Statistics/Data Analysis

Title

rdmcplot —— Plots for Regression Discontinuity Designs with Multiple Cutoffs.

Syntax

rdmcplot *depvar runvar* [*if*] [*in*] [**, cvar(***string***) hvar(***string***) pvar(***string***) noscatter nodraw**]

Description

rdmcplot plots estimated regression functions at each cutoff in regression discontinuity designs with multiple cutoffs.

A detailed introduction to this command is given in Cattaneo, Titiunik and Gonzalo Vazquez-Bare (2018).

Companion R functions are also available here.

This command employs the Stata (and R) package rdrobust for underlying calculations. See Calonico, Cattaneo and Titiunik (2014) and Calonico, Cattaneo, Farrell and Titiunik (2017) for more details.

Related Stata and R packages useful for inference in RD designs are described in the following website:

https://sites.google.com/site/rdpackages/

Options

cvar(*string***)** specifies the numeric variable containing the RD cutoff for *indepvar* for each unit in the sample.

hvar(*string***)** specifies the bandwidths to be passed to **rdplot**. See **help rdrobust** for details.

pvar(*string***)** specifies the order of the polynomials to be passed to **rdplot**. See **help rdrobust** for details.

noscatter omits the scatter plot.

nodraw omits plot.

Examples

Standard use of rdmcplot

```
. rdmcplot yvar xvar, c(cvar)
```

rdmcplot without scatter plot

```
. rdmcplot yvar xvar, c(cvar) noscatter
```

Saved results

rdmcplot saves the following in **r()**:

Scalars

r(p)	order of the polynomial
r(cnum)	number of cutoffs

Macros

r(cvar)	cutoff variable
r(clist)	cutoff list

References

Calonico, S., M. D. Cattaneo, M. H. Farrell, and R. Titiunik. 2017. rdrobust: Software for Regression Discontinuity Designs.
Stata Journal 17(2): 372–404.

Calonico, S., M. D. Cattaneo, and R. Titiunik. 2014. Robust Data–Driven Inference in the Regression–Discontinuity Design.
Stata Journal 14(4): 909–946.

Cattaneo, M. D., Frandsen, B., and R. Titiunik. 2015. Randomization Inference in the Regression Discontinuity Design: An Application to Party Advantages in the U.S. Senate.
Journal of Causal Inference 3(1): 1–24.

Cattaneo, M. D., R. Titiunik, and G. Vazquez–Bare. 2018. Power Calculations for Regression Discontinuity Designs.
Working paper, University of Michigan.

Authors

Matias D. Cattaneo, University of Michigan, Ann Arbor, MI. cattaneo@umich.edu.

Rocio Titiunik, University of Michigan, Ann Arbor, MI. titiunik@umich.edu.

Gonzalo Vazquez–Bare, University of Michigan, Ann Arbor, MI. gvazquez@umich.edu.