**testnl — Wald test of nonlinear hypotheses**

**Description**

_testnl_ is a postestimation command for use after _sem_, _gsem_, and other Stata estimation commands. _testnl_ performs the Wald test of the nonlinear hypothesis or hypotheses. In the case of _sem_ and _gsem_, you must use the _\_b[]_ coefficient notation.

**Menu**

Statistics > SEM (structural equation modeling) > Testing and CIs > Wald tests of nonlinear hypotheses

**Syntax**

```stata
testnl  exp = exp  [= ...]  [,  options]
testnl  (exp = exp  [= ...])  [(exp = exp  [= ...])  ...]  [,  options]
```

**Options**

See _Options in [R] testnl_.

**Remarks and examples**

_testnl_ works in the metric of SEM, which is to say path coefficients, variances, and covariances. If you want to frame your tests in terms of standardized coefficients and correlations and you fit the model with _sem_, not _gsem_, then prefix _testnl_ with _estat stdize_; see _SEM_ _estat stdize_.

**Technical note**

_estat stdize:_ is unnecessary because, with _testnl_, everywhere you wanted a standardized coefficient or correlation, you could just type the formula. If you did that, you would get the same answer except for numerical precision. In this case, the answer produced with the _estat stdize:_ prefix will be a little more accurate because _estat stdize:_ is able to substitute an analytic derivative in one part of the calculation where _testnl_, doing the whole thing itself, would be forced to use a numeric derivative.
Stored results

See Stored results in [R] testnl.

Also see

[R] testnl — Test nonlinear hypotheses after estimation
[SEM] test — Wald test of linear hypotheses
[SEM] lrtest — Likelihood-ratio test of linear hypothesis
[SEM] estat stdize — Test standardized parameters
[SEM] estat eqtest — Equation-level tests that all coefficients are zero
[SEM] nlcom — Nonlinear combinations of parameters