```
      name:  <unnamed>
       log:  /Users/admin/Dropbox/RDHonest_TimArmstrong/RDHonest-vStata/current/rdhc
> cl
  log type:  smcl
 opened on:  15 Aug 2022, 23:38:30

. 
. *******************************************************************************
. //  1. Lee08
. qui: use `"${datadir}/lee08.dta"', clear

. 
. // 1.1 uni kernel
. 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
Smoothness constant M: .1

 Dependent variable: voteshare
   Running variable: margin

. 
. // 1.1.1 uni kernel + optimal h
. 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,  9.18131434)
Bandwidth (optimized): 6.91475868
Number of effective observations: 843

Parameters:
```

```
Cutoff: 0
Kernel: uniform
Optimization criterion: MSE
Standard error estimation method: NN
Maximum leverage for estimated parameter: .005503345
Smoothness 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
Smoothness 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
Smoothness constant M: .1
```

```
  Dependent variable: voteshare
    Running variable: margin

. 
. // 1.1.2 uni kernel + optimal h + without M + est_w saved as wgt
. 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
 Smoothness constant M (estimated): .142810807
------------------------------------------------------------------------------
  Dependent variable: voteshare
    Running variable: margin

 Generated variables:
      Estimated weight: wgt

. 
. // 1.2 tri kernel
. 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: triangular
 Optimization criterion: MSE
 Standard error estimation method: NN
 Maximum leverage for estimated parameter: .007243217
```

```
Smoothness 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: triangular
Optimization criterion: MSE
Standard error estimation method: NN
Maximum leverage for estimated parameter: .008236342
Smoothness 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
Smoothness 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: triangular
    Optimization criterion: FLCI
    Standard error estimation method: NN
    Maximum leverage for estimated parameter: .007988219
    Smoothness 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: triangular
    Optimization criterion: MSE
    Standard error estimation method: NN
    Maximum leverage for estimated parameter: .009560868
    Smoothness constant M (estimated): .142810807
     Dependent variable: voteshare
       Running variable: margin

    Generated variables:
```

```
          Estimated weight: wgt

. 
. // 1.3 display option tests and by option tests
. // 1.3.1 by option (psuedo categories)
. qui{

. 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
 Smoothness 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
```

```
Smoothness 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
 Smoothness 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 leverage for estimated parameter: .00719001
Smoothness constant M: .1
```

```
 Dependent variable: voteshare
   Running variable: margin

Generated variables:
     Estimated weight: wgt
```

```
. 
. // 1.3.2 hide parameters
. 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
```

```
. 
. // 1.3.3 show iteration log
. 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
Smoothness constant M: .1
```

```
  Dependent variable: voteshare
    Running variable: margin

. 
. ********************************************************************************
. // 2. rcp
. qui: use `"${datadir}/rcp.dta"', clear

. 
. // 2.1 uni kernel
. 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
 Smoothness constant M (first-stage): .4
 Smoothness constant M (reduced-form): 4
------------------------------------------------------------------------------
  Dependent variable: cn
    Running variable: elig_year
  Treatment variable: retired

. 
. // 2.1.1 uni kernel + optimal h
. 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
```

Parameters:
Cutoff: **0**
Kernel: **uniform**
Optimization criterion: **MSE**
Standard error estimation method: **NN**
Maximum leverage for estimated parameter: **.000272655**
Smoothness constant M (first-stage): **.4**
Smoothness 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**
Smoothness constant M (first-stage): **.4**
Smoothness 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**

```
Parameters:
Cutoff: 0
Kernel: uniform
Optimization criterion: FLCI
Standard error estimation method: NN
Maximum leverage for estimated parameter: .000260008
Smoothness constant M (first-stage): .4
Smoothness 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
Smoothness constant M (first-stage, estimated): .008178929
Smoothness 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]

```
 95% One-sided Conf. intervals: (-26698.5649, Inf), (-Inf,   17450.824)
 First-stage estimate: .291631727
 Bandwidth: 3
 Number of effective observations: 1867

 Parameters:
 Cutoff: 0
 Kernel: triangular
 Optimization criterion: MSE
 Standard error estimation method: NN
 Maximum leverage for estimated parameter: .001285804
 Smoothness constant M (first-stage): .4
 Smoothness 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	Maximum Bias	Std. Error	[95% Conf.	intervals]
-3265.40486	135894.954	738.634152	-140375.304	133844.494

```
 95% One-sided Conf. intervals: (-140375.304, Inf), (-Inf,  133844.494)
 First-stage estimate: .472339873
 Bandwidth (optimized): 20.0998523
 Number of effective observations: 17348.1317

 Parameters:
 Cutoff: 0
 Kernel: triangular
 Optimization criterion: MSE
 Standard error estimation method: NN
 Maximum leverage for estimated parameter: .00039064
 Smoothness constant M (first-stage): .4
 Smoothness 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
```

Honest inference: **FUZZY** Regression Discontinuity

Estimate	Maximum Bias	Std. Error	[95% Conf.	intervals]
-2669.29654	**90024.1378**	**822.046921**	**-94045.5812**	**88706.9881**

95% One-sided Conf. intervals: (**-94045.5812**, Inf), (-Inf, **88706.9881**)
First-stage estimate: **.459890039**
Bandwidth (optimized): **17.472809**
Number of effective observations: **15268.0335**

Parameters:
Cutoff: **0**
Kernel: **triangular**
Optimization criterion: **OCI**, with beta **.8**
Standard error estimation method: **NN**
Maximum leverage for estimated parameter: **.000451411**
Smoothness constant M (first-stage): **.4**
Smoothness 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]
-3477.16991	**154173.916**	**717.998154**	**-158832.087**	**151877.748**

95% One-sided Conf. intervals: (**-158832.087**, Inf), (-Inf, **151877.748**)
First-stage estimate: **.474805228**
Bandwidth (optimized): **20.851468**
Number of effective observations: **18110.8884**

Parameters:
Cutoff: **0**
Kernel: **triangular**
Optimization criterion: **FLCI**
Standard error estimation method: **NN**
Maximum leverage for estimated parameter: **.000374766**
Smoothness constant M (first-stage): **.4**
Smoothness constant M (reduced-form): **4**

Dependent variable: **cn**
Running variable: **elig_year**

```
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
```

Estimate	Maximum Bias	Std. Error	[95% Conf.	intervals]
-4006.29648	**2166.60936**	**2298.52396**	**-9958.24339**	**1945.65042**

```
    95% One-sided Conf. intervals: (-9953.64131, Inf), (-Inf,  1941.04834)
    First-stage estimate: .31992201
    Bandwidth (optimized): 6.52830264
    Number of effective observations: 4968.84146

    Parameters:
    Cutoff: 0
    Kernel: triangular
    Optimization criterion: MSE
    Standard error estimation method: NN
    Maximum leverage for estimated parameter: .001077215
    Smoothness constant M (first-stage, estimated): .008178929
    Smoothness 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**

```
 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
 Smoothness constant M (first-stage): .4
 Smoothness 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
 Smoothness constant M (first-stage): .4
 Smoothness 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**
Smoothness constant M (first-stage): **.4**
Smoothness 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**
Smoothness constant M (first-stage): **.4**
Smoothness constant M (reduced-form): **4**

Dependent variable: **cn**
Running variable: **elig_year**
Treatment variable: **retired**

```
    Generated variables:
         Estimated weight: wgt

73 .
74 . // 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 . // 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) =  165964.76
   Iteration 5:   f(p) =  157556.01
   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 ]
   ------------------------------------------------------------------------------
    -3265.39171   135893.857        738.635477      -140374.196       133843.413
   ------------------------------------------------------------------------------
    95% One-sided Conf. intervals: (-140374.196, Inf), (-Inf,  133843.413)
    First-stage estimate: .472339717
    Bandwidth (optimized): 20.0998126
    Number of effective observations: 17348.0841

    Parameters:
    Cutoff: 0
    Kernel: triangular
```

```
Standard error estimation method: NN
Maximum leverage for estimated parameter: .000390641
Smoothness constant M (first-stage): .4
Smoothness 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/rdho
> cl
  log type:  smcl
 closed on:  15 Aug 2022, 23:43:01
------------------------------------------------------------------------------
```