

# **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 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 <u>Granzier</u>, <u>Pons</u>, <u>and Tricaud</u> (2023) Data
        . use rdhte_dataset.dta
   RD-HTE Estimation by left/right groups
        . rdhte y x, covs hte(i.w ideology) vce(cluster cluster var)
   Robust RD Estimation of HTE
        . rdhte_lincom 4.w_ideology - 3.w_ideology
    Testing for equality of the effects
        . test 4.w_ideology = 3.w_ideology = 2.w_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, Cattaneo, and 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. <u>Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs</u>. *Econometrica*, 82(6): 2295-2326.

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