

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 linear. More
 general post-estimation linear hypotheses can be tested with the Stata
 function test.

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

A detailed introduction to **rdhte** in Stata is given in <u>Calonico</u>, <u>Cattaneo</u>, <u>Farrell</u>, <u>Palomba and Titiunik</u> (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 <u>Calonico</u>, <u>Cattaneo</u>, <u>Farrell</u>, <u>and Titiunik</u> (2019), <u>Calonico</u>, <u>Cattaneo</u> and <u>Farrell</u> (2020), <u>Cattaneo</u> and <u>Titiunik</u> (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
                             p-value
     e(rdhte_lincom_pv)
     e(rdhte_lincom_lb)
e(rdhte_lincom_ub)
                             lower bound of confidence interval
                            upper bound of confidence interval
```

- Calonico, Cattaneo, Farrell, Palomba and Titiunik. 2025a. <u>Treatment Effect Heterogeneity in Regression Discontinuity Designs</u>. Working Paper.
- Calonico, Cattaneo, Farrell, Palomba and Titiunik. 2025b. <u>rdhte: Conditional Average Treatment Effects in RD Designs</u>. Working Paper.
- Granzier, Pons, and Tricaud. 2023. <u>Coordination and Bandwagon Effects: How Past Rankings Shape the Behavior of Voters and Candidates</u>. American Economic Journal: Applied Economics, 15(4): 177?217.
- Cattaneo and Titiunik. 2022. <u>Regression Discontinuity Designs</u>. Annual Review of Economics, 14: 821-851.
- Calonico, S., M. D. Cattaneo, and M. H. Farrell. 2020. <u>Optimal Bandwidth Choice for Robust Bias Corrected Inference in Regression Discontinuity Designs</u>. *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. <u>Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs</u>. *Econometrica*, 82(6): 2295-2326.

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