scobit postestimation — Postestimation tools for scobit

Postestimation commands predict margins Remarks and examples Also see

Postestimation commands

The following postestimation commands are available after scobit:

Command	Description				
contrast	contrasts and ANOVA-style joint tests of parameters				
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)				
estat (svy)	postestimation statistics for survey data				
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	probabilities, linear predictions and their SEs, etc.				
predictnl	point estimates, standard errors, testing, and inference for generalized predictions				
pwcompare	pairwise comparisons of parameters				
suest	seemingly unrelated estimation				
test	Wald tests of simple and composite linear hypotheses				
testnl	Wald tests of nonlinear hypotheses				

^{*}forecast and lrtest are not appropriate with svy estimation results.

Description for predict

predict creates a new variable containing predictions such as probabilities, linear predictions, and standard errors.

Menu for predict

Statistics > Postestimation

Syntax for predict

```
predict [type] newvar [if] [in] [, statistic nooffset]
predict [type] stub* [if] [in], scores
```

statistic	Description
Main	
pr	probability of a positive outcome; the default
xb	$\mathbf{x}_{i}\mathbf{b}$, linear prediction
stdp	standard error of the linear prediction

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

pr, the default, calculates the probability of a positive outcome.

xb calculates the linear prediction.

stdp calculates the standard error of the linear prediction.

nooffset is relevant only if you specified offset (*varname*) for scobit. It modifies the calculations made by predict so that they ignore the offset variable; the linear prediction is treated as $\mathbf{x}_j \mathbf{b}$ rather than as $\mathbf{x}_j \mathbf{b} + \text{offset}_j$.

scores calculates equation-level score variables.

The first new variable will contain $\partial \ln L/\partial (\mathbf{x}_i \boldsymbol{\beta})$.

The second new variable will contain $\partial \ln L/\partial \ln \alpha$.

margins

Description for margins

margins estimates margins of response for probabilities and linear predictions.

Menu for margins

Statistics > Postestimation

Syntax for margins

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

statistic	Description
pr xb stdp	probability of a positive outcome; the default $\mathbf{x}_{j}\mathbf{b}$, linear prediction not allowed with margins

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

For the full syntax, see [R] margins.

Remarks and examples

Once you have fit a model, you can obtain the predicted probabilities by using the predict command for both the estimation sample and other samples; see [U] 20 Estimation and postestimation commands and [R] **predict**. Here we will make only a few additional comments.

predict without arguments calculates the predicted probability of a positive outcome. With the xb option, it calculates the linear combination $x_i b$, where x_i are the independent variables in the jth observation and **b** is the estimated parameter vector.

With the stdp option, predict calculates the standard error of the prediction, which is not adjusted for replicated covariate patterns in the data.

In example 1 of [R] scobit, we fit the model scobit foreign mpg. To obtain predicted probabilities, we type

- . use https://www.stata-press.com/data/r19/auto
 (1978 automobile data)
- . keep make mpg weight foreign
- . scobit foreign mpg
 (output omitted)
- . predict p

(option pr assumed; Pr(foreign))

. summarize foreign p

Variable	Obs	Mean	Std. dev.	Min	Max
foreign	74	.2972973	.4601885	0	1
σ	74	.2974049	.182352	.0714664	.871624

1

Also see

[R] scobit — Skewed logistic regression

[U] 20 Estimation and postestimation commands

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on citing Stata documentation.