

Example 11 — estat framework

[Description](#) [Remarks and examples](#) [Also see](#)

Description

To demonstrate `estat framework`, which displays results in Bentler–Weeks form, we continue where [\[SEM\] Example 10](#) left off:

```
. use https://www.stata-press.com/data/r18/sem_mimic1
. ssd describe
. notes
. sem (SubjSES -> s_income s_occpres s_socstat)   ///
      (SubjSES <- income occpres)
. estat residuals, normalized
. estimates store mimic1
. sem (SubjSES -> s_income s_occpres s_socstat)   ///
      (SubjSES <- income occpres)               ///
      (s_income <- income)                       ///
      (s_occpres <- occpres)
. lrtest mimic1 .
```

See *Structural models 10: MIMIC models* in [\[SEM\] Intro 5](#) for background.

Remarks and examples

[stata.com](#)

If you prefer to see SEM results reported in Bentler–Weeks form, type `estat framework` after estimating with `sem`. Many people find Bentler–Weeks form helpful in understanding how the model is fit.

[\[SEM\] Example 10](#) ended by fitting

```
. sem (SubjSES -> s_income s_occpres s_socstat)   ///
      (SubjSES <- income occpres)               ///
      (s_income <- income)                       ///
      (s_occpres <- occpres)
```

In Bentler–Weeks form, the output appears as

```
. estat framework, fitted
Endogenous variables on endogenous variables
```

Beta	Observed	s_income	s_occpres	s_socstat	Latent
					SubjSES
Observed					
s_income	0	0	0	0	1
s_occpres	0	0	0	0	.783781
s_socstat	0	0	0	0	1.195539
Latent					
SubjSES	0	0	0	0	0

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Endogenous variables on exogenous variables

Gamma	Observed	
	income	occpres
Observed		
s_income	.0532425	0
s_occpres	0	.0045201
s_socstat	0	0
Latent		
SubjSES	.0538025	.0034324

Covariances of error variables

Psi	Observed			Latent
	e.s_incr~e	e.s_occ~s	e.s_soc~t	e.SubjSES
Observed				
e.s_income	.2292697			
e.s_occpres	0	.2773786		
e.s_socstat	0	0	.1459009	
Latent				
e.SubjSES	0	0	0	.1480275

Intercepts of endogenous variables

alpha	Observed			Latent
	s_income	s_occpres	s_socstat	SubjSES
_cons	.8825314	1.06586	1.07922	0

Covariances of exogenous variables

Phi	Observed	
	income	occpres
Observed		
income	4.820021	
occpres	13.62431	451.6628

Means of exogenous variables

kappa	Observed	
	income	occpres
mean	5.04	36.698

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For suggested citations, see the FAQ on [citing Stata documentation](#).