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Estimation options — Estimation options

Description Syntax Options Also see

Description

This entry describes the options common to many estimation commands. Not all the options documented here work with all estimation commands. See the documentation for the particular estimation command; if an option is listed there, it is applicable.

Syntax

estimation_cmd [, options]	
options	Description
Model	
<u>nocons</u> tant	suppress constant term
$\underline{off}set(\mathit{varname}_o)$	include varname _o in model with coefficient constrained to 1
$exposure(varname_e)$	include $ln(varname_e)$ in model with coefficient constrained to 1
<pre>constraints(constraints)</pre>	apply specified linear constraints
Reporting	
<u>l</u> evel(#)	set confidence level; default is level(95)
lrmodel	perform likelihood-ratio model test instead of the default Wald test
<u>nocnsr</u> eport	do not display constraints
noci	suppress confidence intervals
<u>nopv</u> alues	suppress p-values and their test statistics
<u>noomit</u> ted	do not display omitted collinear variables
vsquish	suppress blank space separating factor variables or time-series variables
$\underline{\mathtt{noempty}}_{\mathtt{cells}}$	do not display empty interaction cells of factor variables
<u>base</u> levels	report base levels for factor variables and interactions
<u>allbase</u> levels	display all base levels for factor variables and interactions
<u>nofvlab</u> el	display factor-variable level values rather than value labels
fvwrap(#)	allow # lines when wrapping long value labels
fvwrapon(style)	apply style for wrapping long value labels; style may be word or width
cformat(% <i>fmt</i>)	format for coefficients, standard errors, and confidence limits
<pre>pformat(%fmt)</pre>	format for p-values
sformat(%fmt)	format for test statistics
Integration	
<pre>intmethod(intmethod)</pre>	integration method for random-effects models
<pre>intpoints(#)</pre>	use # integration (quadrature) points
nolstretch	do not automatically widen coefficient table for long variable names
<u>col</u> linear	keep collinear variables
<u>coefl</u> egend	display legend instead of statistics

Model

noconstant suppresses the constant term (intercept) in the model.

- offset $(varname_o)$ specifies that $varname_o$ be included in the model with the coefficient constrained to be 1.
- exposure ($varname_e$) specifies a variable that reflects the amount of exposure over which the depvar events were observed for each observation; $ln(varname_e)$ with the coefficient constrained to be 1 is entered into the log-link function.
- constraints (*numlist* | *matname*) specifies the linear constraints to be applied during estimation. The default is to perform unconstrained estimation. See [R] reg3 for the use of constraints in multiple-equation contexts.

constraints (*numlist*) specifies the constraints by number after they have been defined by using the constraint command; see [R] **constraint**. Some commands (for example, slogit) allow only constraints (*numlist*).

constraints (matname) specifies a matrix containing the constraints; see [P] makecns.

Reporting

- level(#) specifies the confidence level, as a percentage, for confidence intervals. The default is level(95) or as set by set level; see [U] 20.8 Specifying the width of confidence intervals.
- lrmodel specifies to conduct a likelihood-ratio test of the full maximum-likelihood model versus the restricted model that includes only a constant term in the regression equation instead of conducting the default Wald test that all coefficients are zero. This option can substantially increase estimation time.

lrmodel may not be specified with the vce(robust), vce(cluster clustvar), vce(jackknife), vce(bootstrap), or noconstant option.

lrmodel may not be combined with constraints; see constraints(constraints). In some cases, a likelihood-ratio test is valid for models with constraints. To compute a likelihood-ratio test when constraints have been applied during estimation, use lrtest; see [R] lrtest.

lrmodel may not be specified with the jackknife, bootstrap, svy, or mi estimate prefix. In addition, lrmodel may not be specified on replay.

nocnsreport specifies that no constraints be reported. The default is to display user-specified constraints above the coefficient table.

noci suppresses confidence intervals from being reported in the coefficient table.

nopvalues suppresses p-values and their test statistics from being reported in the coefficient table.

- noomitted specifies that variables that were omitted because of collinearity not be displayed. The default is to include in the table any variables omitted because of collinearity and to label them as "(omitted)".
- vsquish specifies that the blank space separating factor-variable terms or time-series—operated variables from other variables in the model be suppressed.
- noemptycells specifies that empty cells for interactions of factor variables not be displayed. The default is to include in the table interaction cells that do not occur in the estimation sample and to label them as "(empty)".

baselevels and allbaselevels control whether the base levels of factor variables and interactions are displayed. The default is to exclude from the table all base categories.

baselevels specifies that base levels be reported for factor variables and for interactions whose bases cannot be inferred from their component factor variables.

allbaselevels specifies that all base levels of factor variables and interactions be reported.

nofvlabel displays factor-variable level values rather than attached value labels. This option overrides the fylabel setting; see [R] set showbaselevels.

fvwrap(#) specifies how many lines to allow when long value labels must be wrapped. Labels requiring more than # lines are truncated. This option overrides the fywrap setting; see [R] set showbaselevels.

fvwrapon(style) specifies whether value labels that wrap will break at word boundaries or break based on available space.

fvwrapon(word), the default, specifies that value labels break at word boundaries.

fvwrapon(width) specifies that value labels break based on available space.

This option overrides the fvwrapon setting; see [R] set showbaselevels.

cformat (% fmt) specifies how to format coefficients, standard errors, and confidence limits in the coefficient table. The maximum format width is 9. See [R] set cformat.

pformat (% fmt) specifies how to format p-values in the coefficient table. The maximum format width is 5. See [R] set cformat.

sformat (% fmt) specifies how to format test statistics in the coefficient table. The maximum format width is 8. See [R] set cformat.

Integration

intmethod(intmethod) specifies the integration method to be used for the random-effects model. It accepts one of four arguments: mvaghermite, the default for all but a crossed random-effects model, performs mean and variance adaptive Gauss-Hermite quadrature; mcaghermite performs mode and curvature adaptive Gauss-Hermite quadrature; ghermite performs nonadaptive Gauss-Hermite quadrature; and laplace, the default for crossed random-effects models, performs the Laplacian approximation.

intpoints (#) specifies the number of integration points to use for integration by quadrature. The default is intpoints(12); the maximum is intpoints(195). Increasing this value improves the accuracy but also increases computation time. Computation time is roughly proportional to its value.

The following options are not shown in the dialog box:

nolstretch specifies that the width of the coefficient table not be automatically widened to accommodate longer variable names. The default, 1stretch, is to automatically widen the coefficient table up to the width of the Results window. Specifying 1stretch or no1stretch overrides the setting given by set 1stretch. If set 1stretch has not been set, the default is 1stretch.

collinear specifies that the estimation command not omit collinear variables. This option is seldom used because collinear variables make a model unidentified. However, you can add constraints to a model that will identify it even with collinear variables. For example, if variables x1 and x2 are collinear, but you constrain the coefficient on x2 to be a multiple of the coefficient on x1, then your model is identified even with collinear variables. In such cases, you specify collinear so that both x1 and x2 are retained in the model.

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coeflegend specifies that the legend of the coefficients and how to specify them in an expression be displayed rather than displaying the statistics for the coefficients.

Also see

[U] 20 Estimation and postestimation commands

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