

Example 13 — Equation-level Wald test

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Description

We demonstrate `estat eqtest`. See [\[SEM\] Intro 7](#) and [\[SEM\] estat eqtest](#).

This example picks up where [\[SEM\] Example 12](#) left off:

```
. use https://www.stata-press.com/data/r18/auto
. sem (price <- foreign mpg displacement)      ///
      (weight <- foreign length),           ///
      cov(e.price*e.weight)
```

Remarks and examples

We have fit a two-equation model with equations for endogenous variables `price` and `weight`. There happen to be two equations, the model happens to be a seemingly unrelated regression, and the endogenous variables happen to be observed, but none of that is important right now.

`estat eqtest` displays equation-by-equation Wald tests that all coefficients excluding the intercepts are 0.

```
. estat eqtest
Wald tests for equations
```

	chi2	df	p
observed			
price	36.43	3	0.0000
weight	633.34	2	0.0000

Note:

1. The null hypothesis for this test is that the coefficients other than the intercepts are 0. We can reject that null hypothesis for each equation.

Also see

[\[SEM\] Example 12](#) — Seemingly unrelated regression

[\[SEM\] Intro 7](#) — Postestimation tests and predictions

[\[SEM\] estat eqtest](#) — Equation-level tests that all coefficients are zero

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