Statistics/Data analysis

Title

rdhte_lincom —— RD Heterogeneous Treatment Effects. Linear combinations of parameters.

Syntax

rdhte_lincom *exp* [, **options**]

Description

rdhte_lincom computes point estimates, p-values, and robust bias-corrected confidence intervals for linear combinations of parameters after any estimation using **rdhte**. It is based on the Stata function lincom. More general post-estimation linear hypotheses can be tested with the Stata function test.

Companion commands are: rdhte for estimation and inference of RD-HTE, and rdbwhte for data-driven bandwidth selection.

A detailed introduction to **rdhte** in Stata is given in Calonico, Cattaneo, Farrell, Palomba and Titiunik (2025b).

Related software packages for analysis and interpretation of RD designs and related methods are available in:

https://rdpackages.github.io/

For background methodology, see Calonico, Cattaneo, Farrell, and Titiunik (2019), Calonico, Cattaneo and Farrell (2020), Cattaneo and Titiunik (2022).

Options

level(#) specifies the confidence level, as a percentage, for confidence intervals. The default is **level(95)** or as set by set level.

display_options cformat(%fmt), pformat(%fmt), and sformat(%fmt).

Example:

Setup using Granzier, Pons, and Tricaud (2023) Data

```
. use rdhte_dataset.dta
```

RD-HTE Estimation by left/right groups

```
. rdhte y x, covs_hte(i.ideology) vce(cluster id_district)
```

Robust RD Estimation of HTE

```
. rdhte_lincom 4.ideology - 3.ideology
```

Testing for equality of the effects

```
. test 4.ideology = 3.ideology = 2.ideology
```

Stored results

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

Scalars

e(rdhte_lincom_est)	point estimate
e(rdhte_lincom_pv)	p-value
e(rdhte_lincom_lb)	lower bound of confidence interval
e(rdhte_lincom_ub)	upper bound of confidence interval
e(rdhte_lincom_level)	confidence level

References

Calonico, Cattaneo, Farrell, Palomba and Titiunik. 2025a. Treatment Effect Heterogeneity in Regression Discontinuity Designs. *Working Paper*.

Calonico, Cattaneo, Farrell, Palomba and Titiunik. 2025b. rdhte: Conditional Average Treatment Effects in RD Designs. *Working Paper*.

Granzier, Pons, and Tricaud. 2023. Coordination and Bandwagon Effects: How Past Rankings Shape the Behavior of Voters and Candidates. *American Economic Journal: Applied Economics*, 15(4): 177?217.

Cattaneo and Titiunik. 2022. Regression Discontinuity Designs. *Annual Review of Economics*, 14: 821–851.

Calonico, S., M. D. Cattaneo, and M. H. Farrell. 2020. Optimal Bandwidth Choice for Robust Bias Corrected Inference in Regression Discontinuity Designs. *Econometrics Journal*, 23(2): 192–210.

Calonico, Cattaneo, Farrell, and Titiunik. 2019. Regression Discontinuity Designs using Covariates. *Review of Economics and Statistics*, 101(3): 442–451.

Calonico, Cattaneo, and Titiunik. 2014. Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs. *Econometrica*, 82(6): 2295–2326.

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