estat eqtest — Equation-level tests that all coefficients are zero

Description

estat eqtest is for use after sem but not gsem.

estat eqtest displays Wald tests that all coefficients excluding the intercept are 0 for each equation in the model.

Menu

Statistics > SEM (structural equation modeling) > Testing and CIs > Equation-level Wald tests

Syntax

    estat eqtest [ , total nosvyadjust ]

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

Options

    total is for use when estimation was with sem, group(). It specifies that the tests be aggregated across the groups.

    nosvyadjust is for use with svy estimation commands. It specifies that the Wald tests be carried out without the default adjustment for the design degrees of freedom. That is to say the tests are carried out as \( W/k \sim F(k,d) \) rather than as \( (d-k+1)W/(kd) \sim F(k,d-k+1) \), where \( k \) is the dimension of the tests and \( d \) is the total number of sampled PSUs minus the total number of strata.

Remarks and examples

See [SEM] Example 13.
Stored results

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

Scalars
- `r(N_groups)` number of groups

Matrices
- `r(nobs)` sample size for each group
- `r(test[_,#])` test statistics (for group #)
- `r(test_total)` aggregated test statistics (total only)

Also see

[SEM] `sem` — Structural equation model estimation command
[SEM] `sem postestimation` — Postestimation tools for sem
[SEM] `lrtest` — Likelihood-ratio test of linear hypothesis
[SEM] `test` — Wald test of linear hypotheses
[SEM] Example 13 — Equation-level Wald test
[SEM] Methods and formulas for sem — Methods and formulas for sem