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fcast graph — Graph forecasts after fcast compute

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# **Syntax**

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

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

options	Description
Main	
<u>di</u> fferences noci	graph forecasts of the first-differenced variables (vec only) suppress confidence bands
<u>o</u> bserved	include observed values of the predicted variables
Forecast plot cline_options	affect rendition of the forecast lines
Cl plot ciopts(area_options)	affect rendition of the confidence bands
Observed plot <u>obop</u> ts(cline_options)	affect rendition of the observed values
Y axis, Time axis, Titles, Legend, Over twoway_options byopts(by_option)	any options other than by() documented in [G-3] <i>twoway_options</i> affect appearance of the combined graph; see [G-3] <i>by_option</i>

#### Menu

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# **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**

( Main )

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.

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

Cl 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

# Remarks and examples

combined graph.

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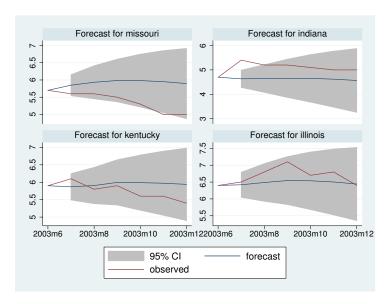
fcast graph graphs dynamic forecasts created by fcast compute.

### 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