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This is the complete contents for all manuals. Every estimation command has a postestimation entry; however, not all postestimation entries are listed here.

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Interface features

### **Getting started**

| [GSM] | Getting Started with Stata for Mac                    |
|-------|---|
| [GSU] | Getting Started with Stata for Unix                   |
| [GSW] | Getting Started with Stata for Windows                |
| [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

### Basic data commands

| codebook        | Describe data contents  |
|-----------------|---|
| data management | . Introduction to data management commands  |
| data types      | Quick reference for data types  |
| datetime        | Date and time values and variables  |
| describe        | Describe data in memory or in file  |
| edit            | Browse or edit data with Data Editor  |
| format          | Set variables' output format  |
| insobs          | Add or insert observations  |
| inspect         | . Display simple summary of data's attributes   |
| label           | Manipulate labels   |
| list            | List values of variables  |
| missing values  | Quick reference for missing values  |
|                 | Rename variable   |
| save            | Save Stata dataset  |
| sort            | Sort data   |
|                 | data management data types datetime describe edit format insobs inspect label list missing values rename save |

| [15]       | Load State dataset  |
|------------|---|
| [D]<br>[D] | use   |
| ركا        | variatings Manage variable labels, formats, and other properties  |
| Creating   | and dropping variables  |
| [FN]       | Date and time functions   |
| [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   |
| [D]        | clear   |
| [D]        | compress Compress data in memory                                  |
| [D]        | drop  |
| [D]        | dyngen Dynamically generate new values of variables               |
| [D]        | egen Extensions to generate                                       |
| [D]        | generate Create or change contents of variable                    |
| [R]        | orthog Orthogonalize variables and compute orthogonal polynomials |
| Functions  | and expressions   |
| [U]        | Section 12.4.2.1  |
| [U]        | Chapter 13 Functions and expressions                              |
| [FN]       | Date and time functions   |
| [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   |
| [D]        | egen Extensions to generate                                       |
| [D]        | 2. Constant   |
| Strings    |   |
| [U]        | Section 12.4 Strings  |
| [U]        | Section 12.4.2 Handling Unicode strings                           |
| [U]        | Chapter 23 Working with strings                                   |
| [FN]       | String functions  |
| [D]        | data types Quick reference for data types                         |
| [D]        | unicode   |
| Dates and  | l times   |
| [U]        | Section 12.5.3  |
| [U]        | Chapter 24  |
| [U]        | bcal  |
| [D]        | datetime  |
| [D]        | datetime business calendars Business calendars                    |
| [D]        | datetime business calendars creation Business calendars creation  |
| [D]        | datetime display formats Display formats for dates and times      |
| رنا        | discrime display formats  |

| [D]          | datetime translation String to numeric date translation functions       |
|--------------|---|
| Loading, sa  | aving, importing, and exporting data                                    |
| [GS]         | Chapter 6 (GSM, GSU, GSW) Using the Data Editor                         |
| [U]          | Chapter 21 Entering and importing data                                  |
| [D]          | edit Browse or edit data with Data Editor                               |
| [D]          | export Overview of exporting data from Stata                            |
| [D]          | import Overview of importing data into Stata                            |
| [D]          | import dbase  |
| [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 sasxport Import and export datasets in SAS XPORT format          |
| [D]          | infile (fixed format) Read text data in fixed format with a dictionary  |
| [D]          | infile (free format)  |
| [D]          | infix (fixed format)  |
| [D]          | input Enter data from keyboard  |
| [D]          | odbc Load, write, or view data from ODBC sources                        |
| [D]          | outfile Export dataset in text format                                   |
| [P]          | putdocx Generate Office Open XML (.docx) file                           |
| [P]          | putexcel Export results to an Excel file                                |
| [P]          | putexcel advanced Export results to an Excel file using advanced syntax |
| [P]          | putpdf  |
| [D]          | save  |
| [D]          | sysuse  |
| [D]          | use   |
| [D]          | webuse  |
| [D]          | weekse Ose dataset from Statu weekste                                   |
| Combining    |   |
| [U]          | Chapter 22  |
| [D]          | append Append datasets  |
| [MI]         | mi append Append mi data  |
| [D]          | cross Form every pairwise combination of two datasets                   |
| [D]          | joinby Form all pairwise combinations within groups                     |
| [D]          | merge Merge datasets  |
| [MI]         | mi merge Merge mi data  |
| Reshaping    | datasets  |
| [D]          | collapse Make dataset of summary statistics                             |
| [D]          | contract Make dataset of frequencies and percentages                    |
| [D]          | expand  |
| [D]          | expandel Duplicate clustered observations                               |
|              | fillin  |
| [D]          | obs   |
| [D]<br>[D]   | reshape Convert data from wide to long form and vice versa              |
| [D]<br>[MI]  | mi reshape  |
| [MI]<br>[TS] | rolling   |
| [18]<br>[D]  | separate  |
|              | ssd   |
| [SEM]        | stack   |
| [D]          | Stack uata  |

| [D]<br>[D]                                      | statsby  |  |  |
|---|--|--|--|
| Labeling,                                       | Labeling, display formats, and notes   |  |  |
| [GS] [U] [U] [D] [D] [D] [D] [D] [D]            | Chapter 7 (GSM, GSU, GSW)  Chapter 7 (GSM, GSU, GSW)  Section 12.5  Formats: Controlling how data are displayed Section 12.6  Dataset, variable, and value labels format  Set variables' output format label  Manipulate labels label language  Labels for variables and values in multiple languages labelbook  Label utilities notes  Place notes in data varmanage  Manage variable labels, formats, and other properties   |  |  |
| Changing  | and renaming variables   |  |  |
| [GS] [U] [D] [D] [D] [D] [D] [D] [D] [D] [D] [D | Chapter 7 (GSM, GSU, GSW)  Chapter 25  Working with categorical data and factor variables clonevar  Clone existing variable destring  Convert string variables to numeric variables and vice versa dyngen  Dynamically generate new values of variables encode  Encode string into numeric and vice versa generate  Create or change contents of variable mvencode  Change missing values to numeric values and vice versa order  Reorder variables in dataset recode  Recode categorical variables rename  Rename variable rename group  Rename groups of variables split  Split string variables into parts varmanage  Manage variable labels, formats, and other properties |  |  |
| [GS]  | Chapter 6 (GSM, GSU, GSW) Using the Data Editor  |  |  |
| [D]<br>[D]                                      | cf   |  |  |
| [D]   | compare Compare two variables  |  |  |
| [D]   | count  |  |  |
| [D]   | describe Describe data in memory or in file  |  |  |
| [D]   | ds List variables matching name patterns or other characteristics  |  |  |
| [D]   | duplicates   |  |  |
| [D]   | edit Browse or edit data with Data Editor  |  |  |
| [D]   | gsort Ascending and descending sort  |  |  |
| [D]   | inspect Display simple summary of data's attributes isid Check for unique identifiers  |  |  |
| [D]<br>[D]                                      | lookfor Search for string in variable names and labels   |  |  |
| [D]<br>[R]                                      | lv   |  |  |
| [R]   | misstable  |  |  |
| [MI]  | mi describe  |  |  |
| [MI]  | mi misstable   |  |  |
| [D]   | pctile Create variable containing percentiles  |  |  |
| [ST]  | stdescribe Describe survival-time data   |  |  |
| [R]   | summarize Summary statistics   |  |  |

| [SVY] [SVY] [P] [R] [R] [R] [R] [R] [R]  | svy: tabulate oneway One-way tables for survey data svy: tabulate twoway Two-way tables for survey data tabdisp Display tables table Flexible table of summary statistics tabstat Compact table of summary statistics tabulate oneway One-way table of frequencies tabulate twoway Two-way table of frequencies tabulate, summarize() One- and two-way tables of summary statistics xtdescribe Describe pattern of xt data   |
|--|--|
| File manij   | pulation   |
| [D]  | cd Change directory  |
| [D]  | cf Compare two datasets  |
| [D]  | changeeol Convert end-of-line characters of text file  |
| [D]  | checksum   |
| [D]  | copy   |
| [D]  | dir Display filenames  |
| [D]  | erase Erase a disk file  |
| [D]  | filefilter Convert ASCII or binary patterns in a file  |
| [D]  | mkdir Create directory   |
| [D]  | rmdir Remove directory   |
| [D]  | type Display contents of a file  |
| [D]  | unicode convertfile Low-level file conversion between encodings  |
| [D]  | unicode translate  |
| [D]  | zipfile Compress and uncompress files and directories in zip archive format  |
|  |  |
| Miscellane   | eous data commands   |
| Miscellane   |  |
|  | corr2data  |
| [D]  | corr2data  |
| [D]<br>[D]   | corr2data  |
| [D]<br>[D]<br>[R]  | corr2data  |
| [D]<br>[D]<br>[R]<br>[D]   | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes  |
| [D]<br>[D]<br>[R]<br>[D]   | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes  |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]  | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codes   |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]<br>[D]   | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codes  |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]<br>[D]<br>[D]  | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codesipolateLinearly interpolate (extrapolate) values  |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]   | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codesicd9pICD-9-CM procedure codesicd9pICD-9-CM gracedure codesicd9pICD-9-CM gracedure codesipolateLinearly interpolate (extrapolate) valuesrangeGenerate numerical range  |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]                                      | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codesipolateLinearly interpolate (extrapolate) values  |
| [D]<br>[D]<br>[R]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]<br>[D]                        | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codesipolateLinearly interpolate (extrapolate) valuesrangeGenerate numerical rangesampleDraw random sample   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i                                      | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i                                      | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation  mi add Add imputations from another mi dataset   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i                                      | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i                                      | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10 diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes ipolate IcD-9-CM |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i  | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation  mi add Add imputations from another mi dataset mi append Append mi data  |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple i  | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10 diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9 ICD-9-CM procedure codes icd9 ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation  mi add Add imputations from another mi dataset mi append Append mi data mi convert Change style of mi data mi copy Copy mi flongsep data   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple in [Mi] [Mi] [Mi] [Mi] [Mi] [Mi] [Mi]      | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-PCS procedure codes icd9 ICD-9-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9 ICD-9-CM procedure codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation  mi add Add imputations from another mi dataset mi append Append mi data mi convert Change style of mi data mi convert Change style of mi data mi copy Copy mi flongsep data mi describe Describe mi data   |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [Multiple in [Mi] [Mi] [Mi] [Mi] [Mi] [Mi] [Mi] [Mi] | corr2data Create dataset with specified correlation structure drawnorm Draw sample from multivariate normal distribution dydx Calculate numeric derivatives and integrals icd Introduction to ICD commands icd10 ICD-10 diagnosis codes icd10cm ICD-10-CM diagnosis codes icd10pcs ICD-10-CM diagnosis codes icd9 ICD-9-CM procedure codes icd9 ICD-9-CM procedure codes icd9p ICD-9-CM procedure codes ipolate Linearly interpolate (extrapolate) values range Generate numerical range sample Draw random sample imputation  mi add Add imputations from another mi dataset mi append Append mi data mi convert Change style of mi data mi copy Copy mi flongsep data mi describe Describe mi data mi erase Erase mi datasets  |
| [D] [D] [R] [D] [D] [D] [D] [D] [D] [D] [D] [MI] [MI] [MI] [MI] [MI] [MI] [MI] [MI               | corr2dataCreate dataset with specified correlation structuredrawnormDraw sample from multivariate normal distributiondydxCalculate numeric derivatives and integralsicdIntroduction to ICD commandsicd10ICD-10 diagnosis codesicd10cmICD-10-CM diagnosis codesicd10pcsICD-10-PCS procedure codesicd9ICD-9-CM diagnosis codesicd9pICD-9-CM procedure codesipolateLinearly interpolate (extrapolate) valuesrangeGenerate numerical rangesampleDraw random sampleimputationAdd imputations from another mi datasetmi addAdd imputations from another mi datami convertChange style of mi datami copyCopy mi flongsep datami describeDescribe mi datami eraseErase mi datasetsmi expandExpand mi data  |

| [MI]  | mi extract F       | Extract original or imputed data from mi data   |
|-------|--------------------|---|
| [MI]  |                    | Import data into mi                             |
| [MI]  |                    | Import flong-like data into mi                  |
| [MI]  | mi import flongsen | Import flongsep-like data into mi               |
| [MI]  |                    | Import nongsep like data into mi                |
|       |                    |   |
| [MI]  |                    | Import NHANES-format data into mi               |
| [MI]  | *                  | Import wide-like data into mi                   |
| [MI]  |                    | Merge mi data                                   |
| [MI]  |                    | Tabulate pattern of missing values              |
| [MI]  |                    | Generate/replace and register passive variables |
| [MI]  | mi ptrace          | Load parameter-trace file into Stata            |
| [MI]  | mi rename          | Rename variable                                 |
| [MI]  | mi replace0        | Replace original data                           |
| [MI]  | mi reset           | Reset imputed or passive variables              |
| [MI]  | mi reshape         | Reshape mi data                                 |
| [MI]  |                    | Declare multiple-imputation data                |
| [MI]  |                    | Stsplit and stjoin mi data                      |
| [MI]  |                    | Ensure that mi data are consistent              |
| [MI]  | =                  | dentify variables that vary across imputations  |
| [MI]  | mi xeq Ex          | xecute command(s) on individual imputations     |
| [MI]  | •                  | Declare mi data to be svy, st, ts, xt, etc.     |
| [MI]  |                    | The noupdate option                             |
| [MI]  |                    | Dataset styles                                  |
| [MI]  |                    | Suggested workflow                              |
| [111] | WUIKHUW            | Suggested Workhow                               |

## **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  |
| [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  |
| [D]     | unicode translate  |
| [R]     | view   |

| [D]        | zipfile Compress and uncompress files and directories in zip archive format |
|------------|---|
| Error mes  | sages   |
| [U]        | Chapter 8 Error messages and return codes                                   |
| [P]        | error   |
| [R]        | error messages Error messages and return codes                              |
| [R]<br>[P] | rmsg  |
| [1]        | Return messages   |
| Stored res | ults  |
| [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  |
| [R]        | estimates for Repeat postestimation command across models                   |
| [R]        | estimates notes   |
| [R]        | estimates replay  |
| [R]        | estimates save  |
| [R]        | estimates stats Model-selection statistics                                  |
| [R]        | estimates store   |
| [R]        | estimates table   |
| [R]        | estimates title   |
| [P]        | _return Preserve stored results   |
| [P]        | return  |
| [R]        | stored results  |
| [IV]       | Stored results  |
| Internet   |   |
| [U]        | Chapter 28 Using the Internet to keep up to date                            |
| [R]        | adoupdate   |
| [D]        | checksum  |
| [D]        | copy  |
| [R]        | net Install and manage community-contributed additions from the Internet    |
| [R]        | net search Search the Internet for installable packages                     |
| [R]        | netio   |
| [R]        | news  |
| [R]        | sj Stata Journal and STB installation instructions                          |
| [R]        | ssc Install and uninstall packages from SSC                                 |
| [R]        | update Check for official updates   |
| [D]        | use Load Stata dataset  |
| Data types | and memory  |
| • •        | Chapter 6 Managing memory   |
| [U]<br>[U] | Section 12.2.2  |
| [U]        | Section 12.4  |
| [U]        | Section 12.4.2  |
| [U]        | Section 13.12   |
| [U]        | Chapter 23 Working with strings   |
|            | compress  |
| [D]        | compress data in memory   |

| [D]      | data types   |
|----------|--|
| [R]      | matsize Set the maximum number of variables in a model                   |
| [D]      | memory Memory management   |
| [D]      | missing values   |
| [D]      | recast   |
| Advanced | utilities  |
| [D]      | assert Verify truth of claim   |
| [D]      | cd Change directory  |
| [D]      | changeeol Convert end-of-line characters of text file                    |
| [D]      | checksum   |
| [D]      | copy   |
| [P]      | _datasignature Determine whether data have changed                       |
| [D]      | datasignature Determine whether data have changed                        |
| [R]      | db Launch dialog   |
| [P]      | dialog programming Dialog programming                                    |
| [D]      | dir Display filenames  |
| [P]      | discard Drop automatically loaded programs                               |
| [D]      | erase Erase a disk file  |
| [P]      | file   |
| [D]      | filefilter Convert ASCII or binary patterns in a file                    |
| [D]      | hexdump Display hexadecimal report on file                               |
| [D]      | mkdir Create directory   |
| [R]      | more   |
| [R]      | query Display system parameters  |
| [P]      | quietly Quietly and noisily perform Stata command                        |
| [D]      | rmdir Remove directory   |
| [R]      | set Overview of system parameters  |
| [R]      | set cformat Format settings for coefficient tables                       |
| [R]      | set_defaults Reset system parameters to original Stata defaults          |
| [R]      | set emptycells Set what to do with empty cells in interactions           |
| [P]      | set locale_functions   |
| [P]      | set locale_ui Specify a localization package for the user interface      |
| [R]      | set rng Set which random-number generator (RNG) to use                   |
| [R]      | set rngstream Specify the stream for the stream random-number generator  |
| [R]      | set seed Specify random-number seed and state                            |
| [R]      | set showbaselevels Display settings for coefficient tables               |
| [D]      | shell Temporarily invoke operating system                                |
| [P]      | signestimationsample Determine whether the estimation sample has changed |
| [P]      | smcl Stata Markup and Control Language                                   |
| [P]      | sysdir Query and set system directories                                  |
| [D]      | type Display contents of a file  |
| [D]      | unicode collator Language-specific Unicode collators                     |
| [D]      | unicode convertfile Low-level file conversion between encodings          |
| [D]      | unicode encoding   |
| [D]      | unicode locale   |
| <br>     | which Display location and vention for an ade file                       |

which ...... Display location and version for an ado-file

[R]

# **Graphics**

## **Common graphs**

| [G-1]          | graph intro                  | Introduction to graphics  |
|----------------|------------------------------|---|
| [G-2]          |                              | The graph command   |
| [G-2]          | ~ ·                          | Bar charts  |
| [G-2]          | <b>U</b> 1                   | Box plots   |
| [G-2]          |                              |   |
| [G-2]          |                              |   |
| [G-2]          |                              |   |
| [G-2]          |                              | Describe contents of graph in memory or on disk   |
| [G-2]          |                              | . List names of graphs in memory and on disk  |
| [G-2]          |                              | Display graph stored in memory  |
| [G-2]          |                              | Display graph stored in memory Dot charts (summary statistics)                                  |
| [G-2]          |                              | Drop graphs from memory   |
| [G-2]          |                              | Export current graph  |
| [G-2]          |                              | Graph manipulation commands   |
| [G-2]          |                              | Matrix graphs   |
| [G-2]          |                              | Other graphics commands   |
|                |                              | Other graphics commands Pie charts  |
| [G-2]<br>[G-2] |                              | Apply edits from a recording on current graph   |
|                |                              | Print a graph   |
| [G-2]          |                              | List available schemes and styles   |
| [G-2]          |                              |   |
| [G-2]          |                              |   |
| [G-2]          |                              | Save graph to disk  |
| [G-2]          |                              | Save graph to disk Set graphics options   |
| [G-2]          |                              | Set graphics options Twoway graphs  |
| [G-2]          |                              |   |
| [G-2]          |                              | Twoway contour plot with area shading Twoway contour-line plot                                  |
| [G-2]          |                              | Twoway contour-line plot Twoway dot plots   |
| [G-2]          |                              |   |
| [G-2]          |                              |   |
| [G-2]          |                              | Twoway fractional-polynomial prediction plots y fractional-polynomial prediction plots with CIs |
| [G-2]          |                              | Twoway line plot of function  |
| [G-2]          |                              |   |
| [G-2]          |                              | Histogram plots   |
| [G-2]          |                              | Kernel density plots  |
| [G-2]          |                              | Twoway linear prediction plots  |
| [G-2]          |                              | Twoway linear prediction plots with CIs   |
| [G-2]          |                              | Twoway line plots   |
| [G-2]          |                              | Local linear smooth plots   |
| [G-2]          | graph twoway ipoly           | Local polynomial smooth plots   |
| [G-2]          |                              | Local polynomial smooth plots with CIs  |
| [G-2]          |                              | Twoway median-band plots  |
| [G-2]          |                              | Twoway median-spline plots  |
| [G-2]          |                              | Paired-coordinate plot with arrows  |
| [G-2]          |                              | 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]        | graph twoway rarea   |
| [G-2]        | graph twoway rbar Range plot with bars                                     |
| [G-2]        | graph twoway rcap  |
| [G-2]        | graph twoway rcapsym Range plot with spikes capped with marker symbols     |
| [G-2]        | graph twoway rconnected  |
| [G-2]        | graph twoway rline   |
| [G-2]        | graph twoway rscatter  |
| [G-2]        | graph twoway rspike  |
| [G-2]        | graph twoway scatter   |
| [G-2]        | graph twoway scatteri Scatter with immediate arguments                     |
| [G-2]        | graph twoway spike Twoway spike plots                                      |
| [G-2]        | graph twoway tsline Twoway line plots                                      |
| [G-2]        | graph use Display graph stored on disk                                     |
| [R]          | histogram Histograms for continuous and categorical variables              |
| [R]          | marginsplot Graph results from margins (profile plots, etc.)               |
| [G-2]        | palette Display palettes of available selections                           |
| Distribution | onal graphs  |
| [R]          | cumul Cumulative distribution  |
| [R]          | diagnostic plots Distributional diagnostic plots                           |
| [R]          | dotplot  |
| [R]          | histogram Histograms for continuous and categorical variables              |
| [R]          | ladder Ladder of powers  |
| [R]          | spikeplot Spike plots and rootograms                                       |
| [R]          | sunflower Density-distribution sunflower plots                             |
| Item respe   | onse theory graphs   |
| [MV]         | biplot Biplots   |
| [IRT]        | irtgraph icc Item characteristic curve plot                                |
| [IRT]        | irtgraph iif   |
| [IRT]        | irtgraph tcc Test characteristic curve plot                                |
| [IRT]        | irtgraph tif Test information function plot                                |
| Multivaria   | ate graphs   |
| [MV]         | biplot Biplots   |
| [MV]         | ca postestimation Postestimation tools for ca and camat                    |
| [MV]         | ca postestimation plots Postestimation plots for ca and camat              |
| [MV]         | cluster dendrogram Dendrograms for hierarchical cluster analysis           |
| [MV]         | mca postestimation   |
| [MV]         | mca postestimation plots   |
| [MV]         | mds postestimation Postestimation tools for mds, mdsmat, and mdslong       |
| [MV]         | mds postestimation plots Postestimation plots for mds, mdsmat, and mdslong |
| [MV]         | procrustes postestimation Postestimation tools for procrustes              |
| [MV]         | scoreplot  |
| [MV]         | screeplot  |
|              |  |

| Quality co  | ntrol  |
|-------------|--|
| [R]         | cusum Cusum plots and tests for binary variables                                     |
| [R]         | qc   |
| [R]         | serrbar Graph standard error bar chart   |
| Regression  | diagnostic plots   |
| [R]         | regress postestimation diagnostic plots Postestimation plots for regress             |
| ROC analy   |  |
| [R]         | estat classification   |
| [R]         | estat gof Pearson or Hosmer–Lemeshow goodness-of-fit test                            |
| [R]         | logistic postestimation Postestimation tools for logistic                            |
| [R]         | lroc   |
| [R]         | lsens Graph sensitivity and specificity versus probability cutoff                    |
| [R]         | roccomp Tests of equality of ROC areas   |
| [R]         | rocfit postestimation Postestimation tools for rocfit                                |
| [R]         | rocregplot Plot marginal and covariate-specific ROC curves after rocreg              |
| [R]         | roctab   |
| Smoothing   | and densities  |
| [R]         | kdensity Univariate kernel density estimation  |
| [R]         | lowess Lowess smoothing  |
| [R]         | lpoly Kernel-weighted local polynomial smoothing                                     |
| Survival-a  | nalysis graphs   |
| [ST]        | ltable Life tables for survival data   |
| [ST]        | stci Confidence intervals for means and percentiles of survival time                 |
| [ST]        | stcox PH-assumption tests Tests of proportional-hazards assumption                   |
| [ST]        | stcurve . Plot survivor, hazard, cumulative hazard, or cumulative incidence function |
| [ST]        | strate   |
| [ST]        | sts graph Graph the survivor, hazard, or cumulative hazard function                  |
| Time-series | s graphs   |
| [TS]        | corrgram Tabulate and graph autocorrelations   |
| [TS]        | cumsp Cumulative spectral distribution   |
| [TS]        | estat acplot Plot parametric autocorrelation and autocovariance functions            |
| [TS]        | estat aroots Check the stability condition of ARIMA estimates                        |
| [TS]        | estat sbcusum Cumulative sum test for parameter stability                            |
| [TS]        | fcast graph Graph forecasts after fcast compute                                      |
| [TS]        | irf cgraph Combined graphs of IRFs, dynamic-multiplier functions, and FEVDs          |
| [TS]        | irf graph Graphs of IRFs, dynamic-multiplier functions, and FEVDs                    |
| [TS]        | irf ograph Overlaid graphs of IRFs, dynamic-multiplier functions, and FEVDs          |
| [TS]        | pergram Periodogram  |
| [TS]        | tsline   |
| [TS]        | varstable Check the stability condition of VAR or SVAR estimates                     |
| [TS]        | vecstable Check the stability condition of VECM estimates                            |
| [TS]        | wntestb Bartlett's periodogram-based test for white noise                            |
| [TS]        | xcorr Cross-correlogram for bivariate time series                                    |

| More statis | tical graphs   |
|-------------|--|
| [BAYES]     | bayesgraph Graphical summaries and convergence diagnostics                       |
| [R]         | epitab Tables for epidemiologists  |
| [R]         | fp postestimation Postestimation tools for fp                                    |
| [R]         | grmeanby Graph means and medians by categorical variables                        |
| [R]         | pkexamine  |
| [R]         | pksumm Summarize pharmacokinetic data  |
| [PSS]       | power, graph Graph results from the power command                                |
| [R]         | stem Stem-and-leaf displays  |
| [TE]        | teffects overlap Overlap plots   |
| [XT]        | xtline   |
| Editing     |  |
| [G-1]       | graph editor Graph Editor  |
| Graph utili | ities  |
| [G-2]       | set graphics Set whether graphs are displayed                                    |
| [G-2]       | set printcolor Set how colors are treated when graphs are printed                |
| [G-2]       | set scheme   |
| Graph sche  | emes   |
| [G-4]       | schemes intro Introduction to schemes  |
| [G-4]       | scheme economist Scheme description: economist                                   |
| [G-4]       | scheme s1 Scheme description: s1 family  |
| [G-4]       | scheme s2 Scheme description: s2 family  |
| [G-4]       | scheme sj Scheme description: sj   |
| Graph con   | cepts  |
| [G-4]       | concept: gph files   |
| [G-4]       | concept: lines   |
| [G-4]       | concept: repeated options Interpretation of repeated options                     |
| [G-4]       | text Text in graphs  |
| Statistics  |  |
| ANOVA an    | d related  |
| [U]         | Chapter 26 Overview of Stata estimation commands                                 |
| [R]         | anova Analysis of variance and covariance  |
| [R]         | contrast Contrasts and linear hypothesis tests after estimation                  |
| [R]         | icc Intraclass correlation coefficients  |
| [R]         | loneway Large one-way ANOVA, random effects, and reliability                     |
| [MV]        | manova Multivariate analysis of variance and covariance                          |
| [ME]        | meglm Multilevel mixed-effects generalized linear model                          |
| [ME]        | mixed Multilevel mixed-effects linear regression                                 |
| [R]         | oneway One-way analysis of variance  |
| [R]         | pkcross Analyze crossover experiments  |
| [R]         | pkshape Reshape (pharmacokinetic) Latin-square data                              |
| [R]         | pwcompare Pairwise comparisons   |
| [R]         | regress Linear regression  |
| [XT]        | xtreg Fixed-, between-, and random-effects and population-averaged linear models |

| Basic statistics   |  |  |
|--------------------|--|--|
| [R]                | anova Analysis of variance and covariance  |  |
| [R]                | bitest Binomial probability test   |  |
| [R]                | ci Confidence intervals for means, proportions, and variances  |  |
| [R]                | correlate Correlations (covariances) of variables or coefficients  |  |
| [D]                | egen Extensions to generate  |  |
| [R]                | esize Effect size based on mean comparison   |  |
| [R]                | icc Intraclass correlation coefficients  |  |
| [R]                | mean Estimate means  |  |
| [R]                | misstable  |  |
| [MV]               | mytest Multivariate tests  |  |
| [R]                | oneway One-way analysis of variance  |  |
| [R]                | proportion Estimate proportions  |  |
| [R]                | prtest Tests of proportions  |  |
| [R]                | pwmean   |  |
| [R]                | ranksum Equality tests on unmatched data   |  |
| [R]                | ratio Estimate ratios  |  |
| [R]                | regress Linear regression  |  |
| [R]                | sdtest   |  |
| [R]                | signrank Equality tests on matched data  |  |
| [D]                | statsby Collect statistics for a command across a by list  |  |
| [R]                | summarize Summary statistics   |  |
| [R]                | table Flexible table of summary statistics   |  |
| [R]                | tabstat  |  |
| [R]                | tabulate oneway  |  |
| [R]                | tabulate twoway  |  |
| [R]                | tabulate, summarize() One- and two-way tables of summary statistics  |  |
| [R]                | total Estimate totals  |  |
| [R]                | ttest  |  |
| [R]                | ztest  |  |
| Bayesian analysis  |  |  |
| [U]                | Section 26.30 Bayesian analysis  |  |
| [BAYES]            | bayes Bayesian regression models using the bayes prefix  |  |
| [BAYES]            | bayes: betareg Bayesian beta regression  |  |
| [BAYES]            | bayes: binreg Bayesian generalized linear models: Extensions to the binomial family                                    |  |
| [BAYES]            | bayes: biprobit Bayesian bivariate probit regression   |  |
| [BAYES]            | bayes: clogit Bayesian conditional logistic regression   |  |
| [BAYES]            | bayes: cloglog Bayesian complementary log-log regression   |  |
| [BAYES]            | bayes: fracreg Bayesian fractional response regression   |  |
| [BAYES]            | bayes: glm Bayesian generalized linear models  |  |
| [BAYES]            | bayes: gnbreg Bayesian generalized negative binomial regression  |  |
| [BAYES]            | bayes: heckman Bayesian Heckman selection model bayes: heckoprobit Bayesian ordered probit model with sample selection |  |
| [BAYES]            |  |  |
| [BAYES]            | bayes: heckprobit  |  |
| [BAYES]            | bayes: heteroskedastic proofit regression bayes: heteroskedastic linear regression                                     |  |
| [BAYES]            | bayes: intreg  |  |
| [BAYES]            | bayes: logistic Bayesian logistic regression, reporting odds ratios  |  |
| [BAYES]<br>[BAYES] | bayes: logistic  |  |
| [BAYES]            | bayes: mecloglog Bayesian nultilevel complementary log-log regression  |  |
| [DATE3]            | Dayesian multilevel complementary log-log regression   |  |

| [BAYES]    | bayes: meglm Bayesian multilevel generalized linear model                     |
|------------|---|
| [BAYES]    | bayes: meintreg Bayesian multilevel interval regression                       |
| [BAYES]    | bayes: melogit Bayesian multilevel logistic regression                        |
| [BAYES]    | bayes: menbreg Bayesian multilevel negative binomial regression               |
| [BAYES]    | bayes: meologit Bayesian multilevel ordered logistic regression               |
| [BAYES]    | bayes: meoprobit Bayesian multilevel ordered probit regression                |
| [BAYES]    | bayes: mepoisson Bayesian multilevel Poisson regression                       |
| [BAYES]    | bayes: meprobit Bayesian multilevel probit regression                         |
| [BAYES]    | bayes: mestreg Bayesian multilevel parametric survival model                  |
| [BAYES]    | bayes: metobit Bayesian multilevel tobit regression                           |
| [BAYES]    | bayes: mixed Bayesian multilevel linear regression                            |
| [BAYES]    | bayes: mlogit Bayesian multinomial logistic regression                        |
| [BAYES]    | bayes: mprobit Bayesian multinomial probit regression                         |
| [BAYES]    | bayes: mvreg Bayesian multivariate regression                                 |
| [BAYES]    | bayes: nbreg Bayesian negative binomial regression                            |
| [BAYES]    | bayes: ologit Bayesian ordered logistic regression                            |
| [BAYES]    | bayes: oprobit Bayesian ordered probit regression                             |
| [BAYES]    | bayes: poisson Bayesian Poisson regression                                    |
| [BAYES]    | bayes: probit Bayesian probit regression                                      |
| [BAYES]    | bayes: regress  |
| [BAYES]    | bayes: streg Bayesian parametric survival models                              |
| [BAYES]    | bayes: tnbreg Bayesian truncated negative binomial regression                 |
| [BAYES]    | bayes: tobit Bayesian tobit regression  |
| [BAYES]    | bayes: tpoisson Bayesian truncated Poisson regression                         |
| [BAYES]    | bayes: truncreg Bayesian truncated regression                                 |
| [BAYES]    | bayes: zinb Bayesian zero-inflated negative binomial regression               |
| [BAYES]    | bayes: zioprobit Bayesian zero-inflated ordered probit regression             |
| [BAYES]    | bayes: zip Bayesian zero-inflated Poisson regression                          |
| [BAYES]    | bayesgraph Graphical summaries and convergence diagnostics                    |
| [BAYES]    | bayesian commands Introduction to commands for Bayesian analysis              |
| [BAYES]    | bayesian estimation Bayesian estimation commands                              |
| [BAYES]    | bayesian postestimation Postestimation tools for bayesmh and the bayes prefix |
| [BAYES]    | bayesmh Bayesian models using Metropolis-Hastings algorithm                   |
| [BAYES]    | bayesmh evaluators  |
| [BAYES]    | bayesstats Bayesian statistics after Bayesian estimation                      |
| [BAYES]    | bayesstats ess Effective sample sizes and related statistics                  |
| [BAYES]    | bayesstats ic Bayesian information criteria and Bayes factors                 |
| [BAYES]    | bayesstats summary Bayesian summary statistics                                |
| [BAYES]    | bayestest Bayesian hypothesis testing   |
| [BAYES]    | bayestest interval Interval hypothesis testing                                |
| [BAYES]    | bayestest model Hypothesis testing using model posterior probabilities        |
| Rinary out | comes   |

## **Binary outcomes**

| [U]     | Chapter 20 Estimation and postestimation comma                   | ands |
|---------|--|------|
| [U]     | Section 26.4 Binary outco  | mes  |
| [BAYES] | bayesian estimation Bayesian estimation comma                    | ands |
| [R]     | binreg Generalized linear models: Extensions to the binomial far | nily |
| [R]     | biprobit Bivariate probit regres                                 | sion |
| [R]     | cloglog Complementary log-log regres                             | sion |
| [ERM]   | eprobit Extended probit regres                                   | sion |
| [TE]    | eteffects Endogenous treatment-effects estima                    | tion |

| [R]          | exlogistic Exact logistic regression  |
|--------------|---|
| [FMM]        | fmm estimation Fitting finite mixture models                                |
| [R]          | glm Generalized linear models   |
| [R]          | heckprobit Probit model with sample selection                               |
| [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 hybrid  |
| [R]          | ivprobit Probit model with continuous endogenous covariates                 |
| [R]          | logistic Logistic regression, reporting odds ratios                         |
| [R]          | logit   |
| [ME]         | mecloglog Multilevel mixed-effects complementary log-log regression         |
| [ME]         | melogit   |
| [ME]         | meprobit  |
| [ME]         | megrlogit Multilevel mixed-effects logistic regression (QR decomposition)   |
| [R]          | probit Probit regression  |
| [R]          | rocfit Parametric ROC models  |
| [R]          | rocreg  |
| [R]          | scobit  |
| [K]<br>[TE]  | teffects aipw Augmented inverse-probability weighting                       |
| [TE]         | teffects ipw Inverse-probability weighting                                  |
| [TE]         | teffects ipwra Inverse-probability-weighted regression adjustment           |
| [TE]         | teffects nnmatch  |
| [TE]         | teffects psmatch  |
| [TE]         | teffects ra   |
| [XT]         | xtcloglog   |
| [XT]         | xtlogit Fixed-effects, random-effects, and population-averaged logit models |
| [XT]         | xtprobit  |
| []           | r · · · · · · · · · · · · · · · · · · ·                                     |
| Categorica   | l outcomes  |
| [U]          | Chapter 20 Estimation and postestimation commands                           |
| [U]          | Section 26.6 Ordinal outcomes   |
| [U]          | Section 26.7 Categorical outcomes   |
| [R]          | asclogit Alternative-specific conditional logit (McFadden's choice) model   |
| [R]          | asmixlogit Alternative-specific mixed logit regression                      |
| [R]          | asmprobit Alternative-specific multinomial probit regression                |
| [BAYES]      | bayesian estimation   |
| [R]          | clogit Conditional (fixed-effects) logistic regression                      |
| [FMM]        | fmm estimation Fitting finite mixture models                                |
| [IRT]        | irt nrm Nominal response model  |
| [R]          | mlogit Multinomial (polytomous) logistic regression                         |
| [R]          | mprobit   |
| [R]          | nlogit Nested logit regression  |
| [R]          | slogit Stereotype logistic regression                                       |
| Censored a   | and truncated regression models   |
| [0]          | churdle   |
| [R]<br>[R]   | cpoisson  |
| [K]<br>[ERM] | eintreg Extended interval regression  |
| [EKM]        | Extended interval regression  |

| [R] [R] [R] [R] [ME] [ME] [ME] [ST] [ST] [TE] [R] [R] [R] [R] [XT] | heckmanHeckman selection modelheckoprobitOrdered probit model with sample selectionheckprobitProbit model with sample selectionintregInterval regressionmeintregMultilevel mixed-effects interval regressionmestregMultilevel mixed-effects parametric survival modelsmetobitMultilevel mixed-effects tobit regressionstintregParametric models for interval-censored survival-time datastregParametric survival modelsstteffectsTreatment-effects estimation for observational survival-time datatnbregTruncated negative binomial regressiontobitTobit regressiontpoissonTruncated Poisson regressiontruncregTruncated regressionxtintregRandom-effects interval-data regression modelsxtstregRandom-effects parametric survival models |
|--|---|
| [XT]   | xttobit   |
| Cluster and  | alysis  |
| [U] [MV] [MV] [MV] [MV] [MV] [MV] [MV] [MV                         | Section 26.20   |
| [MV]<br>[MV]   | ca  |
| Count out  | comes   |
| [U] [U] [U] [BAYES] [R] [TE] [TE] [R] [FMM] [R] [ME]               | Chapter 20Estimation and postestimation commandsSection 26.8Count outcomesSection 26.14.3Discrete outcomes with panel databayesian estimationBayesian estimation commandscpoissonCensored Poisson regressioneteffectsEndogenous treatment-effects estimationetpoissonPoisson regression with endogenous treatment effectsexpoissonExact Poisson regressionfmm estimationFitting finite mixture modelsheckpoissonPoisson regression with sample selectionmenbregMultilevel mixed-effects negative binomial regression  |

| [ME]       | mepoisson Multilevel mixed-effects Poisson regression                                 |
|------------|---|
| [ME]       | meqrpoisson Multilevel mixed-effects Poisson regression (QR decomposition)            |
| [R]        | nbreg   |
| [R]        | poisson   |
| [TE]       | teffects aipw Augmented inverse-probability weighting                                 |
| [TE]       | teffects ipw Inverse-probability weighting  |
| [TE]       | teffects ipwra Inverse-probability-weighted regression adjustment                     |
| [TE]       | teffects nnmatch  |
| [TE]       | teffects psmatch Propensity-score matching  |
| [TE]       | teffects ra   |
| [R]        | tnbreg  |
| [R]        | tpoisson  |
| [XT]       | xtnbreg Fixed-effects, random-effects, & population-averaged negative binomial models |
| [XT]       | xtpoisson Fixed-effects, random-effects, and population-averaged Poisson models       |
|            | zinb  |
| [R]        | zip Zero-inflated negative binofinal regression zip Zero-inflated Poisson regression  |
| [R]        | zip Zero-innated Poisson regression   |
| Discrimina | ant analysis  |
| [MV]       | candisc Canonical linear discriminant analysis  |
| [MV]       | discrim Discriminant analysis   |
| [MV]       | discrim estat   |
| [MV]       | discrim knn kth-nearest-neighbor discriminant analysis                                |
| [MV]       | discrim Ida Linear discriminant analysis  |
| [MV]       | discrim logistic  |
| [MV]       | discrim qda   |
| [MV]       | scoreplot Score and loading plots   |
| [MV]       | screeplot   |
| [141 4 ]   | Seree proc  |
| Do-it-your | self generalized method of moments  |
| [U]        | Section 26.21 Generalized method of moments (GMM)                                     |
| [R]        | gmm Generalized method of moments estimation  |
| [P]        | matrix Introduction to matrix commands  |
| Do-it-vour | self maximum likelihood estimation  |
| •          |   |
| [P]        | matrix  |
| [R]        | ml Maximum likelihood estimation  |
| [R]        | mlexp Maximum likelihood estimation of user-specified expressions                     |
| Dynamic s  | stochastic general equilibrium models   |
| [U]        | Section 26.26 . Linearized dynamic stochastic general equilibrium (DSGE) models       |
| [DSGE]     | dsge Linearized dynamic stochastic general equilibrium models                         |
| [DSGE]     | dsge postestimation Postestimation tools for dsge                                     |
| [DSGE]     | estat policy  |
| [DSGE]     | estat stable  |
| [DSGE]     | estat transition Display state transition matrix                                      |
| [2002]     | Display state transition matrix   |

| Endogenou                | is covariates  |  |
|--------------------------|--|--|
| [U]                      | Chapter 20 Estimation and postestimation commands                                |  |
| [U]                      | Chapter 26 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  |  |
| [TE]                     | eteffects Endogenous treatment-effects estimation                                |  |
| [TE]                     | etpoisson  |  |
| [TE]                     | etregress Linear regression with endogenous treatment effects                    |  |
| [TS]                     | forecast Econometric model forecasting   |  |
| [R]                      | gmm Generalized method of moments estimation                                     |  |
| [R]                      | ivpoisson Poisson model with continuous endogenous covariates                    |  |
| [R]                      | ivprobit Probit model with continuous endogenous covariates                      |  |
| [R]                      | ivregress Single-equation instrumental-variables regression                      |  |
| [R]                      | ivtobit  |  |
| [R]                      | reg3 Three-stage estimation for systems of simultaneous equations                |  |
| [XT]                     | xtabond Arellano–Bond linear dynamic panel-data estimation                       |  |
| [XT]                     | xtdpd Linear dynamic panel-data estimation                                       |  |
| [XT]                     | xtdpdsys Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation       |  |
| [XT]                     | xthtaylor Hausman—Taylor estimator for error-components models                   |  |
| [XT]                     | xtivreg Instrumental variables and two-stage least squares for panel-data models |  |
| Epidemiology and related |  |  |
| Epidemioid               |  |  |
| [R]                      | binreg Generalized linear models: Extensions to the binomial family              |  |
| [R]                      | brier Brier score decomposition  |  |
| [R]                      | clogit   |  |
| [R]                      | dstdize Direct and indirect standardization                                      |  |
| [R]                      | epitab   |  |
| [R]                      | exlogistic Exact logistic regression   |  |
| [R]                      | expoisson Exact Poisson regression   |  |
| [R]                      | glm Generalized linear models  |  |
| [D]                      | icd Introduction to ICD commands   |  |
| [D]                      | icd10  |  |
| [D]                      | icd10cm ICD-10-CM diagnosis codes  |  |
| [D]                      | icd10pcs ICD-10-PCS procedure codes  |  |
| [D]                      | icd9   |  |
| [D]                      | icd9p ICD-9-CM procedure codes   |  |
| [R]                      | kappa Interrater agreement   |  |
| [R]                      | logistic Logistic regression, reporting odds ratios                              |  |
| [R]                      | nbreg  |  |
| [R]                      | pk Pharmacokinetic (biopharmaceutical) data                                      |  |
| [R]                      | pkcollapse Generate pharmacokinetic measurement dataset                          |  |
| [R]                      | pkcross Analyze crossover experiments  |  |
| [R]                      | pkequiv Perform bioequivalence tests   |  |
| [R]                      | pkexamine  |  |
| [R]                      | pkshape  |  |
| [R]                      | pksumm Summarize pharmacokinetic data  |  |
| [R]                      | poisson Poisson regression   |  |
| [R]                      | roc  |  |
| [R]                      | roccomp Tests of equality of ROC areas   |  |
|                          |  |  |

| 20 COMBIN                  | ed subject table of contents   |
|----------------------------|--|
|                            |  |
| [R]                        | rocfit   |
| [R]                        | rocreg   |
| [R]                        | roctab   |
| [R]                        | symmetry Symmetry and marginal homogeneity tests   |
| [R]                        | tabulate twoway Two-way table of frequencies   |
| Also see M<br>Treatment ef | fultilevel mixed-effects models, Survival analysis, Structural equation modeling, and fects. |
| Estimation                 | n related  |
| [R]                        | BIC note   |
| [R]                        | constraint Define and list constraints   |
| [R]                        | eform_option Displaying exponentiated coefficients   |
| [R]                        | estimation options Estimation options  |
| [R]                        | fp Fractional polynomial regression  |
| [R]                        | maximize Details of iterative maximization   |
| [R]                        | mfp Multivariable fractional polynomial models   |
| [R]                        | mkspline Linear and restricted cubic spline construction                                     |
| [R]                        | stepwise Stepwise estimation   |
| [R]                        | vce_option Variance estimators   |
| [XT]                       | vce_options Variance estimators  |
| Exact stat                 | tistics  |
| [U]                        | Section 26.8   |
| [U]                        | Section 26.10 Exact estimators   |
| [R]                        | bitest Binomial probability test   |
| [R]                        | centile  |
| [R]                        | ci Confidence intervals for means, proportions, and variances                                |
| [R]                        | dstdize Direct and indirect standardization  |
| [R]                        | epitab Tables for epidemiologists  |
| [R]                        | exlogistic Exact logistic regression   |
| [R]                        | expoisson Exact Poisson regression   |
| [R]                        | ksmirnov Kolmogorov-Smirnov equality-of-distributions test                                   |
| [R]                        | loneway Large one-way ANOVA, random effects, and reliability                                 |
| [R]                        | ranksum Equality tests on unmatched data   |
| [R]                        | roctab   |
| [R]                        | symmetry Symmetry and marginal homogeneity tests   |
| [R]                        | tabulate twoway  |
| [R]                        | tetrachoric  |
| Extended                   | regression models  |
| [ERM]                      | eintreg Extended interval regression   |
| [ERM]                      | eintreg postestimation Postestimation tools for eintreg                                      |
| [ERM]                      | eintreg predict predict after eintreg  |
| [ERM]                      | eoprobit Extended ordered probit regression  |
| [ERM]                      | eoprobit postestimation  |
| [ERM]                      | eoprobit predict predict after eoprobit  |
| [ERM]                      | eprobit Extended probit regression   |
| [ERM]                      | eprobit postestimation Postestimation tools for eprobit                                      |
| [ERM]                      | eprobit predict predict after eprobit  |
| [ERM]                      | eregress Extended linear regression  |
|                            |  |

| [ERM]                                    | eregress postestimation Postestimation tools for eregress  |  |
|--|--|--|
| [ERM]                                    | eregress predict predict after eregress  |  |
| [ERM]                                    | erm options Extended regression model options  |  |
| [ERM]                                    | estat teffects Average treatment effects for extended regression models  |  |
| [ERM]                                    | example 1a Linear regression with continuous endogenous covariate  |  |
| [ERM]                                    | example 1b Interval regression with continuous endogenous covariate  |  |
| [ERM]                                    | example 1c Interval regression with endogenous covariate and sample selection  |  |
| [ERM]                                    | example 2a Linear regression with binary endogenous covariate  |  |
| [ERM]                                    | example 2b Linear regression with exogenous treatment  |  |
| [ERM]                                    | example 2c Linear regression with endogenous treatment   |  |
| [ERM]                                    | example 3a Probit regression with continuous endogenous covariate  |  |
| [ERM]                                    | example 3b Probit regression with endogenous covariate and treatment   |  |
| [ERM]                                    | example 4a Probit regression with endogenous sample selection  |  |
| [ERM]                                    | example 4b Probit regression with endogenous treatment and sample selection  |  |
| [ERM]                                    | example 5 Probit regression with endogenous ordinal treatment  |  |
| [ERM]                                    | example 6a   |  |
| [ERM]                                    | example 6b Ordered probit regression with endogenous treatment and sample selection  |  |
| [ERM]                                    | predict advanced predict's advanced features   |  |
| [ERM]                                    | predict treatment predict for treatment statistics   |  |
| [ERM]                                    | triangularize How to triangularize a system of equations   |  |
| [224.7]                                  |  |  |
| Factor analysis and principal components |  |  |
| [MV]                                     | alpha Compute interitem correlations (covariances) and Cronbach's alpha  |  |
| [MV]                                     | canon  |  |
| [MV]                                     | factor Factor analysis   |  |
| [MV]                                     | pca Principal component analysis   |  |
| [MV]                                     | rotate Orthogonal and oblique rotations after factor and pca   |  |
| [MV]                                     | rotatemat Orthogonal and oblique rotations of a Stata matrix   |  |
| [MV]                                     | scoreplot Score and loading plots  |  |
| [MV]                                     | screeplot Scree plot   |  |
| [R]                                      | tetrachoric  |  |
| Finite mix                               | ture models  |  |
| [U]                                      | Section 26.24  |  |
| [FMM]                                    | estat eform Display exponentiated coefficients   |  |
| [FMM]                                    | estat lcmean Latent class marginal means   |  |
| [FMM]                                    | estat lcprob Latent class marginal probabilities   |  |
| [FMM]                                    | example 1a Mixture of linear regression models   |  |
| [FMM]                                    | example 1b   |  |
| [FMM]                                    | example 1c Testing coefficients across class models  |  |
| [FMM]                                    | example 1d   |  |
| [FMM]                                    | example 2 Mixture of Poisson regression models   |  |
| [FMM]                                    | example 3 Zero-inflated models   |  |
| [FMM]                                    | example 4 Mixture cure models for survival data  |  |
| [FMM]                                    | fmm Finite mixture models using the fmm prefix   |  |
| [FMM]                                    | fmm estimation Fitting finite mixture models   |  |
| [FMM]                                    | fmm postestimation Postestimation tools for fmm  |  |
| [FMM]                                    | fmm: betareg Finite mixtures of beta regression models   |  |
| [FMM]                                    | fmm: cloglog Finite mixtures of complementary log-log regression models  |  |
| [FMM]                                    | fmm: glm Finite mixtures of generalized linear regression models   |  |
| [FMM]                                    | fmm: intreg Finite mixtures of interval regression models  |  |
| [2 272172]                               | - Indiana in the control of the cont |  |

| [FMM] | fmm: ivregress Finite mixtures of linear regression models with endogenous covariates fmm: logit  |
|---|---|
| Fractional  | outcomes  |
| [BAYES] [BAYES] [R] [TE] [FMM] [R] [TE] [TE] [TE]                             | bayes: betareg Bayesian beta regression bayes: fracreg Bayesian fractional response regression betareg Beta regression eteffects Endogenous treatment-effects estimation fmm: betareg Finite mixtures of beta regression models fracreg Fractional response regression teffects ipw Inverse-probability weighting teffects nnmatch Nearest-neighbor matching teffects psmatch Propensity-score matching       |
|   |   |
| [U] [U] [BAYES] [R] [FMM] [R] [R] [R]   | Chapter 20 Estimation and postestimation commands Section 26.9 Generalized linear models bayes: glm Bayesian generalized linear models binreg Generalized linear models: Extensions to the binomial family fmm: glm Finite mixtures of generalized linear regression models fracreg Fractional response regression glm Generalized linear models xtgee Fit population-averaged panel-data models by using GEE |
| Indicator a   | and categorical variables   |
| [U]<br>[U]<br>[R]   | Section 11.4.3 Factor variables Chapter 25 Working with categorical data and factor variables fvset Declare factor-variable settings  |
| Item respo  | onse theory   |
| [U]<br>[IRT]<br>[IRT]<br>[IRT]<br>[IRT]                                       | Section 26.25 Item response theory (IRT) Control Panel IRT Control Panel dif Introduction to differential item functioning diflogistic Logistic regression DIF difmh Mantel–Haenszel DIF  |

| [IRT] ir<br>[IRT] ir<br>[IRT] ir<br>[IRT] ir<br>[IRT] ir<br>[IRT] ir<br>[IRT] ir | irt grm Graded response model irt hybrid Hybrid IRT models irt nrm Nominal response model irt pcm Partial credit model irt rsm Rating scale model irtgraph icc Item characteristic curve plot irtgraph iif Item information function plot irtgraph tcc Test characteristic curve plot irtgraph tif Test information function plot  |
|--|--|
| Latent class   | models   |
| [SEM] e [SEM] e [SEM] e [SEM] e [SEM] e [SEM] e [SEM] iii                        | Section 26.23 Latent class models estat lcmean Latent class marginal means estat lcprob Latent class marginal probabilities example 50g Latent class model example 52g Latent profile model example 53g Finite mixture Poisson regression intro 2 Learning the language: Path diagrams and command language intro 5 Tour of models   |
| Linear regre   | ession and related   |
| [U] (C) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R                                   | Chapter 20 Estimation and postestimation commands Chapter 26 Overview of Stata estimation commands areg Linear regression with a large dummy-variable set bayesian estimation Bayesian estimation commands charge Constraint Bayesian estimation commands charge Constraint Define and list constraints beivreg Errors-in-variables regression eregress Extended linear regression eregress Extended linear regression eregress Extended linear regression eregress Linear regression with endogenous treatment effects errors-in-variables regression with endogenous treatment effects from estimation Fitting finite mixture models for Fractional polynomial regression frontier Stochastic frontier models heckman Generalized linear models heckman Heckman selection model hectregress Heteroskedastic linear regression invoisson Poisson model with continuous endogenous covariates vivegress Single-equation instrumental-variables regression vivibit Tobit model with continuous endogenous covariates lipoly Kernel-weighted local polynomial smoothing meglm Multilevel mixed-effects generalized linear model mixed Multilevel mixed-effects generalized linear model mixed Multilevel mixed-effects linear regression mixed Multilevel mixed-effects linear regression mestreg Nested model statistics newey Regression with Newey-West standard errors prais Prais-Winsten and Cochrane-Orcutt regression quegem |

|             | D 1 DOG . 11   |
|-------------|--|
| [R]         | rocfit   |
| [R]         | rreg   |
| [ST]        | stcox  |
| [ST]        | sterreg Competing-risks regression   |
| [R]         | stepwise   |
| [ST]        | stintreg Parametric models for interval-censored survival-time data              |
| [ST]        | streg Parametric survival models   |
| [R]         | sureg Zellner's seemingly unrelated regression                                   |
| [R]         | tnbreg   |
| [R]         | vwls   |
| [XT]        | xtabond Arellano–Bond linear dynamic panel-data estimation                       |
| [XT]        | xtdpd Linear dynamic panel-data estimation                                       |
| [XT]        | xtdpdsys Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation       |
| [XT]        | xtgee Fit population-averaged panel-data models by using GEE                     |
| [XT]        | xtgls Fit panel-data models by using GLS   |
| [XT]        | xthtaylor Hausman-Taylor estimator for error-components models                   |
| [XT]        | xtivreg Instrumental variables and two-stage least squares for panel-data models |
| [XT]        | xtpcse Linear regression with panel-corrected standard errors                    |
| [XT]        | xtrc   |
| [XT]        | xtreg Fixed-, between-, and random-effects and population-averaged linear models |
| [XT]        | xtregar Fixed- and random-effects linear models with an AR(1) disturbance        |
| [XT]        | xtstreg  |
|             |  |
| Logistic ar | nd probit regression   |
| [U]         | Chapter 20 Estimation and postestimation commands                                |
| [U]         | Chapter 26 Overview of Stata estimation commands                                 |
| [R]         | asclogit Alternative-specific conditional logit (McFadden's choice) model        |
| [R]         | asmixlogit Alternative-specific mixed logit regression                           |
| [R]         | asmprobit Alternative-specific multinomial probit regression                     |
| [R]         | asroprobit Alternative-specific rank-ordered probit regression                   |
| [R]         | biprobit Bivariate probit regression   |
| [R]         | clogit Conditional (fixed-effects) logistic regression                           |
| [R]         | cloglog  |
| [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   |
| [R]         | hetprobit Heteroskedastic probit model   |
| [IRT]       | irt 1pl One-parameter logistic model   |
| [IRT]       | irt 2pl Two-parameter logistic model   |
| [IRT]       | irt 3pl  |
| [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  |
| [R]         | ivprobit Probit model with continuous endogenous covariates                      |
| [R]         | logistic Logistic regression, reporting odds ratios                              |
| [R]         | logit Logistic regression, reporting coefficients                                |
| [ME]        | melogit  |
|             |  |

| [ME]<br>[ME] | meologit  |
|--------------|---|
|              | meprobit  |
| [ME]         | megrlogit Multilevel mixed-effects logistic regression (QR decomposition)   |
| [ME]         |   |
| [R]          | mlogit  |
| [R]          | mprobit   |
| [R]          | nlogit  |
| [R]          | ologit Ordered logistic regression  |
| [R]          | oprobit Ordered probit regression   |
| [R]          | probit Probit regression  |
| [R]          | rologit   |
| [R]          | scobit  |
| [R]          | slogit Stereotype logistic regression                                       |
| [XT]         | xtcloglog   |
| [XT]         | xtgee Fit population-averaged panel-data models by using GEE                |
| [XT]         | xtlogit Fixed-effects, random-effects, and population-averaged logit models |
| [XT]         | xtologit  |
|              |   |
| [XT]         | xtoprobit   |
| [XT]         | xtprobit  |
| [R]          | zioprobit   |
|              |   |

## Longitudinal data/panel data

| U    | •   |
|------|---|
| [U]  | Chapter 20 Estimation and postestimation commands                                     |
| [U]  | Section 26.14 Panel-data models   |
| [ME] | meologit Multilevel mixed-effects ordered logistic regression                         |
| [ME] | meoprobit Multilevel mixed-effects ordered probit regression                          |
| [ME] | mepoisson Multilevel mixed-effects Poisson regression                                 |
| [ME] | meprobit Multilevel mixed-effects probit regression                                   |
| [ME] | meqrpoisson Multilevel mixed-effects Poisson regression (QR decomposition)            |
| [ME] | mixed Multilevel mixed-effects linear regression                                      |
| [XT] | quadchk Check sensitivity of quadrature approximation                                 |
| [XT] | xt Introduction to xt commands  |
| [XT] | xtabond Arellano–Bond linear dynamic panel-data estimation                            |
| [XT] | xtcloglog Random-effects and population-averaged cloglog models                       |
| [XT] | xtcointtest Panel-data cointegration tests  |
| [XT] | xtdata Faster specification searches with xt data                                     |
| [XT] | xtdescribe Describe pattern of xt data  |
| [XT] | xtdpd Linear dynamic panel-data estimation  |
| [XT] | xtdpdsys Arellano-Bover/Blundell-Bond linear dynamic panel-data estimation            |
| [XT] | xtfrontier Stochastic frontier models for panel data                                  |
| [XT] | xtgee Fit population-averaged panel-data models by using GEE                          |
| [XT] | xtgls Fit panel-data models by using GLS  |
| [XT] | xthtaylor Hausman-Taylor estimator for error-components models                        |
| [XT] | xtintreg Random-effects interval-data regression models                               |
| [XT] | xtivreg Instrumental variables and two-stage least squares for panel-data models      |
| [XT] | xtline Panel-data line plots  |
| [XT] | xtlogit Fixed-effects, random-effects, and population-averaged logit models           |
| [XT] | xtnbreg Fixed-effects, random-effects, & population-averaged negative binomial models |
| [XT] | xtologit  |
| [XT] | xtoprobit   |
|      |   |

| [XT]     | xtpcse Linear regression with panel-corrected standard errors                    |
|----------|--|
| [XT]     | xtpoisson Fixed-effects, random-effects, and population-averaged Poisson models  |
| [XT]     | xtprobit Random-effects and population-averaged probit models                    |
| [XT]     | xtrc   |
| [XT]     | xtreg Fixed-, between-, and random-effects and population-averaged linear models |
| [XT]     | xtregar Fixed- and random-effects linear models with an AR(1) disturbance        |
| [XT]     | xtset Declare data to be panel data  |
| [XT]     | xtstreg Random-effects parametric survival models                                |
| [XT]     | xtsum Summarize xt data  |
| [XT]     | xttab Tabulate xt data   |
| [XT]     | xttobit  |
| [XT]     | xtunitroot   |
|          |  |
| Mixed mo | dels   |
| [U]      | Chapter 20 Estimation and postestimation commands                                |
| [U]      | Section 26.15 Multilevel mixed-effects models                                    |
| [R]      | anova Analysis of variance and covariance  |
| [ME]     | estat df Calculate degrees of freedom for fixed effects                          |
| [ME]     | estat group Summarize the composition of the nested groups                       |
| [ME]     | estat icc Estimate intraclass correlations                                       |
| [ME]     | estat recovariance Display estimated random-effects covariance matrices          |
| [ME]     | estat sd Display variance components as standard deviations and correlations     |
| [ME]     | estat wcorrelation Display within-cluster correlations and standard deviations   |
| [R]      | icc Intraclass correlation coefficients  |
| [MV]     | manova Multivariate analysis of variance and covariance                          |
| [ME]     | me Introduction to multilevel mixed-effects models                               |
| [ME]     | mecloglog Multilevel mixed-effects complementary log-log regression              |
| [ME]     | meglm Multilevel mixed-effects generalized linear model                          |
| [ME]     | meintreg Multilevel mixed-effects interval regression                            |
| [ME]     | melogit Multilevel mixed-effects logistic regression                             |
| [ME]     | menbreg  |
| [ME]     | menl   |
| [ME]     | meologit   |
| [ME]     | meoprobit Multilevel mixed-effects ordered probit regression                     |
| [ME]     | mepoisson  |
| [ME]     | meprobit   |
| [ME]     | meqrlogit Multilevel mixed-effects logistic regression (QR decomposition)        |
| [ME]     | meqrpoisson Multilevel mixed-effects Poisson regression (QR decomposition)       |
| [ME]     | mestreg Multilevel mixed-effects parametric survival models                      |
| [ME]     | metobit  |
| [ME]     | mixed Multilevel mixed-effects linear regression                                 |
| [XT]     | xtcloglog  |
| [XT]     | xtintreg   |
| [XT]     | xtlogit Fixed-effects, random-effects, and population-averaged logit models      |
| [XT]     | xtologit   |
| [XT]     | xtoprobit  |
| [XT]     | xtprobit   |
| [XT]     | xtrc   |
| [XT]     | xtreg Fixed-, between-, and random-effects and population-averaged linear models |
| [XT]     | xttobit  |
|          |  |

| Multidime    | nsional scaling and biplots  |
|--------------|--|
| [MV]         | biplot   |
| [MV]<br>[MV] | mds  |
| [MV]         | mdsmat   |
| [MV]         | measure_option Option for similarity and dissimilarity measures  |
|              | mixed-effects models   |
| [U]          | Section 26.15 Multilevel mixed-effects models  |
| [BAYES]      | bayesian estimation Bayesian estimation commands   |
| [ME]         | me Introduction to multilevel mixed-effects models   |
| [ME]         | mecloglog Multilevel mixed-effects complementary log-log regression  |
| [ME]         | meglm Multilevel mixed-effects generalized linear model  |
| [ME]         | meintreg Multilevel mixed-effects interval regression  |
| [ME]<br>[ME] | melogit Multilevel mixed-effects logistic regression menbreg Multilevel mixed-effects negative binomial regression       |
| [ME]         | menl   |
| [ME]         | meologit   |
| [ME]         | meoprobit Multilevel mixed-effects ordered probit regression   |
| [ME]         | mepoisson Multilevel mixed-effects Poisson regression  |
| [ME]         | meprobit Multilevel mixed-effects probit regression  |
| [ME]         | meqrlogit Multilevel mixed-effects logistic regression (QR decomposition)  |
| [ME]         | megrpoisson Multilevel mixed-effects Poisson regression (QR decomposition)   |
| [ME]         | mestreg  |
| [ME]<br>[ME] | metobit  |
| [IVIL]       | iniacu ividitievei miacu-enects micai regression   |
| Multiple in  |  |
| [U]          | Section 26.28 Multiple imputation  |
| [MI]         | estimation Estimation commands for use with mi estimate  |
| [MI]         | intro substantive Introduction to multiple-imputation analysis   |
| [MI]<br>[MI] | mi estimate Estimation using multiple imputations mi estimate using Estimation using previously saved estimation results |
| [MI]         | mi estimate postestimation   |
| [MI]         | mi impute  |
| [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   |
| [MI]         | mi impute mvn Impute using multivariate normal regression  |
| [MI]         | mi impute nbreg Impute using negative binomial regression mi impute ologit Impute using ordered logistic regression      |
| [MI]<br>[MI] | mi impute using ordered logistic regression mi impute pmm  |
| [MI]         | mi impute poisson Impute using Poisson regression  |
| [MI]         | mi impute regress  |
| D 073        | Impute voice town ones   |

mi impute truncreg ...... Impute using truncated regression

mi predict ...... Obtain multiple-imputation predictions

mi test ...... Test hypotheses after mi estimate

[MI]

[MI]

[MI]

[MI]

| Multivaria                        | te analysis of variance and related techniques                          |  |  |
|-----------------------------------|---|--|--|
| [U] [MV] [MV] [MV] [MV] [MV] [MV] | Section 26.20   |  |  |
| [R]                               | boxcox Box–Cox regression models  |  |  |
| [ME]                              | menl  |  |  |
| [R]                               | nl Nonlinear least-squares estimation                                   |  |  |
| [R]                               | nlsur Estimation of nonlinear systems of equations                      |  |  |
| Nonparam                          | etric statistics  |  |  |
| [R]                               | bitest Binomial probability test  |  |  |
| [R]                               | bootstrap Bootstrap sampling and estimation                             |  |  |
| [R]                               | bsample Sampling with replacement                                       |  |  |
| [R]                               | bstat   |  |  |
| [R]                               | centile Report centile and confidence interval                          |  |  |
| [R]                               | cusum Cusum plots and tests for binary variables                        |  |  |
| [R]                               | kdensity Univariate kernel density estimation                           |  |  |
| [R]                               | ksmirnov Kolmogorov-Smirnov equality-of-distributions test              |  |  |
| [R]                               | kwallis Kruskal-Wallis equality-of-populations rank test                |  |  |
| [R]                               | lowess  |  |  |
| [R]                               | lpoly Kernel-weighted local polynomial smoothing                        |  |  |
| [R]                               | npregress   |  |  |
| [R]                               | npregress intro Introduction to nonparametric kernel regression         |  |  |
| [R]                               | nptrend Test for trend across ordered groups                            |  |  |
| [R]                               | prtest Tests of proportions   |  |  |
| [R]                               | qreg  |  |  |
| [R]                               | ranksum Equality tests on unmatched data                                |  |  |
| [R]                               | roc   |  |  |
| [R]                               | roccomp Tests of equality of ROC areas                                  |  |  |
| [R]                               | rocreg  |  |  |
| [R]                               | rocregplot Plot marginal and covariate-specific ROC curves after rocreg |  |  |
| [R]                               | roctab  |  |  |
| [R]                               | runtest Test for random order   |  |  |
| [R]                               | signrank Equality tests on matched data                                 |  |  |
| [R]                               | simulate Monte Carlo simulations  |  |  |
| [R]                               | smooth Robust nonlinear smoother  |  |  |
| [R]                               | spearman Spearman's and Kendall's correlations                          |  |  |
| [R]                               | symmetry Symmetry and marginal homogeneity tests                        |  |  |
| [R]                               | tabulate twoway   |  |  |
| Ordinal ou                        | Ordinal outcomes  |  |  |
| [U]                               | Chapter 20 Estimation and postestimation commands                       |  |  |
| [R]                               | asroprobit Alternative-specific rank-ordered probit regression          |  |  |
| [BAYES]                           | bayesian estimation Bayesian estimation commands                        |  |  |

| [ERM] [FMM] [R] [IRT] [IRT] [IRT] [ME] [ME] [R] [R] [R] [R] [R] [XT] [XT] [R] | eoprobit Extended ordered probit regression fmm estimation Fitting finite mixture models heckoprobit Ordered probit model with sample selection irt grm Graded response model irt pcm Partial credit model irt rsm Rating scale model meologit Multilevel mixed-effects ordered logistic regression meoprobit Multilevel mixed-effects ordered probit regression oprobit Ordered logistic regression oprobit Ordered logistic regression rologit Rank-ordered logistic regression xtologit Random-effects ordered logistic models xtoprobit Random-effects ordered probit models zioprobit Zero-inflated ordered probit regression |  |  |
|---|--|--|--|
| Other stat  | istics   |  |  |
| [MV]  | alpha Compute interitem correlations (covariances) and Cronbach's alpha  |  |  |
| [R]   | ameans Arithmetic, geometric, and harmonic means   |  |  |
| [R]   | brier Brier score decomposition  |  |  |
| [R]   | centile  |  |  |
| [R]   | kappa Interrater agreement   |  |  |
| [MV]  | mytest correlations  |  |  |
| [R]   | pcorr Partial and semipartial correlation coefficients   |  |  |
| [D]   | pctile Create variable containing percentiles  |  |  |
| [D]   | range Generate numerical range   |  |  |
| Pharmaco  | kinetic statistics   |  |  |
| [U]   | Section 26.19 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  |  |  |
| [R]   | pkshape  |  |  |
| [R]   | pksumm Summarize pharmacokinetic data  |  |  |
| Power and sample size   |  |  |  |
| [U]   | Section 26.29 Power and sample-size analysis   |  |  |
| [PSS]   | GUI Graphical user interface for power and sample-size analysis  |  |  |
| [PSS]   | power Power and sample-size analysis for hypothesis tests  |  |  |
| [PSS]   | power cmh Power and sample size for the Cochran-Mantel-Haenszel test   |  |  |
| [PSS]   | power cox Power analysis for the Cox proportional hazards model  |  |  |
| [PSS]   | power exponential Power analysis for the exponential test  |  |  |
| [PSS]   | power logrank Power analysis for the log-rank test   |  |  |
| [PSS]   | power logrank, cluster Power analysis for the log-rank test, CRD   |  |  |
| [PSS]   | power mcc Power analysis for matched case–control studies  |  |  |
| [PSS]   | power onecorrelation Power analysis for a one-sample correlation test  |  |  |
| [PSS]   | power onemean Power analysis for a one-sample mean test  |  |  |
| [PSS]   | power onemean, cluster Power analysis for a one-sample mean test, CRD  |  |  |
| [PSS]   | power one proportion Power analysis for a one-sample proportion test   |  |  |
| [PSS]   | power one proportion, cluster Power analysis for a one-sample proportion test, CRD   |  |  |

| [PSS] | power oneslope Power analysis for a slope test in a simple linear regression power onevariance Power analysis for a one-sample variance test power oneway Power analysis for one-way analysis of variance power pairedmeans Power analysis for a two-sample paired-means test power pairedproportions Power analysis for a two-sample paired-proportions test power poorr Power analysis for a partial-correlation test in a multiple linear regression power repeated Power analysis for repeated-measures analysis of variance power rsquared Power analysis for an R <sup>2</sup> test in a multiple linear regression power trend Power analysis for the Cochran–Armitage trend test power twocorrelations Power analysis for a two-sample correlations test power twomeans Power analysis for a two-sample means test power twomeans, cluster Power analysis for a two-sample means test power twoproportions Power analysis for a two-sample proportions test power twoproportions, cluster Power analysis for a two-sample proportions test power twovariances Power analysis for a two-sample variances test power twovariances Power analysis for two-way analysis of variance power twoway Power analysis for two-way analysis of variance power usermethod Add your own methods to the power command power, table Produce table of results from the power command unbalanced designs Specifications for unbalanced designs |
|---|---|
| Quality con   | ntrol   |
| [R]   | cusum   |
| [R]   | qc  |
| [R]   | serrbar Graph standard error bar chart  |
| ROC analy   | agic  |
| -   |   |
| [U]<br>[R]  | Section 26.4.3 ROC analysis roc Receiver operating characteristic (ROC) analysis  |
| [R]   | roccomp   |
| [R]   | rocfit  |
| [R]   | rocfit postestimation Postestimation tools for rocfit   |
| [R]   | rocreg  |
| [R]   | rocreg postestimation   |
| [R]   | rocregplot Plot marginal and covariate-specific ROC curves after rocreg   |
| [R]   | roctab  |
| Do4o4!  |   |
| Rotation  |   |
| [MV]  | procrustes  |
| [MV]  | rotate Orthogonal and oblique rotations after factor and pca  |
| [MV]  | rotatemat Orthogonal and oblique rotations of a Stata matrix  |
| Comple s-1  | action models   |
| _   | ection models   |
| [U]   | Chapter 20 Estimation and postestimation commands Section 26.12 Models with endogenous sample selection   |
| [U]   | bayesian estimation   |
| [BAYES]<br>[ERM]  | eintreg Extended interval regression  |
| [ERM]   | eoprobit Extended ordered probit regression   |
| [ERM]   | eprobit Extended ordered probit regression  |
| [ERM]   | eregress Extended linear regression   |
| [TE]  | etpoisson   |
| r J   | 1   |

| [TE]         | etregress Linear regression with endogenous treatment effects   |
|--------------|---|
| [R]          | heckman Heckman selection model   |
| [R]          | heckoprobit Ordered probit model with sample selection  |
| [R]          | heckpoisson Poisson regression with sample selection  |
| [R]          | heckprobit  |
| Simulatio    | n/resampling  |
| [R]          | bootstrap Bootstrap sampling and estimation   |
| [R]          | bsample Sampling with replacement   |
| [R]          | jackknife Jackknife estimation  |
| [R]          | permute Monte Carlo permutation tests   |
| [R]          | simulate Monte Carlo simulations  |
| Spatial a    | utoregressive models  |
| [U]          | Section 26.17   |
| [SP]         | estat moran Moran test of residual correlation with nearby residuals  |
| [SP]         | grmap Graph choropleth maps   |
| [SP]         | intro Introduction to spatial data and SAR models   |
| [SP]         | intro 1 A brief introduction to SAR models  |
| [SP]         | intro 2   |
| [SP]         | intro 3 Preparing data for analysis   |
| [SP]         | intro 4 Preparing data: Data with shapefiles  |
| [SP]         | intro 5 Preparing data: Data containing locations (no shapefiles)   |
| [SP]         | intro 6 Preparing data: Data without shapefiles or locations  |
| [SP]         | intro 7 Example from start to finish  |
| [SP]         | intro 8   |
| [SP]         | spbalance Make panel data strongly balanced   |
| [SP]         | spcompress  |
| [SP]         | spdistance  |
| [SP]         | spgenerate Generate new variables containing spatial lags   |
| [SP]         | spivregress Spatial autoregressive models with endogenous covariates  |
| [SP]         | spmatrix Categorical guide to the spmatrix command  |
| [SP]         | spmatrix copy   |
| [SP]         | spmatrix drop List and delete weighting matrices stored in memory   |
| [SP]         | spmatrix export Exist and delete weighting matrices stored in memory spmatrix export Export weighting matrix to text file |
| [SP]<br>[SP] | spmatrix fromdata   |
| [SP]         | spmatrix import   |
| [SP]         | spmatrix matafromsp   |
| [SP]         | spmatrix normalize  |
| [SP]         | spmatrix note   |
| [SP]         | spmatrix save Save spatial weighting matrix to file   |
| [SP]         | spmatrix spfrommata Copy Mata matrix to Sp  |
| [SP]         | spmatrix summarize Summarize weighting matrix stored in memory  |
| [SP]         | spmatrix use Load spatial weighting matrix from file  |
| [SP]         | spmatrix userdefined Create custom weighting matrix   |
| [SP]         | spregress   |
| [SP]         | spset Declare data to be Sp spatial data  |
| [SP]         | spshape2dta Translate shapefile to Stata format   |
| [SP]         | spxtregress Spatial autoregressive models for panel data  |
|              |   |

## Standard postestimation tests, tables, and other analyses

| - Fr 13 | Section 12.5   |          |
|---------|--|----------|
| [U]     | Section 13.5   |          |
| [U]     | Chapter 20 Estimation and postestimation comman  |          |
| [R]     | contrast Contrasts and linear hypothesis tests after estimation  |          |
| [R]     | correlate Correlations (covariances) of variables or coefficien  |          |
| [R]     | estat Postestimation statisti  |          |
| [R]     | estat ic Display information criter  |          |
| [R]     | estat summarize Summarize estimation samp  | ole      |
| [R]     | estat vce Display covariance matrix estimat  | es       |
| [R]     | estimates  | lts      |
| [R]     | estimates describe   |          |
| [R]     | estimates for Repeat postestimation command across mode  | els      |
| [R]     | estimates notes Add notes to estimation result   |          |
| [R]     | estimates replay   |          |
| [R]     | estimates save   |          |
| [R]     | estimates stats Model-selection statisti   | cs       |
| [R]     | estimates store  |          |
| [R]     | estimates table  |          |
| [R]     | estimates title  |          |
|         | forecast Econometric model forecasting   |          |
| [TS]    | forecast adjust  |          |
| [TS]    |  |          |
| [TS]    | forecast clear   |          |
| [TS]    | forecast coefvector Specify an equation via a coefficient vect   |          |
| [TS]    | forecast create  |          |
| [TS]    | forecast describe Describe features of the forecast moderate forecast moderate forecast moderate forecast describe |          |
| [TS]    | forecast drop Drop forecast variable   | es       |
| [TS]    | forecast estimates Add estimation results to a forecast mod  |          |
| [TS]    | forecast exogenous Declare exogenous variable  |          |
| [TS]    | forecast identity Add an identity to a forecast mod  |          |
| [TS]    | forecast list List forecast commands composing current mod   | lel      |
| [TS]    | forecast query Check whether a forecast model has been start   | ed       |
| [TS]    | forecast solve Obtain static and dynamic forecast  | sts      |
| [R]     | hausman Hausman specification to   | est      |
| [R]     | lincom Linear combinations of parameter  |          |
| [R]     | linktest Specification link test for single-equation mode  |          |
| [R]     | lrtest Likelihood-ratio test after estimation  |          |
| [R]     | margins Marginal means, predictive margins, and marginal effect  |          |
| [R]     | margins, contrast  |          |
| [R]     | margins, pwcompare   |          |
| [R]     | marginsplot  |          |
| [MV]    | mytest   |          |
|         | nlcom  |          |
| [R]     |  |          |
| [R]     | postest  | OI<br>On |
| [R]     |  |          |
| [R]     | predictnl Obtain nonlinear predictions, standard errors, etc., after estimation                                    |          |
| [R]     | pwcompare Pairwise compariso   |          |
| [R]     | suest  |          |
| [R]     | test Test linear hypotheses after estimation   |          |
| [R]     | testnl Test nonlinear hypotheses after estimation  | on       |
|         |  |          |

## Structural equation modeling

| [U]            | Section 26.22 Structural equation modeling (SEM)                             |
|----------------|--|
| [SEM]          | Builder SEM Builder  |
| [SEM]          | Builder, generalized   |
| [SEM]          | estat eform Display exponentiated coefficients                               |
| [SEM]          | estat eggof Equation-level goodness-of-fit statistics                        |
| [SEM]          | estat eqtest Equation-level goodiness-of-in statistics                       |
| [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  |
| [SEM]          | estat legof Latent class goodness-of-fit statistics                          |
| [SEM]          | estat lcmean Latent class marginal means                                     |
| [SEM]          | estat lcprob 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  |
| [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   |
| [SEM]          | example 11 estat framework   |
| [SEM]          | example 12   |
| [SEM]          | example 13 Equation-level want test example 14                               |
| [SEM]<br>[SEM] | example 15 Higher-order CFA  |
| [SEM]          | example 16   |
| [SEM]          | example 17   |
| [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   |
| [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  |
| [SEM] | example 41g Two-level multinomial logistic regression (multilevel)         |
| [SEM] | example 42g One- and two-level mediation models (multilevel)               |
| [SEM] | example 43g  |
| [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] | intro 1  |
| [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  |
| [SEM] | intro 5  |
| [SEM] | intro 6  |
| [SEM] | intro 7  |
| [SEM] | intro 8  |
| [SEM] | intro 9  |
| [SEM] | intro 10 Fitting models with survey data                                   |
| [SEM] | intro 11 Fitting models with summary statistics data (sem only)            |
| [SEM] | intro 12   |
| [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   |
| [SEM] | methods and formulas for sem Michigas and formulas for sem                 |

|       | N. 11   |
|-------|---|
| [SEM] | nlcom   |
| [SEM] | predict after gsem Generalized linear predictions, etc.                             |
| [SEM] | predict after sem Factor scores, linear predictions, etc.                           |
| [SEM] | sem Structural equation model estimation command                                    |
| [SEM] | sem and gsem option constraints() Specifying constraints                            |
| [SEM] | sem and gsem option covstructure() Specifying covariance restrictions               |
|       |   |
| [SEM] | sem and gsem option from() Specifying starting values                               |
| [SEM] | sem and gsem option reliability() Fraction of variance not due to measurement error |
| [SEM] | sem and gsem path notation Command syntax for path diagrams                         |
| [SEM] | sem and gsem syntax options Options affecting interpretation of syntax              |
| [SEM] | sem estimation options Options affecting estimation                                 |
| [SEM] | sem group options Fitting models on different groups                                |
| [SEM] | sem model description options Model description options                             |
| [SEM] | sem option method() Specifying method and calculation of VCE                        |
| [SEM] | sem option noxconditional Computing means, etc., of observed exogenous variables    |
| [SEM] | sem option select() Using sem with summary statistics data                          |
| [SEM] | sem path notation extensions Command syntax for path diagrams                       |
| [SEM] | sem postestimation Postestimation tools for sem                                     |
| [SEM] | sem reporting options Options affecting reporting of results                        |
| [SEM] | sem ssd options Options for use with summary statistics data                        |
| [SEM] | ssd Making summary statistics data (sem only)                                       |
| [SEM] | test  |
| [SEM] | testnl Wald test of nonlinear hypotheses  |
|       |   |

## Survey data

| Chapter 20 Estimation and postestimation commands                                   |
|---|
| Section 26.27 Survey data   |
| survey Introduction to survey commands  |
| bootstrap_options More options for bootstrap variance estimation                    |
| brr_options More options for BRR variance estimation                                |
| calibration   |
| direct standardization Direct standardization of means, proportions, and ratios     |
| estat Postestimation statistics for survey data                                     |
| jackknife_options More options for jackknife variance estimation                    |
| ml for svy Maximum pseudolikelihood estimation for survey data                      |
| poststratification Poststratification for survey data                               |
| _robust Robust variance estimates   |
| sdr_options More options for SDR variance estimation                                |
| subpopulation estimation Subpopulation estimation for survey data                   |
| svy The survey prefix command   |
| svy bootstrap Bootstrap for survey data   |
| svy brr Balanced repeated replication for survey data                               |
| svy estimation Estimation commands for survey data                                  |
| svy jackknife Jackknife estimation for survey data                                  |
| svy postestimation Postestimation tools for svy                                     |
| svy sdr Successive difference replication for survey data                           |
| svy: tabulate oneway One-way tables for survey data                                 |
| svy: tabulate twoway Two-way tables for survey data                                 |
| svydescribe Describe survey data  |
| svymarkout . Mark observations for exclusion on the basis of survey characteristics |
|   |

[TE]

| [SVY]        | svyset Declare survey design for dataset  |
|--------------|---|
| [MI]         | mi XXXset Declare mi data to be svy, st, ts, xt, etc.   |
| [SVY]        | variance estimation Variance estimation for survey data                                       |
|              | ·   |
| Survival a   | ·   |
| [U]          | Chapter 20 Estimation and postestimation commands   |
| [U]          | Section 26.14.5 Survival models with panel data   |
| [U]          | Section 26.16 Survival analysis models  |
| [U]          | Section 26.18 Treatment-effects models  |
| [U]          | Section 26.29   |
| [ST]         | survival analysis Introduction to survival analysis   |
| [BAYES]      | bayes: streg Bayesian parametric survival models  |
| [ST]         | ct  |
| [ST]         | ctset Declare data to be count-time data  |
| [ST]         | cttost  |
| [ST]         | discrete Discrete-time survival analysis  |
| [FMM]        | fmm: streg Finite mixtures of parametric survival models ltable Life tables for survival data |
| [ST]         | mestreg   |
| [ME]         | snapspan Convert snapshot data to time-span data  |
| [ST]         | st  |
| [ST]<br>[ST] | st_is   |
| [ST]         | stbase  |
| [ST]         | stei Confidence intervals for means and percentiles of survival time                          |
| [ST]         | steox   |
| [ST]         | stcox PH-assumption tests Tests of proportional-hazards assumption                            |
| [ST]         | sterreg   |
| [ST]         | stcurve . Plot survivor, hazard, cumulative hazard, or cumulative incidence function          |
| [ST]         | stdescribe  |
| [R]          | stepwise Stepwise estimation  |
| [ST]         | stfill Fill in by carrying forward values of covariates                                       |
| [ST]         | stgen Generate variables reflecting entire histories  |
| [ST]         | stintreg Parametric models for interval-censored survival-time data                           |
| [ST]         | stir Report incidence-rate comparison   |
| [ST]         | stptime Calculate person-time, incidence rates, and SMR                                       |
| [ST]         | strate  |
| [ST]         | streg Parametric survival models  |
| [ST]         | sts Generate, graph, list, and test the survivor and cumulative hazard functions              |
| [ST]         | sts generate Create variables containing survivor and related functions                       |
| [ST]         | sts graph Graph the survivor, hazard, or cumulative hazard function                           |
| [ST]         | sts list List the survivor or cumulative hazard function                                      |
| [ST]         | sts test Test equality of survivor functions  |
| [ST]         | stset Declare data to be survival-time data   |
| [MI]         | mi XXXset Declare mi data to be svy, st, ts, xt, etc.   |
| [ST]         | stsplit   |
| [MI]         | mi stsplit Stsplit and stjoin mi data   |
| [ST]         | stsum   |
| [TE]         | stteffects ipw  |
| [TE]         | stteffects ipwra Survival-time inverse-probability-weighted regression adjustment             |
| [TE]         | stteffects ra Survival-time regression adjustment   |

stteffects wra ...... Survival-time weighted regression adjustment

| [ST] | sttocc Convert survival-time data to case-control data |
|------|--|
| [ST] | sttoct Convert survival-time data to count-time data   |
| [ST] | stvary Report variables that vary over time            |
| [XT] | xtstreg Random-effects parametric survival models      |

Als

| lso see Pow | ver and sample size.  |
|-------------|---|
| Time serie  | s, multivariate   |
| [U]         | Section 11.4.4  |
| [U]         | Section 13.10 Time-series operators   |
| [U]         | Chapter 20 Estimation and postestimation commands                           |
| [U]         | Section 26.13 Time-series models  |
| [TS]        | time series Introduction to time-series commands                            |
| [TS]        | dfactor Dynamic-factor models   |
| [TS]        | fcast compute Compute dynamic forecasts after var, svar, or vec             |
| [TS]        | fcast graph Graph forecasts after fcast compute                             |
| [TS]        | forecast Econometric model forecasting                                      |
| [TS]        | forecast adjust Adjust a variable by add factoring, replacing, etc.         |
| [TS]        | forecast clear  |
| [TS]        | forecast coefvector Specify an equation via a coefficient vector            |
| [TS]        | forecast create   |
| [TS]        | forecast describe Describe features of the forecast model                   |
| [TS]        | forecast drop   |
| [TS]        | forecast estimates Add estimation results to a forecast model               |
| [TS]        | forecast exogenous  |
| [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]        | irf Create and analyze IRFs, dynamic-multiplier functions, and FEVDs        |
| [TS]        | irf add Add results from an IRF file to the active IRF file                 |
| [TS]        | irf cgraph Combined graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS]        | irf create Obtain IRFs, dynamic-multiplier functions, and FEVDs             |
| [TS]        | irf ctable Combined tables of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS]        | irf describe  |
| [TS]        | irf drop Drop IRF results from the active IRF file                          |
| [TS]        | irf graph Graphs of IRFs, dynamic-multiplier functions, and FEVDs           |
| [TS]        | irf ograph Overlaid graphs of IRFs, dynamic-multiplier functions, and FEVDs |
| [TS]        | irf rename  |
| [TS]        | irf set   |
| [TS]        | irf table Tables of IRFs, dynamic-multiplier functions, and FEVDs           |
| [TS]        | mgarch Multivariate GARCH models  |
| [TS]        | mgarch ccc Constant conditional correlation multivariate GARCH models       |
| [TS]        | mgarch dcc Dynamic conditional correlation multivariate GARCH models        |
| [TS]        | mgarch dvech Diagonal vech multivariate GARCH models                        |
| [TS]        | mgarch vcc Varying conditional correlation multivariate GARCH models        |
| [TS]        | rolling   |
| [TS]        | sspace  |
| [TS]        | tsappend Add observations to a time-series dataset                          |
| [TS]        | tsfill Fill in gaps in time variable  |
| [TS]        | tsline  |
| [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]        | var intro Introduction to vector autoregressive models                         |
| [TS]        | var svar Structural vector autoregressive models                               |
| [TS]        | var Vector autoregressive models   |
| [TS]        | varbasic Fit a simple VAR and graph IRFs or FEVDs                              |
| [TS]        | vargranger Perform pairwise Granger causality tests after var or svar          |
| [TS]        | varlmar Perform LM test for residual autocorrelation after var or svar         |
| [TS]        | varnorm Test for normally distributed disturbances after var or svar           |
| [TS]        | varsoc Obtain lag-order selection statistics for VARs and VECMs                |
| [TS]        | varstable Check the stability condition of VAR or SVAR estimates               |
| [TS]        | varwle Obtain Wald lag-exclusion statistics after var or svar                  |
| [TS]        | vec intro Introduction to vector error-correction models                       |
| [TS]        | vec Vector error-correction models   |
| [TS]        | veclmar Perform LM test for residual autocorrelation after vec                 |
| [TS]        | vecnorm Test for normally distributed disturbances after vec                   |
| [TS]        | vecrank Estimate the cointegrating rank of a VECM                              |
| [TS]        | vecstable Check the stability condition of VECM estimates                      |
| [TS]        | xcorr Cross-correlogram for bivariate time series                              |
|             |  |
| Time series | s, univariate  |
| [U]         | Section 11.4.4   |
| [U]         | Section 13.10 Time-series operators  |
| [U]         | Chapter 20 Estimation and postestimation commands                              |
| [U]         | Section 26.13 Time-series models   |
| [TS]        | time series Introduction to time-series commands                               |
| [TS]        | arch Autoregressive conditional heteroskedasticity (ARCH) family of estimators |
| [TS]        | arfima Autoregressive fractionally integrated moving-average models            |
| [TS]        | arima ARIMA, ARMAX, and other dynamic regression models                        |
| [TS]        | corrgram Tabulate and graph autocorrelations                                   |
| [TS]        | cumsp Cumulative spectral distribution   |
| [TS]        | dfgls DF-GLS unit-root test  |
| [TS]        | dfuller Augmented Dickey–Fuller unit-root test                                 |
| [TS]        | estat acplot Plot parametric autocorrelation and autocovariance functions      |
| [TS]        | estat aroots Check the stability condition of ARIMA estimates                  |
| [TS]        | estat sbcusum Cumulative sum test for parameter stability                      |
| [TS]        | estat sbknown Test for a structural break with a known break date              |
| [TS]        | estat sbsingle Test for a structural break with an unknown break date          |
| [TS]        | forecast Econometric model forecasting   |
| [TS]        | forecast adjust Adjust a variable by add factoring, replacing, etc.            |
| [TS]        | forecast clear   |
| [TS]        | forecast coefvector Specify an equation via a coefficient vector               |
| [TS]        | forecast create  |
| [TS]        | forecast describe Describe features of the forecast model                      |
| [TS]        | forecast drop  |
| [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] [TS] [TS] [TS] [TS] [TS] [TS] [TS] | mswitch Markov-switching regression models newey Regression with Newey-West standard errors pergram Periodogram Postesity Parametric spectral density estimation after arima, arfima, and ucm regress postestimation time series Postestimation tools for regress with time series rolling Rolling-window and recursive estimation sspace State-space models threshold Threshold regression tsappend Add observations to a time-series dataset sfill Fill in gaps in time variable tsfiller Fill in gaps in time variable tsfilter Filter a time-series, keeping only selected periodicities tsfilter by Butterworth time-series filter tsfilter by Butterworth time-series filter tsfilter of Christiano-Fitzgerald time-series filter tsfilter for Christiano-Fitzgerald time-series filter tsfilter ph Hodrick-Prescott time-series data tsreport Report time-series aspects of a dataset or estimation sample tsrevar Time-series operator programming command tsset Declare data to be time-series data tssmooth dexponential Double-exponential smoothing tssmooth exponential Single-exponential smoothing tssmooth hwinters Holt-Winters nonseasonal smoothing tssmooth hwinters Holt-Winters seasonal smoothing tssmooth hwinters Holt-Winters seasonal smoothing tssmooth shwinters Holt-Winters seasonal smoothing ucm Unobserved-component model wntestb Bartlett's periodogram-based test for white noise wntestq Portmanteau (Q) test for white noise |
|---|---|
| [TS]                                    | xcorr Cross-correlogram for bivariate time series   |
| Transforms                              | s and normality tests   |
| [R] [R] [R] [R] [R] [MV] [R]            | boxcoxBox-Cox regression modelsfpFractional polynomial regressionladderLadder of powerslnskew0Find zero-skewness log or Box-Cox transformmfpMultivariable fractional polynomial modelsmvtest normalityMultivariate normality testssktestSkewness and kurtosis test for normalityswilkShapiro-Wilk and Shapiro-Francia tests for normality   |
| Treatment                               | effects   |
| [U] [ERM] [ERM] [ERM] [ERM] [TE] [TE]   | Section 26.18Treatment-effects modelseintregExtended interval regressioneoprobitExtended ordered probit regressioneprobitExtended probit regressioneregressExtended linear regressioneteffectsEndogenous treatment-effects estimationetpoissonPoisson regression with endogenous treatment effects  |

[P]

[P]

[P]

| [TE]     | etregress Linear regression with endogenous treatment effects                             |
|----------|---|
| [TE]     | stteffects Treatment-effects estimation for observational survival-time data              |
| [TE]     | stteffects intro   Introduction to treatment effects for observational survival-time data |
| [TE]     | stteffects ipw Survival-time inverse-probability weighting                                |
| [TE]     | stteffects ipwra Survival-time inverse-probability-weighted regression adjustment         |
| [TE]     | stteffects ra Survival-time regression adjustment   |
| [TE]     | stteffects wra Survival-time weighted regression adjustment                               |
| [TE]     | tebalance Check balance after teffects or stteffects estimation                           |
| [TE]     | tebalance box   |
| [TE]     | tebalance density   |
| [TE]     | tebalance overid Test for covariate balance   |
| [TE]     | tebalance summarize Covariate-balance summary statistics                                  |
| [TE]     | teffects Treatment-effects estimation for observational data                              |
| [TE]     | teffects aipw Augmented inverse-probability weighting                                     |
| [TE]     | teffects intro Introduction to treatment effects for observational data                   |
| [TE]     | teffects intro advanced Advanced introduction to treatment effects for observational data |
| [TE]     | teffects ipw Inverse-probability weighting  |
| [TE]     | teffects ipwra Inverse-probability-weighted regression adjustment                         |
| [TE]     | teffects multivalued  |
| [TE]     | teffects nnmatch  |
| [TE]     | teffects overlap Overlap plots  |
| [TE]     | teffects psmatch Propensity-score matching  |
| [TE]     | teffects ra   |
| [TE]     | treatment effects Introduction to treatment-effects commands                              |
| Matrix c | commands  |
| Basics   |   |
| [U]      | Chapter 14 Matrix expressions   |
| [P]      | matlist Display a matrix and control its format   |
| [P]      | matrix Introduction to matrix commands  |
| [P]      | matrix define Matrix definition, operators, and functions                                 |
| [P]      | matrix utility List, rename, and drop matrices  |
| Program  | ming  |
| [P]      | ereturn Post the estimation results   |
| [P]      | matrix accum Form cross-product matrices  |
| [P]      | matrix rownames   |
| [P]      | matrix score Score data from coefficient vectors  |
| [R]      | ml Maximum likelihood estimation  |
| [M]      | Mata Reference Manual   |
| Other    |   |
| [P]      | makecns Constrained estimation  |
| [P]      | matrix dissimilarity Compute similarity or dissimilarity measures                         |
| [P]      | matrix eigenvalues Eigenvalues of nonsymmetric matrices                                   |
| [P]      | matrix get Access system matrices   |
| [m]      | Convert veriables to metric and vice verse  |

matrix mkmat ...... Convert variables to matrix and vice versa

matrix svd ...... Singular value decomposition

matrix symeigen ..... Eigenvalues and eigenvectors of symmetric matrices

| Mata       |  |
|------------|--|
| [D]        | putmata Put Stata variables into Mata and vice versa     |
| [M]        | Mata Reference Manual                                    |
| Progran    | nming  |
| Basics     |  |
| [U]        | Chapter 18 Programming Stata                             |
| [U]        | Section 18.3   |
| [U]        | Section 18.11  |
| [P]        | comments   |
| [P]        | fvexpand Expand factor variists                          |
| [P]        | macro Macro definition and manipulation                  |
| [P]        | program  |
| [P]        | return   |
| Program    | control  |
| [U]        | Section 18.11.1 Version                                  |
| [P]        | capture  |
| [P]        | continue Break out of loops                              |
| [P]        | error Display generic error message and exit             |
| [P]        | foreach Loop over items                                  |
| [P]        | forvalues Loop over consecutive values                   |
| [P]        | if if programming command                                |
| [P]        | version Version control                                  |
| [P]        | while Looping  |
| Parsing a  | and program arguments                                    |
| [U]        | Section 18.4 Program arguments                           |
| [P]        | confirm Argument verification                            |
| [P]        | gettoken Low-level parsing                               |
| [P]        | levels of variable                                       |
| [P]        | numlist  |
| [P]        | syntax Parse Stata syntax                                |
| [P]        | tokenize Divide strings into tokens                      |
| Console    | output   |
| [U]        | Section 12.4.2 Handling Unicode strings                  |
| [P]        | dialog programming Dialog programming                    |
| [P]        | display Display strings and values of scalar expressions |
| [P]        | smcl Stata Markup and Control Language                   |
| [P]        | tabdisp Display tables                                   |
| [D]        | unicode  |
| Common     | aly used programming commands                            |
| [P]        | byable   |
| [P]<br>[P] | #delimit   |
| [P]<br>[P] | exit Exit from a program or do-file                      |
| [F]<br>[R] | fvrevar Factor-variables operator programming command    |
|            |  |

| [D]       putmata       Put Stata variables into Mata and vice         [P]       putpdf       Create a PE         [P]       _return       Preserve stored at PE         [P]       _rmcoll       Remove collinear var         [P]       _robust       Robust variance est         [P]       serset       Create and manipulate st         [D]       snapshot       Save and restore data sna         [P]       unab       Unabbreviate variab         [P]       unabcmd       Unabbreviate command         [D]       unicode collator       Language-specific Unicode co         [D]       unicode convertfile       Low-level file conversion between enco         [P]       varabbrev       Control variable abbrev         [P]       viewsource       View source         [M-5]       xl()       Excel file I/C | DF file results riables imates sersets pshots ole list name llators odings viation e code |
|---|---|
| Special-interest programming commands   |   |
| [R]       bstat       Report bootstrap of cluster programming subroutines       Add cluster-analysis routines         [MV]       cluster programming utilities       Cluster-analysis programming utilities         [R]       fvrevar       Factor-variables operator programming commatrix dissimilarity         [P]       matrix dissimilarity       Compute similarity or dissimilarity mental programmer's alternative to missimilarity in the select         [ST]       st_is       Survival analysis subroutines for programming subroutines for programming subroutines for exclusion on the basis of survey characted technical         [MI]       technical       Details for programming committee         [TS]       Time-series operator programming committee  | outines<br>tilities<br>nmand<br>asures<br>extract<br>nmers<br>eristics<br>nmers           |
| Projects  |   |
| [P] Project Manager Organize State  | a files   |
| File formats  |   |
| [P]       file formats .dta   | odings  |
| Mata  |   |
| [M] Mata Reference Manual   |   |
| Automated document and report creation  |   |
| [P] dynamic tags Dynamic tags for Markdown docu   | ments   |
| [P] dyndoc Convert dynamic Markdown document to an HTM  | IL file   |
| [P] dyntext Process Stata dynamic tags in te  |   |
| [P] markdown  |   |
| [P]       putdocx       Generate Office Open XML (.doc         [P]       putexcel       Export results to an Exc  |   |
| [P] putexcel Export results to an Exc<br>[P] putpdf Create a PD   |   |

## **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  |
| [P]  | sleep  |
|      |  |
| [P]  | smcl   |
| [D]  | unicode locale   |
| [D]  | varmanage Manage variable labels, formats, and other properties      |
| [P]  | viewsource   |
| [P]  | window fopen Display open/save dialog box                            |
| [P]  | window manage  |
| [P]  | window menu Create menus   |
| [P]  | window programming Programming menus and windows                     |
| [P]  | window push  |
| [P]  | window stopbox Display message box                                   |