Title

> **estat recovariance —** Display estimated random-effects covariance matrices

Description

estat recovariance is for use after estimation with menl and mixed.

estat recovariance displays the estimated variance–covariance matrix of the random effects for each level in the model.

Menu for estat

Statistics > Postestimation

Syntax

> estat <u>recov</u>ariance [, <u>releve</u>l(*levelvar*) <u>corr</u>elation *matlist_options*]

collect is allowed; see [U] **11.1.10 Prefix commands**.

Options

<u>releve</u>l(*levelvar*) specifies the level in the model for which the random-effects covariance matrix is to be displayed. By default, the covariance matrices for all levels in the model are displayed. *levelvar* is the name of the model level and is either the name of the variable describing the grouping at that level or is _all, a special designation for a group comprising all the estimation data. The _all designation is not supported with menl.

<u>corr</u>elation displays the covariance matrix as a correlation matrix.

matlist_options are style and formatting options that control how the matrix (or matrices) is displayed; see [P] **matlist** for a list of options that are available.

Remarks and examples

For menl, the rows and columns of the matrix are labeled with full random-effects names as they are defined in the model.

For other commands, the rows and columns of the matrix are labeled as _cons for the random intercepts; for random coefficients, the label is the name of the associated variable in the data.

See example 1 in [ME] **mixed postestimation**.

Stored results

estat recovariance stores the following in r():

Scalars
    r(relevels)   number of levels

Matrices
    r(Cov#)   level-# random-effects covariance matrix
    r(Corr#)   level-# random-effects correlation matrix (if option correlation was specified)

For a G-level nested model, # can be any integer between 2 and G.

Also see

[ME] **menl** — Nonlinear mixed-effects regression

[ME] **mixed** — Multilevel mixed-effects linear regression

[U] **20 Estimation and postestimation commands**

For suggested citations, see the FAQ on citing Stata documentation.