xteprobit — Extended random-effects probit regression

Description

`xteprobit` fits a random-effects probit model that accommodates any combination of endogenous covariates, nonrandom treatment assignment, and endogenous sample selection and also accounts for correlation of observations within panels or within groups.

Continuous, binary, and ordinal endogenous covariates are allowed. Treatment assignment may be endogenous or exogenous. A probit or tobit model may be used to account for endogenous sample selection.

`xteprobit` fits probit extended regression models for panel data in the same way that `eprobit` does for cross-sectional data. See [ERM] **eprobit** to learn about these models and how to fit them using `xteprobit`.

Quick start

Random-effects probit regression of `y` on `x` with continuous endogenous covariate `y2` modeled by `x` and `z` using `xtset` data

```
xteprobit y x, endogenous(y2 = x z)
```

Same as above, but with binary endogenous covariate `d` modeled by `x` and `z`

```
xteprobit y x, endogenous(d = x z, probit)
```

Random-effects probit regression of `y` on `x` with endogenous treatment `trtvar` modeled by `x` and `z`

```
xteprobit y x, entreat(trtvar = x z)
```

Same as above, but only the equation for `y` has a random effect

```
xteprobit x, entreat(trtvar = x z, nore)
```

Random-effects probit regression of `y` on `x` with endogenous sample-selection indicator `selvar` modeled by `x` and `z`

```
xteprobit y x, select(selvar = x z)
```

Same as above, but adding endogenous covariate `y2` modeled by `x` and `z2`

```
xteprobit y x, select(selvar = x z) endogenous(y2 = x z2)
```

Menu

Statistics > Longitudinal/panel data > Endogenous covariates > Models adding selection and treatment > Probit regression (RE)

Syntax

For syntax, methods, and all other information on `xteprobit`, see [ERM] **eprobit**.

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