```
name:
               <unnamed>
         log:
               /Users/admin/Dropbox/RDHonest_TimArmstrong/RDHonest-vStata/current vers
  > _test.smcl
    log type:
               smcl
   opened on:
               15 Aug 2022, 13:09:31
3 . // 1. Lee08
4 . qui: use `"${datadir}/lee08.dta"', clear
5.
6 . // 1.1 uni kernel
7 . rdhonest voteshare margin, m(0.1) kernel("uni") h(10)
  Honest inference: SHARP Regression Discontinuity
   Estimate
                Maximum Bias
                                  Std. Error
                                                 [ 95% Conf.
                                                                 intervals ]
   6.05677353
                 1.72376825
                                  1.19052699
                                                 2.37473029
                                                                  9.73881678
   95% One-sided Conf. intervals: (2.37476265 , Inf), (-Inf,
                                                           9.73878442)
   Bandwidth: 10
   Number of effective observations: 1209
   Parameters:
   Cutoff: 0
   Kernel: uniform
   Optimization criterion: MSE
   Standard error estimation method: NN
   Maximum leverage for estimated parameter: .003703381
   Smootheness constant M: .1
    Dependent variable: voteshare
      Running variable: margin
9 . // 1.1.1 uni kernel + optimal h
10 . rdhonest voteshare margin, m(0.1) kernel("uni")
  Honest inference: SHARP Regression Discontinuity
   Estimate
                Maximum Bias
                                  Std. Error
                                                 [ 95% Conf.
                                                                 intervals ]
   5.97398151
                 .850259518
                                  1.43299882
                                                 2.73601889
                                                                  9.21194414
   95% One-sided Conf. intervals: (2.76664868 , Inf), (-Inf,
   Bandwidth (optimized): 6.91475868
   Number of effective observations: 843
```

2022/8/15, 1:15 PM

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .005503345

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

11 . rdhonest voteshare margin, m(0.1) kernel("uni") opt\_criterion("OCI")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
4.88998924	.572475838	1.55210007	1.65199641	8.12798208

95% One-sided Conf. intervals: (1.76453597 , Inf), (-Inf, 8.01544252)

Bandwidth (optimized): 5.77180088

Number of effective observations: 701

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: **OCI**, with beta **.8** Standard error estimation method: **NN** 

Maximum leverage for estimated parameter: .007011609

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

12 . rdhonest voteshare margin, m(0.1) kernel("uni") opt\_criterion("FLCI")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.57055475	.890553506	1.4221318	2.31590621	8.82520329

95% One-sided Conf. intervals: (2.34080259, Inf), (-Inf, 8.80030691)

Bandwidth (optimized): 7.10620284

Number of effective observations: 863

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: FLCI

Standard error estimation method: NN

Maximum leverage for estimated parameter: .005349821

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

13 .

14 . // 1.1.2 uni kernel + optimal h + without M + est\_w saved as wgt

15 . rdhonest voteshare margin, kernel("uni") savew("wgt")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
4.79816988	.891210516	1.57140644	1.2829887	8.31335106

95% One-sided Conf. intervals: (1.32222577 , Inf), (-Inf, 8.27411398)

Bandwidth (optimized): 6.01199567

Number of effective observations: 728

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .006421319

Smootheness constant M (estimated): .142810807

Dependent variable: voteshare
Running variable: margin

Generated variables:

Estimated weight: wgt

16 .

17 . // 1.2 tri kernel

18 . rdhonest voteshare margin, m(0.1) kernel("tri") h(10)

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.93672596	1.05606425	1.23301022	2.84789393	9.02555799

95% One-sided Conf. intervals: (2.85254037 , Inf), (-Inf, 9.02091154)

Bandwidth: 10

Number of effective observations: 1003.37472

Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .007243217

User: admin

#### Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

19 .

20 . // 1.2.1 tri kernel + optimal h

21 . rdhonest voteshare margin, m(0.1) kernel("tri")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.93665377	.832266594	1.29441808	2.95483117	8.91847638

95% One-sided Conf. intervals: (2.9752589 , Inf), (-Inf, 8.89804865)

Bandwidth (optimized): 8.84855171

Number of effective observations: 889.051245

Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .008236342

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

22 . rdhonest voteshare margin, m(0.1) kernel("tri") opt\_criterion("OCI")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.82265043	.575826613	1.38202457	2.89467975	8.75062111

95% One-sided Conf. intervals: (2.9735957 , Inf), (-Inf, 8.67170516)

Bandwidth (optimized): 7.42934716

Number of effective observations: 737.592837

Parameters:

Cutoff: 0

Kernel: triangular

Optimization criterion: OCI, with beta .8

Standard error estimation method: NN

Maximum leverage for estimated parameter: .009973466

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

## 23 . rdhonest voteshare margin, m(0.1) kernel("tri") opt\_criterion("FLCI")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.95445705	.883482126	1.27874983	2.95272674	8.95618736

95% One-sided Conf. intervals: (2.96761863 , Inf), (-Inf, 8.94129547)

Bandwidth (optimized): 9.11159306

Number of effective observations: 917.823736

## Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: FLCI

Standard error estimation method: NN

Maximum leverage for estimated parameter: .007988219

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

24 .

25 . cap drop wgt /\*for the dofile to run\*/

26 . // 1.2.2 tri kernel + optimal h + without M + est\_w saved as wgt

27 . rdhonest voteshare margin, kernel("tri") savew("wgt")

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.84973224	.88800705	1.36588331	2.69443541	9.00502906

95% One-sided Conf. intervals: (2.71504707 , Inf), (-Inf, 8.98441741)

Bandwidth (optimized): 7.71506984

Number of effective observations: 764.559585

## Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .009560868

Smootheness constant M (estimated): .142810807

Dependent variable: voteshare
Running variable: margin

Generated variables:

Estimated weight: wgt

28 .

29 . // 1.3 display option tests and by option tests

30 . // 1.3.1 by option (psuedo categories)

31 . qui{

32 . bys bygrp: rdhonest voteshare margin, m(0.1) kernel("uni") h(10)

-> bygrp = 0

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.27567752	1.71837784	1.63811092	.861406093	9.68994895

95% One-sided Conf. intervals: (.862846988 , Inf), (-Inf, 9.68850806)

Bandwidth: 10

Number of effective observations: 604

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .007626798

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

-> bygrp = 1

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
6.80020499	1.72728041	1.77634908	2.14825205	11.4521579

95% One-sided Conf. intervals: (2.15109035 , Inf), (-Inf, 11.4493196)

Bandwidth: 10

Number of effective observations: 605

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .00719001

Smootneness constant M: .1

Dependent variable: voteshare
Running variable: margin

33 . bys bygrp: rdhonest voteshare margin, m(0.1) kernel("uni") h(10) savew("wgt")

-> bygrp = 0

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.27567752	1.71837784	1.63811092	.861406093	9.68994895

95% One-sided Conf. intervals: (.862846988 , Inf), (-Inf, 9.68850806)

Bandwidth: 10

Number of effective observations: 604

Parameters:
Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .007626798

Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

Generated variables:

Estimated weight: wgt

-> bygrp = 1

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
6.80020499	1.72728041	1.77634908	2.14825205	11.4521579

95% One-sided Conf. intervals: (2.15109035 , Inf), (-Inf, 11.4493196)

Bandwidth: 10

Number of effective observations: 605

Parameters:
Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

maximum reverage for estimated parameter: .00/13001 Smootheness constant M: .1

Dependent variable: voteshare
Running variable: margin

Generated variables:

Estimated weight: wgt

- 34 .
- 35 . // 1.3.2 hide parameters
- 36 . rdhonest voteshare margin, m(0.1) kernel("uni") h(10) noparam

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
6.05677353	1.72376825	1.19052699	2.37473029	9.73881678

95% One-sided Conf. intervals: (2.37476265 , Inf), (-Inf, 9.73878442)

Bandwidth: 10

Number of effective observations: 1209

Dependent variable: voteshare
Running variable: margin

- 37 .
- 38 . // 1.3.3 show iteration log
- 39 . rdhonest voteshare margin, m(0.1) kernel("tri") iterl

Iteration 0: f(p) = 3.2843434

Iteration 1: f(p) = 3.2545513

Iteration 2: f(p) = 3.2537915

Iteration 3: f(p) = 3.2537877

Iteration 4: f(p) = 3.2537877

Honest inference: SHARP Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
5.93665377	.832266594	1.29441808	2.95483117	8.91847638

95% One-sided Conf. intervals: (2.9752589 , Inf), (-Inf, 8.89804865)

Bandwidth (optimized): 8.84855171

Number of effective observations: 889.051245

Parameters:

Cutoff: 0

Kernel: triangular

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .008236342

Smootheness constant M: .1

```
Dependent variable: voteshare
      Running variable: margin
40 .
42 . // 2. rcp
43 . qui: use `"${datadir}/rcp.dta"', clear
44 .
45 . // 2.1 uni kernel
46 . rdhonest cn (retired=elig_year), m(4 0.4) kernel("uni") h(3)
  Honest inference: FUZZY Regression Discontinuity
   Estimate
                 Maximum Bias
                                  Std. Error
                                                 [ 95% Conf.
                                                                  intervals ]
   -6081.32789
                 24908.345
                                  3330.31152
                                                 -36467.5479
                                                                   24304.8921
   95% One-sided Conf. intervals: (-36467.5479, Inf), (-Inf, 24304.8921)
   First-stage estimate: .330652239
   Bandwidth: 3
   Number of effective observations: 2859
   Parameters:
   Cutoff: 0
   Kernel: uniform
   Optimization criterion: MSE
   Standard error estimation method: NN
   Maximum leverage for estimated parameter: .001148573
   Smootheness constant M (first-stage): .4
   Smootheness constant M (reduced-form): 4
    Dependent variable: cn
      Running variable: elig year
    Treatment variable: retired
47 .
48 . // 2.1.1 uni kernel + optimal h
49 . rdhonest cn (retired=elig_year), m(4 0.4) kernel("uni") t0(0)
  Honest inference: FUZZY Regression Discontinuity
   Estimate
                 Maximum Bias
                                  Std. Error
                                                 [ 95% Conf.
                                                                  intervals ]
   -3041.98487
                 119639.281
                                  721.142172
                                                 -123867.44
                                                                    117783.47
   95% One-sided Conf. intervals: (-123867.44 , Inf), (-Inf,
                                                             117783.47)
   First-stage estimate: .501984619
   Bandwidth (optimized): 15
   Number of effective observations: 16531
```

1 u1 u1110 c c c c c c

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .000272655

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig\_year
Treatment variable: retired

50 . rdhonest cn (retired=elig\_year), m(4 0.4) kernel("uni") t0(0) opt\_criterion("OCI")

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-2372.75338	82919.9153	792.503945	-86596.2216	81850.7149

95% One-sided Conf. intervals: (-86596.2216, Inf), (-Inf, 81850.7149)

First-stage estimate: .479008759

Bandwidth (optimized): 14

Number of effective observations: 14923

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: OCI, with beta .8

Standard error estimation method: NN

Maximum leverage for estimated parameter: .000308509

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig\_year Treatment variable: retired

51 . rdhonest cn (retired=elig\_year), m(4 0.4) kernel("uni") t0(0) opt\_criterion("FLCI'

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-3273.64811	141925.173	702.843267	-146354.895	139807.599

95% One-sided Conf. intervals: (-146354.895, Inf), (-Inf, 139807.599)

First-stage estimate: .500478044

Bandwidth (optimized): 16

Number of effective observations: 17524

\_ \_\_ \_\_ .

```
Cutoff: 0
   Kernel: uniform
   Optimization criterion: FLCI
    Standard error estimation method: NN
   Maximum leverage for estimated parameter: .000260008
   Smootheness constant M (first-stage): .4
   Smootheness constant M (reduced-form): 4
    Dependent variable: cn
       Running variable: elig_year
     Treatment variable: retired
52 .
53 . // 2.1.2 uni kernel + optimal h + without M + est_w saved as wgt
54 . rdhonest cn (retired=elig_year), kernel("uni") t0(0) savew("wgt")
   Honest inference: FUZZY Regression Discontinuity
   Estimate
                  Maximum Bias
                                    Std. Error
                                                     [ 95% Conf.
                                                                      intervals ]
    -4101.28302
                  2305.5557
                                    2288.74466
                                                     -10174.2817
                                                                       1971.71564
    95% One-sided Conf. intervals: (-10171.4887, Inf), (-Inf,
                                                                1968.92264)
   First-stage estimate: .323809965
   Bandwidth (optimized): 5
   Number of effective observations: 5018
   Parameters:
   Cutoff: 0
   Kernel: uniform
   Optimization criterion: MSE
    Standard error estimation method: NN
   Maximum leverage for estimated parameter: .000763565
    Smootheness constant M (first-stage, estimated): .008178929
    Smootheness constant M (reduced-form, estimated): 67.2320533
    Dependent variable: cn
       Running variable: elig year
    Treatment variable: retired
    Generated variables:
         Estimated weight: wgt
55 .
56 . // 2.2 tri kernel
57 . rdhonest cn (retired=elig_year), m(4 0.4) kernel("tri") h(3)
  Honest inference: FUZZY Regression Discontinuity
   Estimate
                  Maximum Bias
                                    Std. Error
                                                     [ 95% Conf.
                                                                      intervals ]
```

```
First-stage estimate: .291631727
   Bandwidth: 3
   Number of effective observations: 1867
   Parameters:
   Cutoff: 0
   Kernel: <u>tri</u>angular
   Optimization criterion: MSE
   Standard error estimation method: NN
   Maximum leverage for estimated parameter: .001285804
   Smootheness constant M (first-stage): .4
   Smootheness constant M (reduced-form): 4
    Dependent variable: cn
      Running variable: elig year
    Treatment variable: retired
58 .
59 . // 2.2.1 tri kernel + optimal h
60 . rdhonest cn (retired=elig_year), m(4 0.4) kernel("tri") t0(0)
  numerical derivatives are approximate
  flat or discontinuous region encountered
  Honest inference: FUZZY Regression Discontinuity
   Estimate
                                                     [ 95% Conf.
                 Maximum Bias
                                    Std. Error
                                                                      intervals ]
                                                     -140374.176
                                                                       133843.393
    -3265.39147
                  135893.838
                                    738.635501
   95% One-sided Conf. intervals: (-140374.176, Inf), (-Inf, 133843.393)
   First-stage estimate: .472339715
   Bandwidth (optimized): 20.0998119
   Number of effective observations: 17348.0832
   Parameters:
   Cutoff: 0
   Kernel: <u>tri</u>angular
   Optimization criterion: MSE
   Standard error estimation method: NN
   Maximum leverage for estimated parameter: .000390641
    Smootheness constant M (first-stage): .4
   Smootheness constant M (reduced-form): 4
    Dependent variable: cn
       Running variable: elig_year
    Treatment variable: retired
61 . rdhonest cn (retired=elig_year), m(4 0.4) kernel("tri") opt_criterion("OCI") t0(0)
  numerical derivatives are approximate
```

--------

95% One-sided Conf. intervals: (-26698.5649, Inf), (-Inf,

\_----

-----

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-2669.3215	90025.9302	822.041871	-94047.3902	88708.7472

95% One-sided Conf. intervals: (-94047.3902, Inf), (-Inf, 88708.7472)

First-stage estimate: .459890906
Bandwidth (optimized): 17.4729304

Number of effective observations: 15268.1575

### Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: **OCI**, with beta **.8** Standard error estimation method: **NN** 

Maximum leverage for estimated parameter: .000451407

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn
Running variable: elig\_year
Treatment variable: retired

62 . rdhonest cn (retired=elig\_year), m(4 0.4) kernel("tri") opt\_criterion("FLCI") t0(( numerical derivatives are approximate flat or discontinuous region encountered

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-3477.08743	154166.552	718.005915	-158824.655	151870.48

95% One-sided Conf. intervals: (-158824.655, Inf), (-Inf, 151870.48)

First-stage estimate: .474804285
Bandwidth (optimized): 20.8511249

Number of effective observations: 18110.5938

# Parameters:

Cutoff: 0

Kernel: <u>tri</u>angular

Optimization criterion: FLCI

Standard error estimation method: NN

Maximum leverage for estimated parameter: .000374772

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig\_year

User: admin

```
63 .
64 . cap drop wgt /*for the dofile to run*/
65 . // 2.2.1 tri kernel + optimal h + without M + est_w saved as wgt
66 . rdhonest cn (retired=elig_year), kernel("tri") t0(0) savew("wgt")
  numerical derivatives are approximate
  flat or discontinuous region encountered
  Honest inference: FUZZY Regression Discontinuity
                  Maximum Bias
                                    Std. Error
                                                    [ 95% Conf.
   Estimate
                                                                      intervals ]
    -4006.29653
                  2166.60935
                                                    -9958.24344
                                    2298.52397
                                                                       1945.65038
   95% One-sided Conf. intervals: (-9953.64136, Inf), (-Inf,
                                                                 1941.0483)
   First-stage estimate: .31992201
   Bandwidth (optimized): 6.52830259
   Number of effective observations: 4968.84142
   Parameters:
   Cutoff: 0
   Kernel: triangular
   Optimization criterion: MSE
    Standard error estimation method: NN
   Maximum leverage for estimated parameter: .001077215
    Smootheness constant M (first-stage, estimated): .008178929
    Smootheness constant M (reduced-form, estimated): 67.2320533
    Dependent variable: cn
       Running variable: elig_year
    Treatment variable: retired
    Generated variables:
        Estimated weight: wgt
67.
68 . // 2.3 display option tests and by option tests
69 . // 2.3.1 by option (psuedo categories)
70 . qui{
71 . bys bygrp: rdhonest cn (retired=elig_year), m(4 0.4) kernel("uni") h(3)
  -> bygrp = 0
  Honest inference: FUZZY Regression Discontinuity
```

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-4491.91001	16079.1055	4215.82584	-27505.4319	18521.6119

User: admin

```
95% One-sided Conf. intervals: (-27505.4319, Inf), (-Inf, 18521.6119)
   First-stage estimate: .377016964
   Bandwidth: 3
   Number of effective observations: 1486
   Parameters:
   Cutoff: 0
   Kernel: uniform
   Optimization criterion: MSE
    Standard error estimation method: NN
   Maximum leverage for estimated parameter: .001944326
   Smootheness constant M (first-stage): .4
   Smootheness constant M (reduced-form): 4
    Dependent variable: cn
      Running variable: elig year
    Treatment variable: retired
  -> bygrp = 1
  Honest inference: FUZZY Regression Discontinuity
   Estimate
                  Maximum Bias
                                    Std. Error
                                                    [ 95% Conf.
                                                                      intervals ]
    -8403.37021
                  42323.5418
                                    5684.21055
                                                    -60076.6063
                                                                       43269.8659
   95% One-sided Conf. intervals: (-60076.6063, Inf), (-Inf, 43269.8659)
   First-stage estimate: .270350791
   Bandwidth: 3
   Number of effective observations: 1373
   Parameters:
   Cutoff: 0
   Kernel: uniform
   Optimization criterion: MSE
    Standard error estimation method: NN
   Maximum leverage for estimated parameter: .002761653
   Smootheness constant M (first-stage): .4
    Smootheness constant M (reduced-form): 4
    Dependent variable: cn
      Running variable: elig year
    Treatment variable: retired
72 . bys bygrp: rdhonest cn (retired=elig_year), m(4 0.4) kernel("uni") h(3) savew("wgt
  -> bygrp = 0
```

Honest inference: FUZZY Regression Discontinuity

Estimate Maximum Bias Std. Error [ 95% Conf. intervals ]
-4491.91001 16079.1055 4215.82584 -27505.4319 18521.6119

95% One-sided Conf. intervals: (-27505.4319, Inf), (-Inf, 18521.6119)

First-stage estimate: .377016964

Bandwidth: 3

Number of effective observations: 1486

Parameters:
Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .001944326

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig\_year
Treatment variable: retired

Generated variables:

Estimated weight: wgt

-> bygrp = 1

Honest inference: FUZZY Regression Discontinuity

Estimate Maximum Bias Std. Error [ 95% Conf. intervals ]

-8403.37021 42323.5418 5684.21055 -60076.6063 43269.8659

95% One-sided Conf. intervals: (-60076.6063, Inf), (-Inf, 43269.8659)

First-stage estimate: .270350791

Bandwidth: 3

Number of effective observations: 1373

Parameters:

Cutoff: 0

Kernel: uniform

Optimization criterion: MSE

Standard error estimation method: NN

Maximum leverage for estimated parameter: .002761653

Smootheness constant M (first-stage): .4
Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig\_year
Treatment variable: retired

## Generated variables:

Estimated weight: wgt

73 .

 $74 \cdot // 2.3.2$  hide parameters

75 . rdhonest cn (retired=elig\_year), m(4 0.4) kernel("uni") h(3) noparam

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-6081.32789	24908.345	3330.31152	-36467.5479	24304.8921

95% One-sided Conf. intervals: (-36467.5479, Inf), (-Inf, 24304.8921)

First-stage estimate: .330652239

Bandwidth: 3

Number of effective observations: 2859

Dependent variable: cn

Running variable: elig\_year
Treatment variable: retired

76 .

77  $\cdot$  // 2.3.3 show iteration log

78 . rdhonest cn (retired=elig\_year),  $m(4\ 0.4)$  kernel("tri") t0(0) iterl

numerical derivatives are approximate

flat or discontinuous region encountered

Iteration 0: f(p) = 2481787.2

Iteration 1: f(p) = 484315.37

Iteration 2: f(p) = 484315.37 (backed up)

Iteration 3: f(p) = 484315.37 (backed up)

Iteration 4: f(p) = 165964.77

Iteration 5: f(p) = 157556

Iteration 6: f(p) = 157372.99

Iteration 7: f(p) = 157372.99

Iteration 8: f(p) = 157372.99

Honest inference: FUZZY Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[ 95% Conf.	intervals ]
-3265.39179	135893.864	738.635469	-140374.203	133843.419

95% One-sided Conf. intervals: (-140374.203, Inf), (-Inf, 133843.419)

First-stage estimate: .472339718
Bandwidth (optimized): 20.0998129

Number of effective observations: 17348.0844

Parameters:

Cutoff: 0

 $\texttt{Kernel: } \underline{\texttt{tri}} \\ \textbf{angular}$ 

```
Standard error estimation method: NN

Maximum leverage for estimated parameter: .000390641

Smootheness constant M (first-stage): .4

Smootheness constant M (reduced-form): 4

Dependent variable: cn

Running variable: elig_year

Treatment variable: retired

79 .

80 . log close

name: <unnamed>

log: /Users/admin/Dropbox/RDHonest_TimArmstrong/RDHonest-vStata/current vers

- _test.smcl

log type: smcl

closed on: 15 Aug 2022, 13:13:22
```