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

Syntax

```stata
estat eqtest [ , total nosvyadjust ]
```

Menu

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

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.

Option

`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 test be carried out without the default adjustment for the design degrees of freedom. That is to say the test is 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 test 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] example 13 — Equation-level Wald test
[SEM] test — Wald test of linear hypotheses
[SEM] lrtest — Likelihood-ratio test of linear hypothesis
[SEM] methods and formulas for sem — Methods and formulas for sem
[SEM] sem postestimation — Postestimation tools for sem