Title

> **estimates table —** Compare estimation results

Description

estimates table organizes estimation results from one or more models in a single formatted table.

Quick start

Display a table of coefficients for stored estimates m1 and m2
    estimates table m1 m2

As above, but include standard errors
    estimates table m1 m2, se

As above, but display coefficients and standard errors to 2 decimal places
    estimates table m1 m2, b(%7.2f) se(%7.2f)

As above, but include p-values displayed to 3 decimal places
    estimates table m1 m2, b(%7.2f) se(%7.2f) p(%4.3f)

Table of coefficients for m1 and m2 with sample size and adjusted R^2
    estimates table m1 m2, stats(N r2_a)

As above, but replace variable names with labels
    estimates table m1 m2, stats(N r2_a) varlabel

Table of coefficients with stars to denote significance
    estimates table m1 m2, star

Display coefficients in exponentiated form
    estimates table m3 m4, eform

Display only a subset of variables and reorder variables in table
    estimates table m1 m2, keep(v2 v1 v3 _cons)

Menu

Statistics > Postestimation

1

Syntax

> <u>est</u>imates <u>table</u> [*namelist*] [, *options*]

namelist is the name given to previously stored estimation results, a list of names, _all, or *. A
name may be ., meaning the current (active) estimates. _all and * mean the same thing.

options	Description
[Main]	
stats(*scalarlist*)	report *scalarlist* in table
star[(*#1 #2 #3*)]	use stars to denote significance
[Options]	
keep(*coeflist*)	report coefficients in order specified
drop(*coeflist*)	omit specified coefficients from table
equations(*matchlist*)	match equations of models as specified
[Numerical formats]	
b[(*%fmt*)]	how to format coefficients, which are always reported
se[(*%fmt*)]	report standard errors and use optional format
t[(*%fmt*)]	report t or z and use optional format
p[(*%fmt*)]	report p-values and use optional format
<u>st</u>fmt(*%fmt*)	how to format scalar statistics
[General format]	
varwidth(*#*)	use *#* characters to display variable names and statistics
modelwidth(*#*)	use *#* characters to display model names
eform	display coefficients in exponentiated form
varlabel	display variable labels rather than variable names
newpanel	display statistics in separate table from coefficients
style(oneline)	put vertical line after variable names; the default
style(columns)	put vertical line separating every column
style(noline)	suppress all vertical lines
coded	display compact table
[Reporting]	
display_options	control row spacing, line width, and display of omitted variables and base and empty cells
<u>title</u>(*string*)	title for table

title() does not appear in the dialog box.

Options

    _____| Main |_____

stats(*scalarlist*) specifies a list of any of or all the names of scalars stored in e() to be displayed
    in the table. *scalarlist* may also contain the following:

aic	Akaike's information criterion
bic	Schwarz's Bayesian information criterion
rank	rank of e(V) (# of free parameters in model)

    The specified statistics do not have to be available for all estimation results being displayed.

    For example, stats(N ll chi2 aic) specifies that e(N), e(ll), e(chi2), and AIC be included.
    In Stata, e(N) records the number of observations; e(ll), the log likelihood; and e(chi2), the
    chi-squared test that all coefficients in the first equation of the model are equal to zero.

star and star(*#1 #2 #3*) specify that stars (asterisks) are to be used to mark significance. The
    second syntax specifies the significance for one, two, and three stars. If you specify simply star,
    that is equivalent to specifying star(.05 .01 .001), which means one star (*) if $p < 0.05$, two
    stars (**) if $p < 0.01$, and three stars (***) if $p < 0.001$.

    The star and star() options may not be combined with the se, t, or p option.

    _____| Options |_____

keep(*coeflist*) and drop(*coeflist*) are alternatives; they specify coefficients to be included or omitted
    from the table. The default is to display all coefficients.

    If keep() is specified, it specifies not only the coefficients to be included but also the order in
    which they appear.

    A *coeflist* is a list of coefficient names, each name of which may be simple (for example, price),
    an equation name followed by a colon (for example, mean:), or a full name (for example,
    mean:price). Names are separated from each other by blanks.

    When full names are not specified, all coefficients that match the partial specification are included.
    For instance, drop(_cons) would omit _cons for all equations.

equations(*matchlist*) specifies how the equations of the models in *namelist* are to be matched. The
    default is to match equations by name. Matching by name usually works well when all results were
    fit by the same estimation command. When you are comparing results from different estimation
    commands, however, specifying equations() may be necessary.

    The most common usage is equations(1), which indicates that all first equations are to be
    matched into one equation named #1.

    matchlist has the syntax

        term [, *term* ...]

    term is

        [*eqname* =] *#:#...:#*   (syntax 1)

        [*eqname* =] *#*   (syntax 2)

    In syntax 1, each # is a number or a period (.). If a number, it specifies the position of the equation
    in the corresponding model; 1:3:1 would indicate that equation 1 in the first model matches
    equation 3 in the second, which matches equation 1 in the third. A period indicates that there

is no corresponding equation in the model; 1:..:1 indicates that equation 1 in the first matches equation 1 in the third.

In syntax 2, you specify just one number, say, 1 or 2, and that is shorthand for 1:1...:1 or 2:2...:2, meaning that equation 1 matches across all models specified or that equation 2 matches across all models specified.

Now that you can specify a *term*, you can put that together into a *matchlist* by separating one term from the other by commas. In what follows, we will assume that three names were specified,

```
. estimates table alpha beta gamma, ...
```

equations(1) is equivalent to equations(1:1:1); we would be saying that the first equations match across the board.

equations(1:..:1) would specify that equation 1 matches in models alpha and gamma but that there is nothing corresponding in model beta.

equations(1,2) is equivalent to equations(1:1:1, 2:2:2). We would be saying that the first equations match across the board and so do the second equations.

equations(1, 2:..:2) would specify that the first equations match across the board, that the second equations match for models alpha and gamma, and that there is nothing equivalent to equation 2 in model beta.

If equations() is specified, equations not matched by position are matched by name.

    � Numerical formats ⌐

b(%*fmt*) specifies how the coefficients are to be displayed. You might specify b(%9.2f) to make decimal points line up. There is also a b option, which specifies that coefficients are to be displayed, but that is just included for consistency with the se, t, and p options. Coefficients are always displayed.

se, t, and p specify that standard errors, t or z statistics, and p-values are to be displayed. The default is not to display them. se(%*fmt*), t(%*fmt*), and p(%*fmt*) specify that each is to be displayed and specifies the display format to be used to format them.

stfmt(%*fmt*) specifies the format for displaying the scalar statistics included by the stats() option.

    ⌐ General format ⌐

varwidth(#) specifies the number of character positions used to display the names of the variables and statistics. The default is 12.

modelwidth(#) specifies the number of character positions used to display the names of the models. The default is 12.

eform displays coefficients in exponentiated form. For each coefficient, $\exp(\beta)$ rather than β is displayed, and standard errors are transformed appropriately. Display of the intercept, if any, is suppressed.

varlabel specifies that variable labels be displayed instead of variable names.

newpanel specifies that the statistics be displayed in a table separated by a blank line from the table with coefficients rather than in the style of another equation in the table of coefficients.

style(*stylespec*) specifies the style of the coefficient table.

    style(oneline) specifies that a vertical line be displayed after the variables but not between the models. This is the default.

style(columns) specifies that vertical lines be displayed after each column.

style(noline) specifies that no vertical lines be displayed.

coded specifies that a compact table be displayed. This format is especially useful for comparing variables that are included in a large collection of models.

> Reporting

display_options: <u>noomit</u>ted, vsquish, <u>noempty</u>cells, <u>base</u>levels, <u>allbase</u>levels, <u>nofvlab</u>el, fvwrap(*#*), and fvwrapon(*style*); see [R] **estimation options**.

The following option is available with estimates table but is not shown in the dialog box:

title(*string*) specifies the title to appear above the table.

Remarks and examples stata.com

estimates table lets you format estimation results and organize results from multiple models in a single table. You achieve this by combining estimates table with estimates store; see [R] **estimates store**. When combined with putdocx or putpdf, estimates table lets you create customized tables of results in .docx or .pdf format.

▷ Example 1: Creating the default table

If you type estimates table without arguments, a table of the most recent estimation results will be shown:

```
. use http://www.stata-press.com/data/r15/auto
(1978 Automobile Data)
. regress mpg weight
 (output omitted )
. regress mpg weight displ
 (output omitted )
. estimates table
```

Variable	active
weight	-.00656711
displacement	.00528078
_cons	40.084522

In the above output table, only the results from the second regress command are displayed because they are the current (active) estimates.

◁

By default, estimates table displays only coefficient estimates. You can request additional model statistics by specifying the stats() option. Estimation commands store e-class results. To see a list of available results from the last estimation command that can be specified in the stats() option, you can use the ereturn list command.

▷ Example 2: Creating a table with multiple models

If we want to display more than one set of estimation results in a single table, we can use `estimates store` to store each set of estimation results in memory so that they can be accessed later by `estimates table`. This is one of the primary uses of `estimates table`—comparing estimation results:

```
. regress mpg weight displ
(output omitted )
. estimates store base
. regress mpg weight displ i.foreign
(output omitted )
. estimates store alt
. qreg mpg weight displ i.foreign
(output omitted )
. estimates store qreg
. estimates table base alt qreg, stats(r2)
```

Variable	base	alt	qreg
weight	-.00656711	-.00677449	-.00595056
displacement	.00528078	.00192865	.00018552
foreign			
Foreign		-1.6006312	-2.1326005
_cons	40.084522	41.847949	39.213348
r2	.6529307	.66287957	

`estimates table` automatically lines up the point estimates of coefficients on covariates that are common across each model. The `stats(r2)` option specifies that the coefficient of determination (R^2) be placed under the models for which it is computed.

The `foreign` variable was included in the models `alt` and `qreg` as a factor variable. Because the values of `foreign` are labeled, the value labels are displayed by default. See [D] **label** for information about managing value labels.

◁

▷ Example 3: Creating and exporting a formatted table

We can add estimates of the standard errors to the table and format them along with the original coefficient estimates by using the `b()` and `se()` options.

As shown in example 2, the labeled values of any factor variables are displayed by default. To see the labels corresponding to the variables that are included in the model rather than the names of the variables, we can specify the `varlabel` option.

```
. estimates table alt, b(%5.4f) se(%5.4f) varlabel
```
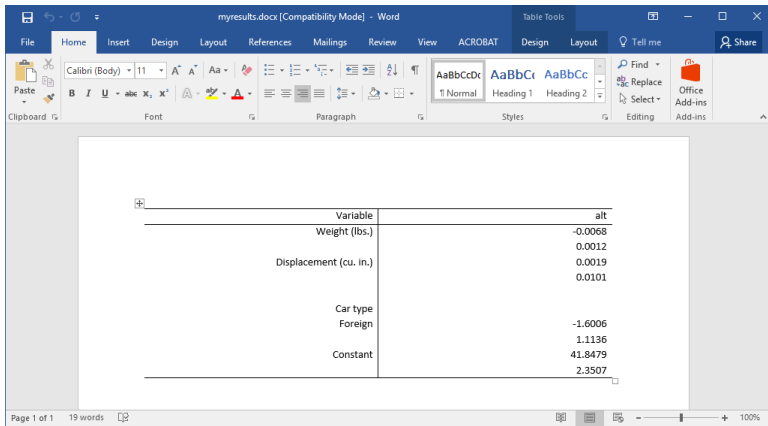
Variable	alt
Weight (lbs.)	-0.0068
	0.0012
Displacement (cu. in.)	0.0019
	0.0101
Car type	
Foreign	-1.6006
	1.1136
Constant	41.8479
	2.3507

legend: b/se

If we wanted this table to appear in a Word document, we could use the `putdocx` command with the `etable` output type to write it to a new document. To create the new document `myresults.docx`, we would type the following `putdocx` commands:

```
. putdocx begin
. putdocx table results = etable
. putdocx save myresults.docx
```

This creates a table in Word that looks like

Stored results

estimates table stores the following in r():

Macros
    r(names)   names of results used

Matrices
    r(coef)   matrix M: $n \times 2*m$
                      $M[i, 2j-1] = i$th parameter estimate for model j;
                      $M[i, 2j] = $ variance of $M[i, 2j-1]$; $i=1,...,n$; $j=1,...,m$
    r(stats)   matrix S: $k \times m$ (if option stats() specified)
                      $S[i, j] = i$th statistic for model j; $i=1,...,k$; $j=1,...,m$

References

Gallup, J. L. 2012. A new system for formatting estimation tables. *Stata Journal* 12: 3–28.

Weiss, M. 2010. Stata tip 90: Displaying partial results. *Stata Journal* 10: 500–502.

Also see

[R] **estimates** — Save and manipulate estimation results