**vec postestimation** — Postestimation tools for vec

Postestimation commands predict margins Remarks and examples Also see

## 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, consistent Akaike's, corrected Akaike's, and Schwarz's Bayesian information criteria (AIC, CAIC, AICc, and BIC, respectively) |
| estat summarize | summary statistics for the estimation sample |
| estat vce | variance–covariance matrix of the estimators (VCE) |
| estimates | cataloging estimation results |
| etable | table of estimation results |
| forecast | dynamic forecasts and simulations |
| lincom | point estimates, standard errors, testing, and inference for linear combinations of parameters |
| 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 parameters |
| predict | linear predictions and their SEs; residuals |
| 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*$_{ce}$`)` | 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 VEC model 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 VEC model.

`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*$_{ce}$`)` specifies that previously predicted cointegrating equations saved under the names in *varlist*$_{ce}$ be used to compute the predictions. The number of variables in the *varlist*$_{ce}$ 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*$_{ce}$`)` | 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

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 VAR and VEC models
[TS] **veclmar** — LM test for residual autocorrelation after vec
[TS] **vecnorm** — Test for normally distributed disturbances after vec
[TS] **vecrank** — Estimate the cointegrating rank of a VEC model
[TS] **vecstable** — Check the stability condition of VEC model estimates

## Forecasting

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

[TS] **fcast compute** — Compute dynamic forecasts
[TS] **fcast graph** — Graph forecasts after fcast compute

# Also see

[TS] **vec** — Vector error-correction models
[TS] **vec intro** — Introduction to vector error-correction models
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