Title

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biprobit postestimation — Postestimation tools for biprobit

Description Syntax for predict Menu for predict Options for predict Also see

Description

The following postestimation commands are available after `biprobit`:

Command	Description
`contrast`	contrasts and ANOVA-style joint tests of estimates
`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)
`estat` (svy)	postestimation statistics for survey data
`estimates`	cataloging estimation results
`lincom`	point estimates, standard errors, testing, and inference for linear combinations of coefficients
`lrtest`[1]	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
`pwcompare`	pairwise comparisons of estimates
`suest`	seemingly unrelated estimation
`test`	Wald tests of simple and composite linear hypotheses
`testnl`	Wald tests of nonlinear hypotheses

[1] `lrtest` is not appropriate with `svy` estimation results.

Syntax for predict

```
predict [type] newvar [if] [in] [, statistic nooffset]

predict [type] {stub* | newvar_eq1 newvar_eq2 newvar_athrho} [if] [in] , scores
```

statistic	Description
Main	
p11	$\Phi_2(\mathbf{x}_j\mathbf{b}, \mathbf{z}_j\mathbf{g}, \rho)$, predicted probability $\Pr(y_{1j}=1, y_{2j}=1)$; the default
p10	$\Phi_2(\mathbf{x}_j\mathbf{b}, -\mathbf{z}_j\mathbf{g}, -\rho)$, predicted probability $\Pr(y_{1j}=1, y_{2j}=0)$
p01	$\Phi_2(-\mathbf{x}_j\mathbf{b}, \mathbf{z}_j\mathbf{g}, -\rho)$, predicted probability $\Pr(y_{1j}=0, y_{2j}=1)$
p00	$\Phi_2(-\mathbf{x}_j\mathbf{b}, -\mathbf{z}_j\mathbf{g}, \rho)$, predicted probability $\Pr(y_{1j}=0, y_{2j}=0)$
pmarg1	$\Phi(\mathbf{x}_j\mathbf{b})$, marginal success probability for equation 1
pmarg2	$\Phi(\mathbf{z}_j\mathbf{g})$, marginal success probability for equation 2
pcond1	$\Phi_2(\mathbf{x}_j\mathbf{b}, \mathbf{z}_j\mathbf{g}, \rho)/\Phi(\mathbf{z}_j\mathbf{g})$, conditional probability of success for equation 1
pcond2	$\Phi_2(\mathbf{x}_j\mathbf{b}, \mathbf{z}_j\mathbf{g}, \rho)/\Phi(\mathbf{x}_j\mathbf{b})$, conditional probability of success for equation 2
xb1	$\mathbf{x}_j\mathbf{b}$, linear prediction for equation 1
xb2	$\mathbf{z}_j\mathbf{g}$, linear prediction for equation 2
stdp1	standard error of the linear prediction for equation 1
stdp2	standard error of the linear prediction for equation 2

where $\Phi()$ is the standard normal-distribution function and $\Phi_2()$ is the bivariate standard normal-distribution function.

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

Menu for predict

Statistics > Postestimation > Predictions, residuals, etc.

Options for predict

Main

`p11`, the default, calculates the bivariate predicted probability $\Pr(y_{1j}=1, y_{2j}=1)$.

`p10` calculates the bivariate predicted probability $\Pr(y_{1j}=1, y_{2j}=0)$.

`p01` calculates the bivariate predicted probability $\Pr(y_{1j}=0, y_{2j}=1)$.

`p00` calculates the bivariate predicted probability $\Pr(y_{1j}=0, y_{2j}=0)$.

`pmarg1` calculates the univariate (marginal) predicted probability of success $\Pr(y_{1j}=1)$.

`pmarg2` calculates the univariate (marginal) predicted probability of success $\Pr(y_{2j}=1)$.

`pcond1` calculates the conditional (on success in equation 2) predicted probability of success $\Pr(y_{1j}=1, y_{2j}=1)/\Pr(y_{2j}=1)$.

`pcond2` calculates the conditional (on success in equation 1) predicted probability of success $\Pr(y_{1j}=1, y_{2j}=1)/\Pr(y_{1j}=1)$.

`xb1` calculates the probit linear prediction $\mathbf{x}_j\mathbf{b}$.

`xb2` calculates the probit linear prediction $\mathbf{z}_j\mathbf{g}$.

`stdp1` calculates the standard error of the linear prediction for equation 1.

`stdp2` calculates the standard error of the linear prediction for equation 2.

`nooffset` is relevant only if you specified `offset1(`*varname*`)` or `offset2(`*varname*`)` for `biprobit`. It modifies the calculations made by `predict` so that they ignore the offset variables; the linear predictions are treated as $\mathbf{x}_j\mathbf{b}$ rather than as $\mathbf{x}_j\mathbf{b} + \text{offset}_{1\text{j}}$ and $\mathbf{z}_j\gamma$ rather than as $\mathbf{z}_j\gamma + \text{offset}_{2\text{j}}$.

`scores` calculates equation-level score variables.

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

The second new variable will contain $\partial \ln L / \partial(\mathbf{z}_j\boldsymbol{\gamma})$.

The third new variable will contain $\partial \ln L / \partial(\text{atanh}\,\rho)$.

Also see

[R] **biprobit** — Bivariate probit regression

[U] 20 Estimation and postestimation commands