fcast graph — Graph forecasts after fcast compute

Syntax

fcast graph varlist [if] [in] [, options]

where varlist contains one or more forecasted variables generated by fcast compute.

options Description

Main
differences graph forecasts of the first-differenced variables (vec only)
noci suppress confidence bands
observed include observed values of the predicted variables

Forecast plot
cline_options affect rendition of the forecast lines

CI plot
ciopts(area_options) affect rendition of the confidence bands

Observed plot
obopts(cline_options) affect rendition of the observed values

Y axis, Time axis, Titles, Legend, Overall
twoway_options any options other than by() documented in [G-3] twoway_options
byopts(by_option) affect appearance of the combined graph; see [G-3] by_option

Menu

Statistics > Multivariate time series > VEC/VAR forecasts > Graph forecasts

Description

fcast graph graphs dynamic forecasts of the endogenous variables from a VAR(p) or VECM that has already been obtained from fcast compute; see [TS] fcast compute.

Options

differences specifies that the forecasts of the first-differenced variables be graphed. This option is available only with forecasts computed by fcast compute after vec. The differences option implies noci.
noci specifies that the confidence intervals be suppressed. By default, the confidence intervals are included.

observed specifies that observed values of the predicted variables be included in the graph. By default, observed values are not graphed.

**Forecast plot**

cline_options affect the rendition of the plotted lines corresponding to the forecast; see [G-3] cline_options.

**CI plot**

ciopts(area_options) affects the rendition of the confidence bands for the forecasts; see [G-3] area_options.

**Observed plot**

obopts(cline_options) affects the rendition of the observed values of the predicted variables; see [G-3] cline_options. This option implies the observed option.

**Y axis, Time axis, Titles, Legend, Overall**

twoway_options are any of the options documented in [G-3] twoway_options, excluding by().

byopts(by_option) are documented in [G-3] by_option. These options affect the appearance of the combined graph.

### Remarks and examples

fcast graph graphs dynamic forecasts created by fcast compute.

#### Example 1

In this example, we use a cointegrating VECM to model the state-level unemployment rates in Missouri, Indiana, Kentucky, and Illinois, and we graph the forecasts against a 6-month holdout sample.

```
. use http://www.stata-press.com/data/r13/urates
. vec missouri indiana kentucky illinois if t < tm(2003m7), trend(rconstant) > rank(2) lags(4)
   (output omitted)
. fcast compute m1_, step(6)
```
. fcast graph m1_missouri m1_indiana m1_kentucky m1_illinois, observed

Because the 95% confidence bands for the predicted unemployment rates in Missouri and Indiana do not contain all their observed values, the model does not reliably predict these unemployment rates.

Also see

[TS] fcast compute — Compute dynamic forecasts after var, svar, or vec
[TS] var intro — Introduction to vector autoregressive models
[TS] vec intro — Introduction to vector error-correction models