Title

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vec postestimation — Postestimation tools for vec

Postestimation commands

The following postestimation commands are of special interest after `vec`:

Command	Description
`fcast compute`	obtain dynamic forecasts
`fcast graph`	graph dynamic forecasts obtained from `fcast compute`
`irf`	create and analyze IRFs and FEVDs
`veclmar`	LM test for autocorrelation in residuals
`vecnorm`	test for normally distributed residuals
`vecstable`	check stability condition of estimates

The following standard postestimation commands are also available:

Command	Description
`estat ic`	Akaike's and Schwarz's Bayesian information criteria (AIC and BIC)
`estat summarize`	summary statistics for the estimation sample
`estat vce`	variance–covariance matrix of the estimators (VCE)
`estimates`	cataloging estimation results
`forecast`	dynamic forecasts and simulations
`lincom`	point estimates, standard errors, testing, and inference for linear combinations of coefficients
`lrtest`	likelihood-ratio test
`margins`	marginal means, predictive margins, marginal effects, and average marginal effects
`marginsplot`	graph the results from margins (profile plots, interaction plots, etc.)
`nlcom`	point estimates, standard errors, testing, and inference for nonlinear combinations of coefficients
`predict`	predictions, residuals, influence statistics, and other diagnostic measures
`predictnl`	point estimates, standard errors, testing, and inference for generalized predictions
`test`	Wald tests of simple and composite linear hypotheses
`testnl`	Wald tests of nonlinear hypotheses

predict

Description for predict

`predict` creates a new variable containing predictions such as expected values, residuals, and cointegrating equations.

Menu for predict

Statistics > Postestimation

Syntax for predict

`predict` [*type*] *newvar* [*if*] [*in*] [`,` *statistic* `equation(`*eqno* | *eqname*`)`]

statistic	Description
Main	
`xb`	fitted value for the specified equation; the default
`stdp`	standard error of the linear prediction
`residuals`	residuals
`ce`	the predicted value of specified cointegrating equation
`levels`	one-step prediction of the level of the endogenous variable
`usece(`*varlist*$_{\text{ce}}$`)`	compute the predictions using previously predicted cointegrating equations

These statistics are available both in and out of sample; type `predict ... if e(sample) ...` if wanted only for the estimation sample.

Options for predict

Main

`xb`, the default, calculates the fitted values for the specified equation. The form of the VECM implies that these fitted values are the one-step predictions for the first-differenced variables.

`stdp` calculates the standard error of the linear prediction for the specified equation.

`residuals` calculates the residuals from the specified equation of the VECM.

`ce` calculates the predicted value of the specified cointegrating equation.

`levels` calculates the one-step prediction of the level of the endogenous variable in the requested equation.

`usece(`*varlist*$_{\text{ce}}$`)` specifies that previously predicted cointegrating equations saved under the names in *varlist*$_{\text{ce}}$ be used to compute the predictions. The number of variables in the *varlist*$_{\text{ce}}$ must equal the number of cointegrating equations specified in the model.

`equation(`*eqno* | *eqname*`)` specifies to which equation you are referring.

`equation()` is filled in with one *eqno* or *eqname* for `xb`, `residuals`, `stdp`, `ce`, and `levels` options. `equation(#1)` would mean that the calculation is to be made for the first equation, `equation(#2)` would mean the second, and so on. You could also refer to the equation by its name. `equation(D_income)` would refer to the equation named D_income and `equation(_ce1)`, to the first cointegrating equation, which is named _ce1 by `vec`.

If you do not specify `equation()`, the results are as if you specified `equation(#1)`.

For more information on using `predict` after multiple-equation estimation commands, see [R] **predict**.

margins

Description for margins

`margins` estimates margins of response for linear predictions.

Menu for margins

Statistics > Postestimation

Syntax for margins

```
margins [marginlist] [, options]
margins [marginlist] , predict(statistic ...) [predict(statistic ...) ...] [options]
```

statistic	Description
default	linear predictions for each equation
`xb`	linear prediction for a specified equation
`stdp`	not allowed with `margins`
`residuals`	not allowed with `margins`
`ce`	not allowed with `margins`
`levels`	not allowed with `margins`
`usece(`*varlist*$_{\text{ce}}$`)`	not allowed with `margins`

`xb` defaults to the first equation.

Statistics not allowed with `margins` are functions of stochastic quantities other than `e(b)`.

For the full syntax, see [R] **margins**.

Remarks and examples

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Remarks are presented under the following headings:

Model selection and inference
Forecasting

Model selection and inference

See the following sections for information on model selection and inference after `vec`.

[TS] **irf** — Create and analyze IRFs, dynamic-multiplier functions, and FEVDs
[TS] **varsoc** — Obtain lag-order selection statistics for VARs and VECMs
[TS] **veclmar** — Perform LM test for residual autocorrelation after vec
[TS] **vecnorm** — Test for normally distributed disturbances after vec
[TS] **vecrank** — Estimate the cointegrating rank of a VECM
[TS] **vecstable** — Check the stability condition of VECM estimates

Forecasting

See the following sections for information on obtaining forecasts after `vec`:

[TS] **fcast compute** — Compute dynamic forecasts after var, svar, or vec
[TS] **fcast graph** — Graph forecasts after fcast compute

Also see

[TS] **vec** — Vector error-correction models
[U] 20 Estimation and postestimation commands
[TS] **vec intro** — Introduction to vector error-correction models