

estat framework — Display estimation results in modeling framework

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Description

`estat framework` is a postestimation command for use after `sem` but not `gsem`.

`estat framework` displays the estimation results as a series of matrices derived from the Bentler–Weeks form; see [Bentler and Weeks \(1980\)](#).

Menu

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Syntax

estat framework [ , *options* ]

<i>options</i>	Description
<code>standardized</code>	report standardized results
<code>compact</code>	display matrices in compact form
<code>fitted</code>	include fitted means, variances, and covariances
<code>format(<i>%fmt</i>)</code>	display format to use

collect is allowed; see [\[U\] 11.1.10 Prefix commands](#).

Options

`standardized` reports results in standardized form.

`compact` displays matrices in compact form. Zero matrices are displayed as a description. Diagonal matrices are shown as a row vector.

`fitted` displays the fitted mean and covariance values.

`format(%fmt)` specifies the display format to be used. The default is `format(%9.0g)`.

Remarks and examples

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See [\[SEM\] Example 11](#).

## □ Technical note

If `sem`'s `nm1` option was specified when the model was fit, all covariance matrices are calculated using  $N - 1$  in the denominator instead of  $N$ .



## Stored results

`estat framework` stores the following in `r()`:

### Scalars

<code>r(N_groups)</code>	number of groups
<code>r(standardized)</code>	indicator of standardized results (+)

### Matrices

<code>r(nobs)</code>	sample size for each group
<code>r(Beta[_#])</code>	endogenous coefficients, paths between endogenous variables (for group #)
<code>r(Gamma[_#])</code>	exogenous coefficients, paths from exogenous variables to endogenous variables (for group #)
<code>r(alpha[_#])</code>	intercepts (for group #) (*)
<code>r(Psi[_#])</code>	covariances of errors (for group #)
<code>r(Phi[_#])</code>	covariances of exogenous variables (for group #)
<code>r(kappa[_#])</code>	means of exogenous variables (for group #) (*)
<code>r(Sigma[_#])</code>	fitted covariances (for group #)
<code>r(mu[_#])</code>	fitted means (for group #) (*)

(+) If `r(standardized)=1`, the returned matrices contain standardized values.

(\*) If there are no estimated means or intercepts in the `sem` model, these matrices are not returned.

## Reference

Bentler, P. M., and D. G. Weeks. 1980. Linear structural equations with latent variables. *Psychometrika* 45: 289–308.  
<https://doi.org/10.1007/BF02293905>.

## Also see

[SEM] **sem** — Structural equation model estimation command

[SEM] **sem postestimation** — Postestimation tools for `sem`

[SEM] **Intro 7** — Postestimation tests and predictions (*Replaying the model (sem and gsem)*)

[SEM] **Intro 7** — Postestimation tests and predictions (*Accessing stored results*)

[SEM] **Example 11** — `estat framework`

[SEM] **Methods and formulas for sem** — Methods and formulas for `sem`  
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