Title

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xtdidregress — Fixed-effects difference-in-differences estimation

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Description

`xtdidregress` estimates the average treatment effect on the treated (ATET) from observational data by difference in differences (DID) or difference in difference in differences (DDD) for panel data. The ATET of a binary or continuous treatment on a continuous outcome is estimated by fitting a linear model with time and individual (panel) fixed effects.

Quick start

DID estimate of the ATET of `treat1` on outcome `y1` using `xtset` data; `y1` modeled using covariates `x1` and `x2`, and individual (panel) and `tvar` fixed effects, with the treatment occurring at the `grpvar1` and `tvar` levels

```
xtdidregress (y1 x1 x2) (treat1), group(grpvar1) time(tvar)
```

As above, but compute wild cluster–bootstrap p-values and confidence intervals with `grpvar1` as the clustering variable

```
xtdidregress (y1 x1 x2) (treat1), group(grpvar1) time(tvar) ///
     wildbootstrap
```

As above, but aggregate data at the `grpvar1` and `tvar` levels to use the Donald and Lang (2007) method to compute the ATET and standard errors

```
xtdidregress (y1 x1 x2) (treat1), group(grpvar1) time(tvar) ///
     aggregate(dlang)
```

Aggregate data at the `grpvar1` and `tvar1` levels to estimate the ATET

```
xtdidregress 1(y x1 x2) (grpvar1), group(state) time(tvar1) ///
     aggregate(standard)
```

Menu

Statistics > Treatment effects > Continuous outcomes > Difference in differences (FE)

Syntax

For syntax, methods, and all other information on `xtdidregress`, see [TE] **didregress**.

Reference

Donald, S. G., and K. Lang. 2007. Inference with difference-in-differences and other panel data. *Review of Economics and Statistics* 89: 221–233. https://doi.org/10.1162/rest.89.2.221.