telasso postestimation — Postestimation tools for telasso

Postestimation commands predict Remarks and examples Also see

Postestimation commands

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

Command	Description
`teoverlap`	overlap plots
`tebalance`	check balance of covariates
`bicplot`	plot Bayesian information criterion function
* `coefpath`	plot path of coefficients
* `cvplot`	plot cross-validation function
`lassocoef`	display selected coefficients
`lassoinfo`	information about lasso estimation results
`lassoknots`	knot table of coefficient selection and measures of fit
* `lassoselect`	select alternative λ^*

*`coefpath`, `cvplot`, and `lassoselect` require the selection method of the lasso to be `selection(cv)`, `selection(adaptive)`, or `selection(bic)`. See [LASSO] **lasso options**.

The following standard postestimation commands are also available:

Command	Description
`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 parameters
`nlcom`	point estimates, standard errors, testing, and inference for nonlinear combinations of parameters
`predict`	treatment effects, conditional means at treatment, propensity scores, etc.
`predictnl`	point estimates 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 treatment effects, potential outcomes, conditional means, propensity scores, and linear predictions.

Menu for predict

Statistics > Postestimation

Syntax for predict

```
predict [type] { stub* | newvar | newvarlist } [if] [in]
        [ , statistic tlevel(treat_level) ]
```

statistic	Description
Main	
`te`	treatment effect; the default
`cmean`	conditional mean at treatment level
`ps`	propensity score
`xb`	linear prediction
`psxb`	linear prediction for propensity score

Option `tlevel()` may not be combined with `te` or `psxb`.

If you do not specify `tlevel()` and only specify one new variable, then `cmean`, `ps`, and `xb` assume `tlevel()` specifies the control.

You specify one or two new variables with `cmean`, `ps`, and `xb`.

You specify one new variable with `te` and `psxb`.

Options for predict

Main

`te`, the default, calculates the treatment effect for the noncontrol treatment level. You need to specify only one new variable.

`cmean` calculates the conditional mean for each treatment level or the treatment level specified in `tlevel()`. If you specify the `tlevel()` option, you need to specify only one new variable; otherwise, you must specify two new variables corresponding to the control and noncontrol treatment levels.

`ps` calculates the propensity score of each treatment level or the treatment level specified in `tlevel()`. If you specify the `tlevel()` option, you need to specify only one new variable; otherwise, you must specify two new variables corresponding to the control and noncontrol treatment levels.

`xb` calculates the linear prediction at each treatment level or the treatment level specified in `tlevel()`. If you specify the `tlevel()` option, you need to specify only one new variable; otherwise, you must specify two new variables corresponding to the control and noncontrol treatment levels.

`psxb` calculates the linear prediction for the propensity score at the noncontrol level of the treatment.

You need to specify only one new variable.

`tlevel(`*treat_level*`)` specifies the treatment level for prediction.

Remarks and examples

Some of the `telasso` postestimation commands explore the lasso results computed within `telasso`. Here is a list of such commands: `coefpath`, `cvplot`, `bicplot`, `lassoknots`, `lassoselect`, and `lassocoef`.

When referring to a lasso result computed by `telasso`, there is a distinction between the outcome model and the treatment model. To refer to the lasso result for the treatment model, we need to specify the treatment variable with the `for(`*tvar*`)` option. In contrast, to refer to the lasso result for the outcome model, we need to specify the outcome variable at a specific treatment level with the `for(`*ovar*`)` and `tlevel(#)` options. In summary, for the treatment model, the `for(`*tvar*`)` option is required; for the outcome model, both the `for(`*ovar*`)` and the `tlevel(#)` options are required.

Examples that demonstrate how to use the `telasso` command and explore the lasso results using the postestimation tools can be found in *Remarks and examples* in [CAUSAL] **telasso**.

Also see

[CAUSAL] **telasso** — Treatment-effects estimation using lasso

[U] 20 Estimation and postestimation commands