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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

Statistics > SEM (structural equation modeling) > Other > Report model framework

Syntax

```
estat framework [ , options ]
```

options

Description

`standardized`

report standardized results

`compact`

display matrices in compact form

`fitted`

include fitted means, variances, and covariances

`format(%fmt)`

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

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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