

xtregar postestimation — Postestimation tools for xtregar

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Postestimation commands

The following postestimation commands are available after `xtregar`:

| Command | Description |
|------------------------------|---|
| <code>contrast</code> | contrasts and ANOVA-style joint tests of estimates |
| * <code>estat ic</code> | Akaike's, consistent Akaike's, corrected Akaike's, and Schwarz's Bayesian information criteria (AIC, CAIC, AICC, and BIC) |
| <code>estat summarize</code> | summary statistics for the estimation sample |
| <code>estat vce</code> | variance–covariance matrix of the estimators (VCE) |
| <code>estimates</code> | cataloging estimation results |
| <code>etable</code> | table of estimation results |
| <code>forecast</code> | dynamic forecasts and simulations |
| <code>lincom</code> | point estimates, standard errors, testing, and inference for linear combinations of coefficients |
| <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>nlcom</code> | point estimates, standard errors, testing, and inference for nonlinear combinations of coefficients |
| <code>predict</code> | linear predictions, residuals, error components |
| <code>predictnl</code> | point estimates, standard errors, testing, and inference for generalized predictions |
| <code>pwcompare</code> | pairwise comparisons of estimates |
| <code>test</code> | Wald tests of simple and composite linear hypotheses |
| <code>testnl</code> | Wald tests of nonlinear hypotheses |

*`estat ic` is not appropriate after `xtregar`, `re`.

predict

Description for predict

`predict` creates a new variable containing predictions such as linear predictions and predictions.

Menu for predict

Statistics > Postestimation

Syntax for predict

```
predict [type] newvar [if] [in] [, statistic]
```

| <i>statistic</i> | Description |
|------------------|-------------|
|------------------|-------------|

Main

| | |
|------------------|--|
| <code>xb</code> | $\mathbf{x}_{it}\mathbf{b}$, linear prediction; the default |
| <code>ue</code> | $u_i + e_{it}$, the combined residual |
| * <code>u</code> | u_i , the fixed- or random-error component |
| * <code>e</code> | e_{it} , the overall error component |

Unstarred statistics are available both in and out of sample; type `predict ... if e(sample) ...` if wanted only for the estimation sample. Starred statistics are calculated only for the estimation sample, even when `if e(sample)` is not specified.

Options for predict

Main

`xb`, the default, calculates the linear prediction, $\mathbf{x}_{it}\boldsymbol{\beta}$.

`ue` calculates the prediction of $u_i + e_{it}$.

`u` calculates the prediction of u_i , the estimated fixed or random effect.

`e` calculates the prediction of e_{it} .

margins

Description for margins

`margins` estimates margins of response for linear predictions.

Menu for margins

Statistics > Postestimation

Syntax for margins

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

| <i>statistic</i> | Description |
|------------------|--|
| <code>xb</code> | $\mathbf{x}_{it}\mathbf{b}$, linear prediction; the default |
| <code>ue</code> | not allowed with <code>margins</code> |
| <code>u</code> | not allowed with <code>margins</code> |
| <code>e</code> | not allowed with <code>margins</code> |

Statistics not allowed with `margins` are functions of stochastic quantities other than $\mathbf{e}(b)$.

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

Also see

[XT] [xtregar](#) — Fixed- and random-effects linear models with an AR(1) disturbance

[U] [20 Estimation and postestimation commands](#)

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