Description

xteregress fits a random-effects linear regression 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.

xteregress fits linear extended regression models for panel data in the same way that eregress does for cross-sectional data. See [ERM] eregress to learn about these models and how to fit them using xteregress.

Quick start

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

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

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

xteregress y x, endogenous(d = x z, probit)

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

xteregress y x, entreat(trtvar = x z)

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

xteregress y x, entreat(trtvar = x z, nore)

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

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

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

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

Menu

 $\label{eq:statistics} Statistics > Longitudinal/panel \ data > Endogenous \ covariates > Models \ adding \ selection \ and \ treatment > Linear \ regression \ (RE)$

Syntax

For syntax, methods, and all other information on xteregress, see [ERM] eregress.

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.