |                                  |   |
|-----|----------------------------------|---|
| [R] | <a href="#">cumul</a>            | Cumulative distribution                             |
| [R] | <a href="#">Diagnostic plots</a> | Distributional diagnostic plots                     |
| [R] | <a href="#">dotplot</a>          | Comparative distribution dotplots                   |
| [R] | <a href="#">histogram</a>        | Histograms for continuous and categorical variables |
| [R] | <a href="#">ladder</a>           | Ladder of powers                                    |
| [R] | <a href="#">spikeplot</a>        | Spike plots and rootograms                          |
| [R] | <a href="#">sunflower</a>        | Density-distribution sunflower plots                |

## Item response theory graphs

|       |                              |                                |
|-------|------------------------------|--------------------------------|
| [MV]  | <a href="#">biplot</a>       | Biplots                        |
| [IRT] | <a href="#">irtgraph icc</a> | Item characteristic curve plot |
| [IRT] | <a href="#">irtgraph iif</a> | Item information function plot |
| [IRT] | <a href="#">irtgraph tcc</a> | Test characteristic curve plot |
| [IRT] | <a href="#">irtgraph tif</a> | Test information function plot |

## Lasso graphs

|         |                          |  |
|---------|--------------------------|--|
| [LASSO] | <a href="#">bicplot</a>  | Plot Bayesian information criterion function after lasso |
| [LASSO] | <a href="#">coefpath</a> | Plot path of coefficients after lasso                    |
| [LASSO] | <a href="#">cvplot</a>   | Plot cross-validation function after lasso               |

## Meta-analysis graphs

|        |                                    |                                 |
|--------|------------------------------------|---------------------------------|
| [META] | <a href="#">estat bubbleplot</a>   | Bubble plots after meta regress |
| [META] | <a href="#">meta forestplot</a>    | Forest plots                    |
| [META] | <a href="#">meta funnelplot</a>    | Funnel plots                    |
| [META] | <a href="#">meta galbraithplot</a> | Galbraith plots                 |
| [META] | <a href="#">meta labbeplot</a>     | L'Abbé plots                    |

## Multivariate graphs

|      |   |   |
|------|---|---|
| [MV] | <a href="#">biplot</a>                  | Biplots                                       |
| [MV] | <a href="#">ca postestimation</a>       | Postestimation tools for ca and camat         |
| [MV] | <a href="#">ca postestimation plots</a> | Postestimation plots for ca and camat         |
| [MV] | <a href="#">cluster dendrogram</a>      | Dendrograms for hierarchical cluster analysis |

|      |   |   |
|------|---|---|
| [MV] | <a href="#">mca postestimation</a>        | Postestimation tools for mca                      |
| [MV] | <a href="#">mca postestimation plots</a>  | Postestimation plots for mca                      |
| [MV] | <a href="#">mds postestimation</a>        | Postestimation tools for mds, mdsmat, and mdslong |
| [MV] | <a href="#">mds postestimation plots</a>  | Postestimation plots for mds, mdsmat, and mdslong |
| [MV] | <a href="#">procrustes postestimation</a> | Postestimation tools for procrustes               |
| [MV] | <a href="#">scoreplot</a>                 | Score and loading plots                           |
| [MV] | <a href="#">screeplot</a>                 | Scree plot of eigenvalues                         |

### Power, precision, and sample-size graphs

|         |                                |  |
|---------|--------------------------------|--|
| [PSS-3] | <a href="#">ciwidth, graph</a> | Graph results from the ciwidth command   |
| [ADAPT] | <a href="#">gsbounds</a>       | Boundaries for group sequential trials   |
| [ADAPT] | <a href="#">gsdesign</a>       | Study design for group sequential trials |
| [PSS-2] | <a href="#">power, graph</a>   | Graph results from the power command     |

### Quality control

|     |                         |  |
|-----|-------------------------|--|
| [R] | <a href="#">QC</a>      | Quality control charts                     |
| [R] | <a href="#">cusum</a>   | Cusum plots and tests for binary variables |
| [R] | <a href="#">serrbar</a> | Graph standard error bar chart             |

### Regression diagnostic plots

|     |   |                                  |
|-----|---|----------------------------------|
| [R] | <a href="#">regress postestimation diagnostic plots</a> | Postestimation plots for regress |
|-----|---|----------------------------------|

### ROC analysis

|     |   |  |
|-----|---|--|
| [R] | <a href="#">estat classification</a>    | Classification statistics and table                          |
| [R] | <a href="#">estat gof</a>               | Pearson or Hosmer–Lemeshow goodness-of-fit test              |
| [R] | <a href="#">logistic postestimation</a> | Postestimation tools for logistic                            |
| [R] | <a href="#">lroc</a>                    | Compute area under ROC curve and graph the curve             |
| [R] | <a href="#">lsens</a>                   | Graph sensitivity and specificity versus probability cutoff  |
| [R] | <a href="#">roccomp</a>                 | Tests of equality of ROC areas                               |
| [R] | <a href="#">rocfit postestimation</a>   | Postestimation tools for rocfit                              |
| [R] | <a href="#">rocregplot</a>              | Plot marginal and covariate-specific ROC curves after rocreg |
| [R] | <a href="#">roctab</a>                  | Nonparametric ROC analysis                                   |

### Smoothing and densities

|     |                          |  |
|-----|--------------------------|--|
| [R] | <a href="#">kdensity</a> | Univariate kernel density estimation       |
| [R] | <a href="#">lowess</a>   | Lowess smoothing                           |
| [R] | <a href="#">lpoly</a>    | Kernel-weighted local polynomial smoothing |

### Survival-analysis graphs

|      |  |  |
|------|--|--|
| [ST] | <a href="#">estat gofplot</a>                | Goodness-of-fit plots after streg, stcox, stintreg, or stintcox    |
| [ST] | <a href="#">ltable</a>                       | Life tables for survival data                                      |
| [ST] | <a href="#">stci</a>                         | Confidence intervals for means and percentiles of survival time    |
| [ST] | <a href="#">stcox PH-assumption tests</a>    | Tests of proportional-hazards assumption after stcox               |
| [ST] | <a href="#">stcurve</a>                      | Plot the survivor or related function after streg, stcox, and more |
| [ST] | <a href="#">stintcox PH-assumption plots</a> | Plots of proportional-hazards assumption after stintcox            |
| [ST] | <a href="#">strate</a>                       | Tabulate failure rates and rate ratios                             |
| [ST] | <a href="#">sts graph</a>                    | Graph the survivor or related function                             |

**Time-series graphs**

|      |                              |  |
|------|------------------------------|--|
| [TS] | <a href="#">corrgram</a>     | Tabulate and graph autocorrelations                              |
| [TS] | <a href="#">cumsp</a>        | Graph cumulative spectral distribution                           |
| [TS] | <a href="#">estat acplot</a> | Plot parametric autocorrelation and autocovariance functions     |
| [TS] | <a href="#">estat aroots</a> | Check the stability condition of ARIMA estimates                 |
| [TS] | <a href="#">estat sbcsum</a> | Cumulative sum test for parameter stability                      |
| [TS] | <a href="#">fcast graph</a>  | Graph forecasts after fcast compute                              |
| [TS] | <a href="#">irf cgraph</a>   | Combined graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">irf graph</a>    | Graphs of IRFs, dynamic-multiplier functions, and FEVDs          |
| [TS] | <a href="#">irf ograph</a>   | Overlaid graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">pergram</a>      | Periodogram  |
| [TS] | <a href="#">tsline</a>       | Time-series line plots   |
| [TS] | <a href="#">varstable</a>    | Check the stability condition of VAR or SVAR estimates           |
| [TS] | <a href="#">vecstable</a>    | Check the stability condition of VECM estimates                  |
| [TS] | <a href="#">wntestb</a>      | Bartlett's periodogram-based test for white noise                |
| [TS] | <a href="#">xcorr</a>        | Cross-correlogram for bivariate time series                      |

**More statistical graphs**

|          |                                   |  |
|----------|-----------------------------------|--|
| [R]      | <a href="#">Eptab</a>             | Tables for epidemiologists                       |
| [R]      | <a href="#">fp postestimation</a> | Postestimation tools for fp                      |
| [R]      | <a href="#">grmeanby</a>          | Graph means and medians by categorical variables |
| [R]      | <a href="#">pkexamine</a>         | Calculate pharmacokinetic measures               |
| [R]      | <a href="#">pksumm</a>            | Summarize pharmacokinetic data                   |
| [R]      | <a href="#">stem</a>              | Stem-and-leaf displays                           |
| [CAUSAL] | <a href="#">tebalance box</a>     | Covariate balance box                            |
| [CAUSAL] | <a href="#">teoverlap</a>         | Overlap plots                                    |
| [XT]     | <a href="#">xtline</a>            | Panel-data line plots                            |

**Editing**

|       |                              |              |
|-------|------------------------------|--------------|
| [G-1] | <a href="#">Graph Editor</a> | Graph Editor |
|-------|------------------------------|--------------|

**Graph concepts**

|       |   |                                    |
|-------|---|------------------------------------|
| [G-4] | <a href="#">Concept: gph files</a>        | Using gph files                    |
| [G-4] | <a href="#">Concept: lines</a>            | Using lines                        |
| [G-4] | <a href="#">Concept: repeated options</a> | Interpretation of repeated options |
| [G-4] | <a href="#">text</a>                      | Text in graphs                     |

**Graph schemes**

|       |                                  |                               |
|-------|----------------------------------|-------------------------------|
| [G-4] | <a href="#">Schemes intro</a>    | Introduction to schemes       |
| [G-4] | <a href="#">Scheme economist</a> | Scheme description: economist |
| [G-4] | <a href="#">Scheme s1</a>        | Scheme description: s1 family |
| [G-4] | <a href="#">Scheme s2</a>        | Scheme description: s2 family |
| [G-4] | <a href="#">Scheme sj</a>        | Scheme description: sj        |
| [G-4] | <a href="#">Scheme st</a>        | Scheme description: st family |

**Graph utilities**

|       |                                |  |
|-------|--------------------------------|--|
| [G-2] | <a href="#">set graphics</a>   | Set whether graphs are displayed                   |
| [G-2] | <a href="#">set printcolor</a> | Set how colors are treated when graphs are printed |
| [G-2] | <a href="#">set scheme</a>     | Set default scheme                                 |

# Statistics

## ANOVA and related

|      |                                  |  |
|------|----------------------------------|--|
| [U]  | <a href="#">Chapter 27</a> ..... | Overview of Stata estimation commands                                      |
| [R]  | <a href="#">anova</a> .....      | Analysis of variance and covariance  |
| [R]  | <a href="#">contrast</a> .....   | Contrasts and linear hypothesis tests after estimation                     |
| [R]  | <a href="#">icc</a> .....        | Intraclass correlation coefficients  |
| [R]  | <a href="#">loneway</a> .....    | Large one-way ANOVA, random effects, and reliability                       |
| [MV] | <a href="#">manova</a> .....     | Multivariate analysis of variance and covariance                           |
| [ME] | <a href="#">meglm</a> .....      | Multilevel mixed-effects generalized linear models                         |
| [ME] | <a href="#">mixed</a> .....      | Multilevel mixed-effects linear regression                                 |
| [R]  | <a href="#">oneway</a> .....     | One-way analysis of variance   |
| [R]  | <a href="#">pkcross</a> .....    | Analyze crossover experiments  |
| [R]  | <a href="#">pkshape</a> .....    | Reshape (pharmacokinetic) Latin-square data                                |
| [R]  | <a href="#">pwcompare</a> .....  | Pairwise comparisons   |
| [R]  | <a href="#">regress</a> .....    | Linear regression  |
| [XT] | <a href="#">xtreg</a> ..         | Fixed-, between-, and random-effects and population-averaged linear models |

## Basic statistics

|      |  |   |
|------|--|---|
| [R]  | <a href="#">anova</a> .....                  | Analysis of variance and covariance                                   |
| [R]  | <a href="#">bitest</a> .....                 | Binomial probability test   |
| [R]  | <a href="#">ci</a> .....                     | Confidence intervals for means, proportions, and variances            |
| [R]  | <a href="#">correlate</a> .....              | Correlations of variables   |
| [D]  | <a href="#">egen</a> .....                   | Extensions to generate  |
| [R]  | <a href="#">esize</a> .....                  | Effect size based on mean comparison                                  |
| [R]  | <a href="#">icc</a> .....                    | Intraclass correlation coefficients                                   |
| [R]  | <a href="#">mean</a> .....                   | Estimate means  |
| [R]  | <a href="#">misstable</a> .....              | Tabulate missing values   |
| [MV] | <a href="#">mvtest</a> .....                 | Multivariate tests  |
| [R]  | <a href="#">oneway</a> .....                 | One-way analysis of variance  |
| [R]  | <a href="#">proportion</a> .....             | Estimate proportions  |
| [R]  | <a href="#">prtest</a> .....                 | Tests of proportions  |
| [R]  | <a href="#">pwmean</a> .....                 | Pairwise comparisons of means   |
| [R]  | <a href="#">ranksum</a> .....                | Equality tests on unmatched data                                      |
| [R]  | <a href="#">ratio</a> .....                  | Estimate ratios   |
| [R]  | <a href="#">regress</a> .....                | Linear regression   |
| [R]  | <a href="#">sdtest</a> .....                 | Variance-comparison tests   |
| [R]  | <a href="#">signrank</a> .....               | Equality tests on matched data  |
| [D]  | <a href="#">statsby</a> .....                | Collect statistics for a command across a by list                     |
| [R]  | <a href="#">summarize</a> .....              | Summary statistics  |
| [R]  | <a href="#">table intro</a> ..               | Introduction to tables of frequencies, summaries, and command results |
| [R]  | <a href="#">table</a> .....                  | Table of frequencies, summaries, and command results                  |
| [R]  | <a href="#">table hypothesis tests</a> ..... | Table of hypothesis tests   |
| [R]  | <a href="#">table multiway</a> .....         | Multiway tables   |
| [R]  | <a href="#">table oneway</a> .....           | One-way tabulation  |
| [R]  | <a href="#">table summary</a> .....          | Table of summary statistics   |
| [R]  | <a href="#">table twoway</a> .....           | Two-way tabulation  |
| [R]  | <a href="#">tabstat</a> .....                | Compact table of summary statistics                                   |
| [R]  | <a href="#">tabulate oneway</a> .....        | One-way table of frequencies  |
| [R]  | <a href="#">tabulate twoway</a> .....        | Two-way table of frequencies  |
| [R]  | <a href="#">tabulate, summarize()</a> .....  | One- and two-way tables of summary statistics                         |



|     |                       |   |
|-----|-----------------------|---|
| [R] | <a href="#">total</a> | Estimate totals                                   |
| [R] | <a href="#">ttest</a> | $t$ tests (mean-comparison tests)                 |
| [R] | <a href="#">ztest</a> | $z$ tests (mean-comparison tests, known variance) |

## Bayesian analysis

|         |  |   |
|---------|--|---|
| [U]     | <a href="#">Section 27.34</a>              | Bayesian analysis   |
| [BAYES] | <a href="#">Intro</a>                      | Introduction to Bayesian analysis                                     |
| [BAYES] | <a href="#">Bayesian commands</a>          | Introduction to commands for Bayesian analysis                        |
| [BAYES] | <a href="#">Bayesian estimation</a>        | Bayesian estimation commands  |
| [BAYES] | <a href="#">Bayesian postestimation</a>    | Postestimation tools for bayesmh and the bayes prefix                 |
| [BAYES] | <a href="#">bayes</a>                      | Bayesian regression models using the bayes prefix                     |
| [BAYES] | <a href="#">bayes: betareg</a>             | Bayesian beta regression  |
| [BAYES] | <a href="#">bayes: binreg</a>              | Bayesian generalized linear models: Extensions to the binomial family |
| [BAYES] | <a href="#">bayes: biprobit</a>            | Bayesian bivariate probit regression                                  |
| [BAYES] | <a href="#">bayes: clogit</a>              | Bayesian conditional logistic regression                              |
| [BAYES] | <a href="#">bayes: cloglog</a>             | Bayesian complementary log–log regression                             |
| [BAYES] | <a href="#">bayes: dsge</a>                | Bayesian linear dynamic stochastic general equilibrium models         |
| [BAYES] | <a href="#">bayes: dsge postestimation</a> | Postestimation tools for bayes: dsge and bayes: dsge                  |
| [BAYES] | <a href="#">bayes: dsge nl</a>             | Bayesian nonlinear dynamic stochastic general equilibrium models      |
| [BAYES] | <a href="#">bayes: fracreg</a>             | Bayesian fractional response regression                               |
| [BAYES] | <a href="#">bayes: glm</a>                 | Bayesian generalized linear models                                    |
| [BAYES] | <a href="#">bayes: gnbreg</a>              | Bayesian generalized negative binomial regression                     |
| [BAYES] | <a href="#">bayes: heckman</a>             | Bayesian Heckman selection model                                      |
| [BAYES] | <a href="#">bayes: heckprobit</a>          | Bayesian ordered probit model with sample selection                   |
| [BAYES] | <a href="#">bayes: heckprobit</a>          | Bayesian probit model with sample selection                           |
| [BAYES] | <a href="#">bayes: hetoprobit</a>          | Bayesian heteroskedastic ordered probit regression                    |
| [BAYES] | <a href="#">bayes: hetprobit</a>           | Bayesian heteroskedastic probit regression                            |
| [BAYES] | <a href="#">bayes: hetregress</a>          | Bayesian heteroskedastic linear regression                            |
| [BAYES] | <a href="#">bayes: intreg</a>              | Bayesian interval regression  |
| [BAYES] | <a href="#">bayes: logistic</a>            | Bayesian logistic regression, reporting odds ratios                   |
| [BAYES] | <a href="#">bayes: logit</a>               | Bayesian logistic regression, reporting coefficients                  |
| [BAYES] | <a href="#">bayes: meclglog</a>            | Bayesian multilevel complementary log–log regression                  |
| [BAYES] | <a href="#">bayes: meglm</a>               | Bayesian multilevel generalized linear model                          |
| [BAYES] | <a href="#">bayes: meintreg</a>            | Bayesian multilevel interval regression                               |
| [BAYES] | <a href="#">bayes: melogit</a>             | Bayesian multilevel logistic regression                               |
| [BAYES] | <a href="#">bayes: menbreg</a>             | Bayesian multilevel negative binomial regression                      |
| [BAYES] | <a href="#">bayes: meologit</a>            | Bayesian multilevel ordered logistic regression                       |
| [BAYES] | <a href="#">bayes: meoprobit</a>           | Bayesian multilevel ordered probit regression                         |
| [BAYES] | <a href="#">bayes: mepoisson</a>           | Bayesian multilevel Poisson regression                                |
| [BAYES] | <a href="#">bayes: meprobit</a>            | Bayesian multilevel probit regression                                 |
| [BAYES] | <a href="#">bayes: mestreg</a>             | Bayesian multilevel parametric survival models                        |
| [BAYES] | <a href="#">bayes: metobit</a>             | Bayesian multilevel tobit regression                                  |
| [BAYES] | <a href="#">bayes: mixed</a>               | Bayesian multilevel linear regression                                 |
| [BAYES] | <a href="#">bayes: mlogit</a>              | Bayesian multinomial logistic regression                              |
| [BAYES] | <a href="#">bayes: mprobit</a>             | Bayesian multinomial probit regression                                |
| [BAYES] | <a href="#">bayes: mvreg</a>               | Bayesian multivariate regression                                      |
| [BAYES] | <a href="#">bayes: nbreg</a>               | Bayesian negative binomial regression                                 |
| [BAYES] | <a href="#">bayes: ologit</a>              | Bayesian ordered logistic regression                                  |
| [BAYES] | <a href="#">bayes: oprobit</a>             | Bayesian ordered probit regression                                    |
| [BAYES] | <a href="#">bayes: poisson</a>             | Bayesian Poisson regression   |
| [BAYES] | <a href="#">bayes: probit</a>              | Bayesian probit regression  |



|         |   |  |
|---------|---|--|
| [BAYES] | <a href="#">bayes: regress</a>            | Bayesian linear regression                                       |
| [BAYES] | <a href="#">bayes: streg</a>              | Bayesian parametric survival models                              |
| [BAYES] | <a href="#">bayes: tnbgreg</a>            | Bayesian truncated negative binomial regression                  |
| [BAYES] | <a href="#">bayes: tobit</a>              | Bayesian tobit regression  |
| [BAYES] | <a href="#">bayes: tpoisson</a>           | Bayesian truncated Poisson regression                            |
| [BAYES] | <a href="#">bayes: truncreg</a>           | Bayesian truncated regression                                    |
| [BAYES] | <a href="#">bayes: var</a>                | Bayesian vector autoregressive models                            |
| [BAYES] | <a href="#">bayes: var postestimation</a> | Postestimation tools for bayes: var                              |
| [BAYES] | <a href="#">bayes: xtlogit</a>            | Bayesian random-effects logit model                              |
| [BAYES] | <a href="#">bayes: xtmlogit</a>           | Bayesian random-effects multinomial logit model                  |
| [BAYES] | <a href="#">bayes: xtnbreg</a>            | Bayesian random-effects negative binomial model                  |
| [BAYES] | <a href="#">bayes: xtologit</a>           | Bayesian random-effects ordered logistic model                   |
| [BAYES] | <a href="#">bayes: xtoprobit</a>          | Bayesian random-effects ordered probit model                     |
| [BAYES] | <a href="#">bayes: xtpoisson</a>          | Bayesian random-effects Poisson model                            |
| [BAYES] | <a href="#">bayes: xtprobit</a>           | Bayesian random-effects probit model                             |
| [BAYES] | <a href="#">bayes: xtreg</a>              | Bayesian random-effects linear model                             |
| [BAYES] | <a href="#">bayes: zinb</a>               | Bayesian zero-inflated negative binomial regression              |
| [BAYES] | <a href="#">bayes: ziologit</a>           | Bayesian zero-inflated ordered logit regression                  |
| [BAYES] | <a href="#">bayes: zioprobit</a>          | Bayesian zero-inflated ordered probit regression                 |
| [BAYES] | <a href="#">bayes: zip</a>                | Bayesian zero-inflated Poisson regression                        |
| [BAYES] | <a href="#">bayesfcst</a>                 | Bayesian dynamic forecasts                                       |
| [BAYES] | <a href="#">bayesfcst compute</a>         | Compute Bayesian dynamic forecasts                               |
| [BAYES] | <a href="#">bayesfcst graph</a>           | Graphs of Bayesian dynamic forecasts                             |
| [BAYES] | <a href="#">bayesgraph</a>                | Graphical summaries and convergence diagnostics                  |
| [BAYES] | <a href="#">bayesirf</a>                  | Bayesian IRFs, dynamic-multiplier functions, and FEVDs           |
| [BAYES] | <a href="#">bayesirf cgraph</a>           | Combined graphs of Bayesian IRF results                          |
| [BAYES] | <a href="#">bayesirf create</a>           | Obtain Bayesian IRFs, dynamic-multiplier functions, and FEVDs    |
| [BAYES] | <a href="#">bayesirf ctable</a>           | Combined tables of Bayesian IRF results                          |
| [BAYES] | <a href="#">bayesirf graph</a>            | Graphs of Bayesian IRFs, dynamic-multiplier functions, and FEVDs |
| [BAYES] | <a href="#">bayesirf ograph</a>           | Overlaid graphs of Bayesian IRF results                          |
| [BAYES] | <a href="#">bayesirf table</a>            | Tables of Bayesian IRFs, dynamic-multiplier functions, and FEVDs |
| [BAYES] | <a href="#">bayesmh</a>                   | Bayesian models using Metropolis–Hastings algorithm              |
| [BAYES] | <a href="#">bayesmh evaluators</a>        | User-defined evaluators with bayesmh                             |
| [BAYES] | <a href="#">bayespredict</a>              | Bayesian predictions   |
| [BAYES] | <a href="#">bayesstats</a>                | Bayesian statistics after Bayesian estimation                    |
| [BAYES] | <a href="#">bayesstats ess</a>            | Effective sample sizes and related statistics                    |
| [BAYES] | <a href="#">bayesstats grubin</a>         | Gelman–Rubin convergence diagnostics                             |
| [BAYES] | <a href="#">bayesstats ic</a>             | Bayesian information criteria and Bayes factors                  |
| [BAYES] | <a href="#">bayesstats ppvalues</a>       | Bayesian predictive p-values and other predictive summaries      |
| [BAYES] | <a href="#">bayesstats summary</a>        | Bayesian summary statistics                                      |
| [BAYES] | <a href="#">bayestest</a>                 | Bayesian hypothesis testing                                      |
| [BAYES] | <a href="#">bayestest interval</a>        | Interval hypothesis testing                                      |
| [BAYES] | <a href="#">bayestest model</a>           | Hypothesis testing using model posterior probabilities           |
| [BAYES] | <a href="#">bayesvarstable</a>            | Check the stability condition of Bayesian VAR estimates          |
| [BMA]   | <a href="#">bmaregress</a>                | Bayesian model averaging for linear regression                   |

## Bayesian model averaging

|       |                                    |   |
|-------|------------------------------------|---|
| [U]   | <a href="#">Section 27.35</a>      | Bayesian model averaging                              |
| [BMA] | <a href="#">Intro</a>              | Introduction to Bayesian model averaging              |
| [BMA] | <a href="#">BMA commands</a>       | Introduction to commands for Bayesian model averaging |
| [BMA] | <a href="#">BMA postestimation</a> | Postestimation tools for Bayesian model averaging     |

|       |                                      |   |
|-------|--------------------------------------|---|
| [BMA] | <a href="#">bmacoefsample</a>        | Posterior samples of regression coefficients                          |
| [BMA] | <a href="#">bmagraph</a>             | Graphical summary for models and predictors after BMA regression      |
| [BMA] | <a href="#">bmagraph coefdensity</a> | Regression coefficient density plots after BMA regression             |
| [BMA] | <a href="#">bmagraph msiz</a>        | Model-size distribution plots after BMA regression                    |
| [BMA] | <a href="#">bmagraph pmp</a>         | Model-probability plots after BMA regression                          |
| [BMA] | <a href="#">bmagraph varmap</a>      | Variable-inclusion map after BMA regression                           |
| [BMA] | <a href="#">bmapredict</a>           | Predictions after BMA regression                                      |
| [BMA] | <a href="#">bmaregress</a>           | Bayesian model averaging for linear regression                        |
| [BMA] | <a href="#">bmastats</a>             | Summary for models and predictors after BMA regression                |
| [BMA] | <a href="#">bmastats jointness</a>   | Jointness measures for predictors after BMA regression                |
| [BMA] | <a href="#">bmastats lps</a>         | Log predictive-score after BMA regression                             |
| [BMA] | <a href="#">bmastats models</a>      | Model and variable-inclusion summaries after BMA regression           |
| [BMA] | <a href="#">bmastats msiz</a>        | Model-size summary after BMA regression                               |
| [BMA] | <a href="#">bmastats pip</a>         | Posterior inclusion probabilities for predictors after BMA regression |

## Binary outcomes

|          |                                     |  |
|----------|-------------------------------------|--|
| [U]      | <a href="#">Chapter 20</a>          | Estimation and postestimation commands                       |
| [U]      | <a href="#">Section 27.4</a>        | Binary outcomes  |
| [BAYES]  | <a href="#">Bayesian estimation</a> | Bayesian estimation commands                                 |
| [R]      | <a href="#">binreg</a>              | Generalized linear models: Extensions to the binomial family |
| [R]      | <a href="#">biprobit</a>            | Bivariate probit regression                                  |
| [R]      | <a href="#">cloglog</a>             | Complementary log–log regression                             |
| [LASSO]  | <a href="#">dslogit</a>             | Double-selection lasso logistic regression                   |
| [ERM]    | <a href="#">eprobit</a>             | Extended probit regression                                   |
| [CAUSAL] | <a href="#">eteffects</a>           | Endogenous treatment-effects estimation                      |
| [R]      | <a href="#">exlogistic</a>          | Exact logistic regression                                    |
| [FMM]    | <a href="#">fmm estimation</a>      | Fitting finite mixture models                                |
| [R]      | <a href="#">glm</a>                 | Generalized linear models                                    |
| [R]      | <a href="#">heckprobit</a>          | Probit model with sample selection                           |
| [R]      | <a href="#">hetprobit</a>           | Heteroskedastic probit model                                 |
| [IRT]    | <a href="#">irt 1pl</a>             | One-parameter logistic model                                 |
| [IRT]    | <a href="#">irt 2pl</a>             | Two-parameter logistic model                                 |
| [IRT]    | <a href="#">irt 3pl</a>             | Three-parameter logistic model                               |
| [IRT]    | <a href="#">irt hybrid</a>          | Hybrid IRT models  |
| [R]      | <a href="#">ivprobit</a>            | Probit model with continuous endogenous covariates           |
| [R]      | <a href="#">logistic</a>            | Logistic regression, reporting odds ratios                   |
| [R]      | <a href="#">logit</a>               | Logistic regression, reporting coefficients                  |
| [ME]     | <a href="#">mecloglog</a>           | Multilevel mixed-effects complementary log–log regression    |
| [CAUSAL] | <a href="#">mediate</a>             | Causal mediation analysis                                    |
| [ME]     | <a href="#">melogit</a>             | Multilevel mixed-effects logistic regression                 |
| [ME]     | <a href="#">meprobit</a>            | Multilevel mixed-effects probit regression                   |
| [LASSO]  | <a href="#">pologit</a>             | Partialing-out lasso logistic regression                     |
| [R]      | <a href="#">probit</a>              | Probit regression  |
| [R]      | <a href="#">rocf</a>                | Parametric ROC models  |
| [R]      | <a href="#">rocreg</a>              | Receiver operating characteristic (ROC) regression           |
| [R]      | <a href="#">scobit</a>              | Skewed logistic regression                                   |
| [CAUSAL] | <a href="#">teffects aipw</a>       | Augmented inverse-probability weighting                      |
| [CAUSAL] | <a href="#">teffects ipw</a>        | Inverse-probability weighting                                |
| [CAUSAL] | <a href="#">teffects ipwra</a>      | Inverse-probability-weighted regression adjustment           |
| [CAUSAL] | <a href="#">teffects nnmatch</a>    | Nearest-neighbor matching                                    |
| [CAUSAL] | <a href="#">teffects psmatch</a>    | Propensity-score matching                                    |

|          |                             |   |
|----------|-----------------------------|---|
| [CAUSAL] | <a href="#">teffects ra</a> | Regression adjustment   |
| [CAUSAL] | <a href="#">telasso</a>     | Treatment-effects estimation using lasso                            |
| [LASSO]  | <a href="#">xpologit</a>    | Cross-fit partialing-out lasso logistic regression                  |
| [XT]     | <a href="#">xtcloglog</a>   | Random-effects and population-averaged cloglog models               |
| [XT]     | <a href="#">xtprobit</a>    | Extended random-effects probit regression                           |
| [XT]     | <a href="#">xtlogit</a>     | Fixed-effects, random-effects, and population-averaged logit models |
| [XT]     | <a href="#">xtprobit</a>    | Random-effects and population-averaged probit models                |

## Categorical outcomes

|         |                                     |   |
|---------|-------------------------------------|---|
| [U]     | <a href="#">Chapter 20</a>          | Estimation and postestimation commands                    |
| [U]     | <a href="#">Section 27.6</a>        | Ordinal outcomes  |
| [U]     | <a href="#">Section 27.7</a>        | Categorical outcomes                                      |
| [BAYES] | <a href="#">Bayesian estimation</a> | Bayesian estimation commands                              |
| [R]     | <a href="#">clogit</a>              | Conditional (fixed-effects) logistic regression           |
| [CM]    | <a href="#">cmclogit</a>            | Conditional logit (McFadden's) choice model               |
| [CM]    | <a href="#">cmmixlogit</a>          | Mixed logit choice model                                  |
| [CM]    | <a href="#">cmmprobit</a>           | Multinomial probit choice model                           |
| [CM]    | <a href="#">cmxtmixlogit</a>        | Panel-data mixed logit choice model                       |
| [FMM]   | <a href="#">fmm estimation</a>      | Fitting finite mixture models                             |
| [IRT]   | <a href="#">irt nrm</a>             | Nominal response model                                    |
| [R]     | <a href="#">mlogit</a>              | Multinomial (polytomous) logistic regression              |
| [R]     | <a href="#">mprobit</a>             | Multinomial probit regression                             |
| [CM]    | <a href="#">nlogit</a>              | Nested logit regression                                   |
| [R]     | <a href="#">slogit</a>              | Stereotype logistic regression                            |
| [XT]    | <a href="#">xtmlogit</a>            | Fixed-effects and random-effects multinomial logit models |

## Causal inference and treatment-effects estimation

|          |   |  |
|----------|---|--|
| [U]      | <a href="#">Section 27.20</a>             | Causal inference   |
| [CAUSAL] | <a href="#">Causal inference commands</a> | Introduction to causal inference commands                              |
| [CAUSAL] | <a href="#">DID intro</a>                 | Introduction to difference-in-differences estimation                   |
| [CAUSAL] | <a href="#">Intro</a>                     | Introduction to causal inference and treatment-effects estimation      |
| [CAUSAL] | <a href="#">didregress</a>                | Difference-in-differences estimation                                   |
| [ERM]    | <a href="#">eintreg</a>                   | Extended interval regression   |
| [ERM]    | <a href="#">eoprobit</a>                  | Extended ordered probit regression                                     |
| [ERM]    | <a href="#">eprobit</a>                   | Extended probit regression   |
| [ERM]    | <a href="#">eregress</a>                  | Extended linear regression   |
| [CAUSAL] | <a href="#">eteffects</a>                 | Endogenous treatment-effects estimation                                |
| [CAUSAL] | <a href="#">etpoisson</a>                 | Poisson regression with endogenous treatment effects                   |
| [CAUSAL] | <a href="#">etregress</a>                 | Linear regression with endogenous treatment effects                    |
| [CAUSAL] | <a href="#">hdidregress</a>               | Heterogeneous difference in differences                                |
| [CAUSAL] | <a href="#">mediate</a>                   | Causal mediation analysis  |
| [CAUSAL] | <a href="#">stteffects</a>                | Treatment-effects estimation for observational survival-time data      |
| [CAUSAL] | <a href="#">stteffects intro</a>          | Introduction to treatment effects for observational survival-time data |
| [CAUSAL] | <a href="#">stteffects ipw</a>            | Survival-time inverse-probability weighting                            |
| [CAUSAL] | <a href="#">stteffects ipwra</a>          | Survival-time inverse-probability-weighted regression adjustment       |
| [CAUSAL] | <a href="#">stteffects ra</a>             | Survival-time regression adjustment                                    |
| [CAUSAL] | <a href="#">stteffects wra</a>            | Survival-time weighted regression adjustment                           |
| [CAUSAL] | <a href="#">tebalance</a>                 | Check balance after teffects or stteffects estimation                  |
| [CAUSAL] | <a href="#">tebalance box</a>             | Covariate balance box  |
| [CAUSAL] | <a href="#">tebalance density</a>         | Covariate balance density  |
| [CAUSAL] | <a href="#">tebalance overid</a>          | Test for covariate balance   |

|          |   |   |
|----------|---|---|
| [CAUSAL] | <a href="#">tebalance summarize</a> .....     | Covariate-balance summary statistics                              |
| [CAUSAL] | <a href="#">teffects</a> .....                | Treatment-effects estimation for observational data               |
| [CAUSAL] | <a href="#">teffects aipw</a> .....           | Augmented inverse-probability weighting                           |
| [CAUSAL] | <a href="#">teffects intro</a> .....          | Introduction to treatment effects for observational data          |
| [CAUSAL] | <a href="#">teffects intro advanced</a> ..... | Advanced introduction to treatment effects for observational data |
| [CAUSAL] | <a href="#">teffects ipw</a> .....            | Inverse-probability weighting                                     |
| [CAUSAL] | <a href="#">teffects ipwra</a> .....          | Inverse-probability-weighted regression adjustment                |
| [CAUSAL] | <a href="#">teffects multivalued</a> .....    | Multivalued treatment effects                                     |
| [CAUSAL] | <a href="#">teffects nnmatch</a> .....        | Nearest-neighbor matching   |
| [CAUSAL] | <a href="#">teffects psmatch</a> .....        | Propensity-score matching   |
| [CAUSAL] | <a href="#">teffects ra</a> .....             | Regression adjustment   |
| [CAUSAL] | <a href="#">telasso</a> .....                 | Treatment-effects estimation using lasso                          |
| [CAUSAL] | <a href="#">teoverlap</a> .....               | Overlap plots   |
| [XT]     | <a href="#">xtdidregress</a> .....            | Fixed-effects difference-in-differences estimation                |
| [XT]     | <a href="#">xteintreg</a> .....               | Extended random-effects interval regression                       |
| [XT]     | <a href="#">xteoprobit</a> .....              | Extended random-effects ordered probit regression                 |
| [XT]     | <a href="#">xteprobit</a> .....               | Extended random-effects probit regression                         |
| [XT]     | <a href="#">xteregress</a> .....              | Extended random-effects linear regression                         |
| [CAUSAL] | <a href="#">xthdidregress</a> .....           | Heterogeneous difference in differences for panel data            |

## Censored and truncated regression models

|          |                                   |   |
|----------|-----------------------------------|---|
| [R]      | <a href="#">churdle</a> .....     | Cragg hurdle regression   |
| [R]      | <a href="#">cpoisson</a> .....    | Censored Poisson regression   |
| [ERM]    | <a href="#">eintreg</a> .....     | Extended interval regression  |
| [R]      | <a href="#">heckman</a> .....     | Heckman selection model   |
| [R]      | <a href="#">heckoprobit</a> ..... | Ordered probit model with sample selection                              |
| [R]      | <a href="#">heckprobit</a> .....  | Probit model with sample selection                                      |
| [R]      | <a href="#">intreg</a> .....      | Interval regression   |
| [ME]     | <a href="#">meintreg</a> .....    | Multilevel mixed-effects interval regression                            |
| [ME]     | <a href="#">mestreg</a> .....     | Multilevel mixed-effects parametric survival models                     |
| [ME]     | <a href="#">metobit</a> .....     | Multilevel mixed-effects tobit regression                               |
| [ST]     | <a href="#">stintcox</a> ...      | Cox proportional hazards model for interval-censored survival-time data |
| [ST]     | <a href="#">stintreg</a> .....    | Parametric models for interval-censored survival-time data              |
| [ST]     | <a href="#">streg</a> .....       | Parametric survival models  |
| [CAUSAL] | <a href="#">stteffects</a> .....  | Treatment-effects estimation for observational survival-time data       |
| [R]      | <a href="#">tnbreg</a> .....      | Truncated negative binomial regression                                  |
| [R]      | <a href="#">tobit</a> .....       | Tobit regression  |
| [R]      | <a href="#">tpoisson</a> .....    | Truncated Poisson regression  |
| [R]      | <a href="#">truncreg</a> .....    | Truncated regression  |
| [XT]     | <a href="#">xteintreg</a> .....   | Extended random-effects interval regression                             |
| [XT]     | <a href="#">xtheckman</a> .....   | Random-effects regression with sample selection                         |
| [XT]     | <a href="#">xtintreg</a> .....    | Random-effects interval-data regression models                          |
| [XT]     | <a href="#">xtstreg</a> .....     | Random-effects parametric survival models                               |
| [XT]     | <a href="#">xttobit</a> .....     | Random-effects tobit models   |

## Choice models

|      |                                     |                                      |
|------|-------------------------------------|--------------------------------------|
| [U]  | <a href="#">Section 27.10</a> ..... | Choice models                        |
| [CM] | <a href="#">Intro</a> .....         | Introduction to choice models manual |
| [CM] | <a href="#">Intro 1</a> .....       | Interpretation of choice models      |
| [CM] | <a href="#">Intro 2</a> .....       | Data layout                          |

|      |              |  |
|------|--------------|--|
| [CM] | Intro 3      | Descriptive statistics   |
| [CM] | Intro 4      | Estimation commands  |
| [CM] | Intro 5      | Models for discrete choices                                    |
| [CM] | Intro 6      | Models for rank-ordered alternatives                           |
| [CM] | Intro 7      | Models for panel data  |
| [CM] | Intro 8      | Random utility models, assumptions, and estimation             |
| [CM] | cmchoiceset  | Tabulate choice sets   |
| [CM] | cmclgit      | Conditional logit (McFadden's) choice model                    |
| [CM] | cmmixlogit   | Mixed logit choice model                                       |
| [CM] | cmmprobit    | Multinomial probit choice model                                |
| [CM] | cmrologit    | Rank-ordered logit choice model                                |
| [CM] | cmroprobit   | Rank-ordered probit choice model                               |
| [CM] | cmsample     | Display reasons for sample exclusion                           |
| [CM] | cmset        | Declare data to be choice model data                           |
| [CM] | cmsummarize  | Summarize variables by chosen alternatives                     |
| [CM] | cmtab        | Tabulate chosen alternatives                                   |
| [CM] | cmxtmixlogit | Panel-data mixed logit choice model                            |
| [CM] | margins      | Adjusted predictions, predictive margins, and marginal effects |
| [CM] | nlogit       | Nested logit regression  |

**Cluster analysis**

|      |                                 |   |
|------|---------------------------------|---|
| [U]  | Section 27.22                   | Multivariate analysis                               |
| [MV] | Multivariate                    | Introduction to multivariate commands               |
| [MV] | cluster                         | Introduction to cluster-analysis commands           |
| [MV] | cluster dendrogram              | Dendrograms for hierarchical cluster analysis       |
| [MV] | cluster generate                | Generate grouping variables from a cluster analysis |
| [MV] | cluster kmeans and kmedians     | Kmeans and kmedians cluster analysis                |
| [MV] | cluster linkage                 | Hierarchical cluster analysis                       |
| [MV] | cluster notes                   | Cluster analysis notes                              |
| [MV] | cluster programming subroutines | Add cluster-analysis routines                       |
| [MV] | cluster programming utilities   | Cluster-analysis programming utilities              |
| [MV] | cluster stop                    | Cluster-analysis stopping rules                     |
| [MV] | cluster utility                 | List, rename, use, and drop cluster analyses        |
| [MV] | clustermat                      | Introduction to clustermat commands                 |
| [MV] | matrix dissimilarity            | Compute similarity or dissimilarity measures        |
| [MV] | measure_option                  | Option for similarity and dissimilarity measures    |

**Correspondence analysis**

|      |     |  |
|------|-----|--|
| [MV] | ca  | Simple correspondence analysis             |
| [MV] | mca | Multiple and joint correspondence analysis |

**Count outcomes**

|          |                     |  |
|----------|---------------------|--|
| [U]      | Chapter 20          | Estimation and postestimation commands               |
| [U]      | Section 27.8        | Count outcomes                                       |
| [U]      | Section 27.15.3     | Discrete outcomes with panel data                    |
| [BAYES]  | Bayesian estimation | Bayesian estimation commands                         |
| [R]      | cpoisson            | Censored Poisson regression                          |
| [LASSO]  | dspoisson           | Double-selection lasso Poisson regression            |
| [CAUSAL] | eteffects           | Endogenous treatment-effects estimation              |
| [CAUSAL] | etpoisson           | Poisson regression with endogenous treatment effects |
| [R]      | exppoisson          | Exact Poisson regression                             |

|          |                                  |   |
|----------|----------------------------------|---|
| [FMM]    | <a href="#">fmm estimation</a>   | Fitting finite mixture models   |
| [R]      | <a href="#">heckpoisson</a>      | Poisson regression with sample selection                                      |
| [CAUSAL] | <a href="#">mediate</a>          | Causal mediation analysis   |
| [ME]     | <a href="#">menbreg</a>          | Multilevel mixed-effects negative binomial regression                         |
| [ME]     | <a href="#">mepoisson</a>        | Multilevel mixed-effects Poisson regression                                   |
| [R]      | <a href="#">nbreg</a>            | Negative binomial regression  |
| [R]      | <a href="#">poisson</a>          | Poisson regression  |
| [LASSO]  | <a href="#">popoisson</a>        | Partialing-out lasso Poisson regression                                       |
| [CAUSAL] | <a href="#">teffects aipw</a>    | Augmented inverse-probability weighting                                       |
| [CAUSAL] | <a href="#">teffects ipw</a>     | Inverse-probability weighting   |
| [CAUSAL] | <a href="#">teffects ipwra</a>   | Inverse-probability-weighted regression adjustment                            |
| [CAUSAL] | <a href="#">teffects nnmatch</a> | Nearest-neighbor matching   |
| [CAUSAL] | <a href="#">teffects psmatch</a> | Propensity-score matching   |
| [CAUSAL] | <a href="#">teffects ra</a>      | Regression adjustment   |
| [CAUSAL] | <a href="#">telasso</a>          | Treatment-effects estimation using lasso                                      |
| [R]      | <a href="#">tnbreg</a>           | Truncated negative binomial regression  |
| [R]      | <a href="#">tpoisson</a>         | Truncated Poisson regression  |
| [LASSO]  | <a href="#">xpoboisson</a>       | Cross-fit partialing-out lasso Poisson regression                             |
| [XT]     | <a href="#">xtnbreg</a>          | Fixed-effects, random-effects, & population-averaged negative binomial models |
| [XT]     | <a href="#">xtpoisson</a>        | Fixed-effects, random-effects, and population-averaged Poisson models         |
| [R]      | <a href="#">zinb</a>             | Zero-inflated negative binomial regression                                    |
| [R]      | <a href="#">zip</a>              | Zero-inflated Poisson regression  |

## Discriminant analysis

|      |                                  |  |
|------|----------------------------------|--|
| [MV] | <a href="#">candisc</a>          | Canonical linear discriminant analysis     |
| [MV] | <a href="#">discrim</a>          | Discriminant analysis                      |
| [MV] | <a href="#">discrim estat</a>    | Postestimation tools for discrim           |
| [MV] | <a href="#">discrim knn</a>      | kth-nearest-neighbor discriminant analysis |
| [MV] | <a href="#">discrim lda</a>      | Linear discriminant analysis               |
| [MV] | <a href="#">discrim logistic</a> | Logistic discriminant analysis             |
| [MV] | <a href="#">discrim qda</a>      | Quadratic discriminant analysis            |
| [MV] | <a href="#">scoreplot</a>        | Score and loading plots                    |
| [MV] | <a href="#">screeplot</a>        | Scree plot of eigenvalues                  |

## Do-it-yourself generalized method of moments

|     |                               |  |
|-----|-------------------------------|--|
| [U] | <a href="#">Section 27.24</a> | Generalized method of moments (GMM)      |
| [R] | <a href="#">gmm</a>           | Generalized method of moments estimation |
| [P] | <a href="#">matrix</a>        | Introduction to matrix commands          |

## Do-it-yourself maximum likelihood estimation

|     |                        |   |
|-----|------------------------|---|
| [P] | <a href="#">matrix</a> | Introduction to matrix commands                             |
| [R] | <a href="#">ml</a>     | Maximum likelihood estimation                               |
| [R] | <a href="#">mlexp</a>  | Maximum likelihood estimation of user-specified expressions |

## Dynamic stochastic general equilibrium models

|        |                               |  |
|--------|-------------------------------|--|
| [U]    | <a href="#">Section 27.29</a> | Dynamic stochastic general equilibrium (DSGE) models |
| [DSGE] | <a href="#">Intro</a>         | Introduction to DSGE manual                          |
| [DSGE] | <a href="#">Intro 1</a>       | Introduction to DSGEs                                |
| [DSGE] | <a href="#">Intro 2</a>       | Learning the syntax                                  |
| [DSGE] | <a href="#">Intro 3</a>       | Classic DSGE examples                                |
| [DSGE] | <a href="#">Intro 3a</a>      | New Keynesian model                                  |

|        |                       |       |  |
|--------|-----------------------|-------|--|
| [DSGE] | Intro 3b              | ..... | New Classical model  |
| [DSGE] | Intro 3c              | ..... | Financial frictions model                                    |
| [DSGE] | Intro 3d              | ..... | Nonlinear New Keynesian model                                |
| [DSGE] | Intro 3e              | ..... | Nonlinear New Classical model                                |
| [DSGE] | Intro 3f              | ..... | Stochastic growth model                                      |
| [DSGE] | Intro 4               | ..... | Writing a DSGE in a solvable form                            |
| [DSGE] | Intro 4a              | ..... | Specifying a shock on a control variable                     |
| [DSGE] | Intro 4b              | ..... | Including a lag of a control variable                        |
| [DSGE] | Intro 4c              | ..... | Including a lag of a state variable                          |
| [DSGE] | Intro 4d              | ..... | Including an expectation dated by more than one period ahead |
| [DSGE] | Intro 4e              | ..... | Including a second-order lag of a control                    |
| [DSGE] | Intro 4f              | ..... | Including an observed exogenous variable                     |
| [DSGE] | Intro 4g              | ..... | Correlated state variables                                   |
| [DSGE] | Intro 5               | ..... | Stability conditions   |
| [DSGE] | Intro 6               | ..... | Identification   |
| [DSGE] | Intro 7               | ..... | Convergence problems   |
| [DSGE] | Intro 8               | ..... | Wald tests vary with nonlinear transforms                    |
| [DSGE] | Intro 9               | ..... | Bayesian estimation  |
| [DSGE] | Intro 9a              | ..... | Bayesian estimation of a New Keynesian model                 |
| [DSGE] | Intro 9b              | ..... | Bayesian estimation of stochastic growth model               |
| [DSGE] | dsge                  | ..... | Linear dynamic stochastic general equilibrium models         |
| [DSGE] | dsge postestimation   | ..... | Postestimation tools for dsge                                |
| [DSGE] | dsgenl                | ..... | Nonlinear dynamic stochastic general equilibrium models      |
| [DSGE] | dsgenl postestimation | ..... | Postestimation tools for dsgenl                              |
| [DSGE] | estat covariance      | ..... | Display estimated covariances of model variables             |
| [DSGE] | estat policy          | ..... | Display policy matrix  |
| [DSGE] | estat stable          | ..... | Check stability of system                                    |
| [DSGE] | estat steady          | ..... | Display steady state of nonlinear DSGE model                 |
| [DSGE] | estat transition      | ..... | Display state transition matrix                              |

## Endogenous covariates

|          |              |       |  |
|----------|--------------|-------|--|
| [U]      | Chapter 20   | ..... | Estimation and postestimation commands                           |
| [U]      | Chapter 27   | ..... | Overview of Stata estimation commands                            |
| [ERM]    | eintreg      | ..... | Extended interval regression                                     |
| [ERM]    | eoprobit     | ..... | Extended ordered probit regression                               |
| [ERM]    | eprobit      | ..... | Extended probit regression                                       |
| [ERM]    | eregress     | ..... | Extended linear regression                                       |
| [CAUSAL] | eteffects    | ..... | Endogenous treatment-effects estimation                          |
| [CAUSAL] | etpoisson    | ..... | Poisson regression with endogenous treatment effects             |
| [CAUSAL] | etregress    | ..... | Linear regression with endogenous treatment effects              |
| [TS]     | forecast     | ..... | Econometric model forecasting                                    |
| [R]      | gmm          | ..... | Generalized method of moments estimation                         |
| [R]      | ivfprobit    | ..... | Fractional probit model with continuous endogenous covariates    |
| [R]      | ivpoisson    | ..... | Poisson model with continuous endogenous covariates              |
| [R]      | ivprobit     | ..... | Probit model with continuous endogenous covariates               |
| [R]      | ivqregress   | ..... | Instrumental-variables quantile regression                       |
| [R]      | ivregress    | ..... | Single-equation instrumental-variables regression                |
| [R]      | ivtobit      | ..... | Tobit model with continuous endogenous covariates                |
| [LASSO]  | poivregress  | ..... | Partialing-out lasso instrumental-variables regression           |
| [R]      | reg3         | ..... | Three-stage estimation for systems of simultaneous equations     |
| [LASSO]  | xpoivregress | ..... | Cross-fit partialing-out lasso instrumental-variables regression |



|      |                            |  |
|------|----------------------------|--|
| [XT] | <a href="#">xtabond</a>    | Arellano–Bond linear dynamic panel-data estimation                       |
| [XT] | <a href="#">xtdpd</a>      | Linear dynamic panel-data estimation                                     |
| [XT] | <a href="#">xtdpdsys</a>   | Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation        |
| [XT] | <a href="#">xteintreg</a>  | Extended random-effects interval regression                              |
| [XT] | <a href="#">xteoprobit</a> | Extended random-effects ordered probit regression                        |
| [XT] | <a href="#">xteprobit</a>  | Extended random-effects probit regression                                |
| [XT] | <a href="#">xteregless</a> | Extended random-effects linear regression                                |
| [XT] | <a href="#">xthtaylor</a>  | Hausman–Taylor estimator for error-components models                     |
| [XT] | <a href="#">xtivreg</a>    | Instrumental variables and two-stage least squares for panel-data models |

## Epidemiology and related

|     |                                 |  |
|-----|---------------------------------|--|
| [R] | <a href="#">binreg</a>          | Generalized linear models: Extensions to the binomial family |
| [R] | <a href="#">brier</a>           | Brier score decomposition                                    |
| [R] | <a href="#">clogit</a>          | Conditional (fixed-effects) logistic regression              |
| [R] | <a href="#">dstdize</a>         | Direct and indirect standardization                          |
| [R] | <a href="#">Epitab</a>          | Tables for epidemiologists                                   |
| [R] | <a href="#">exlogistic</a>      | Exact logistic regression                                    |
| [R] | <a href="#">expoisson</a>       | Exact Poisson regression                                     |
| [R] | <a href="#">glm</a>             | Generalized linear models                                    |
| [D] | <a href="#">icd</a>             | Introduction to ICD commands                                 |
| [D] | <a href="#">icd10</a>           | ICD-10 diagnosis codes                                       |
| [D] | <a href="#">icd10cm</a>         | ICD-10-CM diagnosis codes                                    |
| [D] | <a href="#">icd10pcs</a>        | ICD-10-PCS procedure codes                                   |
| [D] | <a href="#">icd9</a>            | ICD-9-CM diagnosis codes                                     |
| [D] | <a href="#">icd9p</a>           | ICD-9-CM procedure codes                                     |
| [R] | <a href="#">kappa</a>           | Interrater agreement   |
| [R] | <a href="#">logistic</a>        | Logistic regression, reporting odds ratios                   |
| [R] | <a href="#">nbreg</a>           | Negative binomial regression                                 |
| [R] | <a href="#">pk</a>              | Pharmacokinetic (biopharmaceutical) data                     |
| [R] | <a href="#">pkcollapse</a>      | Generate pharmacokinetic measurement dataset                 |
| [R] | <a href="#">pkcross</a>         | Analyze crossover experiments                                |
| [R] | <a href="#">pkequiv</a>         | Perform bioequivalence tests                                 |
| [R] | <a href="#">pkexamine</a>       | Calculate pharmacokinetic measures                           |
| [R] | <a href="#">pkshape</a>         | Reshape (pharmacokinetic) Latin-square data                  |
| [R] | <a href="#">pksumm</a>          | Summarize pharmacokinetic data                               |
| [R] | <a href="#">poisson</a>         | Poisson regression   |
| [R] | <a href="#">rer</a>             | Relative excess risk due to interaction                      |
| [R] | <a href="#">roc</a>             | Receiver operating characteristic (ROC) analysis             |
| [R] | <a href="#">roccomp</a>         | Tests of equality of ROC areas                               |
| [R] | <a href="#">rocf</a>            | Parametric ROC models  |
| [R] | <a href="#">rocreg</a>          | Receiver operating characteristic (ROC) regression           |
| [R] | <a href="#">roctab</a>          | Nonparametric ROC analysis                                   |
| [R] | <a href="#">symmetry</a>        | Symmetry and marginal homogeneity tests                      |
| [R] | <a href="#">tabulate twoway</a> | Two-way table of frequencies                                 |

Also see *Multilevel mixed-effects models*, *Survival analysis*, *Structural equation modeling*, and *Causal inference and treatment-effects estimation*.

## Estimation related

|     |                                    |                                       |
|-----|------------------------------------|---------------------------------------|
| [R] | <a href="#">constraint</a>         | Define and list constraints           |
| [R] | <a href="#">eform_option</a>       | Displaying exponentiated coefficients |
| [R] | <a href="#">Estimation options</a> | Estimation options                    |



|      |                             |   |
|------|-----------------------------|---|
| [R]  | <a href="#">fp</a>          | Fractional polynomial regression                  |
| [R]  | <a href="#">IC note</a>     | Calculating and interpreting information criteria |
| [R]  | <a href="#">makespline</a>  | Spline generation                                 |
| [R]  | <a href="#">Maximize</a>    | Details of iterative maximization                 |
| [R]  | <a href="#">mfp</a>         | Multivariable fractional polynomial models        |
| [R]  | <a href="#">stepwise</a>    | Stepwise estimation                               |
| [R]  | <a href="#">vce_option</a>  | Variance estimators                               |
| [XT] | <a href="#">vce_options</a> | Variance estimators                               |

## Exact statistics

|         |                                     |  |
|---------|-------------------------------------|--|
| [U]     | <a href="#">Section 27.8</a>        | Count outcomes   |
| [U]     | <a href="#">Section 27.11</a>       | Exact estimators   |
| [R]     | <a href="#">bittest</a>             | Binomial probability test                                  |
| [R]     | <a href="#">centile</a>             | Report centile and confidence interval                     |
| [R]     | <a href="#">ci</a>                  | Confidence intervals for means, proportions, and variances |
| [R]     | <a href="#">dstdize</a>             | Direct and indirect standardization                        |
| [R]     | <a href="#">Epitab</a>              | Tables for epidemiologists                                 |
| [R]     | <a href="#">exlogistic</a>          | Exact logistic regression                                  |
| [R]     | <a href="#">expoisson</a>           | Exact Poisson regression                                   |
| [R]     | <a href="#">ksmirnov</a>            | Kolmogorov–Smirnov equality-of-distributions test          |
| [R]     | <a href="#">loneway</a>             | Large one-way ANOVA, random effects, and reliability       |
| [PSS-2] | <a href="#">power oneproportion</a> | Power analysis for a one-sample proportion test            |
| [R]     | <a href="#">ranksum</a>             | Equality tests on unmatched data                           |
| [R]     | <a href="#">roctab</a>              | Nonparametric ROC analysis                                 |
| [R]     | <a href="#">symmetry</a>            | Symmetry and marginal homogeneity tests                    |
| [R]     | <a href="#">tabulate twoway</a>     | Two-way table of frequencies                               |
| [R]     | <a href="#">tetrachoric</a>         | Tetrachoric correlations for binary variables              |

## Extended regression models

|       |   |   |
|-------|---|---|
| [ERM] | <a href="#">ERM options</a>             | Extended regression model options                 |
| [ERM] | <a href="#">Intro</a>                   | Introduction to extended regression models manual |
| [ERM] | <a href="#">Intro 1</a>                 | An introduction to the ERM commands               |
| [ERM] | <a href="#">Intro 2</a>                 | The models that ERMs fit                          |
| [ERM] | <a href="#">Intro 3</a>                 | Endogenous covariates features                    |
| [ERM] | <a href="#">Intro 4</a>                 | Endogenous sample-selection features              |
| [ERM] | <a href="#">Intro 5</a>                 | Treatment assignment features                     |
| [ERM] | <a href="#">Intro 6</a>                 | Panel data and grouped data model features        |
| [ERM] | <a href="#">Intro 7</a>                 | Model interpretation                              |
| [ERM] | <a href="#">Intro 8</a>                 | A Rosetta stone for extended regression commands  |
| [ERM] | <a href="#">Intro 9</a>                 | Conceptual introduction via worked example        |
| [ERM] | <a href="#">eintreg</a>                 | Extended interval regression                      |
| [ERM] | <a href="#">eintreg postestimation</a>  | Postestimation tools for eintreg and xteintreg    |
| [ERM] | <a href="#">eintreg predict</a>         | predict after eintreg and xteintreg               |
| [ERM] | <a href="#">eoprobit</a>                | Extended ordered probit regression                |
| [ERM] | <a href="#">eoprobit postestimation</a> | Postestimation tools for eoprobit and xteoprobit  |
| [ERM] | <a href="#">eoprobit predict</a>        | predict after eoprobit and xteoprobit             |
| [ERM] | <a href="#">eprobit</a>                 | Extended probit regression                        |
| [ERM] | <a href="#">eprobit postestimation</a>  | Postestimation tools for eprobit and xteprobit    |
| [ERM] | <a href="#">eprobit predict</a>         | predict after eprobit and xteprobit               |
| [ERM] | <a href="#">eregress</a>                | Extended linear regression                        |
| [ERM] | <a href="#">eregress postestimation</a> | Postestimation tools for eregress and xteregress  |

|       |                                   |  |
|-------|-----------------------------------|--|
| [ERM] | <a href="#">eregress predict</a>  | predict after eregress and xtegress                                      |
| [ERM] | <a href="#">estat teffects</a>    | Average treatment effects for extended regression models                 |
| [ERM] | <a href="#">Example 1a</a>        | Linear regression with continuous endogenous covariate                   |
| [ERM] | <a href="#">Example 1b</a>        | Interval regression with continuous endogenous covariate                 |
| [ERM] | <a href="#">Example 1c</a>        | Interval regression with endogenous covariate and sample selection       |
| [ERM] | <a href="#">Example 2a</a>        | Linear regression with binary endogenous covariate                       |
| [ERM] | <a href="#">Example 2b</a>        | Linear regression with exogenous treatment                               |
| [ERM] | <a href="#">Example 2c</a>        | Linear regression with endogenous treatment                              |
| [ERM] | <a href="#">Example 3a</a>        | Probit regression with continuous endogenous covariate                   |
| [ERM] | <a href="#">Example 3b</a>        | Probit regression with endogenous covariate and treatment                |
| [ERM] | <a href="#">Example 4a</a>        | Probit regression with endogenous sample selection                       |
| [ERM] | <a href="#">Example 4b</a>        | Probit regression with endogenous treatment and sample selection         |
| [ERM] | <a href="#">Example 5</a>         | Probit regression with endogenous ordinal treatment                      |
| [ERM] | <a href="#">Example 6a</a>        | Ordered probit regression with endogenous treatment                      |
| [ERM] | <a href="#">Example 6b</a>        | Ordered probit regression with endogenous treatment and sample selection |
| [ERM] | <a href="#">Example 7</a>         | Random-effects regression with continuous endogenous covariate           |
| [ERM] | <a href="#">Example 8a</a>        | Random effects in one equation and endogenous covariate                  |
| [ERM] | <a href="#">Example 8b</a>        | Random effects, endogenous covariate, and endogenous sample selection    |
| [ERM] | <a href="#">Example 9</a>         | Ordered probit regression with endogenous treatment and random effects   |
| [ERM] | <a href="#">predict advanced</a>  | predict's advanced features  |
| [ERM] | <a href="#">predict treatment</a> | predict for treatment statistics   |
| [ERM] | <a href="#">Triangularize</a>     | How to triangularize a system of equations                               |
| [XT]  | <a href="#">xteintreg</a>         | Extended random-effects interval regression                              |
| [XT]  | <a href="#">xteoprobit</a>        | Extended random-effects ordered probit regression                        |
| [XT]  | <a href="#">xteprobit</a>         | Extended random-effects probit regression                                |
| [XT]  | <a href="#">xtegress</a>          | Extended random-effects linear regression                                |

## Factor analysis and principal components

|      |                             |   |
|------|-----------------------------|---|
| [MV] | <a href="#">alpha</a>       | Compute interitem correlations (covariances) and Cronbach's alpha |
| [MV] | <a href="#">canon</a>       | Canonical correlations  |
| [MV] | <a href="#">factor</a>      | Factor analysis   |
| [MV] | <a href="#">pca</a>         | Principal component analysis                                      |
| [MV] | <a href="#">rotate</a>      | Orthogonal and oblique rotations after factor and pca             |
| [MV] | <a href="#">rotatemat</a>   | Orthogonal and oblique rotations of a Stata matrix                |
| [MV] | <a href="#">scoreplot</a>   | Score and loading plots   |
| [MV] | <a href="#">screeplot</a>   | Scree plot of eigenvalues   |
| [R]  | <a href="#">tetrachoric</a> | Tetrachoric correlations for binary variables                     |

## Finite mixture models

|       |                               |  |
|-------|-------------------------------|--|
| [U]   | <a href="#">Section 27.27</a> | Finite mixture models (FMMs)               |
| [FMM] | <a href="#">estat eform</a>   | Display exponentiated coefficients         |
| [FMM] | <a href="#">estat lmean</a>   | Latent class marginal means                |
| [FMM] | <a href="#">estat lprob</a>   | Latent class marginal probabilities        |
| [FMM] | <a href="#">Example 1a</a>    | Mixture of linear regression models        |
| [FMM] | <a href="#">Example 1b</a>    | Covariates for class membership            |
| [FMM] | <a href="#">Example 1c</a>    | Testing coefficients across class models   |
| [FMM] | <a href="#">Example 1d</a>    | Component-specific covariates              |
| [FMM] | <a href="#">Example 2</a>     | Mixture of Poisson regression models       |
| [FMM] | <a href="#">Example 3</a>     | Zero-inflated models                       |
| [FMM] | <a href="#">Example 4</a>     | Mixture cure models for survival data      |
| [FMM] | <a href="#">fmm</a>           | Finite mixture models using the fmm prefix |

|       |                                    |  |
|-------|------------------------------------|--|
| [FMM] | <a href="#">fmm estimation</a>     | Fitting finite mixture models  |
| [FMM] | <a href="#">fmm intro</a>          | Introduction to finite mixture models                                  |
| [FMM] | <a href="#">fmm postestimation</a> | Postestimation tools for fmm   |
| [FMM] | <a href="#">fmm: betareg</a>       | Finite mixtures of beta regression models                              |
| [FMM] | <a href="#">fmm: cloglog</a>       | Finite mixtures of complementary log–log regression models             |
| [FMM] | <a href="#">fmm: glm</a>           | Finite mixtures of generalized linear regression models                |
| [FMM] | <a href="#">fmm: intreg</a>        | Finite mixtures of interval regression models                          |
| [FMM] | <a href="#">fmm: ivregress</a>     | Finite mixtures of linear regression models with endogenous covariates |
| [FMM] | <a href="#">fmm: logit</a>         | Finite mixtures of logistic regression models                          |
| [FMM] | <a href="#">fmm: mlogit</a>        | Finite mixtures of multinomial (polytomous) logistic regression models |
| [FMM] | <a href="#">fmm: nbreg</a>         | Finite mixtures of negative binomial regression models                 |
| [FMM] | <a href="#">fmm: ologit</a>        | Finite mixtures of ordered logistic regression models                  |
| [FMM] | <a href="#">fmm: oprobit</a>       | Finite mixtures of ordered probit regression models                    |
| [FMM] | <a href="#">fmm: pointmass</a>     | Finite mixtures models with a density mass at a single point           |
| [FMM] | <a href="#">fmm: poisson</a>       | Finite mixtures of Poisson regression models                           |
| [FMM] | <a href="#">fmm: probit</a>        | Finite mixtures of probit regression models                            |
| [FMM] | <a href="#">fmm: regress</a>       | Finite mixtures of linear regression models                            |
| [FMM] | <a href="#">fmm: streg</a>         | Finite mixtures of parametric survival models                          |
| [FMM] | <a href="#">fmm: tobit</a>         | Finite mixtures of tobit regression models                             |
| [FMM] | <a href="#">fmm: tpoisson</a>      | Finite mixtures of truncated Poisson regression models                 |
| [FMM] | <a href="#">fmm: truncreg</a>      | Finite mixtures of truncated linear regression models                  |

## Fractional outcomes

|          |                                  |   |
|----------|----------------------------------|---|
| [BAYES]  | <a href="#">bayes: betareg</a>   | Bayesian beta regression                                      |
| [BAYES]  | <a href="#">bayes: fracreg</a>   | Bayesian fractional response regression                       |
| [R]      | <a href="#">betareg</a>          | Beta regression   |
| [CAUSAL] | <a href="#">eteffects</a>        | Endogenous treatment-effects estimation                       |
| [FMM]    | <a href="#">fmm: betareg</a>     | Finite mixtures of beta regression models                     |
| [R]      | <a href="#">fracreg</a>          | Fractional response regression                                |
| [R]      | <a href="#">ivfprobit</a>        | Fractional probit model with continuous endogenous covariates |
| [CAUSAL] | <a href="#">teffects ipw</a>     | Inverse-probability weighting                                 |
| [CAUSAL] | <a href="#">teffects nnmatch</a> | Nearest-neighbor matching                                     |
| [CAUSAL] | <a href="#">teffects psmatch</a> | Propensity-score matching                                     |

## Generalized linear models

|         |                              |  |
|---------|------------------------------|--|
| [U]     | <a href="#">Chapter 20</a>   | Estimation and postestimation commands                       |
| [U]     | <a href="#">Section 27.9</a> | Generalized linear models                                    |
| [BAYES] | <a href="#">bayes: glm</a>   | Bayesian generalized linear models                           |
| [R]     | <a href="#">binreg</a>       | Generalized linear models: Extensions to the binomial family |
| [FMM]   | <a href="#">fmm: glm</a>     | Finite mixtures of generalized linear regression models      |
| [R]     | <a href="#">fracreg</a>      | Fractional response regression                               |
| [R]     | <a href="#">glm</a>          | Generalized linear models                                    |
| [XT]    | <a href="#">xtgee</a>        | GEE population-averaged panel-data models                    |

## Group sequential designs

|         |                               |  |
|---------|-------------------------------|--|
| [U]     | <a href="#">Section 27.33</a> | Power, precision, and sample-size analysis           |
| [ADAPT] | <a href="#">GSD intro</a>     | Introduction to group sequential designs             |
| [ADAPT] | <a href="#">Intro</a>         | Introduction to adaptive designs for clinical trials |
| [ADAPT] | <a href="#">gs</a>            | Introduction to commands for group sequential design |
| [ADAPT] | <a href="#">gsbounds</a>      | Boundaries for group sequential trials               |
| [ADAPT] | <a href="#">gsdesign</a>      | Study design for group sequential trials             |

|         |   |   |
|---------|---|---|
| [ADAPT] | <a href="#">gsdesign logrank</a>        | Group sequential design for a log-rank test               |
| [ADAPT] | <a href="#">gsdesign onemean</a>        | Group sequential design for a one-sample mean test        |
| [ADAPT] | <a href="#">gsdesign oneproportion</a>  | Group sequential design for a one-sample proportion test  |
| [ADAPT] | <a href="#">gsdesign twomeans</a>       | Group sequential design for a two-sample means test       |
| [ADAPT] | <a href="#">gsdesign twoproportions</a> | Group sequential design for a two-sample proportions test |
| [ADAPT] | <a href="#">gsdesign usermethod</a>     | Add your own methods to the <code>gsdesign</code> command |

## Indicator and categorical variables

|     |                                |  |
|-----|--------------------------------|--|
| [U] | <a href="#">Section 11.4.3</a> | Factor variables                                   |
| [U] | <a href="#">Chapter 26</a>     | Working with categorical data and factor variables |
| [R] | <a href="#">fvset</a>          | Declare factor-variable settings                   |

## Item response theory

|       |                                 |   |
|-------|---------------------------------|---|
| [U]   | <a href="#">Section 27.28</a>   | Item response theory (IRT)                    |
| [IRT] | <a href="#">Control Panel</a>   | IRT Control Panel                             |
| [IRT] | <a href="#">DIF</a>             | Introduction to differential item functioning |
| [IRT] | <a href="#">diflogistic</a>     | Logistic regression DIF                       |
| [IRT] | <a href="#">difmh</a>           | Mantel–Haenszel DIF                           |
| [IRT] | <a href="#">estat greport</a>   | Report estimated group IRT parameters         |
| [IRT] | <a href="#">estat report</a>    | Report estimated IRT parameters               |
| [IRT] | <a href="#">irt 1pl</a>         | One-parameter logistic model                  |
| [IRT] | <a href="#">irt 2pl</a>         | Two-parameter logistic model                  |
| [IRT] | <a href="#">irt 3pl</a>         | Three-parameter logistic model                |
| [IRT] | <a href="#">irt constraints</a> | Specifying constraints                        |
| [IRT] | <a href="#">irt grm</a>         | Graded response model                         |
| [IRT] | <a href="#">irt hybrid</a>      | Hybrid IRT models                             |
| [IRT] | <a href="#">irt nrm</a>         | Nominal response model                        |
| [IRT] | <a href="#">irt pcm</a>         | Partial credit model                          |
| [IRT] | <a href="#">irt rsm</a>         | Rating scale model                            |
| [IRT] | <a href="#">irt, group()</a>    | IRT models for multiple groups                |
| [IRT] | <a href="#">irtgraph icc</a>    | Item characteristic curve plot                |
| [IRT] | <a href="#">irtgraph iif</a>    | Item information function plot                |
| [IRT] | <a href="#">irtgraph tcc</a>    | Test characteristic curve plot                |
| [IRT] | <a href="#">irtgraph tif</a>    | Test information function plot                |

## Lasso

|         |  |  |
|---------|--|--|
| [U]     | <a href="#">Section 27.30</a>          | Lasso  |
| [LASSO] | <a href="#">Collinear covariates</a>   | Treatment of collinear covariates                        |
| [LASSO] | <a href="#">Inference examples</a>     | Examples and workflow for inference                      |
| [LASSO] | <a href="#">Inference requirements</a> | Requirements for inference                               |
| [LASSO] | <a href="#">Lasso inference intro</a>  | Introduction to inferential lasso models                 |
| [LASSO] | <a href="#">Lasso intro</a>            | Introduction to lasso                                    |
| [LASSO] | <a href="#">bicplot</a>                | Plot Bayesian information criterion function after lasso |
| [LASSO] | <a href="#">coefpath</a>               | Plot path of coefficients after lasso                    |
| [LASSO] | <a href="#">cvplot</a>                 | Plot cross-validation function after lasso               |
| [LASSO] | <a href="#">dslogit</a>                | Double-selection lasso logistic regression               |
| [LASSO] | <a href="#">dspoisson</a>              | Double-selection lasso Poisson regression                |
| [LASSO] | <a href="#">dsregress</a>              | Double-selection lasso linear regression                 |
| [LASSO] | <a href="#">elasticnet</a>             | Elastic net for prediction and model selection           |
| [LASSO] | <a href="#">estimates store</a>        | Saving and restoring estimates in memory and on disk     |
| [LASSO] | <a href="#">lasso</a>                  | Lasso for prediction and model selection                 |

|         |                                |  |
|---------|--------------------------------|--|
| [LASSO] | lasso examples                 | Examples of lasso for prediction                                 |
| [LASSO] | lasso fitting                  | The process (in a nutshell) of fitting lasso models              |
| [LASSO] | lasso inference postestimation | Postestimation tools for lasso inferential models                |
| [LASSO] | lasso options                  | Lasso options for inferential models                             |
| [LASSO] | lasso postestimation           | Postestimation tools for lasso for prediction                    |
| [LASSO] | lassocoef                      | Display coefficients after lasso estimation results              |
| [LASSO] | lassogof                       | Goodness of fit after lasso for prediction                       |
| [LASSO] | lassoinfo                      | Display information about lasso estimation results               |
| [LASSO] | lassoknots                     | Display knot table after lasso estimation                        |
| [LASSO] | lassoselect                    | Select lambda after lasso  |
| [LASSO] | poivregress                    | Partialing-out lasso instrumental-variables regression           |
| [LASSO] | pologit                        | Partialing-out lasso logistic regression                         |
| [LASSO] | popoisson                      | Partialing-out lasso Poisson regression                          |
| [LASSO] | poregress                      | Partialing-out lasso linear regression                           |
| [LASSO] | sqrlasso                       | Square-root lasso for prediction and model selection             |
| [LASSO] | xpoivregress                   | Cross-fit partialing-out lasso instrumental-variables regression |
| [LASSO] | xpologit                       | Cross-fit partialing-out lasso logistic regression               |
| [LASSO] | xpopoisson                     | Cross-fit partialing-out lasso Poisson regression                |
| [LASSO] | xporegress                     | Cross-fit partialing-out lasso linear regression                 |

## Latent class models

|       |               |   |
|-------|---------------|---|
| [U]   | Section 27.26 | Latent class models                                       |
| [SEM] | estat lmean   | Latent class marginal means                               |
| [SEM] | estat lprob   | Latent class marginal probabilities                       |
| [SEM] | Example 50g   | Latent class model  |
| [SEM] | Example 52g   | Latent profile model                                      |
| [SEM] | Example 53g   | Finite mixture Poisson regression                         |
| [SEM] | Intro 2       | Learning the language: Path diagrams and command language |
| [SEM] | Intro 5       | Tour of models  |

## Linear regression and related

|          |                     |  |
|----------|---------------------|--|
| [U]      | Chapter 20          | Estimation and postestimation commands               |
| [U]      | Chapter 27          | Overview of Stata estimation commands                |
| [R]      | areg                | Linear regression with a large dummy-variable set    |
| [BAYES]  | Bayesian estimation | Bayesian estimation commands                         |
| [BMA]    | bmaregress          | Bayesian model averaging for linear regression       |
| [R]      | cnsreg              | Constrained linear regression                        |
| [R]      | constraint          | Define and list constraints                          |
| [CAUSAL] | didregress          | Difference-in-differences estimation                 |
| [LASSO]  | dsregress           | Double-selection lasso linear regression             |
| [R]      | eivreg              | Errors-in-variables regression                       |
| [ERM]    | eregress            | Extended linear regression                           |
| [CAUSAL] | etpoisson           | Poisson regression with endogenous treatment effects |
| [CAUSAL] | etregress           | Linear regression with endogenous treatment effects  |
| [FMM]    | fmm estimation      | Fitting finite mixture models                        |
| [R]      | fp                  | Fractional polynomial regression                     |
| [R]      | frontier            | Stochastic frontier models                           |
| [R]      | glm                 | Generalized linear models                            |
| [CAUSAL] | hdidregress         | Heterogeneous difference in differences              |
| [R]      | heckman             | Heckman selection model                              |
| [R]      | hetregress          | Heteroskedastic linear regression                    |

|          |                                 |  |
|----------|---------------------------------|--|
| [R]      | <a href="#">ivpoisson</a>       | Poisson model with continuous endogenous covariates                        |
| [R]      | <a href="#">ivqregress</a>      | Instrumental-variables quantile regression                                 |
| [R]      | <a href="#">ivregress</a>       | Single-equation instrumental-variables regression                          |
| [R]      | <a href="#">ivtobit</a>         | Tobit model with continuous endogenous covariates                          |
| [R]      | <a href="#">lpoly</a>           | Kernel-weighted local polynomial smoothing                                 |
| [ME]     | <a href="#">meglm</a>           | Multilevel mixed-effects generalized linear models                         |
| [META]   | <a href="#">meta meregress</a>  | Multilevel mixed-effects meta-regression                                   |
| [META]   | <a href="#">meta multilevel</a> | Multilevel random-intercepts meta-regression                               |
| [META]   | <a href="#">meta mvregress</a>  | Multivariate meta-regression   |
| [META]   | <a href="#">meta regress</a>    | Meta-analysis regression   |
| [R]      | <a href="#">mfp</a>             | Multivariable fractional polynomial models                                 |
| [ME]     | <a href="#">mixed</a>           | Multilevel mixed-effects linear regression                                 |
| [MV]     | <a href="#">mvreg</a>           | Multivariate regression  |
| [R]      | <a href="#">nestreg</a>         | Nested model statistics  |
| [TS]     | <a href="#">newey</a>           | Regression with Newey–West standard errors                                 |
| [LASSO]  | <a href="#">poivregress</a>     | Partialing-out lasso instrumental-variables regression                     |
| [LASSO]  | <a href="#">poregress</a>       | Partialing-out lasso linear regression                                     |
| [TS]     | <a href="#">prais</a>           | Prais–Winsten and Cochrane–Orcutt regression                               |
| [R]      | <a href="#">qreg</a>            | Quantile regression  |
| [R]      | <a href="#">reg3</a>            | Three-stage estimation for systems of simultaneous equations               |
| [R]      | <a href="#">regress</a>         | Linear regression  |
| [R]      | <a href="#">rocfits</a>         | Parametric ROC models  |
| [R]      | <a href="#">rreg</a>            | Robust regression  |
| [ST]     | <a href="#">stcox</a>           | Cox proportional hazards model   |
| [ST]     | <a href="#">stcrreg</a>         | Competing-risks regression   |
| [R]      | <a href="#">stepwise</a>        | Stepwise estimation  |
| [ST]     | <a href="#">stintcox</a>        | Cox proportional hazards model for interval-censored survival-time data    |
| [ST]     | <a href="#">stintreg</a>        | Parametric models for interval-censored survival-time data                 |
| [ST]     | <a href="#">streg</a>           | Parametric survival models   |
| [R]      | <a href="#">sureg</a>           | Zellner’s seemingly unrelated regression                                   |
| [R]      | <a href="#">tnbreg</a>          | Truncated negative binomial regression                                     |
| [R]      | <a href="#">vwlsl</a>           | Variance-weighted least squares  |
| [LASSO]  | <a href="#">xpoivregress</a>    | Cross-fit partialing-out lasso instrumental-variables regression           |
| [LASSO]  | <a href="#">xporegress</a>      | Cross-fit partialing-out lasso linear regression                           |
| [XT]     | <a href="#">xtabond</a>         | Arellano–Bond linear dynamic panel-data estimation                         |
| [XT]     | <a href="#">xtdidregress</a>    | Fixed-effects difference-in-differences estimation                         |
| [XT]     | <a href="#">xtddpd</a>          | Linear dynamic panel-data estimation                                       |
| [XT]     | <a href="#">xtdpdsys</a>        | Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation          |
| [XT]     | <a href="#">xteregress</a>      | Extended random-effects linear regression                                  |
| [XT]     | <a href="#">xtgee</a>           | GEE population-averaged panel-data models                                  |
| [XT]     | <a href="#">xtgls</a>           | GLS linear model with heteroskedastic and correlated errors                |
| [CAUSAL] | <a href="#">xthdidregress</a>   | Heterogeneous difference in differences for panel data                     |
| [XT]     | <a href="#">xthheckman</a>      | Random-effects regression with sample selection                            |
| [XT]     | <a href="#">xthtaylor</a>       | Hausman–Taylor estimator for error-components models                       |
| [XT]     | <a href="#">xtivreg</a>         | Instrumental variables and two-stage least squares for panel-data models   |
| [XT]     | <a href="#">xtpcse</a>          | Linear regression with panel-corrected standard errors                     |
| [XT]     | <a href="#">xtcr</a>            | Random-coefficients model  |
| [XT]     | <a href="#">xtreg</a>           | Fixed-, between-, and random-effects and population-averaged linear models |
| [XT]     | <a href="#">xtregar</a>         | Fixed- and random-effects linear models with an AR(1) disturbance          |
| [XT]     | <a href="#">xtstreg</a>         | Random-effects parametric survival models                                  |

**Logistic and probit regression**

|         |              |   |
|---------|--------------|---|
| [U]     | Chapter 20   | Estimation and postestimation commands                              |
| [U]     | Chapter 27   | Overview of Stata estimation commands                               |
| [R]     | biprobit     | Bivariate probit regression   |
| [R]     | clogit       | Conditional (fixed-effects) logistic regression                     |
| [R]     | cloglog      | Complementary log–log regression                                    |
| [CM]    | cmclogit     | Conditional logit (McFadden's) choice model                         |
| [CM]    | cmmixlogit   | Mixed logit choice model  |
| [CM]    | cmmprobit    | Multinomial probit choice model                                     |
| [CM]    | cmrologit    | Rank-ordered logit choice model                                     |
| [CM]    | cmroprobit   | Rank-ordered probit choice model                                    |
| [CM]    | cmxtmixlogit | Panel-data mixed logit choice model                                 |
| [LASSO] | dslogit      | Double-selection lasso logistic regression                          |
| [ERM]   | eoprobit     | Extended ordered probit regression                                  |
| [ERM]   | eprobit      | Extended probit regression  |
| [R]     | exlogistic   | Exact logistic regression   |
| [R]     | heckoprobit  | Ordered probit model with sample selection                          |
| [R]     | heckprobit   | Probit model with sample selection                                  |
| [R]     | hetoprobit   | Heteroskedastic ordered probit regression                           |
| [R]     | hetprobit    | Heteroskedastic probit model  |
| [IRT]   | irt 1pl      | One-parameter logistic model  |
| [IRT]   | irt 2pl      | Two-parameter logistic model  |
| [IRT]   | irt 3pl      | Three-parameter logistic model                                      |
| [IRT]   | irt grm      | Graded response model   |
| [IRT]   | irt hybrid   | Hybrid IRT models   |
| [IRT]   | irt nrm      | Nominal response model  |
| [IRT]   | irt pcm      | Partial credit model  |
| [IRT]   | irt rsm      | Rating scale model  |
| [R]     | ivfprobit    | Fractional probit model with continuous endogenous covariates       |
| [R]     | ivprobit     | Probit model with continuous endogenous covariates                  |
| [R]     | logistic     | Logistic regression, reporting odds ratios                          |
| [R]     | logit        | Logistic regression, reporting coefficients                         |
| [ME]    | melogit      | Multilevel mixed-effects logistic regression                        |
| [ME]    | meologit     | Multilevel mixed-effects ordered logistic regression                |
| [ME]    | meoprobit    | Multilevel mixed-effects ordered probit regression                  |
| [ME]    | meprobit     | Multilevel mixed-effects probit regression                          |
| [R]     | mlogit       | Multinomial (polytomous) logistic regression                        |
| [R]     | mprobit      | Multinomial probit regression                                       |
| [CM]    | nlogit       | Nested logit regression   |
| [R]     | ologit       | Ordered logistic regression   |
| [R]     | oprobit      | Ordered probit regression   |
| [LASSO] | pologit      | Partialing-out lasso logistic regression                            |
| [R]     | probit       | Probit regression   |
| [R]     | scobit       | Skewed logistic regression  |
| [R]     | slogit       | Stereotype logistic regression                                      |
| [LASSO] | xpologit     | Cross-fit partialing-out lasso logistic regression                  |
| [XT]    | xtcloglog    | Random-effects and population-averaged cloglog models               |
| [XT]    | xteoprobit   | Extended random-effects ordered probit regression                   |
| [XT]    | xteprobit    | Extended random-effects probit regression                           |
| [XT]    | xtgee        | GEE population-averaged panel-data models                           |
| [XT]    | xtlogit      | Fixed-effects, random-effects, and population-averaged logit models |



|      |                           |   |
|------|---------------------------|---|
| [XT] | <a href="#">xtmlogit</a>  | Fixed-effects and random-effects multinomial logit models |
| [XT] | <a href="#">xtologit</a>  | Random-effects ordered logistic models                    |
| [XT] | <a href="#">xtoprobit</a> | Random-effects ordered probit models                      |
| [XT] | <a href="#">xtprobit</a>  | Random-effects and population-averaged probit models      |
| [R]  | <a href="#">ziologit</a>  | Zero-inflated ordered logit regression                    |
| [R]  | <a href="#">zioprobit</a> | Zero-inflated ordered probit regression                   |

## Longitudinal data/panel data

|          |                               |   |
|----------|-------------------------------|---|
| [U]      | <a href="#">Chapter 20</a>    | Estimation and postestimation commands  |
| [U]      | <a href="#">Section 27.15</a> | Panel-data models   |
| [CAUSAL] | <a href="#">didregress</a>    | Difference-in-differences estimation  |
| [ERM]    | <a href="#">eintreg</a>       | Extended interval regression  |
| [ERM]    | <a href="#">eoprobit</a>      | Extended ordered probit regression  |
| [ERM]    | <a href="#">eprobit</a>       | Extended probit regression  |
| [ERM]    | <a href="#">eregress</a>      | Extended linear regression  |
| [CAUSAL] | <a href="#">hdidregress</a>   | Heterogeneous difference in differences                                       |
| [ME]     | <a href="#">meologit</a>      | Multilevel mixed-effects ordered logistic regression                          |
| [ME]     | <a href="#">meoprobit</a>     | Multilevel mixed-effects ordered probit regression                            |
| [ME]     | <a href="#">mepoisson</a>     | Multilevel mixed-effects Poisson regression                                   |
| [ME]     | <a href="#">meprobit</a>      | Multilevel mixed-effects probit regression                                    |
| [ME]     | <a href="#">mixed</a>         | Multilevel mixed-effects linear regression                                    |
| [XT]     | <a href="#">quadchk</a>       | Check sensitivity of quadrature approximation                                 |
| [XT]     | <a href="#">xt</a>            | Introduction to xt commands   |
| [XT]     | <a href="#">xtabond</a>       | Arellano–Bond linear dynamic panel-data estimation                            |
| [XT]     | <a href="#">xtcloglog</a>     | Random-effects and population-averaged cloglog models                         |
| [XT]     | <a href="#">xtcointest</a>    | Panel-data cointegration tests  |
| [XT]     | <a href="#">xtdata</a>        | Faster specification searches with xt data                                    |
| [XT]     | <a href="#">xtdescribe</a>    | Describe pattern of xt data   |
| [XT]     | <a href="#">xtdidregress</a>  | Fixed-effects difference-in-differences estimation                            |
| [XT]     | <a href="#">xtdpd</a>         | Linear dynamic panel-data estimation  |
| [XT]     | <a href="#">xtdpdsys</a>      | Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation             |
| [XT]     | <a href="#">xteintreg</a>     | Extended random-effects interval regression                                   |
| [XT]     | <a href="#">xteoprobit</a>    | Extended random-effects ordered probit regression                             |
| [XT]     | <a href="#">xteprobit</a>     | Extended random-effects probit regression                                     |
| [XT]     | <a href="#">xteregress</a>    | Extended random-effects linear regression                                     |
| [XT]     | <a href="#">xtfrontier</a>    | Stochastic frontier models for panel data                                     |
| [XT]     | <a href="#">xtgee</a>         | GEE population-averaged panel-data models                                     |
| [XT]     | <a href="#">xtgls</a>         | GLS linear model with heteroskedastic and correlated errors                   |
| [CAUSAL] | <a href="#">xthdidregress</a> | Heterogeneous difference in differences for panel data                        |
| [XT]     | <a href="#">xthheckman</a>    | Random-effects regression with sample selection                               |
| [XT]     | <a href="#">xhtaylor</a>      | Hausman–Taylor estimator for error-components models                          |
| [XT]     | <a href="#">xtintreg</a>      | Random-effects interval-data regression models                                |
| [XT]     | <a href="#">xtivreg</a>       | Instrumental variables and two-stage least squares for panel-data models      |
| [XT]     | <a href="#">xtline</a>        | Panel-data line plots   |
| [XT]     | <a href="#">xtlogit</a>       | Fixed-effects, random-effects, and population-averaged logit models           |
| [XT]     | <a href="#">xtmlogit</a>      | Fixed-effects and random-effects multinomial logit models                     |
| [XT]     | <a href="#">xtnbreg</a>       | Fixed-effects, random-effects, & population-averaged negative binomial models |
| [XT]     | <a href="#">xtologit</a>      | Random-effects ordered logistic models  |
| [XT]     | <a href="#">xtoprobit</a>     | Random-effects ordered probit models  |
| [XT]     | <a href="#">xtpcse</a>        | Linear regression with panel-corrected standard errors                        |
| [XT]     | <a href="#">xtpoisson</a>     | Fixed-effects, random-effects, and population-averaged Poisson models         |



|      |                            |  |
|------|----------------------------|--|
| [XT] | <a href="#">xtprobit</a>   | Random-effects and population-averaged probit models                       |
| [XT] | <a href="#">xtreg</a>      | Random-coefficients model  |
| [XT] | <a href="#">xtreg</a> ..   | Fixed-, between-, and random-effects and population-averaged linear models |
| [XT] | <a href="#">xtregar</a>    | Fixed- and random-effects linear models with an AR(1) disturbance          |
| [XT] | <a href="#">xtset</a>      | Declare data to be panel data  |
| [XT] | <a href="#">xtstreg</a>    | Random-effects parametric survival models                                  |
| [XT] | <a href="#">xtsum</a>      | Summarize xt data  |
| [XT] | <a href="#">xttab</a>      | Tabulate xt data   |
| [XT] | <a href="#">xttobit</a>    | Random-effects tobit models  |
| [XT] | <a href="#">xtunitroot</a> | Panel-data unit-root tests   |

## Meta-analysis

|        |  |   |
|--------|--|---|
| [U]    | <a href="#">Section 27.18</a>            | Meta-analysis   |
| [META] | <a href="#">Intro</a>                    | Introduction to meta-analysis                                       |
| [META] | <a href="#">estat bubbleplot</a>         | Bubble plots after meta regress                                     |
| [META] | <a href="#">estat group</a>              | Summarize the composition of the nested groups                      |
| [META] | <a href="#">estat heterogeneity (me)</a> | Compute multilevel heterogeneity statistics                         |
| [META] | <a href="#">estat heterogeneity (mv)</a> | Compute multivariate heterogeneity statistics                       |
| [META] | <a href="#">estat recovariance</a>       | Display estimated random-effects covariance matrices                |
| [META] | <a href="#">estat sd</a>                 | Display variance components as standard deviations and correlations |
| [META] | <a href="#">meta</a>                     | Introduction to meta  |
| [META] | <a href="#">meta bias</a>                | Tests for small-study effects in meta-analysis                      |
| [META] | <a href="#">meta data</a>                | Declare meta-analysis data  |
| [META] | <a href="#">meta esize</a>               | Compute effect sizes and declare meta-analysis data                 |
| [META] | <a href="#">meta forestplot</a>          | Forest plots  |
| [META] | <a href="#">meta funnelplot</a>          | Funnel plots  |
| [META] | <a href="#">meta galbraithplot</a>       | Galbraith plots   |
| [META] | <a href="#">meta labbeplot</a>           | L'Abbé plots  |
| [META] | <a href="#">meta meregress</a>           | Multilevel mixed-effects meta-regression                            |
| [META] | <a href="#">meta multilevel</a>          | Multilevel random-intercepts meta-regression                        |
| [META] | <a href="#">meta mvregress</a>           | Multivariate meta-regression  |
| [META] | <a href="#">meta regress</a>             | Meta-analysis regression  |
| [META] | <a href="#">meta set</a>                 | Declare meta-analysis data using generic effect sizes               |
| [META] | <a href="#">meta summarize</a>           | Summarize meta-analysis data  |
| [META] | <a href="#">meta trimfill</a>            | Nonparametric trim-and-fill analysis of publication bias            |
| [META] | <a href="#">meta update</a>              | Update, describe, and clear meta-analysis settings                  |

## Mixed models

|      |                                    |   |
|------|------------------------------------|---|
| [U]  | <a href="#">Chapter 20</a>         | Estimation and postestimation commands                              |
| [U]  | <a href="#">Section 27.16</a>      | Multilevel mixed-effects models                                     |
| [R]  | <a href="#">anova</a>              | Analysis of variance and covariance                                 |
| [ME] | <a href="#">estat df</a>           | Calculate degrees of freedom for fixed effects                      |
| [ME] | <a href="#">estat group</a>        | Summarize the composition of the nested groups                      |
| [ME] | <a href="#">estat icc</a>          | Estimate intraclass correlations                                    |
| [ME] | <a href="#">estat recovariance</a> | Display estimated random-effects covariance matrices                |
| [ME] | <a href="#">estat sd</a>           | Display variance components as standard deviations and correlations |
| [ME] | <a href="#">estat wcorrelation</a> | Display within-cluster correlations and standard deviations         |
| [R]  | <a href="#">icc</a>                | Intraclass correlation coefficients                                 |
| [MV] | <a href="#">manova</a>             | Multivariate analysis of variance and covariance                    |
| [ME] | <a href="#">me</a>                 | Introduction to multilevel mixed-effects models                     |
| [ME] | <a href="#">mecloglog</a>          | Multilevel mixed-effects complementary log-log regression           |

|        |                                 |  |
|--------|---------------------------------|--|
| [ME]   | <a href="#">meglm</a>           | Multilevel mixed-effects generalized linear models                         |
| [ME]   | <a href="#">meintreg</a>        | Multilevel mixed-effects interval regression                               |
| [ME]   | <a href="#">melogit</a>         | Multilevel mixed-effects logistic regression                               |
| [ME]   | <a href="#">menbreg</a>         | Multilevel mixed-effects negative binomial regression                      |
| [ME]   | <a href="#">menl</a>            | Nonlinear mixed-effects regression   |
| [ME]   | <a href="#">meologit</a>        | Multilevel mixed-effects ordered logistic regression                       |
| [ME]   | <a href="#">meoprobit</a>       | Multilevel mixed-effects ordered probit regression                         |
| [ME]   | <a href="#">mepoisson</a>       | Multilevel mixed-effects Poisson regression                                |
| [ME]   | <a href="#">meprobit</a>        | Multilevel mixed-effects probit regression                                 |
| [ME]   | <a href="#">mestreg</a>         | Multilevel mixed-effects parametric survival models                        |
| [META] | <a href="#">meta meregress</a>  | Multilevel mixed-effects meta-regression                                   |
| [META] | <a href="#">meta multilevel</a> | Multilevel random-intercepts meta-regression                               |
| [ME]   | <a href="#">metobit</a>         | Multilevel mixed-effects tobit regression                                  |
| [ME]   | <a href="#">mixed</a>           | Multilevel mixed-effects linear regression                                 |
| [XT]   | <a href="#">xtcloglog</a>       | Random-effects and population-averaged cloglog models                      |
| [XT]   | <a href="#">xtintreg</a>        | Random-effects interval-data regression models                             |
| [XT]   | <a href="#">xtlogit</a>         | Fixed-effects, random-effects, and population-averaged logit models        |
| [XT]   | <a href="#">xtologit</a>        | Random-effects ordered logistic models                                     |
| [XT]   | <a href="#">xtoprobit</a>       | Random-effects ordered probit models                                       |
| [XT]   | <a href="#">xtprobit</a>        | Random-effects and population-averaged probit models                       |
| [XT]   | <a href="#">xtrc</a>            | Random-coefficients model  |
| [XT]   | <a href="#">xtreg</a>           | Fixed-, between-, and random-effects and population-averaged linear models |
| [XT]   | <a href="#">xttobit</a>         | Random-effects tobit models  |

## Multidimensional scaling and biplots

|      |                                |   |
|------|--------------------------------|---|
| [MV] | <a href="#">biplot</a>         | Biplots   |
| [MV] | <a href="#">mds</a>            | Multidimensional scaling for two-way data                 |
| [MV] | <a href="#">mdslong</a>        | Multidimensional scaling of proximity data in long format |
| [MV] | <a href="#">mdsmat</a>         | Multidimensional scaling of proximity data in a matrix    |
| [MV] | <a href="#">measure_option</a> | Option for similarity and dissimilarity measures          |

## Multilevel mixed-effects models

|         |                                     |   |
|---------|-------------------------------------|---|
| [U]     | <a href="#">Section 27.16</a>       | Multilevel mixed-effects models                           |
| [BAYES] | <a href="#">Bayesian estimation</a> | Bayesian estimation commands                              |
| [ME]    | <a href="#">me</a>                  | Introduction to multilevel mixed-effects models           |
| [ME]    | <a href="#">mecloglog</a>           | Multilevel mixed-effects complementary log-log regression |
| [ME]    | <a href="#">meglm</a>               | Multilevel mixed-effects generalized linear models        |
| [ME]    | <a href="#">meintreg</a>            | Multilevel mixed-effects interval regression              |
| [ME]    | <a href="#">melogit</a>             | Multilevel mixed-effects logistic regression              |
| [ME]    | <a href="#">menbreg</a>             | Multilevel mixed-effects negative binomial regression     |
| [ME]    | <a href="#">menl</a>                | Nonlinear mixed-effects regression                        |
| [ME]    | <a href="#">meologit</a>            | Multilevel mixed-effects ordered logistic regression      |
| [ME]    | <a href="#">meoprobit</a>           | Multilevel mixed-effects ordered probit regression        |
| [ME]    | <a href="#">mepoisson</a>           | Multilevel mixed-effects Poisson regression               |
| [ME]    | <a href="#">meprobit</a>            | Multilevel mixed-effects probit regression                |
| [ME]    | <a href="#">mestreg</a>             | Multilevel mixed-effects parametric survival models       |
| [META]  | <a href="#">meta meregress</a>      | Multilevel mixed-effects meta-regression                  |
| [META]  | <a href="#">meta multilevel</a>     | Multilevel random-intercepts meta-regression              |
| [ME]    | <a href="#">metobit</a>             | Multilevel mixed-effects tobit regression                 |
| [ME]    | <a href="#">mixed</a>               | Multilevel mixed-effects linear regression                |

**Multiple imputation**

|      |                             |  |
|------|-----------------------------|--|
| [U]  | Section 27.32               | Multiple imputation                                  |
| [MI] | Intro                       | Introduction to mi                                   |
| [MI] | Intro substantive           | Introduction to multiple-imputation analysis         |
| [MI] | Estimation                  | Estimation commands for use with mi estimate         |
| [MI] | mi estimate                 | Estimation using multiple imputations                |
| [MI] | mi estimate using           | Estimation using previously saved estimation results |
| [MI] | mi estimate postestimation  | Postestimation tools for mi estimate                 |
| [MI] | mi impute                   | Impute missing values                                |
| [MI] | mi impute chained           | Impute missing values using chained equations        |
| [MI] | mi impute intreg            | Impute using interval regression                     |
| [MI] | mi impute logit             | Impute using logistic regression                     |
| [MI] | mi impute mlogit            | Impute using multinomial logistic regression         |
| [MI] | mi impute monotone          | Impute missing values in monotone data               |
| [MI] | mi impute mvn               | Impute using multivariate normal regression          |
| [MI] | mi impute nbreg             | Impute using negative binomial regression            |
| [MI] | mi impute ologit            | Impute using ordered logistic regression             |
| [MI] | mi impute pmm               | Impute using predictive mean matching                |
| [MI] | mi impute poisson           | Impute using Poisson regression                      |
| [MI] | mi impute regress           | Impute using linear regression                       |
| [MI] | mi impute truncreg          | Impute using truncated regression                    |
| [MI] | <i>mi impute usermethod</i> | User-defined imputation methods                      |
| [MI] | mi predict                  | Obtain multiple-imputation predictions               |
| [MI] | mi test                     | Test hypotheses after mi estimate                    |

**Multivariate analysis of variance and related techniques**

|      |                    |  |
|------|--------------------|--|
| [U]  | Section 27.22      | Multivariate analysis                            |
| [MV] | canon              | Canonical correlations                           |
| [MV] | hotelling          | Hotelling's $T^2$ generalized means test         |
| [MV] | manova             | Multivariate analysis of variance and covariance |
| [MV] | mvreg              | Multivariate regression                          |
| [MV] | mvtest covariances | Multivariate tests of covariances                |
| [MV] | mvtest means       | Multivariate tests of means                      |

**Nonlinear regression**

|      |           |  |
|------|-----------|--|
| [R]  | boxcox    | Box–Cox regression models                    |
| [R]  | demandsys | Estimation of flexible demand systems        |
| [ME] | menl      | Nonlinear mixed-effects regression           |
| [R]  | nl        | Nonlinear least-squares estimation           |
| [R]  | nlsur     | Estimation of nonlinear systems of equations |

**Nonparametric statistics**

|     |            |  |
|-----|------------|--|
| [R] | bitest     | Binomial probability test                  |
| [R] | bootstrap  | Bootstrap sampling and estimation          |
| [R] | bsample    | Sampling with replacement                  |
| [R] | bstat      | Report bootstrap results                   |
| [R] | centile    | Report centile and confidence interval     |
| [R] | cusum      | Cusum plots and tests for binary variables |
| [R] | ivqregress | Instrumental-variables quantile regression |
| [R] | kdensity   | Univariate kernel density estimation       |

|     |                                  |  |
|-----|----------------------------------|--|
| [R] | <a href="#">ksmirnov</a>         | Kolmogorov–Smirnov equality-of-distributions test            |
| [R] | <a href="#">kwallis</a>          | Kruskal–Wallis equality-of-populations rank test             |
| [R] | <a href="#">lowess</a>           | Lowess smoothing   |
| [R] | <a href="#">lpoly</a>            | Kernel-weighted local polynomial smoothing                   |
| [R] | <a href="#">makespline</a>       | Spline generation  |
| [R] | <a href="#">npregress intro</a>  | Introduction to nonparametric regression                     |
| [R] | <a href="#">npregress kernel</a> | Nonparametric kernel regression                              |
| [R] | <a href="#">npregress series</a> | Nonparametric series regression                              |
| [R] | <a href="#">nptrend</a>          | Tests for trend across ordered groups                        |
| [R] | <a href="#">prtest</a>           | Tests of proportions   |
| [R] | <a href="#">qreg</a>             | Quantile regression  |
| [R] | <a href="#">ranksum</a>          | Equality tests on unmatched data                             |
| [R] | <a href="#">roc</a>              | Receiver operating characteristic (ROC) analysis             |
| [R] | <a href="#">roccomp</a>          | Tests of equality of ROC areas                               |
| [R] | <a href="#">rocreg</a>           | Receiver operating characteristic (ROC) regression           |
| [R] | <a href="#">rocplot</a>          | Plot marginal and covariate-specific ROC curves after rocreg |
| [R] | <a href="#">roctab</a>           | Nonparametric ROC analysis                                   |
| [R] | <a href="#">runtest</a>          | Test for random order  |
| [R] | <a href="#">signrank</a>         | Equality tests on matched data                               |
| [R] | <a href="#">simulate</a>         | Monte Carlo simulations                                      |
| [R] | <a href="#">smooth</a>           | Robust nonlinear smoother                                    |
| [R] | <a href="#">spearman</a>         | Spearman’s and Kendall’s correlations                        |
| [R] | <a href="#">symmetry</a>         | Symmetry and marginal homogeneity tests                      |
| [R] | <a href="#">tabulate twoway</a>  | Two-way table of frequencies                                 |

## Ordinal outcomes

|         |                                     |  |
|---------|-------------------------------------|--|
| [U]     | <a href="#">Chapter 20</a>          | Estimation and postestimation commands               |
| [BAYES] | <a href="#">Bayesian estimation</a> | Bayesian estimation commands                         |
| [CM]    | <a href="#">cmrologit</a>           | Rank-ordered logit choice model                      |
| [CM]    | <a href="#">cmprobit</a>            | Rank-ordered probit choice model                     |
| [ERM]   | <a href="#">eoprobit</a>            | Extended ordered probit regression                   |
| [FMM]   | <a href="#">fmm estimation</a>      | Fitting finite mixture models                        |
| [R]     | <a href="#">heckoprobit</a>         | Ordered probit model with sample selection           |
| [R]     | <a href="#">hetoprobit</a>          | Heteroskedastic ordered probit regression            |
| [IRT]   | <a href="#">irt grm</a>             | Graded response model                                |
| [IRT]   | <a href="#">irt pcm</a>             | Partial credit model                                 |
| [IRT]   | <a href="#">irt rsm</a>             | Rating scale model                                   |
| [ME]    | <a href="#">meologit</a>            | Multilevel mixed-effects ordered logistic regression |
| [ME]    | <a href="#">meoprobit</a>           | Multilevel mixed-effects ordered probit regression   |
| [R]     | <a href="#">ologit</a>              | Ordered logistic regression                          |
| [R]     | <a href="#">oprobit</a>             | Ordered probit regression                            |
| [XT]    | <a href="#">xteoprobit</a>          | Extended random-effects ordered probit regression    |
| [XT]    | <a href="#">xtologit</a>            | Random-effects ordered logistic models               |
| [XT]    | <a href="#">xtoprobit</a>           | Random-effects ordered probit models                 |
| [R]     | <a href="#">ziologit</a>            | Zero-inflated ordered logit regression               |
| [R]     | <a href="#">zioprobit</a>           | Zero-inflated ordered probit regression              |

## Other statistics

|      |                        |   |
|------|------------------------|---|
| [MV] | <a href="#">alpha</a>  | Compute interitem correlations (covariances) and Cronbach’s alpha |
| [R]  | <a href="#">ameans</a> | Arithmetic, geometric, and harmonic means                         |
| [R]  | <a href="#">brier</a>  | Brier score decomposition   |

|      |         |  |
|------|---------|--|
| [R]  | centile | Report centile and confidence interval           |
| [R]  | kappa   | Interrater agreement                             |
| [MV] | mvtest  | Multivariate tests of correlations               |
| [R]  | pcorr   | Partial and semipartial correlation coefficients |
| [D]  | pctile  | Create variable containing percentiles           |
| [D]  | range   | Generate numerical range                         |

Pharmacokinetic statistics

|     |               |  |
|-----|---------------|--|
| [U] | Section 27.21 | Pharmacokinetic data                         |
| [R] | pk            | Pharmacokinetic (biopharmaceutical) data     |
| [R] | pkcollapse    | Generate pharmacokinetic measurement dataset |
| [R] | pkcross       | Analyze crossover experiments                |
| [R] | pkequiv       | Perform bioequivalence tests                 |
| [R] | pkexamine     | Calculate pharmacokinetic measures           |
| [R] | pkshape       | Reshape (pharmacokinetic) Latin-square data  |
| [R] | pksumm        | Summarize pharmacokinetic data               |

Power, precision, and sample size

|         |                              |   |
|---------|------------------------------|---|
| [U]     | Section 27.33                | Power, precision, and sample-size analysis                                    |
| [PSS-1] | Intro                        | Introduction to power, precision, and sample-size analysis                    |
| [PSS-3] | Intro (ciwidth)              | Introduction to precision and sample-size analysis for confidence intervals   |
| [PSS-2] | Intro (power)                | Introduction to power and sample-size analysis for hypothesis tests           |
| [PSS-3] | ciwidth                      | Precision and sample-size analysis for CIs                                    |
| [PSS-3] | ciwidth onemean              | Precision analysis for a one-mean CI  |
| [PSS-3] | ciwidth onevariance          | Precision analysis for a one-variance CI                                      |
| [PSS-3] | ciwidth pairedmeans          | Precision analysis for a paired-means-difference CI                           |
| [PSS-3] | ciwidth twomeans             | Precision analysis for a two-means-difference CI                              |
| [PSS-3] | ciwidth usermethod           | Add your own methods to the ciwidth command                                   |
| [PSS-3] | ciwidth, graph               | Graph results from the ciwidth command  |
| [PSS-3] | ciwidth, table               | Produce table of results from the ciwidth command                             |
| [PSS-3] | GUI (ciwidth)                | Graphical user interface for precision and sample-size analysis               |
| [PSS-2] | GUI (power)                  | Graphical user interface for power and sample-size analysis                   |
| [PSS-2] | power                        | Power and sample-size analysis for hypothesis tests                           |
| [PSS-2] | power cmh                    | Power and sample size for the Cochran–Mantel–Haenszel test                    |
| [PSS-2] | power cox                    | Power analysis for the Cox proportional hazards model                         |
| [PSS-2] | power exponential            | Power analysis for a two-sample exponential test                              |
| [PSS-2] | power logrank                | Power analysis for the log-rank test  |
| [PSS-2] | power logrank, cluster       | Power analysis for the log-rank test, CRD                                     |
| [PSS-2] | power mcc                    | Power analysis for matched case–control studies                               |
| [PSS-2] | power onecorrelation         | Power analysis for a one-sample correlation test                              |
| [PSS-2] | power onemean                | Power analysis for a one-sample mean test                                     |
| [PSS-2] | power onemean, cluster       | Power analysis for a one-sample mean test, CRD                                |
| [PSS-2] | power oneproportion          | Power analysis for a one-sample proportion test                               |
| [PSS-2] | power oneproportion, cluster | Power analysis for a one-sample proportion test, CRD                          |
| [PSS-2] | power oneslope               | Power analysis for a slope test in a simple linear regression                 |
| [PSS-2] | power onevariance            | Power analysis for a one-sample variance test                                 |
| [PSS-2] | power oneway                 | Power analysis for one-way analysis of variance                               |
| [PSS-2] | power pairedmeans            | Power analysis for a two-sample paired-means test                             |
| [PSS-2] | power pairedproportions      | Power analysis for a two-sample paired-proportions test                       |
| [PSS-2] | power pcorr                  | Power analysis for a partial-correlation test in a multiple linear regression |
| [PSS-2] | power repeated               | Power analysis for repeated-measures analysis of variance                     |

|         |   |  |
|---------|---|--|
| [PSS-2] | <a href="#">power rsquared</a>                | Power analysis for an $R^2$ test in a multiple linear regression |
| [PSS-2] | <a href="#">power trend</a>                   | Power analysis for the Cochran–Armitage trend test               |
| [PSS-2] | <a href="#">power twocorrelations</a>         | Power analysis for a two-sample correlations test                |
| [PSS-2] | <a href="#">power twomeans</a>                | Power analysis for a two-sample means test                       |
| [PSS-2] | <a href="#">power twomeans, cluster</a>       | Power analysis for a two-sample means test, CRD                  |
| [PSS-2] | <a href="#">power twoproportions</a>          | Power analysis for a two-sample proportions test                 |
| [PSS-2] | <a href="#">power twoproportions, cluster</a> | Power analysis for a two-sample proportions test, CRD            |
| [PSS-2] | <a href="#">power twovariances</a>            | Power analysis for a two-sample variances test                   |
| [PSS-2] | <a href="#">power twoway</a>                  | Power analysis for two-way analysis of variance                  |
| [PSS-2] | <a href="#">power usermethod</a>              | Add your own methods to the power command                        |
| [PSS-2] | <a href="#">power, graph</a>                  | Graph results from the power command                             |
| [PSS-2] | <a href="#">power, table</a>                  | Produce table of results from the power command                  |
| [PSS-4] | <a href="#">Unbalanced designs</a>            | Specifications for unbalanced designs                            |

## Quality control

|     |                         |  |
|-----|-------------------------|--|
| [R] | <a href="#">QC</a>      | Quality control charts                     |
| [R] | <a href="#">cusum</a>   | Cusum plots and tests for binary variables |
| [R] | <a href="#">serrbar</a> | Graph standard error bar chart             |

## ROC analysis

|     |  |  |
|-----|--|--|
| [U] | <a href="#">Section 27.4.3</a>         | ROC analysis   |
| [R] | <a href="#">roc</a>                    | Receiver operating characteristic (ROC) analysis             |
| [R] | <a href="#">roccomp</a>                | Tests of equality of ROC areas                               |
| [R] | <a href="#">rocfits</a>                | Parametric ROC models  |
| [R] | <a href="#">rocfits postestimation</a> | Postestimation tools for rocfits                             |
| [R] | <a href="#">roclog</a>                 | Receiver operating characteristic (ROC) regression           |
| [R] | <a href="#">roclog postestimation</a>  | Postestimation tools for roclog                              |
| [R] | <a href="#">roclogplot</a>             | Plot marginal and covariate-specific ROC curves after roclog |
| [R] | <a href="#">roctab</a>                 | Nonparametric ROC analysis                                   |

## Rotation

|      |                            |   |
|------|----------------------------|---|
| [MV] | <a href="#">procrustes</a> | Procrustes transformation                             |
| [MV] | <a href="#">rotate</a>     | Orthogonal and oblique rotations after factor and pca |
| [MV] | <a href="#">rotatemat</a>  | Orthogonal and oblique rotations of a Stata matrix    |

## Sample selection models

|          |                                     |  |
|----------|-------------------------------------|--|
| [U]      | <a href="#">Chapter 20</a>          | Estimation and postestimation commands               |
| [U]      | <a href="#">Section 27.13</a>       | Models with endogenous sample selection              |
| [BAYES]  | <a href="#">Bayesian estimation</a> | Bayesian estimation commands                         |
| [ERM]    | <a href="#">eintreg</a>             | Extended interval regression                         |
| [ERM]    | <a href="#">eoprobit</a>            | Extended ordered probit regression                   |
| [ERM]    | <a href="#">eprobit</a>             | Extended probit regression                           |
| [ERM]    | <a href="#">eregress</a>            | Extended linear regression                           |
| [CAUSAL] | <a href="#">etpoisson</a>           | Poisson regression with endogenous treatment effects |
| [CAUSAL] | <a href="#">etregress</a>           | Linear regression with endogenous treatment effects  |
| [R]      | <a href="#">heckman</a>             | Heckman selection model                              |
| [R]      | <a href="#">heckoprobit</a>         | Ordered probit model with sample selection           |
| [R]      | <a href="#">heckpoisson</a>         | Poisson regression with sample selection             |
| [R]      | <a href="#">heckprobit</a>          | Probit model with sample selection                   |
| [XT]     | <a href="#">xteintreg</a>           | Extended random-effects interval regression          |
| [XT]     | <a href="#">xteoprobit</a>          | Extended random-effects ordered probit regression    |

|      |                           |   |
|------|---------------------------|---|
| [XT] | <a href="#">xtprobit</a>  | Extended random-effects probit regression       |
| [XT] | <a href="#">xtregress</a> | Extended random-effects linear regression       |
| [XT] | <a href="#">xthekman</a>  | Random-effects regression with sample selection |

## Simulation/resampling

|     |                               |                                   |
|-----|-------------------------------|-----------------------------------|
| [R] | <a href="#">bootstrap</a>     | Bootstrap sampling and estimation |
| [R] | <a href="#">bsample</a>       | Sampling with replacement         |
| [R] | <a href="#">jackknife</a>     | Jackknife estimation              |
| [R] | <a href="#">permute</a>       | Permutation tests                 |
| [R] | <a href="#">simulate</a>      | Monte Carlo simulations           |
| [R] | <a href="#">wildbootstrap</a> | Wild cluster bootstrap inference  |

## Spatial autoregressive models

|      |                                      |  |
|------|--------------------------------------|--|
| [U]  | <a href="#">Section 27.19</a>        | Spatial autoregressive models                              |
| [SP] | <a href="#">Intro</a>                | Introduction to spatial data and SAR models                |
| [SP] | <a href="#">Intro 1</a>              | A brief introduction to SAR models                         |
| [SP] | <a href="#">Intro 2</a>              | The W matrix   |
| [SP] | <a href="#">Intro 3</a>              | Preparing data for analysis                                |
| [SP] | <a href="#">Intro 4</a>              | Preparing data: Data with shapefiles                       |
| [SP] | <a href="#">Intro 5</a>              | Preparing data: Data containing locations (no shapefiles)  |
| [SP] | <a href="#">Intro 6</a>              | Preparing data: Data without shapefiles or locations       |
| [SP] | <a href="#">Intro 7</a>              | Example from start to finish                               |
| [SP] | <a href="#">Intro 8</a>              | The Sp estimation commands                                 |
| [SP] | <a href="#">estat moran</a>          | Moran's test of residual correlation with nearby residuals |
| [SP] | <a href="#">grmap</a>                | Graph choropleth maps                                      |
| [SP] | <a href="#">spbalance</a>            | Make panel data strongly balanced                          |
| [SP] | <a href="#">spcompress</a>           | Compress Stata-format shapefile                            |
| [SP] | <a href="#">spdistance</a>           | Calculator for distance between places                     |
| [SP] | <a href="#">spgenerate</a>           | Generate variables containing spatial lags                 |
| [SP] | <a href="#">spivregress</a>          | Spatial autoregressive models with endogenous covariates   |
| [SP] | <a href="#">spmatrix</a>             | Categorical guide to the spmatrix command                  |
| [SP] | <a href="#">spmatrix copy</a>        | Copy spatial weighting matrix stored in memory             |
| [SP] | <a href="#">spmatrix create</a>      | Create standard weighting matrices                         |
| [SP] | <a href="#">spmatrix drop</a>        | List and delete weighting matrices stored in memory        |
| [SP] | <a href="#">spmatrix export</a>      | Export weighting matrix to text file                       |
| [SP] | <a href="#">spmatrix fromdata</a>    | Create custom weighting matrix from data                   |
| [SP] | <a href="#">spmatrix import</a>      | Import weighting matrix from text file                     |
| [SP] | <a href="#">spmatrix matafromsp</a>  | Copy weighting matrix to Mata                              |
| [SP] | <a href="#">spmatrix normalize</a>   | Normalize weighting matrix                                 |
| [SP] | <a href="#">spmatrix note</a>        | Put note on weighting matrix, or display it                |
| [SP] | <a href="#">spmatrix save</a>        | Save spatial weighting matrix to file                      |
| [SP] | <a href="#">spmatrix spfrommata</a>  | Copy Mata matrix to Sp                                     |
| [SP] | <a href="#">spmatrix summarize</a>   | Summarize weighting matrix stored in memory                |
| [SP] | <a href="#">spmatrix use</a>         | Load spatial weighting matrix from file                    |
| [SP] | <a href="#">spmatrix userdefined</a> | Create custom weighting matrix                             |
| [SP] | <a href="#">spregress</a>            | Spatial autoregressive models                              |
| [SP] | <a href="#">spset</a>                | Declare data to be Sp spatial data                         |
| [SP] | <a href="#">spshape2dta</a>          | Translate shapefile to Stata format                        |
| [SP] | <a href="#">spxtregress</a>          | Spatial autoregressive models for panel data               |



**Standard postestimation tests, tables, and other analyses**

|      |                     |   |
|------|---------------------|---|
| [U]  | Section 13.5        | Accessing coefficients and standard errors                            |
| [U]  | Chapter 20          | Estimation and postestimation commands                                |
| [R]  | contrast            | Contrasts and linear hypothesis tests after estimation                |
| [R]  | correlate           | Correlations of variables   |
| [R]  | estat               | Postestimation statistics   |
| [R]  | estat ic            | Display information criteria  |
| [R]  | estat summarize     | Summarize estimation sample   |
| [R]  | estat vce           | Display covariance matrix estimates                                   |
| [R]  | estimates           | Save and manipulate estimation results                                |
| [R]  | estimates describe  | Describe estimation results   |
| [R]  | estimates for       | Repeat postestimation command across models                           |
| [R]  | estimates notes     | Add notes to estimation results                                       |
| [R]  | estimates replay    | Redisplay estimation results  |
| [R]  | estimates save      | Save and use estimation results                                       |
| [R]  | estimates selected  | Show selected coefficients  |
| [R]  | estimates stats     | Model-selection statistics  |
| [R]  | estimates store     | Store and restore estimation results                                  |
| [R]  | estimates table     | Compare estimation results  |
| [R]  | estimates title     | Set title for estimation results                                      |
| [TS] | forecast            | Econometric model forecasting   |
| [TS] | forecast adjust     | Adjust variables to produce alternative forecasts                     |
| [TS] | forecast clear      | Clear current model from memory                                       |
| [TS] | forecast coefvector | Specify an equation via a coefficient vector                          |
| [TS] | forecast create     | Create a new forecast model   |
| [TS] | forecast describe   | Describe features of the forecast model                               |
| [TS] | forecast drop       | Drop forecast variables   |
| [TS] | forecast estimates  | Add estimation results to a forecast model                            |
| [TS] | forecast exogenous  | Declare exogenous variables   |
| [TS] | forecast identity   | Add an identity to a forecast model                                   |
| [TS] | forecast list       | List forecast commands composing current model                        |
| [TS] | forecast query      | Check whether a forecast model has been started                       |
| [TS] | forecast solve      | Obtain static and dynamic forecasts                                   |
| [R]  | hausman             | Hausman specification test  |
| [R]  | lincom              | Linear combinations of parameters                                     |
| [R]  | linktest            | Specification link test for single-equation models                    |
| [R]  | lrtest              | Likelihood-ratio test after estimation                                |
| [R]  | margins, contrast   | Contrasts of margins  |
| [R]  | margins, pwcompare  | Pairwise comparisons of margins                                       |
| [CM] | margins             | Adjusted predictions, predictive margins, and marginal effects        |
| [R]  | marginsplot         | Graph results from margins (profile plots, etc.)                      |
| [R]  | margins             | Marginal means, predictive margins, and marginal effects              |
| [MV] | mvtest              | Multivariate tests  |
| [R]  | nlcom               | Nonlinear combinations of parameters                                  |
| [R]  | postest             | Postestimation Selector   |
| [R]  | predict             | Obtain predictions, residuals, etc., after estimation                 |
| [R]  | predictnl           | Obtain nonlinear predictions, standard errors, etc., after estimation |
| [R]  | pwcompare           | Pairwise comparisons  |
| [R]  | suest               | Seemingly unrelated estimation  |
| [R]  | test                | Test linear hypotheses after estimation                               |
| [R]  | testnl              | Test nonlinear hypotheses after estimation                            |



**Structural equation modeling**

|       |                      |   |
|-------|----------------------|---|
| [U]   | Section 27.25        | Structural equation modeling (SEM)                                  |
| [SEM] | Builder              | SEM Builder   |
| [SEM] | Builder, generalized | SEM Builder for generalized models                                  |
| [SEM] | Intro 1              | Introduction  |
| [SEM] | Intro 2              | Learning the language: Path diagrams and command language           |
| [SEM] | Intro 3              | Learning the language: Factor-variable notation (gsem only)         |
| [SEM] | Intro 4              | Substantive concepts  |
| [SEM] | Intro 5              | Tour of models  |
| [SEM] | Intro 6              | Comparing groups  |
| [SEM] | Intro 7              | Postestimation tests and predictions                                |
| [SEM] | Intro 8              | Robust and clustered standard errors                                |
| [SEM] | Intro 9              | Standard errors, the full story                                     |
| [SEM] | Intro 10             | Fitting models with survey data                                     |
| [SEM] | Intro 11             | Fitting models with summary statistics data (sem only)              |
| [SEM] | Intro 12             | Convergence problems and how to solve them                          |
| [SEM] | estat eform          | Display exponentiated coefficients                                  |
| [SEM] | estat eqgof          | Equation-level goodness-of-fit statistics                           |
| [SEM] | estat eqtest         | Equation-level tests that all coefficients are zero                 |
| [SEM] | estat framework      | Display estimation results in modeling framework                    |
| [SEM] | estat ggof           | Group-level goodness-of-fit statistics                              |
| [SEM] | estat ginvariant     | Tests for invariance of parameters across groups                    |
| [SEM] | estat gof            | Goodness-of-fit statistics  |
| [SEM] | estat lcgof          | Latent class goodness-of-fit statistics                             |
| [SEM] | estat lcmean         | Latent class marginal means   |
| [SEM] | estat lcpob          | Latent class marginal probabilities                                 |
| [SEM] | estat mindices       | Modification indices  |
| [SEM] | estat residuals      | Display mean and covariance residuals                               |
| [SEM] | estat scoretests     | Score tests   |
| [SEM] | estat sd             | Display variance components as standard deviations and correlations |
| [SEM] | estat stable         | Check stability of nonrecursive system                              |
| [SEM] | estat stdize         | Test standardized parameters  |
| [SEM] | estat summarize      | Report summary statistics for estimation sample                     |
| [SEM] | estat teffects       | Decomposition of effects into total, direct, and indirect           |
| [SEM] | Example 1            | Single-factor measurement model                                     |
| [SEM] | Example 2            | Creating a dataset from published covariances                       |
| [SEM] | Example 3            | Two-factor measurement model  |
| [SEM] | Example 4            | Goodness-of-fit statistics  |
| [SEM] | Example 5            | Modification indices  |
| [SEM] | Example 6            | Linear regression   |
| [SEM] | Example 7            | Nonrecursive structural model                                       |
| [SEM] | Example 8            | Testing that coefficients are equal, and constraining them          |
| [SEM] | Example 9            | Structural model with measurement component                         |
| [SEM] | Example 10           | MIMIC model   |
| [SEM] | Example 11           | estat framework   |
| [SEM] | Example 12           | Seemingly unrelated regression                                      |
| [SEM] | Example 13           | Equation-level Wald test  |
| [SEM] | Example 14           | Predicted values  |
| [SEM] | Example 15           | Higher-order CFA  |
| [SEM] | Example 16           | Correlation   |
| [SEM] | Example 17           | Correlated uniqueness model   |

|       |                                |  |
|-------|--------------------------------|--|
| [SEM] | Example 18                     | Latent growth model  |
| [SEM] | Example 19                     | Creating multiple-group summary statistics data                |
| [SEM] | Example 20                     | Two-factor measurement model by group                          |
| [SEM] | Example 21                     | Group-level goodness of fit                                    |
| [SEM] | Example 22                     | Testing parameter equality across groups                       |
| [SEM] | Example 23                     | Specifying parameter constraints across groups                 |
| [SEM] | Example 24                     | Reliability  |
| [SEM] | Example 25                     | Creating summary statistics data from raw data                 |
| [SEM] | Example 26                     | Fitting a model with data missing at random                    |
| [SEM] | Example 27g                    | Single-factor measurement model (generalized response)         |
| [SEM] | Example 28g                    | One-parameter logistic IRT (Rasch) model                       |
| [SEM] | Example 29g                    | Two-parameter logistic IRT model                               |
| [SEM] | Example 30g                    | Two-level measurement model (multilevel, generalized response) |
| [SEM] | Example 31g                    | Two-factor measurement model (generalized response)            |
| [SEM] | Example 32g                    | Full structural equation model (generalized response)          |
| [SEM] | Example 33g                    | Logistic regression  |
| [SEM] | Example 34g                    | Combined models (generalized responses)                        |
| [SEM] | Example 35g                    | Ordered probit and ordered logit                               |
| [SEM] | Example 36g                    | MIMIC model (generalized response)                             |
| [SEM] | Example 37g                    | Multinomial logistic regression                                |
| [SEM] | Example 38g                    | Random-intercept and random-slope models (multilevel)          |
| [SEM] | Example 39g                    | Three-level model (multilevel, generalized response)           |
| [SEM] | Example 40g                    | Crossed models (multilevel)                                    |
| [SEM] | Example 41g                    | Two-level multinomial logistic regression (multilevel)         |
| [SEM] | Example 42g                    | One- and two-level mediation models (multilevel)               |
| [SEM] | Example 43g                    | Tobit regression   |
| [SEM] | Example 44g                    | Interval regression  |
| [SEM] | Example 45g                    | Heckman selection model  |
| [SEM] | Example 46g                    | Endogenous treatment-effects model                             |
| [SEM] | Example 47g                    | Exponential survival model                                     |
| [SEM] | Example 48g                    | Loglogistic survival model with censored and truncated data    |
| [SEM] | Example 49g                    | Multiple-group Weibull survival model                          |
| [SEM] | Example 50g                    | Latent class model   |
| [SEM] | Example 51g                    | Latent class goodness-of-fit statistics                        |
| [SEM] | Example 52g                    | Latent profile model   |
| [SEM] | Example 53g                    | Finite mixture Poisson regression                              |
| [SEM] | Example 54g                    | Finite mixture Poisson regression, multiple responses          |
| [SEM] | gsem                           | Generalized structural equation model estimation command       |
| [SEM] | gsem estimation options        | Options affecting estimation                                   |
| [SEM] | gsem family-and-link options   | Family-and-link options  |
| [SEM] | gsem group options             | Fitting models on different groups                             |
| [SEM] | gsem lclass options            | Fitting models with latent classes                             |
| [SEM] | gsem model description options | Model description options                                      |
| [SEM] | gsem path notation extensions  | Command syntax for path diagrams                               |
| [SEM] | gsem postestimation            | Postestimation tools for gsem                                  |
| [SEM] | gsem reporting options         | Options affecting reporting of results                         |
| [SEM] | lincom                         | Linear combinations of parameters                              |
| [SEM] | lrtest                         | Likelihood-ratio test of linear hypothesis                     |
| [SEM] | Methods and formulas for gsem  | Methods and formulas for gsem                                  |
| [SEM] | Methods and formulas for sem   | Methods and formulas for sem                                   |
| [SEM] | nlcom                          | Nonlinear combinations of parameters                           |

|       |   |  |
|-------|---|--|
| [SEM] | <code>predict after gsem</code> .....                 | Generalized linear predictions, etc.                   |
| [SEM] | <code>predict after sem</code> .....                  | Factor scores, linear predictions, etc.                |
| [SEM] | <code>sem</code> .....                                | Structural equation model estimation command           |
| [SEM] | <code>sem and gsem option constraints()</code> .....  | Specifying constraints                                 |
| [SEM] | <code>sem and gsem option covstructure()</code> ..... | Specifying covariance restrictions                     |
| [SEM] | <code>sem and gsem option from()</code> .....         | Specifying starting values                             |
| [SEM] | <code>sem and gsem option reliability()</code> .....  | Fraction of variance not due to measurement error      |
| [SEM] | <code>sem and gsem path notation</code> .....         | Command syntax for path diagrams                       |
| [SEM] | <code>sem and gsem syntax options</code> .....        | Options affecting interpretation of syntax             |
| [SEM] | <code>sem estimation options</code> .....             | Options affecting estimation                           |
| [SEM] | <code>sem group options</code> .....                  | Fitting models on different groups                     |
| [SEM] | <code>sem model description options</code> .....      | Model description options                              |
| [SEM] | <code>sem option method()</code> .....                | Specifying method and calculation of VCE               |
| [SEM] | <code>sem option noxconditional</code> ..             | Computing means, etc., of observed exogenous variables |
| [SEM] | <code>sem option select()</code> .....                | Using sem with summary statistics data                 |
| [SEM] | <code>sem path notation extensions</code> .....       | Command syntax for path diagrams                       |
| [SEM] | <code>sem postestimation</code> .....                 | Postestimation tools for sem                           |
| [SEM] | <code>sem reporting options</code> .....              | Options affecting reporting of results                 |
| [SEM] | <code>sem ssd options</code> .....                    | Options for use with summary statistics data           |
| [SEM] | <code>ssd</code> .....                                | Making summary statistics data (sem only)              |
| [SEM] | <code>test</code> .....                               | Wald test of linear hypotheses                         |
| [SEM] | <code>testnl</code> .....                             | Wald test of nonlinear hypotheses                      |

## Survey data

|          |   |  |
|----------|---|--|
| [U]      | Chapter 20 .....                        | Estimation and postestimation commands                                 |
| [U]      | Section 27.31 .....                     | Survey data  |
| [SVY]    | Survey .....                            | Introduction to survey commands  |
| [SVY]    | <code>bootstrap_options</code> .....    | More options for bootstrap variance estimation                         |
| [SVY]    | <code>brr_options</code> .....          | More options for BRR variance estimation                               |
| [SVY]    | Calibration .....                       | Calibration for survey data  |
| [SVY]    | Direct standardization .....            | Direct standardization of means, proportions, and ratios               |
| [SVY]    | <code>estat</code> .....                | Postestimation statistics for survey data                              |
| [TABLES] | Example 7 .....                         | Table of regression results using survey data                          |
| [SVY]    | <code>jackknife_options</code> .....    | More options for jackknife variance estimation                         |
| [SVY]    | <code>ml for svy</code> .....           | Maximum pseudolikelihood estimation for survey data                    |
| [SVY]    | Poststratification .....                | Poststratification for survey data                                     |
| [P]      | <code>_robust</code> .....              | Robust variance estimates  |
| [SVY]    | <code>sdr_options</code> .....          | More options for SDR variance estimation                               |
| [SVY]    | Subpopulation estimation .....          | Subpopulation estimation for survey data                               |
| [SVY]    | <code>svy</code> .....                  | The survey prefix command  |
| [SVY]    | <code>svy bootstrap</code> .....        | Bootstrap for survey data  |
| [SVY]    | <code>svy brr</code> .....              | Balanced repeated replication for survey data                          |
| [SVY]    | <code>svy estimation</code> .....       | Estimation commands for survey data                                    |
| [SVY]    | <code>svy jackknife</code> .....        | Jackknife estimation for survey data                                   |
| [SVY]    | <code>svy postestimation</code> .....   | Postestimation tools for svy   |
| [SVY]    | <code>svy sdr</code> .....              | Successive difference replication for survey data                      |
| [SVY]    | <code>svy: tabulate oneway</code> ..... | One-way tables for survey data   |
| [SVY]    | <code>svy: tabulate twoway</code> ..... | Two-way tables for survey data   |
| [SVY]    | <code>svydescribe</code> .....          | Describe survey data   |
| [SVY]    | <code>svymarkout</code> ..              | Mark observations for exclusion on the basis of survey characteristics |
| [SVY]    | <code>svyset</code> .....               | Declare survey design for dataset                                      |

|       |  |  |
|-------|--|--|
| [MI]  | <code>mi XXXset</code> .....           | Declare <code>mi</code> data to be <code>svy</code> , <code>st</code> , <code>ts</code> , <code>xt</code> , etc. |
| [SVY] | <code>Variance estimation</code> ..... | Variance estimation for survey data  |

## Survival analysis

|         |   |  |
|---------|---|--|
| [U]     | <code>Chapter 20</code> .....                   | Estimation and postestimation commands   |
| [U]     | <code>Section 27.15.5</code> .....              | Survival models with panel data  |
| [U]     | <code>Section 27.17</code> .....                | Survival analysis models   |
| [U]     | <code>Section 27.20</code> .....                | Causal inference   |
| [U]     | <code>Section 27.33</code> .....                | Power, precision, and sample-size analysis   |
| [ST]    | <code>Survival analysis</code> .....            | Introduction to survival analysis commands   |
| [ST]    | <code>adjustfor_option</code> .....             | Adjust survivor and related functions for covariates at specific values  |
| [BAYES] | <code>bayes: streg</code> .....                 | Bayesian parametric survival models  |
| [ST]    | <code>ct</code> .....                           | Count-time data  |
| [ST]    | <code>ctset</code> .....                        | Declare data to be count-time data   |
| [ST]    | <code>cttost</code> .....                       | Convert count-time data to survival-time data  |
| [ST]    | <code>Discrete</code> .....                     | Discrete-time survival analysis  |
| [LASSO] | <code>elasticnet</code> .....                   | Elastic net for prediction and model selection   |
| [ST]    | <code>estat gofplot</code> .....                | Goodness-of-fit plots after <code>streg</code> , <code>stcox</code> , <code>stintreg</code> , or <code>stintcox</code> |
| [FMM]   | <code>fmm: streg</code> .....                   | Finite mixtures of parametric survival models  |
| [LASSO] | <code>lasso</code> .....                        | Lasso for prediction and model selection   |
| [ST]    | <code>ltable</code> .....                       | Life tables for survival data  |
| [ME]    | <code>mestreg</code> .....                      | Multilevel mixed-effects parametric survival models  |
| [R]     | <code>reri</code> .....                         | Relative excess risk due to interaction  |
| [ST]    | <code>snapsan</code> .....                      | Convert snapshot data to time-span data  |
| [ST]    | <code>st</code> .....                           | Survival-time data   |
| [ST]    | <code>st_is</code> .....                        | Survival analysis subroutines for programmers  |
| [ST]    | <code>stbase</code> .....                       | Form baseline dataset  |
| [ST]    | <code>stci</code> .....                         | Confidence intervals for means and percentiles of survival time  |
| [ST]    | <code>stcox</code> .....                        | Cox proportional hazards model   |
| [ST]    | <code>stcox PH-assumption tests</code> .....    | Tests of proportional-hazards assumption after <code>stcox</code>  |
| [ST]    | <code>stcrreg</code> .....                      | Competing-risks regression   |
| [ST]    | <code>stcurve</code> .....                      | Plot the survivor or related function after <code>streg</code> , <code>stcox</code> , and more                         |
| [ST]    | <code>stdescribe</code> .....                   | Describe survival-time data  |
| [R]     | <code>stepwise</code> .....                     | Stepwise estimation  |
| [ST]    | <code>stfill</code> .....                       | Fill in by carrying forward values of covariates   |
| [ST]    | <code>stgen</code> .....                        | Generate variables reflecting entire histories   |
| [ST]    | <code>stintcox</code> .....                     | Cox proportional hazards model for interval-censored survival-time data  |
| [ST]    | <code>stintcox PH-assumption plots</code> ..... | Plots of proportional-hazards assumption after <code>stintcox</code>   |
| [ST]    | <code>stintreg</code> .....                     | Parametric models for interval-censored survival-time data   |
| [ST]    | <code>stir</code> .....                         | Report incidence-rate comparison   |
| [ST]    | <code>stmc</code> .....                         | Calculate rate ratios with the Mantel–Cox method   |
| [ST]    | <code>stmh</code> .....                         | Calculate rate ratios with the Mantel–Haenszel method  |
| [ST]    | <code>stptime</code> .....                      | Calculate person-time, incidence rates, and SMR  |
| [ST]    | <code>strate</code> .....                       | Tabulate failure rates and rate ratios   |
| [ST]    | <code>streg</code> .....                        | Parametric survival models   |
| [ST]    | <code>sts</code> .....                          | Generate, graph, list, and test the survivor and related functions   |
| [ST]    | <code>sts generate</code> .....                 | Create variables containing survivor and related functions   |
| [ST]    | <code>sts graph</code> .....                    | Graph the survivor or related function   |
| [ST]    | <code>sts list</code> .....                     | List the survivor or related function  |
| [ST]    | <code>sts test</code> .....                     | Test equality of survivor functions  |
| [ST]    | <code>stset</code> .....                        | Declare data to be survival-time data  |

|          |                                  |  |
|----------|----------------------------------|--|
| [MI]     | <a href="#">mi XXXset</a>        | Declare mi data to be svy, st, ts, xt, etc.                      |
| [ST]     | <a href="#">stsplit</a>          | Split and join time-span records                                 |
| [MI]     | <a href="#">mi stsplit</a>       | Split and join time-span records for mi data                     |
| [ST]     | <a href="#">stsum</a>            | Summarize survival-time data                                     |
| [CAUSAL] | <a href="#">stteffects ipw</a>   | Survival-time inverse-probability weighting                      |
| [CAUSAL] | <a href="#">stteffects ipwra</a> | Survival-time inverse-probability-weighted regression adjustment |
| [CAUSAL] | <a href="#">stteffects ra</a>    | Survival-time regression adjustment                              |
| [CAUSAL] | <a href="#">stteffects wra</a>   | Survival-time weighted regression adjustment                     |
| [ST]     | <a href="#">sttocc</a>           | Convert survival-time data to case-control data                  |
| [ST]     | <a href="#">sttoct</a>           | Convert survival-time data to count-time data                    |
| [ST]     | <a href="#">stvary</a>           | Report variables that vary over time                             |
| [XT]     | <a href="#">xtstreg</a>          | Random-effects parametric survival models                        |

Also see [Power, precision, and sample size](#).

### Time series, multivariate

|      |                                     |  |
|------|-------------------------------------|--|
| [U]  | <a href="#">Section 11.4.4</a>      | Time-series varlists   |
| [U]  | <a href="#">Section 13.10</a>       | Time-series operators  |
| [U]  | <a href="#">Chapter 20</a>          | Estimation and postestimation commands                           |
| [U]  | <a href="#">Section 27.14</a>       | Time-series models   |
| [TS] | <a href="#">Time series</a>         | Introduction to time-series commands                             |
| [TS] | <a href="#">dfactor</a>             | Dynamic-factor models  |
| [TS] | <a href="#">fcast compute</a>       | Compute dynamic forecasts after var, svar, or vec                |
| [TS] | <a href="#">fcast graph</a>         | Graph forecasts after fcast compute                              |
| [TS] | <a href="#">forecast</a>            | Econometric model forecasting                                    |
| [TS] | <a href="#">forecast adjust</a>     | Adjust variables to produce alternative forecasts                |
| [TS] | <a href="#">forecast clear</a>      | Clear current model from memory                                  |
| [TS] | <a href="#">forecast coefvector</a> | Specify an equation via a coefficient vector                     |
| [TS] | <a href="#">forecast create</a>     | Create a new forecast model                                      |
| [TS] | <a href="#">forecast describe</a>   | Describe features of the forecast model                          |
| [TS] | <a href="#">forecast drop</a>       | Drop forecast variables  |
| [TS] | <a href="#">forecast estimates</a>  | Add estimation results to a forecast model                       |
| [TS] | <a href="#">forecast exogenous</a>  | Declare exogenous variables                                      |
| [TS] | <a href="#">forecast identity</a>   | Add an identity to a forecast model                              |
| [TS] | <a href="#">forecast list</a>       | List forecast commands composing current model                   |
| [TS] | <a href="#">forecast query</a>      | Check whether a forecast model has been started                  |
| [TS] | <a href="#">forecast solve</a>      | Obtain static and dynamic forecasts                              |
| [TS] | <a href="#">irf</a>                 | Create and analyze IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">irf add</a>             | Add results from an IRF file to the active IRF file              |
| [TS] | <a href="#">irf cgraph</a>          | Combined graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">irf create</a>          | Obtain IRFs, dynamic-multiplier functions, and FEVDs             |
| [TS] | <a href="#">irf ctable</a>          | Combined tables of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">irf describe</a>        | Describe an IRF file   |
| [TS] | <a href="#">irf drop</a>            | Drop IRF results from the active IRF file                        |
| [TS] | <a href="#">irf graph</a>           | Graphs of IRFs, dynamic-multiplier functions, and FEVDs          |
| [TS] | <a href="#">irf ograph</a>          | Overlaid graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS] | <a href="#">irf rename</a>          | Rename an IRF result in an IRF file                              |
| [TS] | <a href="#">irf set</a>             | Set the active IRF file  |
| [TS] | <a href="#">irf table</a>           | Tables of IRFs, dynamic-multiplier functions, and FEVDs          |
| [TS] | <a href="#">lpirf</a>               | Local-projection impulse-response functions                      |
| [TS] | <a href="#">mgarch</a>              | Multivariate GARCH models  |
| [TS] | <a href="#">mgarch ccc</a>          | Constant conditional correlation multivariate GARCH models       |

|      |                              |  |
|------|------------------------------|--|
| [TS] | <a href="#">mgarch dcc</a>   | Dynamic conditional correlation multivariate GARCH models    |
| [TS] | <a href="#">mgarch dvech</a> | Diagonal vech multivariate GARCH models                      |
| [TS] | <a href="#">mgarch vcc</a>   | Varying conditional correlation multivariate GARCH models    |
| [TS] | <a href="#">rolling</a>      | Rolling-window and recursive estimation                      |
| [TS] | <a href="#">sspace</a>       | State-space models   |
| [TS] | <a href="#">tsappend</a>     | Add observations to a time-series dataset                    |
| [TS] | <a href="#">tsfill</a>       | Fill in gaps in time variable                                |
| [TS] | <a href="#">tsline</a>       | Time-series line plots                                       |
| [TS] | <a href="#">tsreport</a>     | Report time-series aspects of a dataset or estimation sample |
| [TS] | <a href="#">tsrevar</a>      | Time-series operator programming command                     |
| [TS] | <a href="#">tsset</a>        | Declare data to be time-series data                          |
| [TS] | <a href="#">var intro</a>    | Introduction to vector autoregressive models                 |
| [TS] | <a href="#">var svar</a>     | Structural vector autoregressive models                      |
| [TS] | <a href="#">var</a>          | Vector autoregressive models                                 |
| [TS] | <a href="#">varbasic</a>     | Fit a simple VAR and graph IRFs or FEVDs                     |
| [TS] | <a href="#">vargranger</a>   | Pairwise Granger causality tests after var or svar           |
| [TS] | <a href="#">varlmar</a>      | LM test for residual autocorrelation after var or svar       |
| [TS] | <a href="#">varnorm</a>      | Test for normally distributed disturbances after var or svar |
| [TS] | <a href="#">varsoc</a>       | Obtain lag-order selection statistics for VARs and VECMs     |
| [TS] | <a href="#">varstable</a>    | Check the stability condition of VAR or SVAR estimates       |
| [TS] | <a href="#">varwle</a>       | Obtain Wald lag-exclusion statistics after var or svar       |
| [TS] | <a href="#">vec intro</a>    | Introduction to vector error-correction models               |
| [TS] | <a href="#">vec</a>          | Vector error-correction models                               |
| [TS] | <a href="#">veclmar</a>      | LM test for residual autocorrelation after vec               |
| [TS] | <a href="#">vecnorm</a>      | Test for normally distributed disturbances after vec         |
| [TS] | <a href="#">vecrank</a>      | Estimate the cointegrating rank of a VECM                    |
| [TS] | <a href="#">vecstable</a>    | Check the stability condition of VECM estimates              |
| [TS] | <a href="#">xcorr</a>        | Cross-correlogram for bivariate time series                  |

## Time series, univariate

|      |                                 |   |
|------|---------------------------------|---|
| [U]  | <a href="#">Section 11.4.4</a>  | Time-series varlists  |
| [U]  | <a href="#">Section 13.10</a>   | Time-series operators   |
| [U]  | <a href="#">Chapter 20</a>      | Estimation and postestimation commands                                    |
| [U]  | <a href="#">Section 27.14</a>   | Time-series models  |
| [TS] | <a href="#">Time series</a>     | Introduction to time-series commands                                      |
| [TS] | <a href="#">arch</a>            | Autoregressive conditional heteroskedasticity (ARCH) family of estimators |
| [TS] | <a href="#">arfima</a>          | Autoregressive fractionally integrated moving-average models              |
| [TS] | <a href="#">arfimasoc</a>       | Obtain lag-order selection statistics for ARFIMAs                         |
| [TS] | <a href="#">arima</a>           | ARIMA, ARMAX, and other dynamic regression models                         |
| [TS] | <a href="#">arimasoc</a>        | Obtain lag-order selection statistics for ARIMAs                          |
| [TS] | <a href="#">corrgram</a>        | Tabulate and graph autocorrelations                                       |
| [TS] | <a href="#">cumsp</a>           | Graph cumulative spectral distribution                                    |
| [TS] | <a href="#">dfgls</a>           | DF-GLS unit-root test   |
| [TS] | <a href="#">dfuller</a>         | Augmented Dickey–Fuller unit-root test                                    |
| [TS] | <a href="#">estat acplot</a>    | Plot parametric autocorrelation and autocovariance functions              |
| [TS] | <a href="#">estat aroots</a>    | Check the stability condition of ARIMA estimates                          |
| [TS] | <a href="#">estat sbcusum</a>   | Cumulative sum test for parameter stability                               |
| [TS] | <a href="#">estat sbknown</a>   | Test for a structural break with a known break date                       |
| [TS] | <a href="#">estat sbsingle</a>  | Test for a structural break with an unknown break date                    |
| [TS] | <a href="#">forecast</a>        | Econometric model forecasting   |
| [TS] | <a href="#">forecast adjust</a> | Adjust variables to produce alternative forecasts                         |



|      |                                    |   |
|------|------------------------------------|---|
| [TS] | forecast clear                     | Clear current model from memory                                     |
| [TS] | forecast coefvector                | Specify an equation via a coefficient vector                        |
| [TS] | forecast create                    | Create a new forecast model   |
| [TS] | forecast describe                  | Describe features of the forecast model                             |
| [TS] | forecast drop                      | Drop forecast variables   |
| [TS] | forecast estimates                 | Add estimation results to a forecast model                          |
| [TS] | forecast exogenous                 | Declare exogenous variables   |
| [TS] | forecast identity                  | Add an identity to a forecast model                                 |
| [TS] | forecast list                      | List forecast commands composing current model                      |
| [TS] | forecast query                     | Check whether a forecast model has been started                     |
| [TS] | forecast solve                     | Obtain static and dynamic forecasts                                 |
| [TS] | mswitch                            | Markov-switching regression models                                  |
| [TS] | newey                              | Regression with Newey–West standard errors                          |
| [TS] | pergram                            | Periodogram   |
| [TS] | pperron                            | Phillips–Perron unit-root test                                      |
| [TS] | prais                              | Prais–Winsten and Cochrane–Orcutt regression                        |
| [TS] | psdensity                          | Parametric spectral density estimation after arima, arfima, and ucm |
| [R]  | regress postestimation time series | Postestimation tools for regress with time series                   |
| [TS] | rolling                            | Rolling-window and recursive estimation                             |
| [TS] | sspace                             | State-space models  |
| [TS] | threshold                          | Threshold regression  |
| [TS] | tsappend                           | Add observations to a time-series dataset                           |
| [TS] | tsfill                             | Fill in gaps in time variable                                       |
| [TS] | tsfilter                           | Filter a time series for cyclical components                        |
| [TS] | tsfilter bk                        | Baxter–King time-series filter                                      |
| [TS] | tsfilter bw                        | Butterworth time-series filter                                      |
| [TS] | tsfilter cf                        | Christiano–Fitzgerald time-series filter                            |
| [TS] | tsfilter hp                        | Hodrick–Prescott time-series filter                                 |
| [TS] | tsline                             | Time-series line plots  |
| [TS] | tsreport                           | Report time-series aspects of a dataset or estimation sample        |
| [TS] | tsrevar                            | Time-series operator programming command                            |
| [TS] | tsset                              | Declare data to be time-series data                                 |
| [TS] | tssmooth                           | Smooth and forecast univariate time-series data                     |
| [TS] | tssmooth dexponential              | Double-exponential smoothing  |
| [TS] | tssmooth exponential               | Single-exponential smoothing  |
| [TS] | tssmooth hwinters                  | Holt–Winters nonseasonal smoothing                                  |
| [TS] | tssmooth ma                        | Moving-average filter   |
| [TS] | tssmooth nl                        | Nonlinear filter  |
| [TS] | tssmooth shwinters                 | Holt–Winters seasonal smoothing                                     |
| [TS] | ucm                                | Unobserved-components model   |
| [TS] | wntestb                            | Bartlett’s periodogram-based test for white noise                   |
| [TS] | wntestq                            | Portmanteau (Q) test for white noise                                |
| [TS] | xcorr                              | Cross-correlogram for bivariate time series                         |

## Transforms and normality tests

|      |                  |   |
|------|------------------|---|
| [R]  | boxcox           | Box–Cox regression models                   |
| [R]  | fp               | Fractional polynomial regression            |
| [R]  | ladder           | Ladder of powers                            |
| [R]  | lnskew0          | Find zero-skewness log or Box–Cox transform |
| [R]  | mfp              | Multivariable fractional polynomial models  |
| [MV] | mvtest normality | Multivariate normality tests                |

|     |                        |  |
|-----|------------------------|--|
| [R] | <a href="#">sktest</a> | Skewness and kurtosis tests for normality            |
| [R] | <a href="#">swilk</a>  | Shapiro–Wilk and Shapiro–Francia tests for normality |

## Matrix commands

### Basics

|     |                                |   |
|-----|--------------------------------|---|
| [U] | <a href="#">Chapter 14</a>     | Matrix expressions                          |
| [P] | <a href="#">matlist</a>        | Display a matrix and control its format     |
| [P] | <a href="#">matrix</a>         | Introduction to matrix commands             |
| [P] | <a href="#">matrix define</a>  | Matrix definition, operators, and functions |
| [P] | <a href="#">matrix utility</a> | List, rename, and drop matrices             |

### Programming

|     |                                       |  |
|-----|---------------------------------------|--|
| [P] | <a href="#">ereturn</a>               | Post the estimation results              |
| [P] | <a href="#">matrix accum</a>          | Form cross-product matrices              |
| [P] | <a href="#">matrix rowjoinbyname</a>  | Join rows while matching on column names |
| [P] | <a href="#">matrix rownames</a>       | Name rows and columns                    |
| [P] | <a href="#">matrix score</a>          | Score data from coefficient vectors      |
| [R] | <a href="#">ml</a>                    | Maximum likelihood estimation            |
| [M] | <a href="#">Mata Reference Manual</a> |  |

### Other

|     |                                      |  |
|-----|--------------------------------------|--|
| [P] | <a href="#">makecns</a>              | Constrained estimation                             |
| [P] | <a href="#">matrix dissimilarity</a> | Compute similarity or dissimilarity measures       |
| [P] | <a href="#">matrix eigenvalues</a>   | Eigenvalues of nonsymmetric matrices               |
| [P] | <a href="#">matrix get</a>           | Access system matrices                             |
| [P] | <a href="#">matrix mkmat</a>         | Convert variables to matrix and vice versa         |
| [P] | <a href="#">matrix svd</a>           | Singular value decomposition                       |
| [P] | <a href="#">matrix symeigen</a>      | Eigenvalues and eigenvectors of symmetric matrices |

### Mata

|     |                                       |  |
|-----|---------------------------------------|--|
| [D] | <a href="#">putmata</a>               | Put Stata variables into Mata and vice versa |
| [M] | <a href="#">Mata Reference Manual</a> |  |

## Programming

### Basics

|     |                               |                                   |
|-----|-------------------------------|-----------------------------------|
| [U] | <a href="#">Chapter 18</a>    | Programming Stata                 |
| [U] | <a href="#">Section 18.3</a>  | Macros                            |
| [U] | <a href="#">Section 18.11</a> | Ado-files                         |
| [P] | <a href="#">comments</a>      | Add comments to programs          |
| [P] | <a href="#">fvexpand</a>      | Expand factor varlists            |
| [P] | <a href="#">macro</a>         | Macro definition and manipulation |
| [P] | <a href="#">program</a>       | Define and manipulate programs    |
| [P] | <a href="#">return</a>        | Return stored results             |

### Program control

|     |                                 |                     |
|-----|---------------------------------|---------------------|
| [U] | <a href="#">Section 18.11.1</a> | Version             |
| [P] | <a href="#">capture</a>         | Capture return code |



|     |                           |  |
|-----|---------------------------|--|
| [P] | <a href="#">continue</a>  | Break out of loops                     |
| [P] | <a href="#">error</a>     | Display generic error message and exit |
| [P] | <a href="#">foreach</a>   | Loop over items                        |
| [P] | <a href="#">forvalues</a> | Loop over consecutive values           |
| [P] | <a href="#">if</a>        | if programming command                 |
| [P] | <a href="#">version</a>   | Version control                        |
| [P] | <a href="#">while</a>     | Looping                                |

## Parsing and program arguments

|     |                              |                               |
|-----|------------------------------|-------------------------------|
| [U] | <a href="#">Section 18.4</a> | Program arguments             |
| [P] | <a href="#">confirm</a>      | Argument verification         |
| [P] | <a href="#">gettoken</a>     | Low-level parsing             |
| [P] | <a href="#">levelsof</a>     | Distinct levels of a variable |
| [P] | <a href="#">numlist</a>      | Parse numeric lists           |
| [P] | <a href="#">syntax</a>       | Parse Stata syntax            |
| [P] | <a href="#">tokenize</a>     | Divide strings into tokens    |

## Console output

|     |                                    |  |
|-----|------------------------------------|--|
| [U] | <a href="#">Section 12.4.2</a>     | Handling Unicode strings                         |
| [P] | <a href="#">Dialog programming</a> | Dialog programming                               |
| [P] | <a href="#">display</a>            | Display strings and values of scalar expressions |
| [P] | <a href="#">smcl</a>               | Stata Markup and Control Language                |
| [P] | <a href="#">tabdisp</a>            | Display tables                                   |
| [D] | <a href="#">unicode</a>            | Unicode utilities                                |

## Commonly used programming commands

|      |                                   |   |
|------|-----------------------------------|---|
| [P]  | <a href="#">byable</a>            | Make programs byable  |
| [P]  | <a href="#">#delimit</a>          | Change delimiter  |
| [P]  | <a href="#">exit</a>              | Exit from a program or do-file                              |
| [R]  | <a href="#">fvrevar</a>           | Factor-variables operator programming command               |
| [P]  | <a href="#">mark</a>              | Mark observations for inclusion                             |
| [P]  | <a href="#">matrix</a>            | Introduction to matrix commands                             |
| [P]  | <a href="#">more</a>              | Pause until key is pressed                                  |
| [P]  | <a href="#">nopreserve option</a> | nopreserve option   |
| [P]  | <a href="#">preserve</a>          | Preserve and restore data                                   |
| [P]  | <a href="#">quietly</a>           | Quietly and noisily perform Stata command                   |
| [P]  | <a href="#">scalar</a>            | Scalar variables  |
| [P]  | <a href="#">smcl</a>              | Stata Markup and Control Language                           |
| [P]  | <a href="#">sortpreserve</a>      | Sort within programs  |
| [P]  | <a href="#">timer</a>             | Time sections of code by recording and reporting time spent |
| [TS] | <a href="#">tsrevar</a>           | Time-series operator programming command                    |

## Debugging

|     |                       |   |
|-----|-----------------------|---|
| [P] | <a href="#">pause</a> | Program debugging command                                   |
| [P] | <a href="#">timer</a> | Time sections of code by recording and reporting time spent |
| [P] | <a href="#">trace</a> | Debug Stata programs  |

## Advanced programming commands

|       |                                      |   |
|-------|--------------------------------------|---|
| [U]   | <a href="#">Section 12.4.2.5</a>     | Sorting strings containing Unicode characters |
| [RPT] | <a href="#">Appendix for putdocx</a> | Appendix for putdocx entries                  |

|       |                               |   |
|-------|-------------------------------|---|
| [RPT] | Appendix for putpdf .....     | Appendix for putpdf entries   |
| [P]   | Automation .....              | Automation  |
| [P]   | break .....                   | Suppress Break key  |
| [P]   | char .....                    | Characteristics   |
| [M-2] | class .....                   | Object-oriented programming (classes)                                     |
| [P]   | class .....                   | Class programming   |
| [P]   | class exit .....              | Exit class-member program and return result                               |
| [P]   | classutil .....               | Class programming utility   |
| [M-5] | _docx*() .....                | Generate Office Open XML (.docx) file                                     |
| [RPT] | docx2pdf .....                | Convert a Word (.docx) document to a PDF file                             |
| [RPT] | Dynamic documents intro ..... | Introduction to dynamic documents   |
| [RPT] | Dynamic tags .....            | Dynamic tags for text files   |
| [RPT] | dyndoc .....                  | Convert dynamic Markdown document to HTML or Word (.docx) document        |
| [RPT] | dyntext .....                 | Process Stata dynamic tags in text file                                   |
| [P]   | estat programming .....       | Controlling estat after community-contributed commands                    |
| [P]   | _estimates .....              | Manage estimation results   |
| [P]   | Estimation command .....      | How to program an estimation command                                      |
| [P]   | file .....                    | Read and write text and binary files                                      |
| [P]   | findfile .....                | Find file in path   |
| [P]   | frame post .....              | Post results to dataset in another frame                                  |
| [P]   | H2O intro .....               | Introduction to integration with H2O                                      |
| [RPT] | html2docx .....               | Convert an HTML file to a Word (.docx) document                           |
| [P]   | include .....                 | Include commands from file  |
| [P]   | Java integration .....        | Java integration for Stata  |
| [P]   | Java intro .....              | Introduction to Java in Stata   |
| [P]   | Java plugin .....             | Introduction to Java plugins  |
| [P]   | Java utilities .....          | Java utilities  |
| [P]   | javacall .....                | Call a Java plugin  |
| [M-5] | LinearProgram() .....         | Linear programming  |
| [P]   | macro .....                   | Macro definition and manipulation   |
| [P]   | macro lists .....             | Manipulate lists  |
| [RPT] | markdown ..                   | Convert Markdown document to HTML file or Word (.docx) document           |
| [R]   | ml .....                      | Maximum likelihood estimation   |
| [M-5] | moptimize() .....             | Model optimization  |
| [M-5] | optimize() .....              | Function optimization   |
| [M-5] | Pdf*() .....                  | Create a PDF file   |
| [P]   | plugin .....                  | Load a plugin   |
| [P]   | postfile .....                | Post results in Stata dataset   |
| [P]   | _predict ..                   | Obtain predictions, residuals, etc., after estimation programming command |
| [P]   | program properties .....      | Properties of user-defined programs                                       |
| [RPT] | putdocx begin .....           | Create an Office Open XML (.docx) file                                    |
| [RPT] | putdocx collect ..            | Add a table from a collection to an Office Open XML (.docx) file          |
| [RPT] | putdocx intro .....           | Introduction to generating Office Open XML (.docx) files                  |
| [RPT] | putdocx pagebreak .....       | Add breaks to an Office Open XML (.docx) file                             |
| [RPT] | putdocx paragraph .....       | Add text or images to an Office Open XML (.docx) file                     |
| [RPT] | putdocx table .....           | Add tables to an Office Open XML (.docx) file                             |
| [RPT] | putexcel .....                | Export results to an Excel file   |
| [RPT] | putexcel advanced .....       | Export results to an Excel file using advanced syntax                     |
| [D]   | putmata .....                 | Put Stata variables into Mata and vice versa                              |
| [RPT] | putpdf begin .....            | Create a PDF file   |
| [RPT] | putpdf collect .....          | Add a table from a collection to a PDF file                               |

|       |                                     |  |
|-------|-------------------------------------|--|
| [RPT] | <a href="#">putpdf intro</a>        | Introduction to generating PDF files             |
| [RPT] | <a href="#">putpdf pagebreak</a>    | Add breaks to a PDF file                         |
| [RPT] | <a href="#">putpdf paragraph</a>    | Add text or images to a PDF file                 |
| [RPT] | <a href="#">putpdf table</a>        | Add tables to a PDF file                         |
| [P]   | <a href="#">PyStata intro</a>       | Introduction to using Python and Stata together  |
| [P]   | <a href="#">PyStata integration</a> | Call Python from Stata                           |
| [P]   | <a href="#">PyStata module</a>      | Python package pystata to call Stata from Python |
| [M-5] | <a href="#">Quadrature()</a>        | Numerical integration                            |
| [P]   | <a href="#">_return</a>             | Preserve stored results                          |
| [P]   | <a href="#">_rmcoll</a>             | Remove collinear variables                       |
| [P]   | <a href="#">_robust</a>             | Robust variance estimates                        |
| [P]   | <a href="#">serset</a>              | Create and manipulate sersets                    |
| [D]   | <a href="#">snapshot</a>            | Save and restore data snapshots                  |
| [P]   | <a href="#">unab</a>                | Unabbreviate variable list                       |
| [P]   | <a href="#">unabcmd</a>             | Unabbreviate command name                        |
| [D]   | <a href="#">unicode collator</a>    | Language-specific Unicode collators              |
| [D]   | <a href="#">unicode convertfile</a> | Low-level file conversion between encodings      |
| [P]   | <a href="#">varabbrev</a>           | Control variable abbreviation                    |
| [P]   | <a href="#">viewsource</a>          | View source code                                 |
| [M-5] | <a href="#">xl()</a>                | Excel file I/O class                             |

**Special-interest programming commands**

|       |   |  |
|-------|---|--|
| [R]   | <a href="#">bstat</a>                           | Report bootstrap results   |
| [MV]  | <a href="#">cluster programming subroutines</a> | Add cluster-analysis routines  |
| [MV]  | <a href="#">cluster programming utilities</a>   | Cluster-analysis programming utilities                                 |
| [R]   | <a href="#">fvrevar</a>                         | Factor-variables operator programming command                          |
| [P]   | <a href="#">matrix dissimilarity</a>            | Compute similarity or dissimilarity measures                           |
| [MI]  | <a href="#">mi select</a>                       | Programmer's alternative to mi extract                                 |
| [ST]  | <a href="#">st_is</a>                           | Survival analysis subroutines for programmers                          |
| [SVY] | <a href="#">svymarkout</a>                      | Mark observations for exclusion on the basis of survey characteristics |
| [MI]  | <a href="#">Technical</a>                       | Details for programmers  |
| [TS]  | <a href="#">tsrevar</a>                         | Time-series operator programming command                               |

**Projects**

|     |                                 |                      |
|-----|---------------------------------|----------------------|
| [P] | <a href="#">Project Manager</a> | Organize Stata files |
|-----|---------------------------------|----------------------|

**File formats**

|     |                                     |   |
|-----|-------------------------------------|---|
| [P] | <a href="#">File formats .dta</a>   | Description of .dta file format                   |
| [P] | <a href="#">File formats .dtas</a>  | Description of Stata frameset (.dtas) file format |
| [D] | <a href="#">unicode convertfile</a> | Low-level file conversion between encodings       |
| [D] | <a href="#">unicode translate</a>   | Translate files to Unicode                        |

**Mata**

|     |                                       |  |
|-----|---------------------------------------|--|
| [M] | <a href="#">Mata Reference Manual</a> |  |
|-----|---------------------------------------|--|

**Customizable tables and collections**

|          |                         |                                 |
|----------|-------------------------|---------------------------------|
| [TABLES] | <a href="#">Intro</a>   | Introduction                    |
| [TABLES] | <a href="#">Intro 1</a> | How to read this manual         |
| [TABLES] | <a href="#">Intro 2</a> | A tour of concepts and commands |
| [TABLES] | <a href="#">Intro 3</a> | Workflow outline                |

|          |                          |   |
|----------|--------------------------|---|
| [TABLES] | Intro 4                  | Overview of commands  |
| [TABLES] | Intro 5                  | Other tabulation commands                                   |
| [TABLES] | Appendix                 | Appendix  |
| [TABLES] | collect addtags          | Add tags to items in a collection                           |
| [TABLES] | collect clear            | Clear all collections in memory                             |
| [TABLES] | collect combine          | Combine collections   |
| [TABLES] | collect composite        | Manage composite results in a collection                    |
| [TABLES] | collect copy             | Copy a collection   |
| [TABLES] | collect create           | Create a new collection                                     |
| [TABLES] | collect dims             | List dimensions in a collection                             |
| [TABLES] | collect dir              | Display names of all collections in memory                  |
| [TABLES] | collect export           | Export table from a collection                              |
| [TABLES] | collect get              | Collect results from a Stata command                        |
| [TABLES] | collect label            | Manage custom labels in a collection                        |
| [TABLES] | collect layout           | Specify table layout for the current collection             |
| [TABLES] | collect levelsof         | List levels of a dimension                                  |
| [TABLES] | collect notes            | Add table notes in a collection                             |
| [TABLES] | collect preview          | Preview the table in a collection                           |
| [TABLES] | collect query            | Query collection style properties                           |
| [TABLES] | collect recode           | Recode dimension levels in a collection                     |
| [TABLES] | collect remap            | Remap tags in a collection                                  |
| [TABLES] | collect rename           | Rename a collection   |
| [TABLES] | collect save             | Save a collection to disk                                   |
| [TABLES] | collect set              | Set the current (active) collection                         |
| [TABLES] | collect stars            | Add stars for significant results in a collection           |
| [TABLES] | collect style _cons      | Collection styles for intercept position                    |
| [TABLES] | collect style autolevels | Collection styles for automatic dimension levels            |
| [TABLES] | collect style cell       | Collection styles for cells                                 |
| [TABLES] | collect style clear      | Clear all collection styles                                 |
| [TABLES] | collect style column     | Collection styles for column headers                        |
| [TABLES] | collect style header     | Collection styles for hiding and showing header components  |
| [TABLES] | collect style html       | Collection styles for HTML files                            |
| [TABLES] | collect style notes      | Collection styles for table notes                           |
| [TABLES] | collect style putdocx    | Collection styles for putdocx                               |
| [TABLES] | collect style putpdf     | Collection styles for putpdf                                |
| [TABLES] | collect style row        | Collection styles for row headers                           |
| [TABLES] | collect style save       | Save collection styles to disk                              |
| [TABLES] | collect style showbase   | Collection styles for displaying base levels                |
| [TABLES] | collect style showempty  | Collection styles for displaying empty cells                |
| [TABLES] | collect style showomit   | Collection styles for displaying omitted coefficients       |
| [TABLES] | collect style table      | Collection styles for table headers                         |
| [TABLES] | collect style tex        | Collection styles for L <sup>A</sup> T <sub>E</sub> X files |
| [TABLES] | collect style title      | Collection styles for table titles                          |
| [TABLES] | collect style use        | Use collection styles from disk                             |
| [TABLES] | collect title            | Add a custom table title in a collection                    |
| [TABLES] | collect use              | Use a collection from disk                                  |
| [TABLES] | Collection principles    | Tags, dimensions, levels, and layout from first principles  |
| [R]      | dtable                   | Create a table of descriptive statistics                    |
| [R]      | etable                   | Create a table of estimation results                        |
| [TABLES] | Example 1                | Table of means, standard deviations, and correlations       |
| [TABLES] | Example 2                | Table of medians and rank-sum test results                  |

|          |                        |   |
|----------|------------------------|---|
| [TABLES] | Example 3              | Table of comparative summary statistics                               |
| [TABLES] | Example 4              | Table of $t$ test results   |
| [TABLES] | Example 5              | Table of regression coefficients and confidence intervals             |
| [TABLES] | Example 6              | Table comparing regression results                                    |
| [TABLES] | Example 7              | Table of regression results using survey data                         |
| [TABLES] | Predefined styles      | Predefined collection styles  |
| [TABLES] | set collect_double     | Storage type settings for collections                                 |
| [TABLES] | set collect_label      | Label settings for collections  |
| [TABLES] | set collect_style      | Style settings for collections  |
| [TABLES] | set collect_warn       | Warning settings for collections                                      |
| [TABLES] | set dtable_style       | Default style settings for dtable                                     |
| [TABLES] | set etable_style       | Default style settings for etable                                     |
| [TABLES] | set table_style        | Default style settings for table                                      |
| [R]      | table intro            | Introduction to tables of frequencies, summaries, and command results |
| [R]      | table                  | Table of frequencies, summaries, and command results                  |
| [R]      | table hypothesis tests | Table of hypothesis tests   |
| [R]      | table multiway         | Multiway tables   |
| [R]      | table oneway           | One-way tabulation  |
| [R]      | table regression       | Table of regression results   |
| [R]      | table summary          | Table of summary statistics   |
| [R]      | table twoway           | Two-way tabulation  |

## Automated document and report creation

|       |                         |  |
|-------|-------------------------|--|
| [U]   | Chapter 21              | Creating reports   |
| [RPT] | Appendix for putdocx    | Appendix for putdocx entries                                       |
| [RPT] | Appendix for putpdf     | Appendix for putpdf entries  |
| [RPT] | Intro                   | Introduction to reporting manual                                   |
| [RPT] | docx2pdf                | Convert a Word (.docx) document to a PDF file                      |
| [RPT] | Dynamic documents intro | Introduction to dynamic documents                                  |
| [RPT] | Dynamic tags            | Dynamic tags for text files  |
| [RPT] | dyndoc                  | Convert dynamic Markdown document to HTML or Word (.docx) document |
| [RPT] | dyntext                 | Process Stata dynamic tags in text file                            |
| [RPT] | html2docx               | Convert an HTML file to a Word (.docx) document                    |
| [RPT] | markdown                | Convert Markdown document to HTML file or Word (.docx) document    |
| [RPT] | putdocx begin           | Create an Office Open XML (.docx) file                             |
| [RPT] | putdocx collect         | Add a table from a collection to an Office Open XML (.docx) file   |
| [RPT] | putdocx intro           | Introduction to generating Office Open XML (.docx) files           |
| [RPT] | putdocx pagebreak       | Add breaks to an Office Open XML (.docx) file                      |
| [RPT] | putdocx paragraph       | Add text or images to an Office Open XML (.docx) file              |
| [RPT] | putdocx table           | Add tables to an Office Open XML (.docx) file                      |
| [RPT] | putexcel                | Export results to an Excel file                                    |
| [RPT] | putexcel advanced       | Export results to an Excel file using advanced syntax              |
| [RPT] | putpdf begin            | Create a PDF file  |
| [RPT] | putpdf collect          | Add a table from a collection to a PDF file                        |
| [RPT] | putpdf intro            | Introduction to generating PDF files                               |
| [RPT] | putpdf pagebreak        | Add breaks to a PDF file   |
| [RPT] | putpdf paragraph        | Add text or images to a PDF file                                   |
| [RPT] | putpdf table            | Add tables to a PDF file   |
| [RPT] | set docx                | Format settings for blocks of text                                 |

## Interface features

|      |                            |   |
|------|----------------------------|---|
| [GS] | Chapter 1 (GSM, GSU, GSW)  | Introducing Stata—sample session                      |
| [GS] | Chapter 2 (GSM, GSU, GSW)  | The Stata user interface                              |
| [GS] | Chapter 3 (GSM, GSU, GSW)  | Using the Viewer                                      |
| [GS] | Chapter 6 (GSM, GSU, GSW)  | Using the Data Editor                                 |
| [GS] | Chapter 7 (GSM, GSU, GSW)  | Using the Variables Manager                           |
| [GS] | Chapter 13 (GSM, GSU, GSW) | Using the Do-file Editor—automating Stata             |
| [GS] | Chapter 15 (GSM, GSU, GSW) | Editing graphs  |
| [P]  | Dialog programming         | Dialog programming                                    |
| [R]  | doedit                     | Edit do-files and other text files                    |
| [D]  | edit                       | Browse or edit data with Data Editor                  |
| [P]  | set locale_ui              | Specify a localization package for the user interface |
| [P]  | sleep                      | Pause for a specified time                            |
| [P]  | smcl                       | Stata Markup and Control Language                     |
| [D]  | unicode locale             | Unicode locale utilities                              |
| [D]  | varmanage                  | Manage variable labels, formats, and other properties |
| [P]  | viewsource                 | View source code                                      |
| [P]  | window fopen               | Display open/save dialog box                          |
| [P]  | window manage              | Manage window characteristics                         |
| [P]  | window menu                | Create menus  |
| [P]  | window programming         | Programming menus and windows                         |
| [P]  | window push                | Copy command into History window                      |
| [P]  | window stopbox             | Display message box                                   |

# Acronym glossary

|        |   |
|--------|---|
| 2SIV   | two-step instrumental variables                             |
| 2SLS   | two-stage least squares                                     |
| 3SLS   | three-stage least squares                                   |
| ADF    | asymptotic distribution free                                |
| ADTE   | average direct treatment effect                             |
| ADTET  | average direct treatment effect with respect to the treated |
| AFE    | attributable fraction among the exposed                     |
| AFP    | attributable fraction for the population                    |
| AFT    | accelerated failure time                                    |
| AIC    | Akaike information criterion                                |
| AICc   | corrected Akaike information criterion                      |
| AIDS   | almost ideal demand system                                  |
| AIPW   | augmented inverse-probability weights                       |
| AITE   | average indirect treatment effect                           |
| AITEC  | average indirect treatment effect with respect to controls  |
| ANCOVA | analysis of covariance                                      |
| ANOVA  | analysis of variance  |
| AP     | attributable proportion                                     |
| APE    | average partial effects                                     |
| API    | application programming interface                           |
| AR     | autoregressive  |
| AR(1)  | first-order autoregressive                                  |
| ARCH   | autoregressive conditional heteroskedasticity               |
| ARFIMA | autoregressive fractionally integrated moving average       |
| ARIMA  | autoregressive integrated moving average                    |
| ARMA   | autoregressive moving average                               |
| ARMAX  | autoregressive moving-average exogenous                     |
| ASCI   | American Standard Code for Information Interchange          |
| ASE    | asymptotic standard error                                   |
| ASF    | average structural function                                 |
| ASL    | achieved significance level                                 |
| ASM    | average structural mean                                     |
| ASP    | average structural probability                              |
| ATE    | average treatment effect                                    |
| ATET   | average treatment effect on the treated                     |
| AUC    | area under the time–concentration curve                     |
| BMA    | Bayesian model averaging                                    |
| BC     | bias corrected  |
| BCa    | bias-corrected and accelerated                              |
| BCC    | boundary characteristic curve                               |
| BE     | between effects   |
| BFGS   | Broyden–Fletcher–Goldfarb–Shanno                            |
| BHHH   | Berndt–Hall–Hall–Hausman                                    |
| BIC    | Bayesian information criterion                              |
| BLOB   | binary large object   |
| BLUP   | best linear unbiased prediction                             |
| BRR    | balanced repeated replication                               |
| CA     | correspondence analysis                                     |
| CAIC   | consistent Akaike information criterion                     |
| CCC    | category characteristic curve                               |
| CCI    | conservative confidence interval                            |
| CCT    | controlled clinical trial                                   |
| CD     | coefficient of determination                                |
| CDC    | Centers for Disease Control and Prevention                  |

|           |   |
|-----------|---|
| CDF       | cumulative distribution function                  |
| CES       | constant elasticity of substitution               |
| CFA       | confirmatory factor analysis                      |
| CFI       | comparative fit index                             |
| CI        | conditional independence                          |
| CI        | confidence interval                               |
| CIF       | cumulative incidence function                     |
| CMA       | cumulative meta-analysis                          |
| CMI       | conditional mean independence                     |
| CMLE      | conditional maximum likelihood estimates          |
| CMYK      | cyan, magenta, yellow, and key                    |
| CPMP      | cumulative posterior model probability            |
| CRD       | cluster randomized design                         |
| CRVE      | cluster-robust variance estimator                 |
| ct        | count time  |
| cusum     | cumulative sum                                    |
| CV        | coefficient of variation                          |
| CV        | cross-validation                                  |
|           |   |
| DA        | data augmentation                                 |
| DDD       | difference in difference in differences           |
| DDF       | denominator degrees of freedom                    |
| DDFs      | multiple denominator degrees of freedom           |
| DEFF      | design effect                                     |
| DEFT      | design effect (standard deviation metric)         |
| DF        | dynamic factor                                    |
| df / d.f. | degree(s) of freedom                              |
| d.f.      | distribution function                             |
| DFAR      | dynamic factors with vector autoregressive errors |
| DFP       | Davidon–Fletcher–Powell                           |
| DIB       | Device-Independent Bitmap                         |
| DIC       | deviance information criterion                    |
| DID       | difference in differences                         |
| DLL       | dynamic-link library                              |
| DMC       | Data Monitoring Committee                         |
| DML       | double machine learning                           |
| DPD       | dynamic panel data                                |
| DSGE      | dynamic stochastic general equilibrium            |
| DSMB      | Data and Safety Monitoring Board                  |
| DSMC      | Data and Safety Monitoring Committee              |
|           |   |
| EBCDIC    | extended binary coded decimal interchange code    |
| EGARCH    | exponential GARCH                                 |
| EGLS      | estimated generalized least squares               |
| EIM       | expected information matrix                       |
| EM        | expectation maximization                          |
| EMF       | Enhanced Metafile                                 |
| EPS       | Encapsulated PostScript                           |
| ERM       | extended regression model                         |
| ERR       | excess relative risk                              |
| ESS       | effective sample size                             |
| ESS       | error sum of squares                              |
| ESS       | expected sample size                              |
|           |   |
| FCS       | fully conditional specification                   |
| FD        | first-differenced estimator                       |
| FDA       | Food and Drug Administration                      |
| FE        | fixed effects                                     |
| FEVD      | forecast-error variance decomposition             |
| FGLS      | feasible generalized least squares                |
| FGNLS     | feasible generalized nonlinear least squares      |
| FIML      | full information maximum likelihood               |



|                |   |
|----------------|---|
| FIVE estimator | full-information instrumental-variables efficient estimator                       |
| flong          | full long   |
| flongsep       | full long and separate  |
| FMI            | fraction of missing information   |
| FMM            | finite mixture model  |
| FP             | fractional polynomial   |
| FPC            | finite population correction  |
| GARCH          | generalized autoregressive conditional heteroskedasticity                         |
| GEE            | generalized estimating equations  |
| GEV            | generalized extreme value   |
| GHK            | Geweke–Hajivassiliou–Keane  |
| GHQ            | Gauss–Hermite quadrature  |
| GIF            | Graphics Interchange Format   |
| GLIM           | generalized linear interactive modeling   |
| GLLAMM         | generalized linear latent and mixed models  |
| GLM            | generalized linear models   |
| GLS            | generalized least squares   |
| GMM            | generalized method of moments   |
| GPCM           | generalized partial credit model  |
| GRM            | graded response model   |
| GS2SLS         | generalized spatial two-stage least squares                                       |
| GSEM           | generalized structural equation modeling/model                                    |
| GSD            | group sequential design   |
| GUI            | graphical user interface  |
| HAC            | heteroskedasticity- and autocorrelation-consistent                                |
| HPD            | highest posterior density   |
| HPM            | highest probability model   |
| HQIC           | Hannan–Quinn information criterion  |
| HR             | hazard ratio  |
| HSB            | hue, saturation, and brightness   |
| HSL            | hue, saturation, and luminance  |
| HSV            | hue, saturation, and value  |
| HTML           | hypertext markup language   |
| IC             | information criteria  |
| ICC            | item characteristic curve   |
| ICD-9          | International Classification of Diseases, Ninth Revision                          |
| ICD-10         | International Classification of Diseases, Tenth Revision                          |
| ICD-10-CM      | International Classification of Diseases, Tenth Revision, Clinical Modification   |
| ICD-10-PCS     | International Classification of Diseases, Tenth Revision, Procedure Coding System |
| ICU            | International Components for Unicode  |
| IIA            | independence of irrelevant alternatives   |
| i.i.d.         | independent and identically distributed   |
| IIF            | item information function   |
| IPW            | inverse-probability weighting   |
| IPWRA          | inverse-probability-weighted regression adjustment                                |
| IQR            | interquartile range   |
| IQR            | inverse quantile regression   |
| IR             | incidence rate  |
| IRF            | impulse–response function   |
| IRLS           | iterated, reweighted least squares  |
| IRR            | incidence-rate ratio  |
| IRT            | item response theory  |
| IV             | instrumental variables  |
| IVQR           | instrumental-variables quantile regression  |
| JAR            | Java Archive file   |
| JCA            | joint correspondence analysis   |
| JDBC           | Java Database Connectivity  |

|         |   |
|---------|---|
| JPEG    | Joint Photographic Experts Group                    |
| JRE     | Java Runtime Environment                            |
| JVM     | Java Virtual Machine                                |
| LAPACK  | linear algebra package                              |
| LASSO   | least absolute shrinkage and selection operator     |
| LAV     | least absolute value                                |
| LCA     | latent class analysis                               |
| LDA     | linear discriminant analysis                        |
| LES     | linear expenditure system                           |
| LIML    | limited-information maximum likelihood              |
| LM      | Lagrange multiplier                                 |
| LOO     | leave one out                                       |
| LOWESS  | locally weighted scatterplot smoothing              |
| LPS     | log predictive-score                                |
| LR      | likelihood ratio                                    |
| LSB     | least-significant byte                              |
| MA      | moving average                                      |
| MAD     | minimum absolute deviation                          |
| MANCOVA | multivariate analysis of covariance                 |
| MANOVA  | multivariate analysis of variance                   |
| MAR     | missing at random                                   |
| MC3     | Markov chain Monte Carlo model composition          |
| MCA     | multiple correspondence analysis                    |
| MCAGHQ  | mode-curvature adaptive Gauss–Hermite quadrature    |
| MCAR    | missing completely at random                        |
| MCE     | Monte Carlo error                                   |
| MCMC    | Markov chain Monte Carlo                            |
| MCSE    | MCMC standard errors                                |
| MDES    | minimum detectable effect size                      |
| MDS     | multidimensional scaling                            |
| ME      | multiple equation                                   |
| MEFF    | misspecification effect                             |
| MEFT    | misspecification effect (standard deviation metric) |
| MFP     | multivariable fractional polynomial                 |
| MI / mi | multiple imputation                                 |
| midp    | mid- $p$ -value                                     |
| MIMIC   | multiple indicators and multiple causes             |
| MINQUE  | minimum norm quadratic unbiased estimation          |
| MIVQUE  | minimum variance quadratic unbiased estimation      |
| ML      | maximum likelihood                                  |
| MLE     | maximum likelihood estimate                         |
| MLMV    | maximum likelihood with missing values              |
| mlong   | marginal long                                       |
| MM      | method of moments                                   |
| MNAR    | missing not at random                               |
| MNL     | multinomial logit                                   |
| MNP     | multinomial probit                                  |
| MPL     | modified profile likelihood                         |
| MPM     | median probability model                            |
| MS      | mean square   |
| MSAR    | Markov-switching autoregression                     |
| MSB     | most-significant byte                               |
| MSDR    | Markov-switching dynamic regression                 |
| MSE     | mean squared error                                  |
| MSL     | maximum simulated likelihood                        |
| MSS     | model sum of squares                                |
| MUE     | median unbiased estimates                           |
| MVAGHQ  | mean–variance adaptive Gauss–Hermite quadrature     |
| MVN     | multivariate normal                                 |
| MVREG   | multivariate regression                             |

|        |  |
|--------|--|
| NARCH  | nonlinear ARCH                                   |
| NDE    | natural direct effect                            |
| NHANES | National Health and Nutrition Examination Survey |
| NIE    | natural indirect effect                          |
| NLS    | nonlinear least squares                          |
| NPARCH | nonlinear power ARCH                             |
| NPMLE  | nonparametric maximum-likelihood estimation      |
| NR     | Newton–Raphson                                   |
| NRM    | nominal response model                           |
|        |  |
| ODBC   | Open DataBase Connectivity                       |
| OIM    | observed information matrix                      |
| OIRF   | orthogonalized impulse–response function         |
| OLE    | Object Linking and Embedding (Microsoft product) |
| OLS    | ordinary least squares                           |
| OPG    | outer product of the gradient                    |
| OR     | odds ratio                                       |
|        |  |
| PA     | population averaged                              |
| PARCH  | power ARCH                                       |
| PCA    | principal component analysis                     |
| PCM    | partial credit model                             |
| PCSE   | panel-corrected standard error                   |
| PDF    | Portable Document Format                         |
| p.d.f. | probability density function                     |
| PFE    | prevented fraction among the exposed             |
| PFP    | prevented fraction for the population            |
| PH     | proportional hazards                             |
| PIP    | posterior inclusion probability                  |
| pk     | pharmacokinetic data                             |
| p.m.f. | probability mass function                        |
| PMM    | predictive mean matching                         |
| PMP    | posterior model probability                      |
| PNG    | Portable Network Graphics                        |
| PNIE   | pure natural indirect effect                     |
| POM    | potential-outcome means                          |
| PPP    | posterior predictive $p$ -value                  |
| PSS    | power (precision) and sample size                |
| PSU    | primary sampling unit                            |
|        |  |
| QDA    | quadratic discriminant analysis                  |
| QML    | quasimaximum likelihood                          |
| QUAIDS | quadratic almost ideal demand system             |
|        |  |
| RA     | regression adjustment                            |
| rc     | return code                                      |
| RCT    | randomized controlled trial                      |
| RE     | random effects                                   |
| REML   | restricted (or residual) maximum likelihood      |
| RERI   | relative excess risk due to interaction          |
| RESET  | regression specification-error test              |
| RGB    | red, green, and blue                             |
| RMSE   | root mean squared error                          |
| RMSEA  | root mean squared error of approximation         |
| RNG    | random-number generator                          |
| ROC    | receiver operating characteristic                |
| ROP    | rank-ordered probit                              |
| ROT    | rule of thumb                                    |
| RR     | relative risk                                    |
| RRR    | relative-risk ratio                              |
| RSM    | rating scale model                               |

|           |   |
|-----------|---|
| RSS       | residual sum of squares   |
| RUM       | random utility model  |
| RVI       | relative variance increase  |
| SAARCH    | simple asymmetric ARCH  |
| SAR       | spatial autoregressive, simultaneous autoregressive, or<br>spatial or simultaneous autoregression, depending on context |
| SARAR     | spatial autoregressive model with spatial autoregressive disturbances   |
| SARIMA    | seasonal ARIMA  |
| SBIC      | Schwarz's Bayesian information criterion  |
| SCI       | simultaneous confidence interval  |
| s.d.      | standard deviation  |
| SE / s.e. | standard error  |
| SEE       | smoothed estimation equations   |
| SEM       | structural equation modeling/model  |
| SF        | static factor   |
| SFAR      | static factors with vector autoregressive errors  |
| SI        | synergy index   |
| SIR       | standardized incidence ratio  |
| SJ        | Stata Journal   |
| SMCL      | Stata Markup and Control Language   |
| SMR       | standardized mortality/morbidity ratio  |
| SMSA      | standard metropolitan statistical area  |
| SOR       | standardized odds ratio   |
| SQL       | Structured Query Language   |
| SRD       | standardized rate difference  |
| SRMR      | standardized root mean squared residual   |
| SRR       | standardized risk ratio   |
| SRS       | simple random sample/sampling   |
| SRSWR     | SRS with replacement  |
| SSC       | Statistical Software Components   |
| SSCP      | sum of squares and cross products   |
| SSD       | summary statistics data   |
| SSU       | secondary sampling unit   |
| st        | survival time   |
| STS       | structural time series  |
| SUR       | seemingly unrelated regression  |
| SURE      | seemingly unrelated regression estimation   |
| SUTVA     | stable unit treatment value assumption  |
| SVAR      | structural vector autoregressive model  |
| SVD       | singular value decomposition  |
| SVG       | scalable vector graphics  |
| TACC      | treatment-arm continuity correction   |
| TAR       | target acceptance rate  |
| TARCH     | threshold ARCH  |
| TCC       | test characteristic curve   |
| TDT       | transmission/disequilibrium test  |
| TE        | total effect  |
| TIF       | test information function   |
| TIFF      | tagged image file format  |
| TLI       | Tucker–Lewis index  |
| TNDE      | total natural direct effect   |
| TSS       | total sum of squares  |
| TWFE      | two-way fixed effects   |
| UCA       | Unicode Collation Algorithm   |
| UCM       | unobserved-components model   |
| UI        | user interface  |
| UTF-8     | Universal character set + Transformation Format—8-bit   |

|            |  |
|------------|--|
| VAR        | vector autoregressive model                      |
| VAR(1)     | first-order vector autoregressive                |
| VARMA      | vector autoregressive moving average             |
| VARMA(1,1) | first-order vector autoregressive moving average |
| VCE        | variance–covariance estimate                     |
| VECM       | vector error-correction model                    |
| VIF        | variance inflation factor                        |
|            |  |
| WCB        | wild cluster bootstrap                           |
| WLC        | worst linear combination                         |
| WLF        | worst linear function                            |
| WLS        | weighted least squares                           |
| WNLS       | weighted nonlinear least squares                 |
| wrt        | with respect to                                  |
|            |  |
| XML        | Extensible Markup Language                       |
|            |  |
| ZINB       | zero-inflated negative binomial                  |
| ZIOL       | zero-inflated ordered logit                      |
| ZIOP       | zero-inflated ordered probit                     |
| ZIP        | zero-inflated Poisson                            |
| ZTNB       | zero-truncated negative binomial                 |
| ZTP        | zero-truncated Poisson                           |

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[MV] **discrim lda**, [MV] **factor**, [MV] **manova**,  
[MV] **matrix dissimilarity**, [MV] **mds**,  
[MV] **mds postestimation**, [MV] **mdslong**,  
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[TS] **arfima**, [TS] **arima**, [TS] **corrgram**,  
[TS] **cumsp**, [TS] **dfuller**, [TS] **estat** **acplot**,  
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[TS] **corrgram**, [TS] **sspace**
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- Brückner, E., [ME] **mestreg**
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- Buchholz, A., [ST] **stcrreg**
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- Cuzick, J., [R] **kappa**, [R] **nptrend**
- Czekanowski, J., [MV] **measure\_option**
- Czyzyk, J., [M-5] **LinearProgram()**
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- D'Agostino, R. B., [MV] **mvtest normality**, [R] **sktest**, [R] **swilk**, [ST] **stintcox**, [ST] **stintreg**

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- Dagne, G. A., [R] **zioprobit**
- Daidone, S., [M-5] **LinearProgram()**, [R] **frontier**, [XT] **xtfrontier**
- Dale, D., [R] **zioprobit**
- Dalhuisen, J. M., [META] **Intro**
- Dallakyan, A., [LASSO] **Lasso intro**
- Daly, M. E., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Danahy, D. T., [ME] **mestreg**
- Daniel, C., [R] **Diagnostic plots**, [R] **oneway**
- Daniel, R. M., [CAUSAL] **teffects intro advanced**, [MI] **Intro substantive**, [MI] **mi impute**, [MI] **mi impute chained**, [MI] **mi impute monotone**
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- Daniels, L., [U] **11.7 References**, [U] **12.11 References**, [U] **20.26 References**
- Daniels, R. C., [SP] **Intro**
- Danuso, F., [R] **nl**
- Dardanoni, V., [MI] **Intro substantive**
- Darling, E., [ADAPT] **gsdesign twoproportions**
- Darmofal, D., [SP] **Intro**, [SP] **spregress**
- Darwen, P. J., [BMA] **Intro**
- Das, S., [XT] **xtunitroot**
- DasGupta, A., [R] **ci**
- Daubechies, I., [LASSO] **lasso**
- Dave, C., [DSGE] **Intro 1**, [DSGE] **Intro 3d**, [DSGE] **Intro 5**
- Davey, C., [PSS-2] **power**
- Davey, P. G., [D] **icd10**
- Davey Smith, G., [META] **Intro**, [META] **meta bias**, [META] **Glossary**
- David, F. N., [R] **correlate**
- David, H. A., [D] **egen**, [R] **spearman**, [R] **summarize**
- Davidian, M., [ME] **me**, [ME] **menl**
- Davidon, W. C., [M-5] **optimize()**
- Davidson, J., [TS] **mswitch postestimation**
- Davidson, R., [DSGE] **Glossary**, [R] **boxcox**, [R] **cnsreg**, [R] **gmm**, [R] **intreg**, [R] **ivregress**, [R] **ivregress postestimation**, [R] **mlogit**, [R] **nl**, [R] **nlshr**, [R] **reg3**, [R] **regress**, [R] **regress postestimation time series**, [R] **truncreg**, [TS] **arch**, [TS] **arima**, [TS] **prais**, [TS] **sspace**, [TS] **varlmar**, [TS] **Glossary**, [XT] **xtgls**, [XT] **xtpcse**
- Davies, R. B., [TS] **estat sbsingle**
- Davis, B. R., [PSS-2] **power repeated**
- Davis, G., [TS] **arima**
- Davis, P. J., [M-5] **Quadrature()**
- Davis, R. A., [TS] **arimasoc**, [TS] **arimasoc**, [TS] **corrgram**, [TS] **sspace**
- Davison, A. C., [R] **bootstrap**
- Dawson, R. J. M., [BAYES] **bayespredict**
- Day, N. E., [PSS-2] **power mcc**, [R] **clogit**, [R] **dstdize**, [R] **Epitab**, [R] **symmetry**
- Day, W. H. E., [MV] **cluster**
- de Ayala, R. J., [IRT] **irt**, [IRT] **irt nrm**, [IRT] **irt pcm**, [IRT] **irt hybrid**
- De Backer, M., [ME] **melogit postestimation**
- De Boeck, P., [BAYES] **bayesmh**, [IRT] **irt**, [IRT] **Control Panel**, [IRT] **irt 1pl**, [IRT] **irt 2pl**, [IRT] **irt 3pl**, [IRT] **irt hybrid**, [IRT] **irt**, **group()**, [IRT] **irtgraph icc**, [IRT] **diflogistic**, [IRT] **difmh**, [ME] **me**
- de Boor, C., [R] **makespline**, [R] **npregress intro**, [R] **npregress series**
- de Cani, J. S., [ADAPT] **GSD intro**, [ADAPT] **gs**, [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign oneproportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**
- de Castro, L., [R] **ivqregress**
- de Chaisemartin, C., [CAUSAL] **DID intro**, [CAUSAL] **hddidregress**, [CAUSAL] **xthdidregress**
- De Cock, D., [BMA] **bmapredict**
- de Finetti, B., [BAYES] **Intro**
- de Groot, H. L. F., [META] **Intro**
- De Hoyos, R. E., [XT] **xreg**
- de Jong, J. J., [M-5] **LinearProgram()**
- De Jong, P., [TS] **dfactor**, [TS] **sspace**, [TS] **sspace postestimation**, [TS] **ucm**
- De Keyser, P., [ME] **melogit postestimation**
- de Kraker, M. E. A., [D] **icd10**
- de Leeuw, J., [MV] **ca postestimation**
- De Luca, G., [BMA] **Intro**, [BMA] **BMA commands**, [ERM] **eoprobit**, [MI] **Intro substantive**, [R] **biprobit**, [R] **heckoprobit**, [R] **heckprobit**, [R] **oprobit**, [R] **probit**
- de Oliveira Pirelli, R., [ADAPT] **gsdesign usermethod**
- De Stavola, B. L., [CAUSAL] **teffects intro advanced**
- de Vet, H. C. W., [G-2] **graph twoway**
- De Vos, I., [XT] **xtabond**, [XT] **xtdpd**, [XT] **xtdpdsys**
- De Vroey, C., [ME] **melogit postestimation**
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- Deady, S., [R] **betareg**
- Dean, N., [R] **proportion**
- Deane, G., [SP] **estat moran**, [SP] **spregress**, [SP] **spxtregress**
- Dearden, L., [CAUSAL] **teffects intro advanced**, [CAUSAL] **teffects multivalued**
- Deaton, A. S., [R] **demandsys**, [R] **nlshr**, [U] **20.26 References**
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- Deistler, M., [TS] **sspace**
- DeJong, D. N., [DSGE] **Intro 1**, [DSGE] **Intro 3d**,  
[DSGE] **Intro 5**
- del Barrio Castro, T., [TS] **dfgls**, [TS] **dfuller**
- del Rio, A., [TS] **tsfilter hp**
- Delgado, A., [ADAPT] **gsdesign oneproportion**
- DeLong, D. M., [R] **roccomp**, [R] **rocreg**, [R] **roctab**
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- DeMets, D. L., [ADAPT] **GSD intro**, [ADAPT] **gs**,  
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- Demirer, M., [CAUSAL] **telasso**, [LASSO] **Lasso**  
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[LASSO] **xpoppoisson**, [LASSO] **xporegress**
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- Demnati, A., [SVY] **Direct standardization**,  
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- Dempster, A. P., [ME] **me**, [ME] **mixed**, [MI] **Intro**  
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- Denis, D., [G-2] **graph twoway scatter**
- DerSimonian, R., [META] **Intro**, [META] **meta esize**,  
[META] **meta set**, [META] **meta summarize**,  
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- DeSarbo, W. S., [FMM] **fmm intro**, [FMM] **Example 3**
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- Desmarais, B. A., [R] **zinvb**, [R] **zip**
- Desu, M. M., [PSS-2] **power exponential**
- Detsky, A. S., [META] **meta labbeplot**
- Deutekom, M., [META] **meta mvregress**
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- Devereaux, P. J., [ADAPT] **gsdesign twoproportions**
- Deville, J.-C., [SVY] **Calibration**, [SVY] **Direct**  
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[SVY] **Variance estimation**
- Devroye, L., [FN] **Random-number functions**
- Dewey, M. E., [R] **correlate**
- Dey, D. D., [BAYES] **Intro**
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- Dezeure, R., [LASSO] **Lasso intro**
- Dhaene, G., [XT] **xt**
- Di Iorio, F., [FMM] **fmm intro**
- Di Pino, A., [TS] **threshold**
- Dias, M. C., [CAUSAL] **DID intro**,  
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- Díaz, J. D., [CAUSAL] **teffects nnmatch**,  
[CAUSAL] **teffects psmatch**
- Dice, L. R., [MV] **measure\_option**
- Dickens, R., [TS] **prais**
- Dickersin, K., [META] **Intro**
- Dickey, D. A., [TS] **dfgls**, [TS] **dfuller**, [TS] **pperron**,  
[TS] **Glossary**, [XT] **xtcointtest**
- Dickman, P. W., [ST] **sts**
- Dickson, E. R., [ST] **stcrreg**
- Dicle, M. F., [D] **import**, [TS] **arch**, [TS] **arma**,  
[TS] **tsline**
- Didelez, V., [R] **ivregress**
- Diebold, F. X., [TS] **arch**
- Dieppe, A., [BAYES] **bayes: var**
- Dieter, U., [FN] **Random-number functions**
- Dietz, E., [FMM] **fmm intro**
- Dietz, T., [D] **describe**, [R] **anova**, [R] **test**
- Digby, P. G. N., [R] **tetrachoric**
- Diggle, P. J., [BAYES] **bayesmh**, [ME] **me**,  
[ME] **meglm**, [ME] **mixed**, [TS] **arma**,  
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- Dijksterhuis, G. B., [MV] **procrustes**
- Dimairo, M., [ADAPT] **Intro**
- DiNardo, J., [CAUSAL] **stteffects ipwra**,  
[CAUSAL] **teoverlap**, [XT] **xtrc**
- Ding, Z., [TS] **arch**
- Dinno, A., [MV] **factor**, [MV] **pca**, [R] **kwallis**,  
[R] **pwcompare**
- Dipnall, J., [R] **dtable**
- Dippel, C., [R] **ivregress**
- Discacciati, A., [R] **glm**
- Ditzen, J., [XT] **xtcointtest**, [XT] **xtunitroot**
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[PSS-2] **power twovariances**, [PSS-3] **Intro**  
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[PSS-3] **ciwidth twomeans**, [PSS-3] **ciwidth**  
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- Doan, T., [BAYES] **bayes: var**
- Dobbin, K., [PSS-2] **power**
- Dobson, A. J., [R] **glm**
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- Dohoo, I., [ME] **meintreg**, [R] **Epitab**, [R] **regress**
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**postestimation**, [XT] **xtdidregress**



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[P] **matrix eigenvalues**, [P] **matrix symeigen**
- Donn, S. M., [ME] **menl**
- Donner, A., [R] **loneway**
- Donoho, D. L., [R] **lpoly**
- Doornik, J. A., [MV] **mvtest**, [MV] **mvtest normality**,  
[TS] **arfima**, [TS] **vec**
- Doppelhofer, G., [BMA] **bmastats jointness**
- Doran, J. E., [MV] **cluster dendrogram**
- Dore, C. J., [R] **fp**
- Dorfman, D. D., [R] **rocfit**, [R] **rocreg**
- Dorfman, S. F., [META] **meta mvregress**
- Doris, A., [R] **gmm**
- Dormann, C. F., [BMA] **Intro**
- Dorta, M., [R] **bootstrap**, [TS] **dfuller**
- Douglas, I. J., [CAUSAL] **teffects psmatch**
- Dow, J. K., [BMA] **Intro**
- Dowd, K., [ADAPT] **gsdesign twomeans**
- Downward, P., [R] **zioprobit**
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- Draper, N., [ME] **me**, [ME] **menl**, [R] **eivreg**,  
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- Drezner, Z., [ERM] **eprobit**, [M-5] **mvnormal()**
- Driver, H. E., [MV] **measure\_option**
- Drukker, D. M., [CAUSAL] **eteffects**,  
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[CAUSAL] **stteffects ipwra**, [CAUSAL] **stteffects postestimation**,  
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[CAUSAL] **teffects intro**, [CAUSAL] **teffects intro advanced**,  
[CAUSAL] **teffects aipw**, [CAUSAL] **teffects ipw**,  
[CAUSAL] **teffects multivalued**, [CAUSAL] **teffects nnmatch**,  
[CAUSAL] **teffects ra**, [CM] **cmmixlogit**, [CM] **cmmprobit**,  
[CM] **cmxtmixlogit**, [D] **import fred**, [ERM] **eregress**,  
[LASSO] **Lasso intro**, [LASSO] **Lasso inference intro**,  
[ME] **me**, [META] **meta meregress**, [P] **Estimation command**,  
[P] **forvalues**, [P] **Java plugin**, [P] **plugin**, [P] **postfile**,  
[R] **boxcox**, [R] **frontier**, [R] **gmm**, [R] **logit**, [R] **lrtest**,  
[R] **margins**, [R] **mlexp**, [R] **nbreg**, [R] **npregress kernel**,  
[R] **oprobit**, [R] **predictnl**, [R] **qreg**, [R] **set rngstream**,  
[R] **test**, [R] **tobit**, [SEM] **Example 46g**, [SP] **Intro**, [SP] **estat moran**,  
[SP] **spivregress**, [SP] **spivregress postestimation**,  
[SP] **spregress**, [SP] **spregress postestimation**, [ST] **stcox**,  
[ST] **streg**, [TS] **sspace**, [TS] **vec**, [U] **18.14 References**,  
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[TS] **vec**, [TS] **vecrank**, [XT] **xtfrontier**, [XT] **xtivreg**
- du Plessis, J. E., [BMA] **bmastats lps**
- Du, Z., [TS] **wntestq**
- Duan, N., [R] **boxcox postestimation**, [R] **heckman**,  
[TS] **forecast estimates**
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- Duchateau, L., [ME] **meintreg**
- Duda, R. O., [MV] **cluster**, [MV] **cluster stop**
- Duflo, E., [CAUSAL] **DID intro**, [CAUSAL] **didregress**,  
[CAUSAL] **telasso**, [LASSO] **Lasso inference intro**,  
[LASSO] **lasso**, [LASSO] **poregress**, [LASSO] **xpologit**, [LASSO] **xpipoisson**,  
[LASSO] **xporegress**
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- DuMouchel, W. H., [META] **meta regress**
- Dumyati, G., [D] **icd10**
- Duncan, A. J., [R] **QC**
- Duncan, O. D., [SEM] **Example 7**
- Dunlop, D. D., [PSS-2] **power onemean**, [PSS-2] **power onemean cluster**,  
[R] **ztest**
- Dunn, G., [CAUSAL] **mediate**, [CAUSAL] **teffects multivalued**,  
[MV] **discrim**, [MV] **discrim qda postestimation**, [MV] **mca**, [R] **kappa**
- Dunn, O. J., [R] **correlate**
- Dunnett, C. W., [FN] **Statistical functions**, [R] **mprobit**,  
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- Dunnington, G. W., [R] **regress**
- Dunsmore, I. R., [BAYES] **Intro**
- Dunson, D. B., [BAYES] **Intro**, [BAYES] **bayesmh**, [BAYES] **bayesstats ic**, [BAYES] **bayesstats ppvalues**,  
[BAYES] **bayesstats summary**, [BAYES] **bayespredict**, [BAYES] **bayes: xtnbreg**,  
[BAYES] **Glossary**, [MI] **Intro substantive**, [MI] **mi impute mvn**, [MI] **mi impute regress**
- Dupont, W. D., [PSS-2] **power oneslope**, [PSS-2] **power mcc**,  
[R] **Epitab**, [R] **Epitab**, [R] **logistic**, [R] **sunflower**, [ST] **stcox**, [ST] **stir**, [ST] **sts**
- Durbin, J., [R] **ivregress postestimation**, [R] **regress postestimation time series**,  
[TS] **estat sbcsum**, [TS] **prais**, [TS] **ucm**, [TS] **Glossary**
- Duren, P., [R] **regress**
- Durlauf, S. N., [BMA] **Intro**, [TS] **vec intro**, [TS] **vec**, [TS] **vecrank**
- Dutcus, C., [ADAPT] **gsdesign logrank**
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- Duval, S., [META] **Intro**, [META] **Intro**, [META] **meta**, [META] **meta funnelplot**, [META] **meta bias**, [META] **meta trimfill**
- Dwivedi, D., [R] **reri**
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- Eberhardt, M., [XT] **xtrc**  
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 [R] **stem**  
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- Gibson, P., [META] **meta data**
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- Giesbrecht, F. G., [ME] **mixed**
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- Gill, R. D., [ST] **stcrreg**
- Gillenwater, H. H., [ADAPT] **gsdesign oneproportion**
- Gillham, N. W., [R] **regress**
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- Gini, C., [SP] **estat moran**, [SP] **spregress**, [SP] **spxtregress**
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- Ginther, O. J., [ME] **menl**, [ME] **mixed**
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- Glass, R. I., [R] **Epitab**
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- Gleser, G., [MV] **alpha**
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- Goldfarb, D., [M-5] **optimize()**
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- Handscorn, D. C., [M-5] **halton()**
- Haneuse, S., [R] **ci**, [R] **Epitab**, [R] **poisson**, [R] **reri**
- Hanji, M. B., [META] **Intro**
- Hankey, B., [ST] **stmh**
- Hanley, J. A., [R] **roccomp**, [R] **rocfit**, [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**, [R] **roctab**
- Hannachi, A., [MV] **pca**
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- Hansen, B. E., [BMA] **Intro**, [R] **makespline**, [R] **npregress intro**, [R] **npregress kernel**, [R] **npregress series**, [TS] **estat sbsingle**, [TS] **threshold**
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- Hansen, H., [MV] **mvtest**, [MV] **mvtest normality**
- Hansen, L. P., [R] **gmm**, [R] **ivregress**, [R] **ivregress postestimation**, [XT] **xtabond**, [XT] **xtdpd**, [XT] **xtdpdsys**
- Hansen, M. R., [R] **log**
- Hansen, W. B., [ME] **me**, [ME] **meglm**, [ME] **meologit**, [ME] **meoprobit**, [XT] **xtologit**, [XT] **xtoprobit**
- Hanson, B. A., [R] **spearman**
- Hao, L., [R] **qreg**
- Harabasz, J., [MV] **cluster**, [MV] **cluster stop**
- Haramoto, H., [FN] **Random-number functions**, [R] **set rngstream**
- Haran, M., [BAYES] **bayesstats summary**
- Harberger, A. C., [R] **demandsys postestimation**
- Harbord, R. M., [ME] **melogit**, [ME] **meoprobit**, [META] **Intro**, [META] **Intro**, [META] **meta**, [META] **meta forestplot**, [META] **meta regress**, [META] **meta funnelplot**, [META] **meta bias**, [META] **meta mvregress**, [R] **roccomp**, [R] **roctab**

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- Hardin, J. W., [G-1] **Graph intro**, [ME] **meglm**  
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- Hardouin, J.-B., [IRT] **irt**, [IRT] **irt pcm**
- Hardy, R. J., [ADAPT] **gs**, [ADAPT] **gsdesign**,  
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- Harel, O., [MI] **mi estimate**
- Hargreaves, J., [PSS-2] **power**
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- Harley, J. B., [PSS-2] **power cox**
- Harman, H. H., [MV] **factor**, [MV] **factor**  
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- Harrell, F. E., Jr., [R] **makespline**, [R] **ologit**,  
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- Harring, J. R., [ME] **menl**
- Harrington, D. P., [ST] **stcox**, [ST] **sts test**
- Harris, E. K., [MV] **discrim**, [MV] **discrim logistic**
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- Harris, R. J., [META] **Intro**, [META] **meta**,  
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- Harris, R. L., [R] **QC**
- Harris, S. C., [ME] **menl**
- Harris, T., [R] **nbreg**, [R] **poisson**, [R] **qreg**,  
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- Harrison, J. M., [ST] **sterreg**
- Harrison, L. H., [D] **icd10**
- Hart, A. A. M., [LASSO] **lasso**
- Hart, P. E., [MV] **cluster**, [MV] **cluster stop**
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- Harville, D. A., [ME] **meglm**, [ME] **mixed**, [R] **estat ic**
- Hasebe, T., [CAUSAL] **etpoisson**, [ERM] **eprobit**
- Hassell, J. F., [ST] **sts**
- Hassink, W. H. J., [MV] **cluster**
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- Hawkins, D. F., [SP] **estat moran**, [SP] **spregress**,  
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- Hayes, T. L., [META] **Intro**
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- Haywood, P., [META] **meta data**
- He, X., [ST] **stcox PH-assumption tests**
- Heafner, T., [META] **meta forestplot**
- Heagerty, P. J., [BAYES] **bayesmh**, [ME] **me**,  
[ME] **meglm**, [ME] **mixed**, [MV] **factor**,  
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- Hedley, D., [ST] stcrreg, [ST] stcrreg postestimation
- Heeringa, S. G., [SVY] Survey, [SVY] Subpopulation estimation
- Heidelberg, P., [BAYES] Intro
- Heien, D., [R] demandsys
- Heine, R. P., [ADAPT] gsdesign twoproportions
- Heinecke, K., [P] matrix mkmat
- Heinonen, O. P., [R] Epitab
- Heiss, F., [CM] nlogit
- Heitjan, D. F., [MI] Intro substantive, [MI] mi impute
- Heller, G., [ST] stcox postestimation
- Hemming, K., [PSS-2] Intro (power)
- Hempel, S., [R] Epitab
- Henderson, B. E., [R] symmetry
- Henderson, C. R., [ME] me, [ME] mixed
- Henderson, D. J., [R] npregress kernel
- Henderson, M. J., [SVY] Calibration
- Hendrickson, A. E., [MV] rotate, [MV] rotatemat, [MV] Glossary
- Hennevogl, W., [ME] me
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- Hensher, D. A., [CM] nlogit, [R] zioprobit
- Hensley, M. J., [META] meta data
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- Herrero, F. J., [ME] mixed
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- Herriot, J. G., [M-5] spline3()
- Hertz, S., [ST] stsplot
- Herwartz, H., [XT] xtointtest, [XT] xtglm
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- Hess, K. R., [ST] stcox PH-assumption tests, [ST] stntcox PH-assumption plots, [ST] sts graph
- Heß, S., [CAUSAL] teffects intro, [CAUSAL] teffects intro advanced
- Hesse, L. O., [M-5] moptimize()
- Hessenberg, K. A., [M-5] hessenbergd()
- Heston, A., [XT] xtunitroot
- Hetherington, J., [META] Intro
- Heyde, C. C., [U] 1.4 References
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- Hickam, D. H., [R] brier
- Hicks, R., [CAUSAL] mediate
- Higbee, K. T., [D] clonevar, [D] ds
- Higdon, D., [BAYES] Intro
- Higgins, J. E., [R] anova
- Higgins, J. P. T., [META] Intro, [META] Intro, [META] meta, [META] meta esize, [META] meta set, [META] meta forestplot, [META] meta summarize, [META] meta galbraithplot, [META] meta labbeplot, [META] meta regress, [META] estat bubbleplot, [META] meta funnelplot, [META] meta bias, [META] meta trimfill, [META] meta mvregress, [META] estat heterogeneity (mv), [META] Glossary
- Higgins, M. L., [TS] arch
- Higgs, M. D., [BMA] Intro, [BMA] bmaregress
- Hilbe, J. M., [FN] Random-number functions, [ME] meglm postestimation, [MV] measure\_option, [R] cloglog, [R] estat ic, [R] glm, [R] glm postestimation, [R] logistic, [R] logit, [R] lroc, [R] nbreg, [R] poisson, [R] simulate, [R] tnbg, [R] tpoisson, [R] zinh, [XT] xtgee, [XT] xtpoisson
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- Hildreth, C., [TS] prais
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- Hilgard, E. R., [R] Epitab
- Hill, A. B., [R] Epitab, [R] poisson
- Hill, D. W., Jr., [R] zioprobit
- Hill, I. D., [R] ranksum
- Hill, J., [ME] me
- Hill, R. C., [R] ensreg, [R] estat ic, [R] heckman, [R] hetregress, [R] ivregress, [R] ivregress postestimation, [R] logit, [R] probit, [R] regress, [R] regress postestimation, [R] test, [TS] arch, [TS] prais, [XT] xtglm, [XT] xtpcse, [XT] xtrc, [XT] xtrg
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- Hills, S. E., [BAYES] Intro, [BAYES] bayesmh
- Hinchliffe, S. R., [ST] stcox, [ST] stcrreg
- Hines, J. R., [R] demandsys postestimation
- Hinkley, D. V., [R] bootstrap
- Hipel, K. W., [TS] arima, [TS] ucm
- Hirano, K., [CAUSAL] stteffects intro, [CAUSAL] stteffects ipw, [CAUSAL] stteffects ipwra, [CAUSAL] teffects intro advanced
- Hirji, K. F., [R] exlogistic, [R] expoisson
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- Hlouskova, J., [XT] **xtunitroot**
- Ho, A. D., [R] **hetoprobit**
- Hoaglin, D. C., [META] **Intro**, [META] **meta**, [META] **meta esize**, [META] **meta set**, [META] **meta summarize**, [META] **meta regress**, [META] **estat bubbleplot**, [META] **meta mvregress**, [R] **Diagnostic plots**, [R] **lv**, [R] **regress postestimation**, [R] **regress postestimation diagnostic plots**, [R] **smooth**, [R] **stem**
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- Hocking, R. R., [ME] **meglm**, [ME] **mixed**, [MI] **Intro substantive**, [R] **stepwise**
- Hodges, J. L., [MV] **discrim knn**
- Hodrick, R. J., [TS] **tsfilter**, [TS] **tsfilter hp**
- Hodson, F. R., [MV] **cluster dendrogram**
- Hoechle, D., [XT] **xtgls**, [XT] **xtpcse**, [XT] **xtreg**, [XT] **xtregar**
- Hoel, D. G., [ST] **stintreg**
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- Hoernig, J. M., [R] **symmetry**
- Hoeting, J. A., [BMA] **Intro**, [BMA] **bmaregress**
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- Hoffmann, J. P., [D] **Data management**, [G-I] **Graph intro**, [R] **glm**
- Hofler, R., [R] **frontier**, [XT] **xtfrontier**
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- Holbrook, J., [META] **meta mvregress**
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- Holm, A., [ERM] **eprobit**
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- Holmes, J., [ADAPT] **Intro**
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- Holt, C. C., [TS] **tssmooth**, [TS] **tssmooth dexpontional**, [TS] **tssmooth exponential**, [TS] **tssmooth hwinters**, [TS] **tssmooth hwinters**
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- Hopper, G. M., [P] **trace**
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- Horst, P., [MV] **factor postestimation**, [MV] **rotate**, [MV] **rotatemat**
- Horton, N. J., [ME] **meglm**, [ME] **mixed**, [MI] **Intro substantive**, [MI] **mi estimate**, [MI] **mi impute**, [XT] **xtgee**
- Horváth, L., [TS] **mgarch**
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- Householder, A. S., [M-5] **qrd()**, [MV] **mds**, [MV] **mdslong**, [MV] **mdsmat**
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- Krall, J. M., [PSS-2] **power cox**
- Kramer, C. Y., [MV] **mvtest**, [MV] **mvtest means**, [R] **pwcompare**
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- Krolzig, H.-M., [TS] **mswitch**
- Kronecker, L., [M-2] **op\_kronecker**
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- Lange, S. M., [ST] **stcrreg**
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- Langlois, P. H., [R] **rer**
- Lanza, S. T., [FMM] **Example 3**
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- Lee, J. C., [MV] **mvtest**
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- Maxwell, A. E., [MV] *factor*, [MV] *factor postestimation*, [R] *symmetry*
- May, S., [MV] *canon*, [MV] *discrim*, [MV] *factor*, [MV] *pca*, [PSS-2] *power cox*, [R] *stepwise*, [ST] *stcox*, [ST] *streg*
- Mayer, A., [R] *ologit*, [R] *oprobit*
- Mayer, K. U., [ME] *mestreg*
- Mayr, E., [MV] *cluster dendrogram*
- Mazliak, L., [ST] *stcox postestimation*
- Mazrekaj, D., [D] *joinby*, [D] *merge*
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- Mazya, V. G., [FN] *Matrix functions*
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- McBride, J. B., [ME] *mixed*
- McCabe, S. E., [SVY] *estat*
- McCaffrey, D. F., [CAUSAL] *DID intro*, [CAUSAL] *didregress*, [R] *areg*, [R] *eivreg*, [R] *regress*, [R] *wildbootstrap*, [XT] *xtnreg*
- McCallum, A. H., [R] *intreg*, [R] *tobit*
- McCarthy, P. J., [SVY] *Survey*, [SVY] *svy bootstrap*, [SVY] *svy brr*, [SVY] *Variance estimation*
- McCathie, A., [MV] *pca*, [R] *rreg*
- McCleary, S. J., [R] *regress postestimation diagnostic plots*
- McClish, D. K., [R] *rocreg*
- McCrary, J., [CAUSAL] *stteffects ipwra*, [CAUSAL] *teoverlap*
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- McCullough, B. D., [TS] *corrgram*
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- McDonald, J. A., [R] *sunflower*
- McDonald, J. F., [R] *tobit*, [R] *tobit postestimation*
- McDonald, R. P., [IRT] *irt*
- McDougal, L. K., [D] *icd10*
- McDowell, A., [G-3] *colorvar\_options*, [R] *boxcox*, [R] *dtable*, [R] *etable*, [R] *marginsplot*, [R] *table oneway*, [R] *table twoway*, [R] *table multiway*, [R] *table summary*, [R] *table hypothesis tests*, [R] *table regression*, [RPT] *putdocx collect*, [RPT] *putdocx table*, [RPT] *putpdf collect*, [RPT] *putpdf table*, [SVY] *Survey*, [SVY] *estat*, [SVY] *Subpopulation estimation*, [SVY] *svy*, [SVY] *svy brr*, [SVY] *svy estimation*, [SVY] *svy jackknife*, [SVY] *svy postestimation*, [SVY] *svy: tabulate oneway*, [SVY] *svy: tabulate twoway*, [SVY] *svydescribe*, [TABLES] *collect addtags*, [TABLES] *collect composite*, [TABLES] *collect label*, [TABLES] *collect notes*, [TABLES] *collect recode*, [TABLES] *collect remap*, [TABLES] *collect title*, [TABLES] *collect use*, [TABLES] *collect layout*, [TABLES] *collect style column*, [TABLES] *collect style \_cons*, [TABLES] *collect style notes*, [TABLES] *collect style row*, [TABLES] *collect style showbase*, [TABLES] *collect style showempty*, [TABLES] *collect style table*, [TABLES] *collect style title*, [TABLES] *collect style use*, [TABLES] *Example 1*, [TABLES] *Example 2*, [TABLES] *Example 3*, [TABLES] *Example 4*, [TABLES] *Example 5*, [TABLES] *Example 6*, [TABLES] *Example 7*
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- McEwen, B. S., [ADAPT] *gsdesign twomeans*
- McFadden, D. L., [CAUSAL] *etregress*, [CAUSAL] *hdidregress*, [CAUSAL] *stteffects ipwra*, [CAUSAL] *teffects aiwpa*, [CAUSAL] *xthdidregress*, [CM] *Intro 5*, [CM] *Intro 8*, [CM] *cmclogit*, [CM] *cmmixlogit*, [CM] *cmmprobit*, [CM] *cmxtmixlogit*, [CM] *nlogit*, [R] *clogit*, [R] *hausman*, [R] *Maximize*, [R] *suest*
- McGilchrist, C. A., [ST] *stcox*, [ST] *streg*
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- Mitchell, C., [R] **exlogistic**
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- Mitchell, W. C., [TS] **tsfilter**, [TS] **tsfilter bk**, [TS] **tsfilter bw**, [TS] **tsfilter cf**, [TS] **tsfilter hp**, [TS] **ucm**
- Mitra, G., [M-5] **LinearProgram()**
- Miura, H., [U] **14.11 Reference**
- Miwa, T., [ERM] **eprobit**, [M-5] **mvnrmal()**
- Modica, S., [MI] **Intro substantive**
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- Moffatt, P. G., [R] **churdle**
- Moffitt, R. A., [R] **tobit**, [R] **tobit postestimation**
- Mohanty, B. P., [R] **rerit**
- Moher, D., [META] **Intro**, [META] **meta forestplot**, [META] **meta funnelplot**, [META] **meta bias**
- Mol, C. D., [LASSO] **lasso**
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- Molenberghs, G., [ME] **me**, [ME] **me**, [ME] **meglm**, [ME] **menl**, [ME] **mixed**, [META] **meta meregress**, [XT] **xtreg postestimation**
- Moler, C. B., [P] **matrix symeigen**
- Molina, G., [BMA] **bmaregress**
- Molina, J. A., [R] **demandsys**
- Møller, A. P., [META] **meta**
- Mollisi, V., [XT] **xtfrontier**
- Molloy, G. J., [META] **meta summarize**
- Monahan, J. F., [FN] **Random-number functions**
- Monfort, A., [R] **hausman**, [R] **suest**, [R] **test**, [TS] **arima**, [TS] **mgarch ccc**, [TS] **mgarch dcc**, [TS] **mgarch vcc**
- Monshouwer, K., [MV] **mvtest**
- Monson, R. R., [R] **Epitab**
- Montanari, A., [LASSO] **Lasso intro**
- Montes-Rojas, G., [CAUSAL] **teffects psmatch**, [R] **QC**, [R] **sktest**, [XT] **xtreg**, [XT] **xtreg postestimation**
- Montgomery, D. C., [TS] **tssmooth**, [TS] **tssmooth dexpontial**, [TS] **tssmooth exponential**, [TS] **tssmooth hwinters**, [TS] **tssmooth shwinters**
- Montgomery, J. M., [BMA] **Intro**
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- Montori, V. M., [ADAPT] **gsdesign twoproportions**
- Montoya, D., [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**
- Mood, A. M., [R] **centile**
- Mooi, E., [MV] **cluster**, [MV] **pca**, [R] **anova**, [R] **regress**
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- Moon, H. R., [XT] **xtcointtest**, [XT] **xtunitroot**
- Mooney, C. Z., [R] **bootstrap**, [R] **jackknife**, [R] **rocreg**, [R] **rocregplot**
- Moore, E. H., [M-5] **pinv()**
- Moore, J. B., [TS] **sSPACE**
- Moore, R. A., [META] **meta**
- Moore, R. J., [FN] **Statistical functions**
- Moore, W. H., [R] **zioprobit**
- Mora, R., [R] **Inequality**
- Moral-Benito, E., [BMA] **Intro**, [BMA] **bmaregress**, [XT] **xtabond**, [XT] **xtddp**, [XT] **xtddpsys**
- Morales-Gómez, A., [SEM] **gsem**
- Moran, J. L., [R] **dstdize**
- Moran, P. A. P., [SP] **estat moran**
- Morelli, S., [SVY] **Survey**
- Moreno, S. G., [META] **meta**, [META] **meta funnelplot**, [META] **meta bias**
- Moreno-Gorrin, C., [ST] **stcox**
- Morgan, K. E., [PSS-2] **Intro (power)**
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- Morgenstern, H., [R] **Epitab**, [R] **Epitab**
- Mori, M., [ST] **sterreg**
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- Morris, C. N., [META] **meta summarize**, [META] **meta regress**, [R] **bootstrap**
- Morris, J. N., [SEM] **Example 48g**, [ST] **stsplit**
- Morris, N. F., [R] **binreg**
- Morris, T. P., [G-4] **colorstyle**, [MI] **Intro substantive**, [MI] **mi impute**, [MI] **mi impute pmm**, [PSS-2] **Intro (power)**, [R] **ssc**
- Morrison, D. F., [MV] **clustermat**, [MV] **discrim lda**, [MV] **discrim logistic**, [MV] **discrim logistic postestimation**, [MV] **manova**
- Morrison, M. A., [D] **icd10**
- Morrow, A., [R] **Epitab**
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- Mosconi, L., [ADAPT] **gsdesign twomeans**
- Moser, M., [BMA] **bmastats jointness**
- Moser, P., [CAUSAL] **didregress**
- Mosier, C. I., [MV] **procrustes**
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- Nelson, W., [ST] **estat gofplot**, [ST] **stcrreg postestimation**, [ST] **sts**
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- Neumayer, E., [SP] **Intro**
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- Neyman, J., [R] **ci**
- Ng, E. S.-W., [ME] **me**, [ME] **meglm**, [ME] **melogit**, [ME] **meprobit**, [R] **bootstrap**, [R] **bstat**
- Ng, S., [TS] **dflgs**
- Nguyen, J. T., [PSS-2] **Intro (power)**, [R] **esize**
- Nguyen, K. N., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Nguyen, T. Q., [CAUSAL] **mediate**
- Nicewander, W. A., [R] **correlate**
- Nichols, A., [CAUSAL] **etregress**, [CAUSAL] **hddidregress**, [CAUSAL] **teffects intro advanced**, [CAUSAL] **xthdidregress**, [ME] **meglm**, [ME] **mixed**, [R] **ivregress**, [R] **reg3**, [XT] **xtrc**, [XT] **xtrreg**
- Nickell, S. J., [R] **gmm**, [TS] **forecast**, [XT] **xtabond**, [XT] **xtdpd**, [XT] **xtdpdsys**, [XT] **xtivreg**, [XT] **xtunitroot**
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- Nielsen, B., [TS] **varsoc**, [TS] **vec intro**
- Nielsen, M. Ø., [CAUSAL] **DID intro**, [CAUSAL] **didregress**, [R] **bootstrap**, [R] **wildbootstrap**
- Nightingale, F. [G-2] **graph pie**
- Nijenhuis, J. W., [R] **oprobit**
- Nijkamp, P., [META] **Intro**
- Nishimura, T., [FN] **Random-number functions**, [R] **set rng**, [R] **set rngstream**, [R] **set seed**
- Nocedal, J., [M-5] **LinearProgram()**
- Nogueras, G. M., [ST] **stcox**
- Nolan, D., [R] **Diagnostic plots**
- Nordlund, D. J., [MV] **discrim lda**
- Norman, R. E., [META] **meta esize**, [META] **meta summarize**
- Norton, E. C., [CAUSAL] **teffects intro advanced**, [FN] **Trigonometric functions**, [R] **churdle**, [R] **ivregress**, [R] **nbreg**, [R] **poisson**, [R] **qreg**, [R] **regress**, [R] **tobit**
- Norton, S. J., [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**
- Norwood, J. L., [R] **Intro**
- Novello, S., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Nunnally, J. C., [MV] **alpha**
- Nyaga, V. N., [META] **meta esize**
- Nyhan, B., [BMA] **Intro**
- Nyquist, H., [LASSO] **elasticnet**

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- O'Brien, K. L., [R] **prtest**
- O'Brien, P. C., [ADAPT] **GSD intro**, [ADAPT] **gs**, [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign oneproportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**
- O'Brien, R. G., [PSS-2] **power oneway**
- O'Brien, S. M., [CAUSAL] **stteffects intro**, [CAUSAL] **stteffects ipw**, [CAUSAL] **stteffects ipwra**, [CAUSAL] **stteffects postestimation**, [CAUSAL] **stteffects ra**, [CAUSAL] **stteffects wra**

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 O'Connell, P. G. J., [XT] **xtunitroot**  
 O'Connell, R. T., [TS] **tssmooth**, [TS] **tssmooth  
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 O'Donnell, O., [R] **Inequality**, [SVY] **svy estimation**,  
 [SVY] **svyset**  
 O'Fallon, W. M., [R] **logit**  
 O'Hara, B., [BAYES] **bayesmh**  
 O'Neill, D., [R] **gmm**  
 O'Neill, S., [R] **Inequality**  
 O'Rourke, K., [META] **meta labbeplot**  
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 Oberhofer, W., [R] **demandsys**  
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 [FN] **Trigonometric functions**  
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 Olson, J. M., [R] **symmetry**  
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 [META] **meta multilevel**  
 Omar, R. Z., [ME] **me**  
 Ooms, M., [TS] **arfima**  
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 [R] **summarize**, [R] **total**, [SP] **Intro**,  
 [SP] **spregress**  
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 Osbat, C., [XT] **xtunitroot**  
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 [ADAPT] **gsdesign oneproportion**  
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 [XT] **xtlogit**, [XT] **xtologit**, [XT] **xtoprobit**,  
 [XT] **xtprobit**, [XT] **xttobit**  
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- Parker, R. A., [META] **meta summarize**
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- Parmar, M. K. B., [ADAPT] **Intro**, [PSS-2] **Intro (power)**, [PSS-2] **power cox**, [ST] **stcox**, [ST] **streg**
- Parmeter, C. F., [R] **frontier**, [R] **npregress kernel**
- Parmigiani, G., [BAYES] **Intro**
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- Parzen, E., [R] **estat ic**, [R] **kdensity**
- Pasquini, J., [R] **Epitab**, [R] **vwls**
- Patel, N. R., [R] **exlogistic**, [R] **exlogistic postestimation**, [R] **expoisson**, [R] **tabulate twoway**
- Paterson, L., [ME] **melogit**
- Patiño, E. G., [ADAPT] **gsdesign usermethod**
- Patterson, H. D., [R] **pkcross**
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- Paulsen, J., [TS] **varsoc**, [TS] **vec intro**
- Pawitan, Y., [CAUSAL] **teffects ra**
- Payne, A., [R] **intreg**, [R] **tobit**
- Pazdur, R., [ADAPT] **gsdesign onemean**
- Pearl, J., [BAYES] **Intro**, [CAUSAL] **Intro**, [CAUSAL] **mediate**
- Pearson, E. S., [BAYES] **bayesmh**, [R] **ci**, [R] **ttest**
- Pearson, K., [G-2] **graph twoway histogram**, [META] **Intro**, [MV] **mds**, [MV] **measure\_option**, [MV] **pca**, [R] **correlate**, [R] **esize**, [R] **tabulate twoway**
- Pechlivanoglou, P., [R] **betareg**
- Péclat, M., [SP] **spdistance**
- Pedace, R., [R] **logit**, [R] **probit**, [R] **regress**, [R] **regress postestimation diagnostic plots**, [U] **20.26 References**
- Pedroni, P., [XT] **xtcointtest**
- Peel, D., [FMM] **fmm intro**, [FMM] **Example 1a**
- Peen, C., [MV] **procrustes**
- Peisker, J., [BMA] **Intro**
- Pellock, I. M., [BAYES] **bayesmh**
- Pendakur, K., [R] **demandsys**
- Pendergast, J. F., [XT] **xtcloglog**, [XT] **xtgee**, [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtlogit**, [XT] **xtoprobit**, [XT] **xtprobit**, [XT] **xttobit**
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- Peng, H., [SP] **Intro**
- Peng, J., [PSS-2] **power oneproportion**
- Peng, M., [R] **pwcompare**
- Peng, Z., [ADAPT] **gsdesign logrank**
- Penrose, R., [M-5] **pinv()**
- Pepe, M. S., [R] **roc**, [R] **roccomp**, [R] **rocfit**, [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**, [R] **roctab**, [ST] **stcrreg**
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- Perales, F., [ME] **meglm**
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- Pérez, C. M., [R] **Epitab**, [ST] **stcox**
- Pérez-Amaral, T., [U] **20.26 References**
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- Perron, P., [TS] **dfgls**, [TS] **estat sbsingle**, [TS] **mswitch**, [TS] **pperron**, [TS] **Glossary**
- Perrot, B., [IRT] **irt**
- Perry, H. M., [PSS-2] **power repeated**
- Persson, R., [G-1] **Graph intro**
- Pesaran, M. H., [XT] **xtunitroot**
- Pesarin, F., [R] **tabulate twoway**
- Peters, J., [CAUSAL] **Intro**
- Peters, J. L., [META] **Intro**, [META] **meta**, [META] **meta funnelplot**, [META] **meta bias**, [META] **meta trimfill**
- Petersen, I., [MI] **mi impute chained**
- Petersen, M., [R] **wildbootstrap**
- Peterson, B., [R] **ologit**
- Peterson, W. W., [R] **lroc**
- Petit, S., [D] **icd10**
- Petitclerc, M., [R] **kappa**
- Petitti, D. B., [META] **meta summarize**
- Petkova, E., [R] **suest**
- Peto, J., [META] **meta esize**, [META] **meta summarize**, [ST] **sts test**
- Peto, R., [META] **meta esize**, [META] **meta summarize**, [R] **ranksum**, [ST] **stcox**, [ST] **streg**, [ST] **sts test**
- Petrin, A. K., [R] **frontier**
- Pettigrew, H. M., [META] **meta esize**
- Pevalin, D., [ME] **mixed**
- Pevehouse, J. C. W., [TS] **Time series**, [TS] **arma**, [TS] **forecast**, [TS] **irf**, [TS] **var**, [TS] **vec**
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- Pfeffermann, D., [ME] **mixed**
- Pfeiffer, F., [ERM] **eoprobit**
- Pflueger, C. E., [R] **ivregress postestimation**
- Pförr, K., [XT] **xtmlogit**
- Philips, A. Q., [TS] **vec**, [TS] **vecrank**, [XT] **xtstreg**
- Phillips, A., [IRT] **difmh**

- Phillips, A. N., [META] **meta bias**
- Phillips, G., [R] **estat gof**
- Phillips, P. C. B., [DSGE] **Intro 8**, [R] **boxcox**, [R] **margins**, [R] **nlcom**, [R] **predictnl**, [R] **regress postestimation time series**, [R] **rocreg postestimation**, [R] **rocregplot**, [R] **testnl**, [TS] **pperron**, [TS] **vargranger**, [TS] **vec intro**, [TS] **vec**, [TS] **vecrank**, [TS] **Glossary**, [XT] **xtcointtest**, [XT] **xtunitroot**
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- Piccolo, D., [FMM] **fmm intro**
- Pichler, S., [R] **mlogit**
- Pickles, A., [CAUSAL] **teffects multivalued**, [ME] **me**, [ME] **mepoisson**, [ME] **mestreg**, [MV] **cluster dendrogram**, [R] **gllamm**, [R] **glm**, [SEM] **Acknowledgments**, [SEM] **Intro 2**, [SEM] **Example 29g**, [SEM] **Methods and formulas for gsem**, [XT] **xtgee**, [XT] **xheckman**
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- Pierce, G. S., [M-5] **LinearProgram()**
- Pierce, M., [CAUSAL] **teffects intro**
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- Piet, L., [FMM] **fmm intro**
- Pietsch, T. W., [MV] **cluster dendrogram**
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- Pillemer, D. B., [META] **Intro**, [META] **meta**, [META] **meta funnelplot**
- Pindyck, R. S., [ERM] **eprobit**, [R] **biprobit**, [R] **heckprobit**
- Pinheiro, J. C., [ME] **me**, [ME] **meglm**, [ME] **melogit**, [ME] **menl**, [ME] **menl postestimation**, [ME] **mepoisson**, [ME] **mixed**, [ME] **mixed**, [ME] **mixed postestimation**, [META] **meta meregress**, [META] **meta mvregress**
- Pinna, M., [G-2] **graph twoway scatter**, [R] **histogram**
- Pintilie, M., [ST] **sterreg**, [ST] **sterreg postestimation**
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- Pinzon, E., [D] **egen**, [P] **postfile**, [R] **gmm**, [R] **ivregress**, [R] **margins**, [R] **marginsplot**, [R] **mlexp**, [R] **npregress intro**, [R] **npregress kernel**, [R] **probit**, [SEM] **gsem**, [U] **1.4 References**, [XT] **xtabond**, [XT] **xtabond postestimation**, [XT] **xtreg**
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- Plan, E. L., [ME] **menl**
- Playfair, W. H., [G-2] **graph bar**, [G-2] **graph pie**
- Ploberger, W., [TS] **estat sbcsum**, [TS] **estat sbsingle**
- Plosser, C. I., [TS] **vecrank**
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- Plummer, W. D., Jr., [PSS-2] **power oneslope**, [R] **Epitab**, [R] **sunflower**
- Plümper, T., [SP] **Intro**
- Pluta, R. M., [ADAPT] **gs**
- Pocock, S. J., [ADAPT] **GSD intro**, [ADAPT] **gs**, [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign onepportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**
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- Poege, F., [R] **roctab**
- Poi, B. P., [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign onepportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**, [M-5] **deriv()**, [M-5] **moptimize()**, [P] **Intro**, [P] **—robust**, [R] **bootstrap**, [R] **bstat**, [R] **demandsys**, [R] **demandsys postestimation**, [R] **frontier**, [R] **gmm**, [R] **ivregress**, [R] **ivregress postestimation**, [R] **Maximize**, [R] **ml**, [R] **mlexp**, [R] **nl**, [R] **nlshr**, [R] **reg3**, [SVY] **Survey**, [SVY] **ml for svy**, [XT] **xtfrontier**, [XT] **xtrc**
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- Pokhrel, A., [ST] **sts**
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- Skrondal, A., [BAYES] **Intro**, [BAYES] **bayes**, [CM] **cmxtmixlogit**, [ERM] **eprobit**, [FMM] **fmm intro**, [IRT] **irt**, [IRT] **irt hybrid postestimation**, [ME] **me**, [ME] **meglm**, [ME] **meglm postestimation**, [ME] **melogit**, [ME] **melogit postestimation**, [ME] **menbreg**, [ME] **menl**, [ME] **meologit**, [ME] **meoprobit**, [ME] **mepoisson**, [ME] **mestreg**, [ME] **mixed**, [ME] **mixed postestimation**, [META] **meta regress postestimation**, [META] **meta me postestimation**, [META] **meta mvregress postestimation**, [R] **gllamm**, [R] **glm**, [R] **reri**, [SEM] **Acknowledgments**, [SEM] **Intro 2**, [SEM] **Intro 4**, [SEM] **Example 28g**, [SEM] **Example 29g**, [SEM] **Example 30g**, [SEM] **Example 39g**, [SEM] **Example 40g**, [SEM] **Example 41g**, [SEM] **Example 45g**, [SEM] **Example 46g**, [SEM] **Methods and formulas for gsem**, [SEM] **predict after gsem**, [U] **1.4 References**, [XT] **xtcloglog**, [XT] **xtgee**, [XT] **xthekman**, [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtologit**, [XT] **xtoprobit**, [XT] **xtpoisson**, [XT] **xtprobit**, [XT] **xtstreg**, [XT] **xttobit**
- Slaymaker, E., [P] **file**
- Sleight, P., [META] **meta esize**, [META] **meta summarize**
- Slone, D., [R] **Epitab**
- Smans, M., [ME] **menbreg**, [ME] **mepoisson**, [SEM] **Example 39g**
- Smeeth, L., [CAUSAL] **teffects psmatch**
- Smeeton, N. C., [R] **ranksum**, [R] **signrank**
- Smirnov, N. V., [R] **ksmirnov**
- Smith, A. F. M., [BAYES] **Intro**, [BAYES] **bayesmh**, [ERM] **eprobit**, [MI] **mi impute chained**, [TS] **arima**, [XT] **xtcloglog**, [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtologit**, [XT] **xtoprobit**, [XT] **xtpoisson**, [XT] **xtprobit**, [XT] **xttobit**
- Smith, B. T., [P] **matrix symeigen**
- Smith, C. A. B., [MV] **discrim estat**, [MV] **discrim qda**, [R] **ranksum**
- Smith, D. D., [META] **Intro**
- Smith, E. K., [R] **ologit**, [R] **oprobit**
- Smith, H., [ME] **me**, [ME] **menl**, [MV] **manova**, [R] **eivreg**, [R] **oneway**, [R] **stepwise**
- Smith, J., [TS] **dfgls**, [TS] **dfuller**, [TS] **pperron**
- Smith, J. M., [R] **fp**
- Smith, M. L., [META] **meta esize**, [META] **Glossary**, [R] **esize**
- Smith, P. G., [ADAPT] **gsdesign twoproportions**, [META] **meta esize**, [META] **meta summarize**, [PSS-2] **power twoproportions**
- Smith, R. J., [R] **ivprobit**
- Smith, R. L., [ST] **streg**
- Smith, T. M. F., [SVY] **Survey**
- Smith-Vikos, T., [MV] **discrim knn**
- Smithson, M., [R] **betareg**, [R] **esize**, [R] **regress postestimation**
- Smullyn, R. M., [MV] **mds**
- Smythe, B., [ST] **sts**
- Sneath, P. H. A., [MV] **cluster dendrogram**, [MV] **measure\_option**
- Snedecor, G. W., [R] **ameans**, [R] **anova**, [R] **correlate**, [R] **oneway**, [R] **ranksum**, [R] **signrank**
- Snell, E. J., [R] **xlogistic**, [R] **xpoisson**, [ST] **estat gofplot**, [ST] **stcox**, [ST] **stcox PH-assumption tests**, [ST] **stintcox postestimation**, [ST] **streg postestimation**
- Snow, J., [CAUSAL] **DID intro**, [R] **Epitab**
- Snowden, C. B., [SVY] **svy bootstrap**, [SVY] **Variance estimation**
- Snyder, M., [LASSO] **lasso examples**
- Sobel, M. E., [SEM] **estat teffects**
- Sobol, D. F., [ME] **me**, [ME] **meglm**, [ME] **meologit**, [ME] **meoprobit**, [XT] **xtologit**, [XT] **xtoprobit**
- Socinski, M. A., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Sohn, I., [LASSO] **lasso examples**
- Sokal, R. R., [MV] **cluster dendrogram**, [MV] **measure\_option**
- Solenberger, P., [MI] **Intro substantive**, [MI] **mi impute**, [MI] **mi impute chained**, [MI] **mi impute logit**, [MI] **mi impute mlogit**, [MI] **mi impute monotone**, [MI] **mi impute ologit**, [MI] **mi impute poisson**, [MI] **mi impute truncreg**
- Soloaga, I., [R] **Inequality**
- Sommer, C. J., [FMM] **fmm intro**
- Sommer, J., [ADAPT] **gsdesign onemean**
- Song, F., [META] **Intro**, [META] **meta trimfill**
- Song, S. H., [ME] **mixed**, [R] **estat ic**
- Sood, A., [ADAPT] **gsdesign twoproportions**
- Sood, N., [CAUSAL] **didregress postestimation**
- Sood, R., [ADAPT] **gsdesign twoproportions**
- Sörbom, D., [MV] **factor postestimation**, [SEM] **estat ginvariant**, [SEM] **estat mindices**, [SEM] **estat residuals**, [SEM] **estat scoretests**
- Sorensen, D., [M-1] **LAPACK**, [M-5] **lapack()**, [P] **matrix eigenvalues**
- Sørensen, T. J., [MV] **measure\_option**
- Sorrentino, R., [TS] **tsfilter**, [TS] **tsfilter bw**
- Sosa-Escudero, W., [XT] **xtreg**, [XT] **xtreg postestimation**, [XT] **xtregar**
- Sotoca, S., [TS] **sspace**
- Soupre, M., [TS] **forecast**
- Sowell, F., [TS] **arima**
- Spanier, J., [FN] **Mathematical functions**, [FN] **Trigonometric functions**

- Sparks, A. T., [SEM] **Example 41g**
- Späth, H., [MV] **cluster**
- Spearman, C. E., [MV] **factor**, [R] **icc**, [R] **spearman**
- Speed, F. M., [R] **margins**
- Speed, T., [R] **Diagnostic plots**
- Spence, I., [G-2] **graph pie**
- Sperling, R. I., [TS] **dflgs**
- Spiegel, N., [R] **ztest**
- Spiegel, D. C., [ME] **me**, [ME] **meglm**, [ME] **meologit**, [ME] **meoprobit**, [XT] **xtologit**, [XT] **xtoprobit**
- Spiegelhalter, D. J., [BAYES] **bayesstats ic**, [META] **meta summarize**, [R] **brier**
- Spieldman, R. S., [R] **symmetry**
- Spieß, J., [CAUSAL] **DID intro**, [CAUSAL] **hddidregress**
- Spießens, B., [ME] **me**, [ME] **melogit postestimation**
- Spindler, M., [LASSO] **Lasso inference intro**, [LASSO] **poivregress**, [LASSO] **poregress**
- Spinelli, D., [SP] **Intro**, [ST] **stcox postestimation**
- Spitzer, J. J., [R] **boxcox**
- Spizzichino, F., [BAYES] **Intro**
- Splawa-Neyman, J., [CAUSAL] **Intro**
- Sprent, P., [R] **ranksum**, [R] **signrank**
- Springate, D. A., [META] **Intro**
- Squire, W., [M-5] **deriv()**
- Sribney, W. M., [P] **matrix mkmat**, [PSS-2] **power trend**, [R] **stepwise**, [SVY] **estat**, [SVY] **svy postestimation**, [SVY] **svy: tabulate twoway**, [SVY] **sydescribe**
- Srivastava, S., [META] **meta summarize**
- Stack, C. B., [META] **meta summarize**
- Staelin, R., [CM] **Intro 6**, [CM] **cmrologit**
- Stagg, V., [R] **pwcompare**
- Stahel, W. A., [CAUSAL] **hddidregress**, [CAUSAL] **xthdidregress**, [D] **egen**
- Stahl, D., [MV] **cluster**, [MV] **cluster stop**
- Staiger, D. O., [R] **ivregress postestimation**
- Stalpers, L. J. A., [ST] **sts**
- Stampini, M., [XT] **xtreg**
- Stangl, D. K., [BAYES] **Intro**
- Starmer, C. F., [R] **vwls**
- Startz, R., [R] **ivregress postestimation**, [TS] **mswitch**
- Staub, K. E., [R] **ologit**, [XT] **xtologit**
- Steel, M. F. J., [BMA] **Intro**, [BMA] **bmaregress**, [BMA] **bmagraph msize**, [BMA] **bmastats jointness**, [BMA] **bmastats lps**, [BMA] **bmastats mszie**
- Stefanski, L. A., [CAUSAL] **teffects aipw**, [R] **eivreg**
- Stegun, I. A., [FN] **Mathematical functions**, [R] **contrast**, [R] **orthog**
- Steichen, T. J., [D] **duplicates**, [META] **meta**, [META] **meta bias**, [META] **meta trimfill**, [R] **sunflower**
- Steiger, J. H., [R] **esize**
- Steiger, W., [R] **qreg**
- Steigerwald, D. G., [MV] **cluster**
- Stein, C., [R] **bootstrap**
- Steinberg, D., [CM] **cmmixlogit**, [CM] **cmxtmixlogit**
- Steinberg, L., [IRT] **irt grm**
- Stephenson, D. B., [MV] **pca**, [R] **brier**
- Stepniewska, K. A., [R] **nptrend**
- Stern, H. S., [BAYES] **Intro**, [BAYES] **bayesmh**, [BAYES] **bayesstats ic**, [BAYES] **bayesstats ppvalues**, [BAYES] **bayesstats summary**, [BAYES] **bayespredict**, [BAYES] **bayes: xtnbreg**, [BAYES] **Glossary**, [MI] **Intro substantive**, [MI] **mi impute mvn**, [MI] **mi impute regress**
- Stern, J. M., [META] **Intro**
- Sterne, J. A. C., [META] **Intro**, [META] **meta**, [META] **meta forestplot**, [META] **meta summarize**, [META] **meta funnelplot**, [META] **meta bias**, [MI] **Intro**, [R] **dstdize**, [R] **summarize**, [SEM] **Intro 5**, [ST] **stcox**, [XT] **xtreg**
- Steurer, M., [META] **meta data**
- Stevens, E. H., [MV] **mvtest**
- Stevenson, R. E., [R] **frontier**
- Stewart, D. L., [ADAPT] **gsdesign twoproportions**
- Stewart, G. W., [M-5] **svd()**, [P] **matrix svd**
- Stewart, J., [ST] **ltable**
- Stewart, M. B., [R] **intreg**, [R] **oprobit**, [R] **tobit**, [XT] **xtprobit**
- Stigler, S. M., [R] **ameans**, [R] **ci**, [R] **correlate**, [R] **kwallis**, [R] **qreg**, [R] **regress**, [R] **summarize**
- Stijnen, T., [META] **meta mvregress**
- Stillman, S., [R] **ivregress**, [R] **ivregress postestimation**
- Stinchcombe, M. B., [R] **npregress kernel**
- Stine, R., [R] **bootstrap**
- Stützer, M. L., [META] **meta mvregress**
- Stock, J. H., [R] **areg postestimation**, [R] **ivregress**, [R] **ivregress postestimation**, [R] **npregress kernel**, [R] **regress**, [TS] **Time series**, [TS] **arch**, [TS] **dfactor**, [TS] **dflgs**, [TS] **irf create**, [TS] **rolling**, [TS] **sspace**, [TS] **var intro**, [TS] **var**, [TS] **var svar**, [TS] **vec intro**, [TS] **vec**, [TS] **vecrank**, [TS] **Glossary**, [XT] **xtcloglog**, [XT] **xthtaylor**, [XT] **xtlogit**, [XT] **xtologit**, [XT] **xtoprobit**, [XT] **xtpoisson**, [XT] **xtprobit**, [XT] **xtreg**, [XT] **xtstreg**
- Stoker, T. M., [R] **npregress kernel**
- Stoll, B. J., [R] **Epitab**
- Stoll, L., [MI] **mi estimate**
- Stone, M. H., [IRT] **irt**
- Stone, R., [R] **demandsys**
- Storer, B. E., [ST] **sterreg**
- Stork, D. G., [MV] **cluster**, [MV] **cluster stop**
- Stoto, M. A., [R] **lv**
- Stouffer, S. A., [SEM] **Example 50g**
- Stover, L., [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**
- Støvring, H., [M-2] **pointers**
- Straathof, B., [D] **insobs**
- Stram, D. O., [ME] **me**
- Strasser, M., [CAUSAL] **didregress postestimation**
- Street, J. O., [R] **rreg**



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     [R] **qreg**, [R] **ratio**, [R] **spearman**,  
     [R] **summarize**, [R] **symmetry**, [R] **total**,  
     [SVY] **Survey**  
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     [PSS-2] **power mcc**, [R] **clogit**, [R] **clogit**  
     **postestimation**, [R] **estat classification**,  
     [R] **estat gof**, [R] **glm**, [R] **lincom**, [R] **logistic**,  
     [R] **logistic postestimation**, [R] **logit**, [R] **logit**  
     **postestimation**, [R] **lroc**, [R] **lrtest**, [R] **lsens**,  
     [R] **mlogit**, [R] **predictnl**, [R] **stepwise**,  
     [RPT] **dyndoc**, [RPT] **putdocx intro**,  
     [RPT] **set docx**, [SEM] **Example 33g**,  
     [SEM] **Example 34g**, [XT] **xtgee**  
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     **intro**, [LASSO] **Inference examples**,  
     [M-5] **LinearProgram()**  
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 Sued, M., [CAUSAL] **teffects intro advanced**  
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     [SVY] **svy: tabulate twoway**  
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 Sumners, J. E., [ADAPT] **gsdesign twoproportions**  
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     [ST] **stintreg**  
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     [R] **ivregress postestimation**  
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     [R] **ivregress**, [R] **test**, [XT] **xt**  
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     **examples**, [M-5] **LinearProgram()**  
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     [ME] **meoprobit**, [XT] **xtologit**, [XT] **xtoprobit**  
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     [META] **meta data**, [META] **meta esize**,  
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     **funnelplot**, [META] **meta bias**, [META] **meta**

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     [XT] **xtreg**  
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     [XT] **xtgee**  
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     **esize**  
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     [PSS-2] **power onemean**, [PSS-2] **power**  
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     [CAUSAL] **teffects aipw**  
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     [MI] **mi impute mvn**  
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     **postestimation**, [R] **lincom**, [R] **mlogit**,  
     [R] **mprobit**, [R] **mprobit postestimation**,  
     [R] **predictnl**, [R] **slogit**, [SEM] **Example 37g**  
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     [R] **demandsys**, [R] **frontier**, [R] **heckman**,  
     [R] **lrtest**, [R] **suest**  
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- Taylor, J. M. G., [MI] **Intro substantive**, [MI] **mi impute**, [MI] **mi impute pmm**, [MI] **mi impute regress**
- Taylor, L. W., [R] **predict**
- Taylor, M. A., [R] **set rngstream**, [R] **simulate**
- Taylor, W. E., [XT] **xhtaylor**
- Tazare, J., [CAUSAL] **teffects psmatch**
- Teller, A. H., [BAYES] **Intro**
- Teller, E., [BAYES] **Intro**
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- Tenhunen, O., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- ter Bogt, T., [MV] **mvtest**
- Teräsvirta, T., [TS] **mgarch**, [TS] **mgarch ccc**
- Terbish, M., [R] **logit**
- Terlaky, T., [M-5] **LinearProgram()**
- Ternès, N., [LASSO] **lasso postestimation**
- Terpstra, T. J., [R] **nptrend**
- Terrin, N., [META] **Intro**, [META] **meta funnelplot**, [META] **meta bias**
- Terza, J. V., [CAUSAL] **eteffects**, [CAUSAL] **etpoisson**, [R] **cpoisson**, [R] **heckpoisson**, [R] **margins**
- Tetzlaff, J., [META] **Intro**, [META] **meta funnelplot**, [META] **meta bias**
- Teukolsky, S. A., [FN] **Statistical functions**, [G-2] **graph twoway contour**, [M-5] **solvenl()**, [P] **matrix symeigen**, [R] **dydx**
- Textor, J., [CAUSAL] **Intro**
- Thall, P. F., [ME] **mepoisson**
- Thayer, D. T., [IRT] **difmh**
- the National Birth Defects Prevention Study, [R] **rer**
- Theil, H., [R] **demandsys**, [R] **ivregress**, [R] **reg3**, [TS] **prais**
- Therneau, T. M., [ME] **mestreg**, [ST] **stcox**, [ST] **stcox PH-assumption tests**, [ST] **stcox postestimation**, [ST] **sterreg**
- Thiele, T. N., [R] **summarize**
- Thissen, D., [IRT] **irt grm**
- Thoenig, M., [SP] **spregress**
- Thomas, A., [BAYES] **bayesmh**
- Thomas, D. C., [R] **rer**, [ST] **sttocc**
- Thomas, D. G., [META] **meta esize**, [R] **Epitab**
- Thomas, D. R., [SVY] **svy: tabulate twoway**
- Thompson, B., [MV] **canon postestimation**, [R] **esize**, [R] **regress postestimation**
- Thompson, C. A., [ADAPT] **gsdesign twoproportions**
- Thompson, D. J., [CAUSAL] **teffects intro advanced**
- Thompson, J., [BAYES] **Intro**, [BAYES] **Bayesian commands**, [BAYES] **bayesmh**, [PSS-2] **power**, [R] **poisson**, [ST] **stptime**
- Thompson, J. A., [PSS-2] **Intro (power)**
- Thompson, J. C., [R] **Diagnostic plots**
- Thompson, J. R., [META] **meta mvregress**, [R] **kdensity**
- Thompson, M. L., [R] **rocreg**
- Thompson, S. G., [ME] **me**, [META] **Intro**, [META] **Intro**, [META] **meta esize**, [META] **meta set**, [META] **meta summarize**, [META] **meta summarize**, [META] **meta regress**, [META] **estat bubbleplot**, [META] **meta meregress**, [META] **meta multilevel**, [META] **meta mvregress**, [META] **estat heterogeneity (mv)**, [META] **Glossary**
- Thompson, S. K., [BAYES] **Intro**, [SVY] **Survey**
- Thompson, W. A., Jr., [ME] **me**, [ME] **menl**, [ME] **mixed**
- Thoms, J., [BAYES] **bayesmh**
- Thomson, G. H., [MV] **factor postestimation**, [MV] **Glossary**
- Thomson, I. R., [ADAPT] **gsdesign twoproportions**
- Thorndike, F., [R] **poisson**
- Thuiller, W., [BMA] **Intro**
- Thurstone, L. L., [CM] **cmrologit**, [MV] **rotate**
- Tian, L., [ST] **stcox**
- Tibbles, M., [G-2] **graph combine**, [G-2] **graph twoway scatter**
- Tibshirani, R. J., [BMA] **bmastats lps**, [LASSO] **Lasso intro**, [LASSO] **elasticnet**, [LASSO] **lasso**, [LASSO] **lassogof**, [LASSO] **lassoknots**, [LASSO] **lasso options**, [LASSO] **sqrtlasso**, [M-5] **LinearProgram()**, [MV] **discrim knn**, [R] **bootstrap**, [R] **qreg**
- Tidmarsh, C. E., [R] **fp**
- Tierney, L., [BAYES] **Intro**, [ME] **me**
- Tilbury, J. B., [R] **signrank**
- Tilford, J. M., [R] **estat gof**
- Tilling, K., [ME] **mixed**, [ST] **stcox**, [XT] **xtreg**
- Timm, N. H., [MV] **manova**
- Ting Lee, M.-L., [ST] **stcox PH-assumption tests**
- Tingley, D., [CAUSAL] **mediate**
- Tippett, L. H. C., [ST] **streg**
- Titunik, R., [CAUSAL] **teffects intro**, [CAUSAL] **teffects intro advanced**, [PSS-2] **power**
- Tjernström, E., [XT] **xtgee**, [XT] **xtreg**
- Tobias, J. L., [BMA] **Intro**
- Tobin, J., [ERM] **eintreg**, [R] **tobit**
- Toby, J., [SEM] **Example 50g**
- Toeplitz, O., [M-5] **Toeplitz()**
- Tolkien, J. R. R., [SP] **Intro 2**
- Tolnay, S. E., [SP] **estat moran**, [SP] **spregress**, [SP] **spxtregress**
- Toman, R. J., [R] **stepwise**
- Tommasello, A. C., [META] **meta mvregress**
- Tone, K., [M-5] **LinearProgram()**
- Tong, H., [R] **estat ic**, [TS] **threshold**
- Topcuoglu, M. A., [ADAPT] **gs**
- Toplis, P. J., [R] **binreg**
- Torgerson, W. S., [MV] **mds**, [MV] **mdslong**, [MV] **mdsmat**
- Torgovitsky, A., [R] **ivregress**
- Touloupoulou, T., [ME] **meclglog**, [ME] **melogit**, [ME] **meprobit**
- Touloumi, G., [ME] **meglm**, [ME] **mixed**
- Townes, J. M., [D] **icd10**

- Townsend, W., [LASSO] **Lasso intro**
- Train, G. F., [SVY] **Survey**, [SVY] **svy sdr**, [SVY] **Variance estimation**
- Train, K. E., [CM] **Intro 5**, [CM] **Intro 8**, [CM] **cmclgit**, [CM] **cmmlgit**, [CM] **cmmprobbit**, [CM] **cmxtmixlogit**
- Tramarin, A., [R] **betareg**
- Tramèr, M. R., [META] **meta**
- Trampe, B., [R] **mlexp**
- Trapido, E., [R] **exlogistic**
- Trapp, G., [M-5] **deriv()**
- Trefethen, L. N., [M-5] **svd()**
- Treiman, D. J., [R] **eivreg**, [R] **mlogit**
- Trewn, J., [MV] **mds**
- Trichopoulos, D., [R] **Epitab**
- Trikalinos, T. A., [META] **meta bias**
- Trimbur, T. M., [TS] **psdensity**, [TS] **tsfilter**, [TS] **tsfilter hp**, [TS] **ucm**
- Trinitapoli, J., [P] **levelsof**, [RPT] **putdocx begin**, [RPT] **putpdf begin**
- Trivedi, P. K., [BAYES] **Intro**, [CAUSAL] **etregress**, [CAUSAL] **stteffects intro**, [CAUSAL] **stteffects ipw**, [CAUSAL] **stteffects ipwra**, [CAUSAL] **stteffects postestimation**, [CAUSAL] **stteffects ra**, [CAUSAL] **stteffects wra**, [CAUSAL] **teffects intro advanced**, [CAUSAL] **teffects aipw**, [CAUSAL] **teffects ra**, [CM] **Intro 8**, [CM] **cmclgit**, [CM] **cmmlgit**, [CM] **cmmprobbit**, [CM] **cmxtmixlogit**, [ERM] **Intro 9**, [ERM] **eintreg**, [FMM] **fmml intro**, [FMM] **Example 1a**, [FMM] **Example 2**, [FMM] **Example 3**, [LASSO] **Lasso intro**, [ME] **meglm**, [ME] **mixed**, [R] **betareg**, [R] **bootstrap**, [R] **cpoisson**, [R] **gmm**, [R] **heckman**, [R] **heckprobit**, [R] **heckpoisson**, [R] **intreg**, [R] **ipoisson**, [R] **ivregress**, [R] **ivregress postestimation**, [R] **logit**, [R] **mprobit**, [R] **nbreg**, [R] **ologit**, [R] **oprobit**, [R] **poisson**, [R] **probit**, [R] **qreg**, [R] **regress**, [R] **regress postestimation**, [R] **simulate**, [R] **sureg**, [R] **tnbreg**, [R] **tobit**, [R] **tpoisson**, [R] **zinb**, [R] **zinb postestimation**, [R] **zip**, [R] **zip postestimation**, [SEM] **Example 53g**, [SEM] **Example 54g**, [TS] **forecast estimates**, [XT] **xt**, [XT] **xtnbreg**, [XT] **xtpoisson**
- Trocino, G., [ADAPT] **gsdesign twoproportions**
- Troncoso, P., [SEM] **gsem**
- Tsai, C.-L., [LASSO] **lasso**, [LASSO] **lassoknots**, [R] **estat ic**, [R] **IC note**, [R] **npregress intro**, [R] **npregress kernel**
- Tsakanikas, D., [ADAPT] **gsdesign twomeans**
- Tsay, R. S., [TS] **varsoc**, [TS] **vec intro**
- Tse, Y. K., [TS] **mgarch**, [TS] **mgarch vcc**
- Tsiatis, A. A., [ADAPT] **GSD intro**, [ADAPT] **gs**, [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign oneproportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**, [CAUSAL] **stteffects intro**, [CAUSAL] **stteffects ipw**, [CAUSAL] **stteffects ipwra**, [CAUSAL] **stteffects postestimation**, [CAUSAL] **stteffects ra**, [CAUSAL] **stteffects wra**, [CAUSAL] **teffects intro advanced**, [CAUSAL] **teffects aipw**, [R] **exlogistic**, [ST] **sterreg**, [ST] **stintcox**, [ST] **stintreg**
- Tsui, A. K. C., [TS] **mgarch**, [TS] **mgarch vcc**
- Tsui, K.-W., [BAYES] **bayesstats ppvalues**, [BAYES] **bayespredict**
- Tsybakov, A. B., [LASSO] **Lasso inference intro**, [LASSO] **lasso**
- Tu, D., [SVY] **Survey**, [SVY] **svy jackknife**, [SVY] **Variance estimation**
- Tübbicke, S., [CAUSAL] **teffects intro**
- Tufte, E. R., [G-2] **graph bar**, [G-2] **graph pie**, [R] **stem**
- Tukey, J. W., [D] **egen**, [G-2] **graph box**, [G-2] **graph matrix**, [META] **meta esize**, [META] **Glossary**, [P] **if**, [R] **jackknife**, [R] **ladder**, [R] **linktest**, [R] **lv**, [R] **pwcompare**, [R] **regress postestimation diagnostic plots**, [R] **rreg**, [R] **smooth**, [R] **spikeplot**, [R] **stem**, [SVY] **svy jackknife**
- Tukey, P. A., [G-2] **graph box**, [G-2] **graph matrix**, [G-3] **by-option**, [R] **Diagnostic plots**, [R] **lowess**, [U] **1.4 References**
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- Turner, E. L., [PSS-2] **power**, [PSS-2] **power onemean**, [PSS-2] **power twomeans**, [PSS-2] **power oneproportion**, [PSS-2] **power twoproportions**, [PSS-2] **power logrank**, [PSS-2] **cluster**, [R] **permute**, [XT] **xtgee**
- Turner, R. M., [ME] **me**, [META] **Intro**, [META] **Intro**, [META] **meta meregress**, [META] **meta multilevel**
- Turpeinen, M., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Tutz, G., [ME] **me**
- Tuuli, M. G., [ADAPT] **gsdesign twoproportions**
- Tweedie, R. L., [META] **Intro**, [META] **Intro**, [META] **meta**, [META] **meta trimfill**
- Twisk, J. W. R., [XT] **xtgee**, [XT] **xtlogit**, [XT] **xtlogit**, [XT] **xtprobit**, [XT] **xtreg**
- Tye, L., [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign oneproportion**
- Tyler, D. E., [MV] **pea**
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- U.S. Food and Drug Administration, [ADAPT] **Intro**, [ADAPT] **Glossary**
- Überhuber, C. W., [M-5] **Quadrature()**
- Uberti, L. J., [R] **logistic**, [R] **logit**
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Uhlendorff, A., [CM] **cmmprobit**, [R] **mlogit**,  
[R] **mprobit**  
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Ulam, S., [BAYES] **Intro**  
Ulene, A. L., [ME] **me**, [ME] **meglm**, [ME] **meologit**,  
[ME] **meoprobit**, [XT] **xtologit**, [XT] **xtoprobit**  
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Upward, R., [ME] **meglm**, [ME] **melogit**,  
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Ura, T., [CAUSAL] **teffects intro advanced**  
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[TS] **mgarch**, [TS] **tsline**  
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## V

Vach, W., [R] **Epitab**, [R] **mlogit**, [R] **regress**,  
[ST] **sterreg**  
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Vahter, P., [ERM] **eprobit**  
Vail, S. C., [ME] **mepoisson**  
Valentine, J. C., [META] **Intro**, [META] **meta**  
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Valsecchi, M. G., [PSS-2] **power logrank**, [ST] **sterreg**,  
[ST] **sts test**  
van Belle, G., [MV] **factor**, [MV] **pca**, [PSS-2] **power**  
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[PSS-2] **power twoway**, [R] **anova**, [R] **dstdize**,  
[R] **oneway**  
van Breukelen, G. J. P., [PSS-2] **power onemean**,  
**cluster**, [PSS-2] **power twomeans**, **cluster**,  
[PSS-2] **power oneproportion**, **cluster**,  
[PSS-2] **power twoproportions**, **cluster**  
van Buuren, S., [MI] **Intro substantive**, [MI] **mi**  
**impute**, [MI] **mi impute chained**, [MI] **mi**  
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**impute monotone**, [MI] **mi impute ologit**,  
[MI] **mi impute poisson**  
van de Geer, S., [LASSO] **Lasso intro**, [LASSO] **lasso**  
van de Ven, L. L. M., [ADAPT] **gsdesign**  
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Van de Ven, W. P. M. M., [ERM] **eprobit**, [R] **biprobit**,  
[R] **heckoprobit**, [R] **heckprobit**  
van den Broeck, J., [R] **frontier**, [XT] **xtfrontier**  
van der Ende, J., [MV] **mvtest**  
Van der Heijden, P. G. M., [MV] **ca postestimation**  
van der Laan, M. J., [CAUSAL] **teffects intro**  
**advanced**  
Van Der Linde, A., [BAYES] **bayesstats ic**  
van der Linden, W. J., [IRT] **irt**, [SEM] **Example 28g**,  
[SEM] **Example 29g**  
Van der Merwe, C. A., [MV] **mvtest**, [MV] **mvtest**  
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Van der Reyden, D., [R] **ranksum**  
van der Vaart, A. W., [BAYES] **bayesstats ppvalues**,  
[CAUSAL] **teffects aiwp**, [ST] **stintcox**  
van der Zander, B., [CAUSAL] **Intro**  
van Doorslaer, E., [SVY] **svy estimation**, [SVY] **svyset**  
van Dorsselaer, S., [MV] **mvtest**  
Van Hoewyk, J., [MI] **Intro substantive**, [MI] **mi**  
**impute**, [MI] **mi impute chained**, [MI] **mi**  
**impute logit**, [MI] **mi impute mlogit**, [MI] **mi**  
**impute monotone**, [MI] **mi impute ologit**,  
[MI] **mi impute poisson**, [MI] **mi impute**  
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van Houwelingen, H. C., [LASSO] **lasso**, [META] **meta**  
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Van Kerm, P., [P] **postfile**, [R] **Inequality**, [R] **kdensity**  
Van Loan, C. F., [R] **orthog**, [R] **tetrachoric**,  
[TS] **arfima**, [TS] **arfima postestimation**  
Van Mechelen, I., [MI] **Intro substantive**, [MI] **mi**  
**impute**  
Van Ourti, T., [R] **Inequality**  
Van Pragg, B. M. S., [ERM] **eprobit**, [R] **biprobit**,  
[R] **heckoprobit**, [R] **heckprobit**  
van Roye, B., [BAYES] **bayes: var**  
van Urk, H., [ADAPT] **gsdesign twoproportions**  
Vandaele, W., [BMA] **bmaregress**  
Vandebroek, M., [CM] **Intro 6**  
Vandermonde, A.-T., [M-5] **Vandermonde()**  
VanderWeele, T. J., [CAUSAL] **Intro**,  
[CAUSAL] **mediate**, [R] **ci**, [R] **Epitab**,  
[R] **poisson**, [R] **rer**  
Varadharajan-Krishnakumar, J., [XT] **xtivreg**  
Varian, H. R., [R] **demandsys**, [R] **demandsys**  
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Vázquez, D. P., [META] **Intro**  
Vazquez-Bare, G., [CAUSAL] **teffects intro**,  
[CAUSAL] **teffects intro advanced**  
Vazquez-Bare, G., [PSS-2] **power**  
Veall, M. R., [DSGE] **Intro 8**  
van't Veer, L. J., [LASSO] **lasso**  
Vega Yon, G. G., [R] **set rngstream**  
Vehtari, A., [BAYES] **Intro**, [BAYES] **bayesm**,  
[BAYES] **bayesstats ic**, [BAYES] **bayesstats**  
**ppvalues**, [BAYES] **bayesstats**  
**summary**, [BAYES] **bayespredict**,  
[BAYES] **bayes: xtnbreg**, [BAYES] **Glossary**,  
[BMA] **Intro**, [BMA] **bmastats lps**, [MI] **Intro**  
**substantive**, [MI] **mi impute mvn**, [MI] **mi**  
**impute regress**  
Vella, F., [CAUSAL] **etregress**, [ME] **me**  
Velleman, P. F., [R] **regress postestimation**, [R] **smooth**  
Venables, W., [R] **esize**  
Venti, S. F., [CAUSAL] **telasso**, [R] **ivqregress**  
Ventura, M., [CAUSAL] **teffects intro**  
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Verardi, V., [G-2] **graph box**, [MV] **pca**, [R] **correlate**, [R] **fp**, [R] **ivregress**, [R] **lpoly**, [R] **npregress kernel**, [R] **poisson**, [R] **rreg**, [R] **summarize**, [XT] **xtreg**

Verbeek, M., [CAUSAL] **etregress**, [ME] **me**

Verbeke, G., [ME] **me**, [ME] **me**, [ME] **meglm**, [ME] **menl**, [ME] **mixed**, [META] **meta meregress**, [MI] **Intro substantive**, [MI] **mi impute**, [XT] **xtreg postestimation**

Verdinelli, I., [BAYES] **Intro**

Verdurmen, J., [MV] **mvtest**

Verger, C., [CAUSAL] **Intro**

Verkuilen, J., [R] **betareg**

Vermadele, C., [G-2] **graph box**, [R] **summarize**

Verme, C. N., [ME] **menl**

Vermeulen, F., [R] **demandsys**

Veroniki, A. A., [META] **Intro**, [META] **meta esize**, [META] **meta set**, [META] **meta summarize**

Vetter, J. A., [META] **meta forestplot**

Vetterling, W. T., [FN] **Statistical functions**, [G-2] **graph twoway contour**, [M-5] **solvenl()**, [P] **matrix symeigen**, [R] **dydx**

Vevea, J. L., [META] **Intro**, [META] **meta summarize**

Vick, R., [R] **mlsexp**

Vidakovic, B., [BAYES] **Intro**

Vidmar, S., [R] **ameans**

Viechtbauer, W., [META] **Intro**, [META] **meta esize**, [META] **meta set**, [META] **meta summarize**, [META] **meta regress**, [META] **meta meregress**

Vigfusson, R. J., [TS] **forecast solve**

Vigna, C., [ADAPT] **gsdesign twoproportions**

Villar, S. S., [ADAPT] **Intro**

Villejo, L., [META] **meta mvregress**

Vinten-Johansen, P., [R] **Epitab**

Vittinghoff, E., [CAUSAL] **stteffects intro**, [CAUSAL] **stteffects ipw**, [CAUSAL] **stteffects ipwra**, [CAUSAL] **stteffects postestimation**, [CAUSAL] **stteffects ra**, [CAUSAL] **stteffects wra**, [CAUSAL] **tteffects intro advanced**, [R] **logistic**, [ST] **stcox**

Vock, D. M., [CAUSAL] **telasso**

Voena, A., [CAUSAL] **didregress**

Vogel, A., [ADAPT] **gsdesign logrank**

Vogel, R. M., [R] **ameans**

Vohr, B. R., [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**

Volinsky, C. T., [BMA] **Intro**, [BMA] **bmaregress**

Vollebergh, W. A. M., [MV] **mvtest**

von Bortkiewicz, L., [R] **poisson**

von Eye, A., [R] **correlate**

von Neumann, J., [BAYES] **Intro**

Von Storch, H., [R] **brier**

Vondráček, J., [R] **correlate**

Vonesh, E. F., [ME] **me**, [ME] **menl**, [R] **estat ic**

Vos, T., [META] **meta esize**, [META] **meta summarize**

Vuong, A. M., [R] **reri**

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Wada, R., [TABLES] **Intro**

Wade, A., [META] **Intro**

Wager, S., [CAUSAL] **Intro**

Wagner, H. M., [R] **qreg**

Wagner, M., [XT] **xtunitroot**

Wagner, T., [MV] **mvtest**

Wagstaff, A., [SVY] **svy estimation**, [SVY] **svyset**

Wagstaff, D. A., [MI] **mi estimate**

Wainer, H., [G-2] **graph pie**, [IRT] **DIF**

Wainwright, M., [LASSO] **Lasso intro**, [LASSO] **elasticnet**, [LASSO] **lasso**, [LASSO] **lassogof**, [LASSO] **lasso options**, [LASSO] **sqrtlasso**

Waksman, J., [PSS-2] **power logrank**, **cluster**

Walburg, H. E., Jr., [ST] **stntreg**

Wald, A., [ADAPT] **GSD intro**, [TS] **varwle**

Wales, T. J., [R] **demandsys**, [R] **demandsys postestimation**

Walker, A. J., [FN] **Random-number functions**, [M-5] **runiform()**

Walker, A. M., [R] **Epitab**, [R] **reri**

Walker, J., [CM] **cmmixlogit**, [CM] **cmxtmixlogit**

Walker, S., [ST] **sts test**

Walle, Y. M., [XT] **xtcointtest**, [XT] **xtgls**

Waller, L. A., [SP] **Intro**, [SP] **spregress**

Wallet, P. A., [META] **Intro**

Wallgren, A., [G-1] **Graph intro**

Wallgren, B., [G-1] **Graph intro**

Wallis, W. A., [ADAPT] **GSD intro**, [R] **kwallis**

Walsh, B., [R] **Inequality**

Walstrum, T., [CAUSAL] **etregress**

Walters, E. H., [META] **meta data**

Walters, S. J., [PSS-2] **power onemean**, **cluster**, [PSS-2] **power twomeans**, **cluster**, [PSS-2] **power oneproportion**, **cluster**, [PSS-2] **power twoproportions**, **cluster**, [R] **ci**, [R] **kappa**, [R] **tabulate twoway**, [R] **ztest**

Wand, M. P., [BAYES] **bayesmh**, [ME] **me**, [ME] **meglm**, [ME] **mixed**, [R] **kdensity**

Wang, C. C. Y., [CAUSAL] **didregress postestimation**

Wang, D., [R] **frontier**, [XT] **xtfrontier**

Wang, E., [ADAPT] **gsdesign onemean**

Wang, G., [ADAPT] **gsdesign logrank**

Wang, H., [ADAPT] **gsdesign oneproportion**, [PSS-2] **Intro (power)**, [PSS-2] **power onemean**, [PSS-2] **power twomeans**, [PSS-2] **power pairedmeans**, [PSS-2] **power oneproportion**, [PSS-2] **power exponential**, [PSS-3] **Intro (ciwidth)**, [PSS-3] **ciwidth onemean**, [PSS-3] **ciwidth twomeans**

Wang, H.-J., [R] **frontier**, [XT] **xtfrontier**

Wang, J., [ADAPT] **gsdesign logrank**

Wang, J.-L., [ST] **sts graph**

Wang, J. W., [ST] **streg**

Wang, K. S., [ADAPT] **gsdesign twoproportions**

Wang, L., [LASSO] **sqrtlasso**, [ST] **stntcox**



- Wang, N., [META] **Intro**
- Wang, Q., [R] **ivregress**, [TS] **arima**, [TS] **newey**
- Wang, S., [R] **ivregress postestimation**
- Wang, S. K., [ADAPT] **GSD intro**, [ADAPT] **gs**, [ADAPT] **gsbounds**, [ADAPT] **gsdesign**, [ADAPT] **gsdesign onemean**, [ADAPT] **gsdesign twomeans**, [ADAPT] **gsdesign oneproportion**, [ADAPT] **gsdesign twoproportions**, [ADAPT] **gsdesign logrank**, [ADAPT] **gsdesign usermethod**
- Wang, X., [ADAPT] **gsdesign onemean**, [PSS-2] **power**
- Wang, Y., [CM] **cmmprobit**, [TS] **var**, [TS] **vargranger**
- Wang, Z., [R] **Epitab**, [R] **logistic postestimation**
- Ward, B. W., [R] **ci**
- Ward, J. H., Jr., [MV] **cluster**, [MV] **cluster linkage**
- Ware, J. H., [ME] **me**, [ME] **meglm**, [ME] **melogit**, [ME] **meoprobit**, [ME] **mepoisson**, [ME] **mestreg**, [ME] **mixed**, [ST] **sts test**
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- Warn, D. E., [META] **Intro**, [META] **meta meregress**, [META] **meta multilevel**
- Warren, K., [R] **Epitab**
- Warton, D. I., [BMA] **Intro**
- Wasi, N., [D] **merge**
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- Webb, M. D., [CAUSAL] **DID intro**, [CAUSAL] **didregress**, [R] **bootstrap**, [R] **wildbootstrap**
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- Webster, A. D., [R] **fp**
- Wechsler, S., [ERM] **eintreg**
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- Weesie, J., [CM] **cmrologit**, [D] **joinby**, [D] **label**, [D] **label language**, [D] **labelbook**, [D] **mvencode**, [D] **recode**, [D] **reshape**, [MV] **alpha**, [MV] **ca postestimation**, [R] **hausman**, [R] **ladder**, [R] **regress postestimation**, [R] **suest**, [R] **tabstat**, [R] **tetrachoric**, [SEM] **Acknowledgments**, [ST] **stsplit**
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- West, S. G., [R] **pcorr**
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- White, H. L., Jr., [ERM] **eintreg**, [ERM] **eoprobit**, [ERM] **eprobit**, [ERM] **eregress**, [P] **\_robust**, [R] **regress**, [R] **regress postestimation**, [R] **rocreg**, [R] **suest**, [TS] **newey**, [TS] **prais**, [U] **20.26 References**, [XT] **xheckman**, [XT] **xtivreg**
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- Wilks, D. S., [R] **brier**
- Wilks, S. S., [MV] **canon**, [MV] **hotelling**, [MV] **manova**
- Williams, B., [SVY] **Survey**
- Williams, B. K., [MV] **discrim lda**
- Williams, G. W., [PSS-2] **power pairedproportions**
- Williams, H. P., [M-5] **LinearProgram()**
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- Williamson, E. J., [CAUSAL] **teffects psmatch**
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- Wilson, D. B., [BAYES] **Intro**
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- Wilson, M., [BAYES] **bayesmh**, [IRT] **irt**, [IRT] **Control Panel**, [IRT] **irt 1pl**, [IRT] **irt 2pl**, [IRT] **irt 3pl**, [IRT] **irt hybrid**, [IRT] **irt group()**, [IRT] **irtgraph icc**, [IRT] **diflogistic**, [IRT] **difmh**, [ME] **me**, [MV] **rotate**
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- Winkler, R. L., [BMA] **Intro**
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- Wolfowitz, J., [TS] **varwle**
- Wolfram, S., [ME] **meglm postestimation**, [ST] **streg**
- Wolfson, C., [R] **kappa**
- Wolfson, J., [CAUSAL] **telasso**
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- Wolpert, D. H., [BMA] **Intro**
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- Wolter, K. M., [SVY] **Survey**, [SVY] **svy brr**, [SVY] **Variance estimation**
- Wolter, S. C., [CAUSAL] **didregress postestimation**
- Wong, S. P., [R] **icc**
- Wong, W. H., [BAYES] **Intro**, [MI] **Intro substantive**, [MI] **mi impute mvn**
- Wood, A. M., [MI] **Intro substantive**, [MI] **mi estimate**, [MI] **mi estimate using**, [MI] **mi impute**, [MI] **mi impute chained**, [MI] **mi predict**
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- Wright, J. T., [R] **binreg**
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- Wu, D.-M., [R] **ivregress postestimation**
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- [BAYES] **bayesirf**, [TS] **irf**, [TS] **var intro**, [TS] **vec intro**, [TS] **vec**, [TS] **Glossary**

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[FMM] **fmm**, [FMM] **fmm: cloglog**,  
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[BAYES] **bayes: glm**, [FMM] **fmm**,  
[FMM] **fmm: glm**, [R] **binreg**, [R] **glm**
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[BAYES] **bayes: logit**,  
[BAYES] **bayes: xtlogit**, [FMM] **fmm**,  
[FMM] **fmm: logit**, [IRT] **irt 1pl**, [IRT] **irt**  
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[LASSO] **dslogit**, [LASSO] **elasticnet**,  
[LASSO] **lasso**, [LASSO] **pologit**,  
[LASSO] **xpologit**, [R] **exlogistic**, [R] **logistic**,  
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[BAYES] **bayes: melogit**,  
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[BAYES] **bayes: heckprobit**,  
[BAYES] **bayes: hetprobit**,  
[BAYES] **bayes: probit**,  
[BAYES] **bayes: xtprobit**, [ERM] **eprobit**,  
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[FMM] **fmm**, [FMM] **fmm: probit**,  
[LASSO] **elasticnet**, [LASSO] **lasso**,  
[R] **biprobit**, [R] **heckprobit**, [R] **hetprobit**,  
[R] **ivprobit**, [R] **probit**, [XT] **xtprobit**
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[CAUSAL] **teffects ipwra**,  
[CAUSAL] **teffects nnmatch**,  
[CAUSAL] **teffects psmatch**,  
[CAUSAL] **teffects ra**, [CAUSAL] **telasso**
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logistic, [BAYES] **bayes: mlogit**,  
[BAYES] **bayes: xtmlogit**, [CM] **cmclogit**,  
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[CM] **nlogit**, [FMM] **fmm**,  
[FMM] **fmm: mlogit**, [IRT] **irt nrm**, [IRT] **irt**  
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[XT] **xtmlogit**  
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[BAYES] **bayes: probit**,  
[BAYES] **bayes: xtprobit**, [CM] **cmmprobit**,  
[R] **mprobit**
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[BAYES] **bayes: metobit**, [ME] **meintreg**,  
[ME] **metobit**
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[LASSO] **elasticnet**, [LASSO] **lasso**,  
[LASSO] **poivregrss**, [LASSO] **poregress**,  
[LASSO] **sqrtlasso**, [LASSO] **xpoivregrss**,  
[LASSO] **xporegress**, [R] **anova**, [R] **areg**,  
[R] **churdle**, [R] **cnsreg**, [R] **frontier**, [R] **glm**,  
[R] **heckman**, [R] **hetregress**, [R] **intreg**,  
[R] **ivqregress**, [R] **ivregress**, [R] **ivtobit**,  
[R] **qreg**, [R] **reg3**, [R] **regress**, [R] **rreg**,  
[R] **sureg**, [R] **tobit**, [R] **truncreg**, [R] **vwls**
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[BAYES] **bayesmh**, [BAYES] **bayes: dsge**,  
[BAYES] **bayes: dsge1**,  
[BAYES] **bayes: glm**,  
[BAYES] **bayes: heckman**,  
[BAYES] **bayes: hetregress**,  
[BAYES] **bayes: intreg**,  
[BAYES] **bayes: regress**,  
[BAYES] **bayes: tobit**,  
[BAYES] **bayes: truncreg**,  
[BAYES] **bayes: var**, [BAYES] **bayes: xtreg**,  
[BMA] **bmaregress**
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[ME] **meintreg**, [ME] **menl**, [ME] **metobit**,  
[ME] **mixed**

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[CAUSAL] **didregress**,  
[CAUSAL] **xthdidregress**, [ERM] **eintreg**,  
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[ERM] **Example 8a**, [ERM] **Example 8b**,  
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[XT] **xtfrontier**, [XT] **xtgls**, [XT] **xthheckman**,  
[XT] **xhtaylor**, [XT] **xtintreg**, [XT] **xtivreg**,  
[XT] **xtpcse**, [XT] **xtreg**, [XT] **xtregar**,  
[XT] **xttobit**

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[PSS-2] **power onemean**, [PSS-2] **power**  
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[TS] **prais**, [TS] **sspace**, [TS] **threshold**,  
[TS] **ucm**, [TS] **var**, [TS] **var svar**, [TS] **vec**

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[CAUSAL] **eteffects**, [CAUSAL] **etregress**,  
[CAUSAL] **hdidregress**, [CAUSAL] **mediate**,  
[CAUSAL] **teffects aipw**, [CAUSAL] **teffects**  
**ipw**, [CAUSAL] **teffects ipwra**,  
[CAUSAL] **teffects nnmatch**,  
[CAUSAL] **teffects psmatch**,  
[CAUSAL] **teffects ra**, [CAUSAL] **telasso**,  
[CAUSAL] **xthdidregress**

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mixed-effects, [BAYES] **bayes: menbreg**,  
[BAYES] **bayes: mepoisson**, [ME] **menbreg**,  
[ME] **mepoisson**

negative binomial, [BAYES] **bayes: gnbreg**,

[BAYES] **bayes: nbreg**,

[BAYES] **bayes: tnbreg**,

[BAYES] **bayes: xtnbreg**,

[BAYES] **bayes: zinb**, [FMM] **fm**,

[FMM] **fm: nbreg**, [R] **nbreg**, [R] **tnbreg**,

[R] **zinb**, [SEM] **Intro 5**, [XT] **xtnbreg**

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Poisson, [BAYES] **bayes: poisson**,

[BAYES] **bayes: tpoisson**,

[BAYES] **bayes: xtpoisson**,

[BAYES] **bayes: zip**, [CAUSAL] **etpoisson**,

[FMM] **fm**, [FMM] **fm: poisson**,

[FMM] **fm: tpoisson**, [FMM] **Example 2**,

[FMM] **Example 3**, [LASSO] **dspoisson**,

[LASSO] **elasticnet**, [LASSO] **lasso**,

[LASSO] **popoisson**, [LASSO] **xpopoisson**,

[R] **cpoisson**, [R] **expoisson**, [R] **ivpoisson**,

[R] **poisson**, [R] **tpoisson**, [R] **zip**,

[SEM] **Intro 5**, [SEM] **Example 34g**,

[SEM] **Example 53g**, [SEM] **Example 54g**,

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treatment effects, [CAUSAL] **eteffects**,

[CAUSAL] **etpoisson**, [CAUSAL] **mediate**,

[CAUSAL] **teffects aipw**, [CAUSAL] **teffects**

**ipw**, [CAUSAL] **teffects ipwra**,

[CAUSAL] **teffects nnmatch**,

[CAUSAL] **teffects psmatch**,

[CAUSAL] **teffects ra**, [CAUSAL] **telasso**

fractional,

beta, [BAYES] **bayes: betareg**,

[FMM] **fm: betareg**, [R] **betareg**

fractional response, [BAYES] **bayes: fracreg**,

[R] **fracreg**, [R] **ivfprobit**

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[CAUSAL] **teffects ipw**, [CAUSAL] **teffects**

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logistic, [BAYES] **bayes: ologit**,

[BAYES] **bayes: xtologit**,

[BAYES] **bayes: ziologit**, [FMM] **fm**,

[FMM] **fm: ologit**, [IRT] **irt grm**,

[IRT] **irt pcm**, [IRT] **irt rsm**, [IRT] **irt**

**hybrid**, [R] **ologit**, [R] **slogit**, [R] **ziologit**,

[XT] **xtologit**

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mixed-effects, [BAYES] **bayes: meologit**,

[BAYES] **bayes: meoprobit**, [ME] **meologit**,

[ME] **meoprobit**

probit, [BAYES] **bayes: hetoprobit**,

[BAYES] **bayes: oprobit**,

[BAYES] **bayes: xtprobit**,

[BAYES] **bayes: zioprobit**, [ERM] **eoprobit**,

[ERM] **Example 6a**, [ERM] **Example 9**,

[FMM] **fm**, [FMM] **fm: oprobit**,

[R] **heckoprobit**, [R] **hetoprobit**, [R] **oprobit**,

[R] **zioprobit**, [XT] **xtoprobit**

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parametric, [BAYES] **bayes: streg**,

[FMM] **fmm: streg**, [FMM] **Example 4**,

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[ME] **mestreg**, [ME] **Glossary**, also see

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[R] **ivpoisson postestimation**, [R] **ivregress**

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- survival models, [BAYES] **bayes: mestreg**, [BAYES] **bayes: streg**, [FMM] **fm**, [FMM] **fm: streg**, [FMM] **Example 4**, [ME] **mestreg**, [SEM] **Intro 5**, [SEM] **Example 47g**, [SEM] **Example 48g**, [SEM] **Example 49g**, [ST] **stintreg**, [ST] **streg**, [SVY] **svy estimation**

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