

gsem postestimation — Postestimation tools for gsem

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Postestimation commands

The following are the postestimation commands that you can use after estimation by `gsem`:

| Command | Description |
|------------------------------|--|
| <code>estat eform</code> | display exponentiated coefficients |
| <code>estat ic</code> | Akaike's and Schwarz's Bayesian information criteria (AIC and BIC) |
| <code>estat lcgof</code> | latent class goodness-of-fit statistic |
| <code>estat lcmean</code> | latent class marginal means |
| <code>estat lcprob</code> | latent class marginal probabilities |
| <code>estat sd</code> | display variance components as standard deviations and correlations |
| * <code>hausman</code> | Hausman's specification test |
| * <code>lrtest</code> | likelihood-ratio tests |
| <code>test</code> | Wald tests |
| <code>lincom</code> | linear combination of parameters |
| <code>nlcom</code> | nonlinear combination of parameters |
| <code>testnl</code> | Wald tests of nonlinear hypotheses |
| <code>estat summarize</code> | summary statistics for the estimation sample |
| <code>estat vce</code> | variance-covariance matrix of the estimators (VCE) |
| <code>predict</code> | generalized linear predictions, etc. |
| <code>predictnl</code> | point estimates, standard errors, testing, and inference for generalized predictions |
| <code>margins</code> | marginal means, predictive margins, marginal effects, and average marginal effects |
| <code>marginsplot</code> | graph the results from margins (profile plots, interaction plots, etc.) |
| <code>contrast</code> | contrasts and linear hypothesis tests |
| <code>pwcompare</code> | pairwise comparisons |
| <code>estimates</code> | cataloging estimation results |

* `hausman` and `lrtest` are not appropriate with `svy` estimation results.

For a summary of postestimation features, see [\[SEM\] intro 7](#).

Postestimation commands such `lincom` and `nlcom` require referencing estimated parameter values, which are accessible via `_b[name]`. To find out what the names are, type `sem, coeflegend`.

margins

Description for margins

`margins` estimates margins of response for expected values, probabilities, and predictions.

Menu for margins

Statistics > Postestimation

Syntax for margins

```
margins [marginlist] [, options]
```

```
margins [marginlist] , predict(statistic ...) [predict(statistic ...) ...] [options]
```

| <i>statistic</i> | Description |
|----------------------------------|--|
| default | calculate expected values for each <i>depvar</i> |
| mu | calculate expected value of <i>depvar</i> |
| pr | calculate probability (synonym for mu when μ is a probability) |
| eta | calculate expected value of linear prediction of <i>depvar</i> |
| <u>expression</u> (<i>exp</i>) | calculate prediction using <i>exp</i> |
| <u>classpr</u> | calculate latent class probabilities |
| <u>density</u> | not allowed with margins |
| <u>distribution</u> | not allowed with margins |
| <u>survival</u> | not allowed with margins |
| latent | not allowed with margins |
| latent(<i>varlist</i>) | not allowed with margins |
| <u>classposteriorpr</u> | not allowed with margins |

`mu` defaults to the first *depvar* if option `outcome()` is not specified. If *depvar* is `family(multinomial)` or `family(ordinal)` the default is the first level of the outcome.

`pr` defaults to the first *depvar* that allows predicted probabilities if option `outcome()` is not specified. If *depvar* is `family(multinomial)` or `family(ordinal)` the default is the first level of the outcome.

`eta` defaults to the first *depvar* if option `outcome()` is not specified. If *depvar* is `family(multinomial)` the default is the first level of the outcome.

`classpr` defaults to the first latent class if option `class()` is not specified.

`predict`'s option `marginal` is assumed if `predict`'s options `conditional(fixedonly)` and `class()` are not specified; see [SEM] [predict after gsem](#).

Statistics not allowed with margins are functions of stochastic quantities other than `e(b)`.

For the full syntax, see [R] [margins](#).

Remarks and examples

[stata.com](http://www.stata.com)

This manual entry concerns `gsem`. For information on postestimation features available after `sem`, see [SEM] [sem postestimation](#).

Also see

[SEM] [gsem reporting options](#) — Options affecting reporting of results