Title

stata.com

bayesirf ctable — Combined tables of Bayesian IRF results

Description

`bayesirf ctable` makes a table or a combined table of Bayesian impulse–response function (IRF) results. A table is made for specified combinations of named IRF results, impulse variables, response variables, and statistics. `irf ctable` combines these tables into one table, unless separate tables are requested.

`bayesirf ctable` operates on the active IRF file; see [TS] **irf set**.

Quick start

Combine tables of an orthogonalized IRF `birf` and cumulative IRF `birf` for dependent variable `y1` and `y2`

```
bayesirf ctable (birf y1 y2 oirf) (birf y1 y2 cirf)
```

Same as above, but with maximum steps of 4 and 80% credible interval

```
bayesirf ctable (birf y1 y2 oirf) (birf y1 y2 cirf), step(4) clevel(80)
```

Note: `bayesirf` commands can be used after `bayes: var`, `bayes: dsge`, or `bayes: dsgenl`; see [BAYES] **bayes: var**, [BAYES] **bayes: dsge**, or [BAYES] **bayes: dsgenl**.

Menu

Statistics > Multivariate time series > Bayesian models > IRF and FEVD analysis

Syntax

```
bayesirf ctable (spec1) [(spec2) ... [(specN)]] [, options]
```

where (*spec*$_k$) is

```
(irfname impulsevar responsevar stat [, spec_options])
```

irfname is the name of a set of IRF results in the active IRF file. *impulsevar* should be specified as an endogenous variable for all statistics except `dm` and `cdm`; for those, specify as an exogenous variable. *responsevar* is an endogenous variable name. *stat* is one or more statistics from the list below:

stat	Description
Main	
`irf`	IRF
`oirf`	orthogonalized IRF
`dm`	dynamic-multiplier function
`cirf`	cumulative IRF
`coirf`	cumulative orthogonalized IRF
`cdm`	cumulative dynamic-multiplier function
`fevd`	Cholesky forecast-error variance decomposition

Note: Only `irf` is available after `bayes: dsge` and `bayes: dsgenl`.

options	Description
irf_options	any *options* documented in [TS] **irf ctable**
Bayesian	
`nocri`	suppress credible intervals
`clevel(#)`	set credible interval level; default is set by `bayesirf create`
`equaltailed`	display equal-tailed credible intervals; default is set by `bayesirf create`
`hpd`	display HPD credible intervals; default is set by `bayesirf create`
`median`	display posterior medians instead of posterior means
`stddev`	include posterior standard deviations in the tables

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

spec_options	Description
irf_spec_options	any *spec_options* documented in [TS] **irf ctable**
Bayesian	
`nocri`	suppress credible intervals
`clevel(#)`	set credible interval level; default is set by `bayesirf create`
`equaltailed`	display equal-tailed credible intervals; default is set by `bayesirf create`
`hpd`	display HPD credible intervals; default is set by `bayesirf create`
`median`	display posterior medians instead of posterior means
`stddev`	include posterior standard deviations in the tables

spec_options may be specified within a table specification, globally, or both. When specified in a table specification, the *spec_options* affect only the specification in which they are used. When supplied globally, the *spec_options* affect all table specifications. When specified in both places, options for the table specification take precedence.

Options

irf_options and *irf_spec_options* are any of the *options* and *spec_options*, respectively, documented in [TS] **irf ctable**. `level(#)` is a synonym for `clevel(#)`, `noci` is a synonym for `nocri`, and `stderror` is a synonym for `stddev`. Synonymous options do not appear on the dialog box.

Bayesian

`nocri` suppresses displaying the credible intervals for each statistic.

`clevel(#)`, `equaltailed`, and `hpd` affect the calculation of credible intervals. When the specified options do not correspond to the default credible intervals saved in the current IRF file by `bayesirf create`, `bayesirf` will need an IRF MCMC sample to recompute the credible intervals. You can save this sample by specifying option `mcmcsaving()` with `bayesirf create`. Alternatively, if you would like to save the desired credible intervals as the default credible intervals in the current IRF file, you can specify the corresponding options directly with `bayesirf create`. See *Remarks and examples* in [BAYES] **bayesirf create**.

`clevel(#)` specifies the credible level, as a percentage, for equal-tailed and HPD credible intervals.

`equaltailed` displays the equal-tailed credible intervals. `equaltailed` may not be specified with `hpd`.

`hpd` displays the HPD credible intervals. `hpd` may not be specified with `equaltailed`.

`median` displays the posterior medians instead of the default posterior means.

`stddev` specifies that posterior standard deviations for each statistic also be included in the table.

Remarks and examples

stata.com

See [TS] **irf ctable** for a general discussion, and see example 2 in [BAYES] **bayesirf create** for an example.

Also see [TS] **irf table**, which produces individual tables; and [TS] **irf graph**, which displays results on a graph.

Stored results

For stored results, see *Stored results* in [TS] **irf ctable**.

Also see

[TS] **irf ctable** — Combined tables of IRFs, dynamic-multiplier functions, and FEVDs

[BAYES] **bayesirf table** — Tables of Bayesian IRFs, dynamic-multiplier functions, and FEVDs

[BAYES] **bayesirf graph** — Graphs of Bayesian IRFs, dynamic-multiplier functions, and FEVDs

[BAYES] **bayesirf create** — Obtain Bayesian IRFs, dynamic-multiplier functions, and FEVDs

[BAYES] **bayesirf** — Bayesian IRFs, dynamic-multiplier functions, and FEVDs