

RD Robustness Project

Exercise: Drop outside OBW

Maor Milgrom

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Introduction

The goal of this project is to test the robustness of the Regression-Discontinuity analysis to different extreme cases, via simulations, using the 'rdrobust' package.

This Document: Exercise #1

Replacing observations outside Optimal Bandwidth (OBW) with zeros, or dropping them.

Select exercise type:

```
exercise="bwo"      # Type of exercise - "zero" or "bwo" ('bandwidth only')
```

Set Parameters

Here we set the main parameters for the exercise:

```
jump=10             # Size of jump at cutoff
loop=1000
figs.iter.save=5
quadratic=T         # T - quadratic DGP, F - linear
symm_obw="mserd"    # mserd - symmetric OBW, msetwo - asymmetric OBW
normal.x=T          # T - normal draws of x around cutoff, F - uniform draws
dgp.sd=10           # sd of normal noise added to DGP
bc=F               # bias-corrected estimates or conventional
```