



Title

svarih, cmat -- display coefficient matrices and matrices of p-values of **svarih** models

Syntax

coefmat , **cmat** [**star** **extended** **nopval** **format(%fmt)** *method_specific_options*]

<i>common_options</i>	Description
star	show .a, .b, .c p-value encoding instead of actual p-values
extended	extend p-value encoding by .d, .e
nopval	do not calculate and display p-value information
format(%fmt)	format numbers of all matrices according to %fmt.

<i>method_specific_options</i>	Description
svarih bacchiocchi	
a	Display A matrix
b	Display B matrix
e	Display E matrix
bpluse	Display sum of B and E matrix
	If none of the above options is specified, the command defaults to option set "a b e"
svarih bfanelli	
b	Display B matrix
e#	Display E matrix for regime #, with $2 \leq \# \leq 4$ and # ≤ number of regimes in the model
bpluse(rgmlist)	Display sum of B and E# matrix for regimes in <i>rgmlist</i>
	If none of the above options is specified, the command defaults to the option "b" and all "e#" matrices in the model
svarih llutkepohl	
b	Display B matrix
l	Display L matrix (a row vector)
bl	Display $B * Ld^{1/2}$ matrix, where Ld is a diagonal matrix whose diagonal elements are those of L
	If none of the above options is specified, the command defaults to option set "b l"

Description

svarih, cmat is a postestimation utility for models estimated by **svarih**. Corresponding **e()**-results must be in memory.

svarih, cmat extends standard estimation replay. If you omit the option **cmat** from your replay statement by typing **svarih** , **replay_options**, replay of **svarih** models works as with any other Stata estimator. If you specify the option **cmat** in your replay statement by typing **svarih, cmat cmat_options**, none of the standard replay options is allowed anymore. Instead, the options as described in this help file apply.

svarih, cmat does two things: First, it displays coefficient matrices along with their p-values in matrix form. Secondly, it calculates linear and nonlinear combinations of model coefficients, and again displays results along with implied p-values in matrix form. It stores all displayed magnitudes in **r()**.

Options (common to all svarih models)

- star** displays a p-value encoding similar to the familiar "star" encoding of "****", "***", "**" corresponding to significance levels of 0.01, 0.05, and 0.1, respectively. Option **star** uses ".a", ".b", ".c" to encode these significance levels.
- extended** extends the p-value encoding to ".d" and ".e" which stand for significance at levels of 0.25 and 0.5, respectively.
- format(%fmt)** formats the elements of the displayed matrices according to display format *%fmt*. See **format**. Setting a format that has few digits may shrink the column widths of the output matrices and invoke variable name abbreviations (the column names of the matrices). If you want to avoid this, supply a large number before the decimal point in *%fmt* (e.g. **format(%12.3f)** instead of **format(%5.3f)**)
- nopval** omits the calculation of p-values. By default, any coefficient matrix requested is displayed and returned in **r()** as a "merged" matrix: p-values are displayed in the row beneath the coefficients. Default behavior also entails that separate p-values matrices are returned in **r()**. Option **nopval** skips this.

Examples

```
. webuse lutkepohl2
. svarih examples llc constr gls , ereplace
. svarih , nocnsreport
. svarih , cmat
. svarih , cmat bl format(%12.3f)
. svarih , cmat bl format(%12.3f) star extended

. svarih examples bac first , ereplace
. svarih , nocnsreport notable
. svarih , cmat
. svarih , cmat b e bpluse
. return list
. matrix list r(E)
. matrix list r(Ep)
. svarih , cmat e nopval
. return list
. matrix list r(E)
```

Saved results

svarih, cmat saves the following in **r()**:

All coefficient matrices displayed are returned. By default, these matrices contain p-values in the row below the coefficients that the p-values refer to. For each of these matrices, default behavior is to additionally return a corresponding matrix of the same name with the letter "p" appended. It contains only p-values. If option **nopval** is used, the coefficient matrices returned are pure coefficient matrices, without p-values, and no separate p-value matrices are returned.

The following table lists the matrices available for each model.

svarih method	
bacchiocchi	A B E BplusE
bfanelli	B E2 BplusE2
	additionally, if the model contains regime 3: E3 BplusE3
	additionally, if the model contains regime 4: E4 BplusE4
llutkepohl	B L BL

Author

Daniel C. Schneider, Goethe University Frankfurt, dan_schneider@outlook.com

Also see

Help: [TS] svar, svarih, svarih bac, svarih bfa, svarih llu, svarih postestimation, dsimih