eivreg postestimation - Postestimation tools for eivreg

Postestimation commands predict margins Remarks and examples Also see

# **Postestimation commands**

The following postestimation commands are available after eivreg:

Command	Description
contrast	contrasts and ANOVA-style joint tests of estimates
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
lincom	point estimates, standard errors, testing, and inference for linear combinations of coefficients
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	linear predictions
pwcompare	pairwise comparisons of estimates
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 the linear prediction assuming that values of the covariates used for the prediction were measured without error.

## Menu for predict

Statistics > Postestimation

#### Syntax for predict

```
predict [type] newvar [if] [in]
```

Available both in and out of sample; type predict ... if e(sample) ... if wanted only for the estimation sample.

## margins

#### **Description for margins**

margins estimates margins of response for linear predictions.

#### Menu for margins

Statistics > Postestimation

#### Syntax for margins

margins [marginlist] [, options]

## **Remarks and examples**

stata.com

#### Example 1

We	return to example	mple 1 from [R	] eivreg:				
	. use https:// (1978 automob:	/www.stata-pres ile data)	ss.com/dat	ta/r18/auto			
	. eivreg price	e weight forei	gn, reliat	o(weight .8	5)		
	Errors-in-var:	iables regress	ion				
	Variable	Assume reliabilit	d V				
			_		Number of	obs =	74
	weight	0.850	0		F( 2,	71) =	18.46
	*	1.000	0		Prob > F	=	0.000
					R-squared	=	0.6483
					Root MSE	=	1773.54
	price	Coefficient	Std. err.	. t	P> t	[95% conf.	interval]
	weight	4.31985	.7134251	6.06	0.000	2.89732	5.742379
	foreign	4637.32	849.0221	5.46	0.000	2944.418	6330.222
	_cons	-8257.017	2390.337	-3.45	0.001 -	-13023.21	-3490.821

We wish to predict the price of a foreign car that weighs 2,300 pounds. We can use predict because 2,300 pounds is the true weight, not the result of an error-prone measurement.

To make this prediction, first we add the new observation to the dataset.

```
. set obs 75
Number of observations (_N) was 74, now 75.
. replace foreign = 1 in 75
(1 real change made)
. replace weight = 2300 in 75
(1 real change made)
```

Now, we use predict to predict the price of the car.

```
. predict newprice in 75
(option xb assumed; fitted values)
(74 missing values generated)
(predictions assume covariates measured without error)
. list weight foreign newprice in 75
75. veight foreign newprice
75. 2,300 Foreign 6315.957
```

predict issued a note reminding us that the computed predictions assume that the covariates used for prediction are measured without error. In general, you should avoid using predict to obtain in-sample predictions unless you first replace the measurement-error covariates with values that are error free.

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## Also see

- [R] eivreg Errors-in-variables regression
- [U] 20 Estimation and postestimation commands

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