Statistics/Data analysis

Title

tot_tut —— Implementation for the estimation of treatment on the treated (ToT), treatment on the untreated (TuT) and the average treatment effect (ATE) jointly using the design introduced in "The limits of self-commitment and private paternalism".

Syntax

tot_tut *depvar treatvar choicevar* [*if*] [*in*] [, **vce(robust | cluster *clustvar*)**]

Description

tot_tut estimates jointly the treatment on the treated, treatment on the untreated, and the average treatment effect, exploiting a design with three arms: a control arm, a forced arm and a choice arm. The specification strategy involves estimating two 2sls regressions, and jointly obtaining errors. Details on the implementation can be found here.

Arguments

Arguments

depvar, this is the outcome of interest.

treatvar, categorical variable indicating treatment status: control arm (0), forced arm (1), choice arm (2).

choicevar, binary variable indicating choice.

Options

Options

vce(robust | cluster *clustvar*) specifies the type of standard error reported, which includes types that are robust to some kinds of misspecification (robust - the default), and that allow for intragroup correlation (cluster *clustvar*).

Examples

"The limits of self-commitment and private paternalism"

Setup

```
use tot_tut_commitment.dta, clear
gen x0 = -(Z==2)*(choose==0)
gen x1 = (Z==2)*(choose==1)
gen z0_ = -(Z==0)
gen z0 = (Z==0)
gen z1 = (Z==1)
gen z2 = (Z==2)
```

ToT & ATE using ivregress

```
ivregress 2sls apr z1 (x1 = z2), vce(cluster clustvar)
```

TuT & ATE using ivregress

```
ivregress 2sls apr z0_ (x0 = z2), vce(cluster clustvar)
```

Simultaneous inference for ToT & TuT

```
tot_tut apr Z choose, vce(cluster clustvar)
```

Stored results

tot_tut stores the following in **e()**:

Scalars
e(N) number of observations.
e(N) residual degrees of freedom.

Matrices
e(b) coefficient fector.
e(V) variance-covariance matrix of the estimators.

References

DiTraglia, McIntosh, Meza, Seira, Sadka. "The limits of self-commitment and private paternalism". Working paper.

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