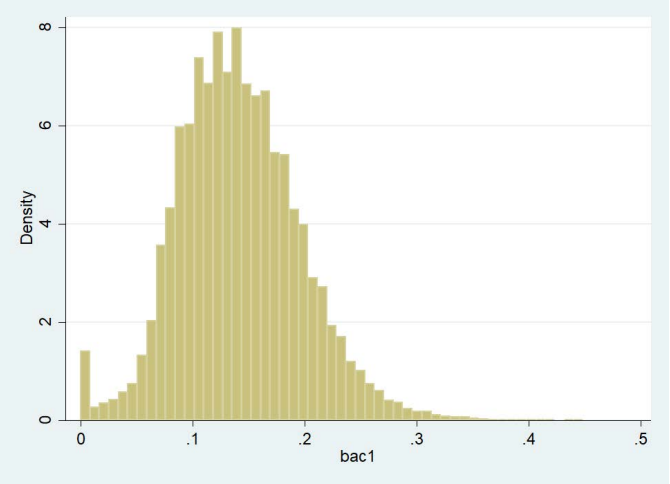
RDD_Appendix

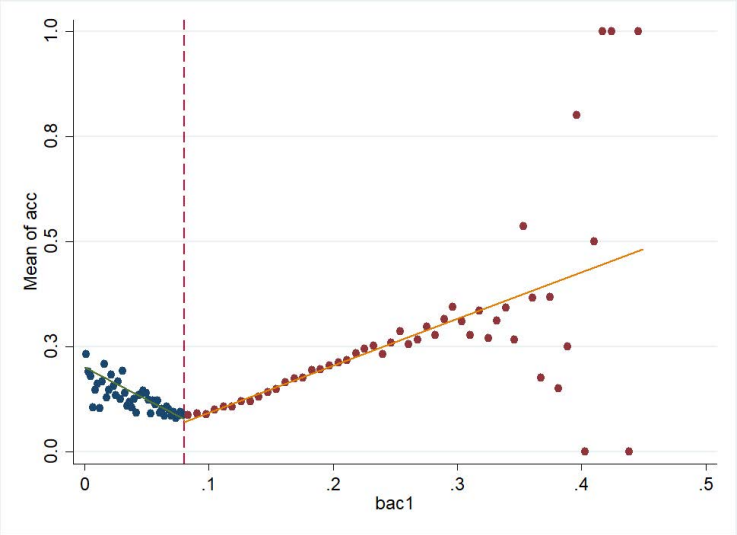
```
-------------------------------------------------------------------------------
-----------------------------
      name:  <unnamed>
       log:  Z:\OneDrive - The University of Texas at Austin\學習小札\2020
UTAustin\2021 Sp_Causal Inference\RDD
>  Replication\RDD_yh23469.log
  log type:  text
 opened on:  17 Feb 2021, 23:44:06

. use "Z:\OneDrive - The University of Texas at Austin\學習小札\2020 UTAustin\2021
Sp_Causal Inference\RDD Repli
> cation\hansen_dwi.dta", clear

. *question3---

***bacc as our dummy variable***
. gen bacc=0

. replace bacc=1 if bac1>=0.08

. hist bac1
(bin=53, start=0, width=.0084717)

. *question4---

*****Graph 1*****
```




```
. *question5---
.
. reg bacc white male aged acc, robust

Linear regression                               Number of obs     =    214,558
                                                F(4, 214553)      =      93.40
                                                Prob > F          =     0.0000
```

```
                                                R-squared         =     0.0016
                                                Root MSE          =     .30918

------------------------------------------------------------------------------
             |               Robust
        bacc |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       white |   .0171179   .0020259     8.45   0.000     .0131472    .0210886
        male |   .0036559   .0016481     2.22   0.027     .0004256    .0068862
        aged |  -.0004864   .0000611    -7.97   0.000    -.0006061   -.0003667
         acc |   .0277418   .0017297    16.04   0.000     .0243517     .031132
       _cons |   .8880377   .0030581   290.39   0.000     .8820439    .8940314
------------------------------------------------------------------------------


. sum white male aged acc

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
       white |    214,558    .8615899    .3453307          0          1
        male |    214,558    .7895115    .4076566          0          1
        aged |    214,558    34.95732    11.50298         21         80
         acc |    214,558    .1472935    .3543991          0          1

. sum bacc

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
        bacc |    214,558    .8927563    .3094236          0          1


. reg recidivism male white age acc bac1 bacc baccbac1, r

Linear regression                               Number of obs     =    214,558
                                                F(7, 214550)      =     124.71
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0039
                                                Root MSE          =     .32155

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |    .029019    .001594    18.21   0.000     .0258948    .0321432
       white |   .0036446   .0020067     1.82   0.069    -.0002884    .0075776
        aged |  -.0006428   .0000586   -10.98   0.000    -.0007575    -.000528
         acc |  -.0075694   .0019721    -3.84   0.000    -.0114346   -.0037041
        bac1 |   -.024135   .0846329    -0.29   0.776    -.1900135    .1417435
        bacc |  -.0542229   .0057368    -9.45   0.000     -.065467   -.0429789
    baccbac1 |   .3764633   .0863911     4.36   0.000     .2071388    .5457877
```

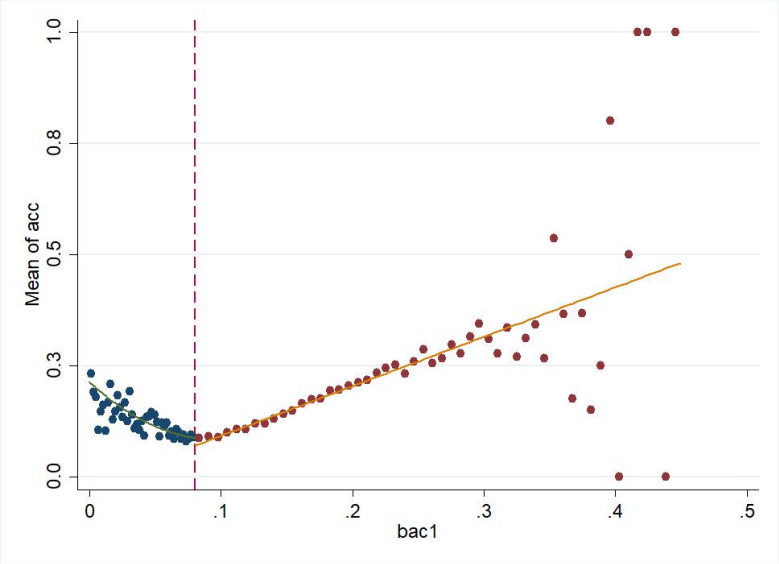
```
       _cons |   .1158642   .0059721    19.40   0.000      .104159    .1275694
------------------------------------------------------------------------------

. *question6---
.
. cmogram acc bac1, cut(0.08) scatter line(0.08) lfit
```




```
Plotting mean of acc, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .2312535775615341)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .1906976744186047)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .1804878048780488)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .1061946902654867)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .1463414634146341)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .1610169491525424)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .103448275862069)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .1666666666666667)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .2090909090909091)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .1294964028776978)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .1472868217054264)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .1825396825396825)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .1568627450980392)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .1345029239766082)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .1666666666666667)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .1257142857142857)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .1921182266009852)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .1394230769230769)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .1084905660377359)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .1171171171171171)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .1055045871559633)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .1261261261261261)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .0928571428571429)
```

Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .1346801346801347)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .1359223300970874)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .1452054794520548)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .1398416886543536)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .1238938053097345)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .0900900900900901)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .121272365805169)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .1128472222222222)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .1219135802469136)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .0928753180661578)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .1013215859030837)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .0855614973262032)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .1062992125984252)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean = .099644128113879)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean = .085423197492163)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.0950035186488389)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .0808344198174707)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .0854906682721252)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.0938032973280273)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.0887353878852285)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .0875465673230442)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .0907650520597555)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .0882200848071155)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
.1001634143996924)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
.1065535994100839)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
.1077773749093546)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean =
.1207050823192555)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
.1195440890616717)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
.1311940430812871)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
.1413904899135447)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
.1493049740411991)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
.1646639511201629)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
.1733923176521364)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
.1760856632956573)
Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
.1934006734006734)

```
Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
.1951042873696408)
Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean =
.2057123427405644)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean =
.2115156311832212)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =
.2179971658006613)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .2342119714442614)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .2441150828247602)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
.2522897585345545)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean =
.2317813765182186)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
.2588383838383838)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
.2871287128712871)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
.2548837209302325)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .2674271229404309)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .2981927710843373)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .2773584905660377)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .3152941176470588)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .3448275862068966)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .3102310231023102)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .2780269058295964)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .3352941176470588)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .2706766917293233)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .3111111111111111)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .3431372549019608)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .2666666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .5365853658536586)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .3666666666666666)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .1764705882352941)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .3684210526315789)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .15)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = .25)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = .8)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 0)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = .5)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 1)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 0)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)

.

. cmogram acc bac1, cut(0.08) scatter line(0.08) qfit
```



Plotting mean of acc, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .2312535775615341)
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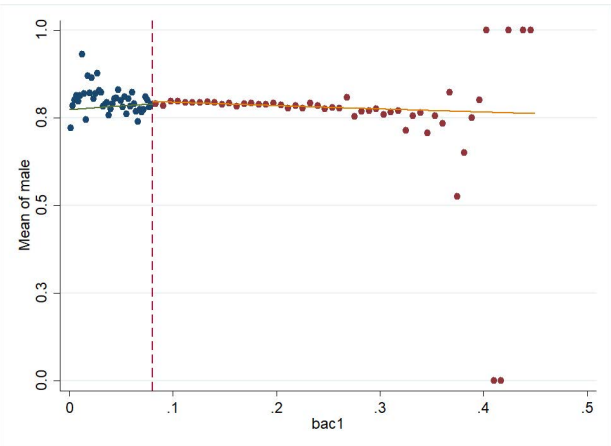
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .1804878048780488)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .1061946902654867)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .1463414634146341)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .1610169491525424)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .103448275862069)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .1666666666666667)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .2090909090909091)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .1294964028776978)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .1472868217054264)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .1825396825396825)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .1568627450980392)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .1345029239766082)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .1666666666666667)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .1257142857142857)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .1921182266009852)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .1394230769230769)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .1084905660377359)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .1171171171171171)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .1055045871559633)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .1261261261261261)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .0928571428571429)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .1346801346801347)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .1359223300970874)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .1452054794520548)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .1398416886543536)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .1238938053097345)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .0900900900900901)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .121272365805169)

Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .1128472222222222)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .1219135802469136)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .0928753180661578)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .1013215859030837)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .0855614973262032)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .1062992125984252)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean = .099644128113879)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean = .085423197492163)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.0950035186488389)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .0808344198174707)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .0854906682721252)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.0938032973280273)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.0887353878852285)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .0875465673230442)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .0907650520597555)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .0882200848071155)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
.1001634143996924)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
.1065535994100839)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
.1077773749093546)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean =
.1207050823192555)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
.1195440890616717)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
.1311940430812871)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
.1413904899135447)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
.1493049740411991)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
.1646639511201629)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
.1733923176521364)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
.1760856632956573)
Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
.1934006734006734)
Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
.1951042873696408)
Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean =
.2057123427405644)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean =
.2115156311832212)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =

```
.2179971658006613)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .2342119714442614)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .2441150828247602)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
.2522897585345545)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean =
.2317813765182186)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
.2588383838383838)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
.2871287128712871)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
.2548837209302325)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .2674271229404309)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .2981927710843373)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .2773584905660377)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .3152941176470588)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .3448275862068966)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .3102310231023102)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .2780269058295964)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .3352941176470588)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .2706766917293233)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .3111111111111111)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .3431372549019608)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .2666666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .5365853658536586)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .3666666666666666)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .1764705882352941)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .3684210526315789)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .15)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = .25)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = .8)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 0)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = .5)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 1)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 0)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)
```

```
. cmogram male bac1, cut(0.08) scatter line(0.08) lfit
```



Plotting mean of male, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .7218088151116199)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .7837209302325582)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .8)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .8141592920353983)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .7967479674796748)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .8135593220338984)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .9310344827586207)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .8181818181818182)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .7454545454545455)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .8705035971223022)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .8217054263565892)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .8650793650793651)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .803921568627451)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .8187134502923976)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .8777777777777778)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .8285714285714286)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .8226600985221675)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .7836538461538462)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .7877358490566038)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .7927927927927928)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .7568807339449541)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .7747747747747747)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .7892857142857143)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .8047138047138047)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .8058252427184466)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .8301369863013699)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .7994722955145118)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .7809734513274337)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .8108108108108109)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .7614314115308151)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .8038194444444444)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .7824074074074074)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .8231552162849872)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .7907488986784141)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .7679144385026738)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .7401574803149607)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
.7740213523131673)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =

.7656739811912225)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.7733990147783252)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .8096479791395046)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .8007224563515955)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.7805571347356453)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.7885228480340064)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .7904470463012241)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .784857401539158)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .797807425793774)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
.7977506488512929)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
.7935293575444742)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
.7933284989122552)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean =
.7934860415175375)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
.7950167874182718)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
.7931034482758621)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean = .788364553314121)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
.7924133311003182)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
.7831975560081467)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
.7898144151920588)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean = .792266508030934)
Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
.7886868686868687)
Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
.7875144843568945)
Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean =
.7927575654539273)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean =
.7872971903442818)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =
.7777515351913085)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .7847336628226249)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .7776809067131648)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
.7922564529558701)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean =
.7844129554655871)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
.7752525252525253)

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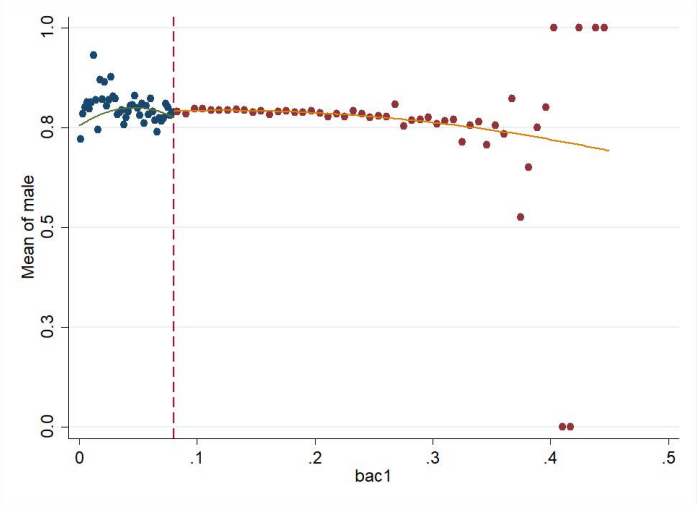
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
.7783701447067783)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
.7776744186046511)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .8073510773130546)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .7545180722891566)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .7679245283018868)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .7694117647058824)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .7758620689655172)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .7590759075907591)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .7668161434977578)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .7705882352941177)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .7142857142857143)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .7555555555555555)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .7647058823529411)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .7066666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .7560975609756098)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .7333333333333333)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .8235294117647058)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .5263157894736842)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .65)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = .75)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = .8)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 1)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 0)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 0)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 1)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)

. cmogram male bac1, cut(0.08) scatter line(0.08) qfit
```




```
Plotting mean of male, conditional on bac1.
```

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .7218088151116199)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .7837209302325582)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .8)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .8141592920353983)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .7967479674796748)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .8135593220338984)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .9310344827586207)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .8181818181818182)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .7454545454545455)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .8705035971223022)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .8217054263565892)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .8650793650793651)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .803921568627451)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .8187134502923976)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .8777777777777778)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .8285714285714286)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .8226600985221675)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .7836538461538462)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .7877358490566038)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .7927927927927928)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .7568807339449541)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .7747747747747747)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .7892857142857143)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .8047138047138047)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .8058252427184466)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .8301369863013699)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .7994722955145118)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .7809734513274337)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .8108108108108109)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .7614314115308151)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .8038194444444444)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .7824074074074074)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .8231552162849872)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .7907488986784141)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .7679144385026738)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .7401574803149607)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean = .7740213523131673)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean = .7656739811912225)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean = .7733990147783252)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .8096479791395046)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .8007224563515955)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean = .7805571347356453)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean = .7885228480340064)

Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .7904470463012241)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .784857401539158)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .797807425793774)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean = .7977506488512929)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean = .7935293575444742)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean = .7933284989122552)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean = .7934860415175375)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean = .7950167874182718)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean = .7931034482758621)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean = .788364553314121)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean = .7924133311003182)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean = .7831975560081467)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean = .7898144151920588)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean = .792266508030934)
Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean = .7886868686868687)
Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean = .7875144843568945)
Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean = .7927575654539273)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean = .7872971903442818)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean = .7777515351913085)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .7847336628226249)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .7776809067131648)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean = .7922564529558701)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean = .7844129554655871)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean = .7752525252525253)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean = .7783701447067783)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean = .7776744186046511)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .8073510773130546)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .7545180722891566)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .7679245283018868)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .7694117647058824)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .7758620689655172)

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Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .7590759075907591)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .7668161434977578)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .7705882352941177)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .7142857142857143)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .7555555555555555)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .7647058823529411)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .7066666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .7560975609756098)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .7333333333333333)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .8235294117647058)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .5263157894736842)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .65)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = .75)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = .8)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 1)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 0)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 0)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 1)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)

.
. cmogram white bac1, cut(0.08) scatter line(0.08) lfit
```

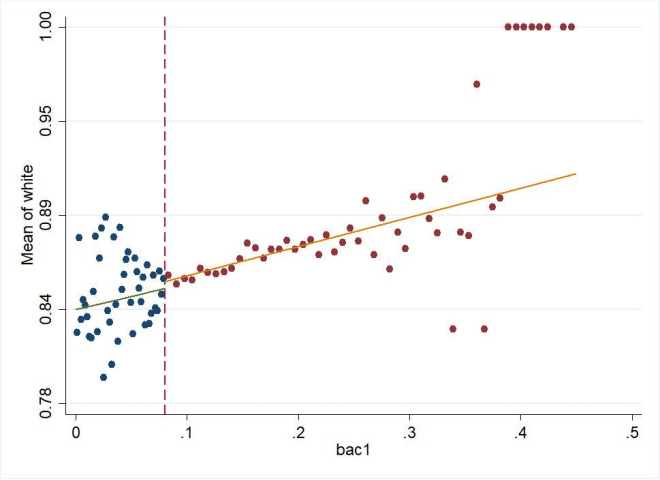


```
Plotting mean of white, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .8214081282198054)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .8767441860465116)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .8292682926829268)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .8407079646017699)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .8373983739837398)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .8305084745762712)
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Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .8189655172413793)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .8181818181818182)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .8454545454545455)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .8776978417266187)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .8217054263565892)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .8650793650793651)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .8823529411764706)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .7953216374269005)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .8888888888888888)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .8342857142857143)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .8275862068965517)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .8028846153846154)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .8773584905660378)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .8378378378378378)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .8165137614678899)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .8828828828828829)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .8464285714285714)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .8552188552188552)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .8640776699029126)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .8684931506849315)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .8390501319261213)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .8207964601769912)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .8648648648648649)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .856858846918489)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .8472222222222222)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .8395061728395061)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .8536895674300254)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .8259911894273128)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .8609625668449198)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .8267716535433071)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
.8327402135231317)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =
.8550156739811913)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.8360309641097818)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .834419817470665)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .8573148705599036)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.8436611711199545)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.8528161530286929)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .854843001596594)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .8499320959710276)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .8531388975074982)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
.8521580313371143)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
.8591575260392663)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =

.8564176939811458)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean = .85567287043665)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
.8571302350238558)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
.8589664036876163)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
.8646433717579251)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
.8737229944732876)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
.8707739307535641)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
.8650194216659474)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
.8703152885187389)
Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
.8703030303030304)
Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
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Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean = .870282216933016)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean = .872774040364068)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =
.8755314123760037)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .8671059857221307)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .8785236849752979)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
.8684429641965029)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean =
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Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
.8825757575757576)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
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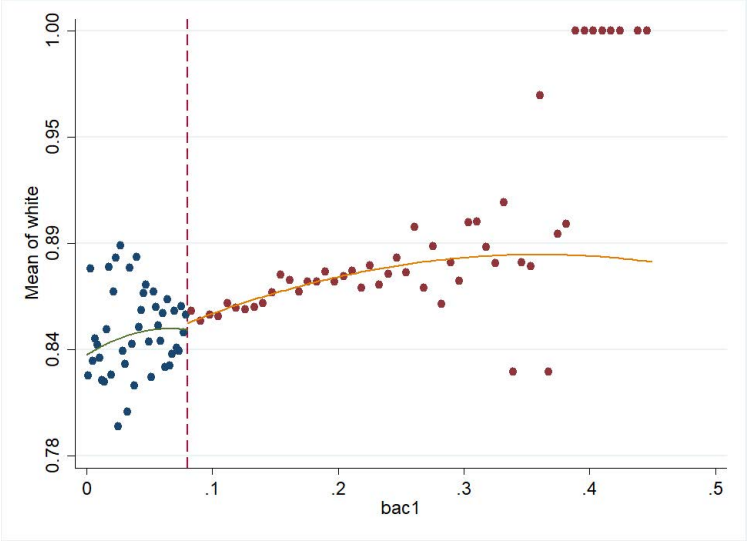
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
.8986046511627907)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .8669201520912547)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .8885542168674698)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .8584905660377359)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .88)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .8706896551724138)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .900990099009901)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .9013452914798207)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .888235294117647)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .8796992481203008)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .9111111111111111)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .8235294117647058)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .88)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .8780487804878049)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .9666666666666667)

```
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .8235294117647058)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .8947368421052632)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .9)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = 1)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = 1)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 1)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 1)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 1)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 1)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)

. cmogram white bac1, cut(0.08) scatter line(0.08) qfit
```




```
Plotting mean of white, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .8214081282198054)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .8767441860465116)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .8292682926829268)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .8407079646017699)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .8373983739837398)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .8305084745762712)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .8189655172413793)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .8181818181818182)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .8454545454545455)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .8776978417266187)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .8217054263565892)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .8650793650793651)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .8823529411764706)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .7953216374269005)
```

Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .8888888888888888)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .8342857142857143)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .8275862068965517)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .8028846153846154)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .8773584905660378)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .8378378378378378)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .8165137614678899)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .8828828828828829)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .8464285714285714)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .8552188552188552)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .8640776699029126)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .8684931506849315)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .8390501319261213)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .8207964601769912)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .8648648648648649)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .856858846918489)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .8472222222222222)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .8395061728395061)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .8536895674300254)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .8259911894273128)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .8609625668449198)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .8267716535433071)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
.8327402135231317)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =
.8550156739811913)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.8360309641097818)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .834419817470665)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .8573148705599036)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.8436611711199545)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.8528161530286929)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = .854843001596594)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = .8499320959710276)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = .8531388975074982)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
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Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
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Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
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Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean = .85567287043665)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
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Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
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Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
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Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
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Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
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Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
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Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
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Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
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Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
.8752896871378911)
Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean = .870282216933016)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean = .872774040364068)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =
.8755314123760037)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = .8671059857221307)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = .8785236849752979)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
.8684429641965029)
Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean =
.8739878542510121)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
.8825757575757576)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
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Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
.8986046511627907)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = .8669201520912547)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = .8885542168674698)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = .8584905660377359)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = .88)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = .8706896551724138)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = .900990099009901)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = .9013452914798207)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = .888235294117647)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = .8796992481203008)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = .9111111111111111)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = .8235294117647058)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = .88)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = .8780487804878049)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = .9666666666666667)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = .8235294117647058)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = .8947368421052632)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = .9)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = 1)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = 1)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 1)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 1)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 1)

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Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 1)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 1)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 1)

.
. cmogram aged bac1, cut(0.08) scatter line(0.08) lfit
```

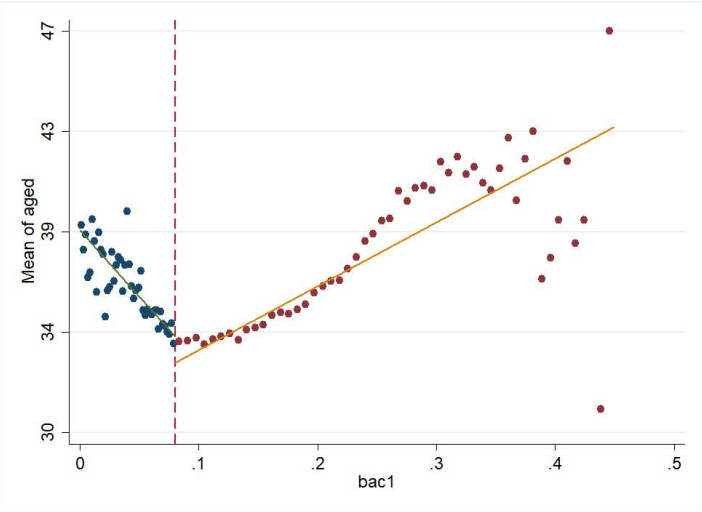


```
Plotting mean of aged, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = 38.79107040641099)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = 37.74418604651163)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = 38.39512195121952)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = 36.5575221238938)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = 36.77235772357724)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = 39.01694915254237)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = 38.11206896551724)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = 35.95454545454545)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = 38.47272727272728)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = 37.71942446043165)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = 37.55038759689923)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = 34.90476190476191)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = 36.01307189542484)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = 36.15204678362573)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = 37.65555555555556)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = 36.42285714285714)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = 37.07389162561577)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = 37.42307692307692)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = 37.29245283018868)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = 35.97297297297298)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = 37.10091743119266)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = 39.36036036036036)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = 37.11071428571429)
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Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = 36.18181818181818)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = 35.65695792880259)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = 36.02191780821918)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = 36.11873350923483)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = 36.82964601769911)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = 35.17567567567568)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = 34.97614314115308)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = 35.21354166666666)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = 35.04012345679013)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = 34.97837150127226)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = 35.16079295154185)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = 35.19251336898396)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = 34.38779527559055)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
35.11120996441281)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =
34.60423197492163)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
34.48979591836735)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = 34.24315514993481)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = 34.15833835039133)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
34.63843092666288)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
33.76620616365569)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = 33.86455561468866)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = 33.90006790402897)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = 33.99658703071673)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
33.72863597039316)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
33.95428150059913)
Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
34.07605148658448)
Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean =
34.20427702219041)
Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
33.93002297225658)
Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
34.33170818189877)
Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
34.43804034582133)
Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
34.56380840730196)
Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
34.95560081466395)
Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
35.07919723780751)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
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Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
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Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
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Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean =
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Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean = 36.1810447170558)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =
36.42158715162967)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = 36.43108182317408)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = 36.94042429526301)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
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Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean = 38.0915991902834)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
38.41287878787879)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
38.95277989337395)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
39.05302325581396)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = 40.24081115335869)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = 39.7816265060241)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = 40.35471698113208)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = 40.43058823529412)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = 40.25862068965517)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = 41.44554455445545)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = 41.00896860986547)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = 41.68823529411765)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = 40.92481203007519)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = 41.24444444444445)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = 40.56862745098039)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = 40.26666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = 41.19512195121951)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = 42.46666666666667)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = 39.8235294117647)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = 41.57894736842106)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = 42.75)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = 36.5)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = 37.4)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 39)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 41.5)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 38)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 39)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 31)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 47)

. cmogram aged bac1, cut(0.08) scatter line(0.08) qfit
```

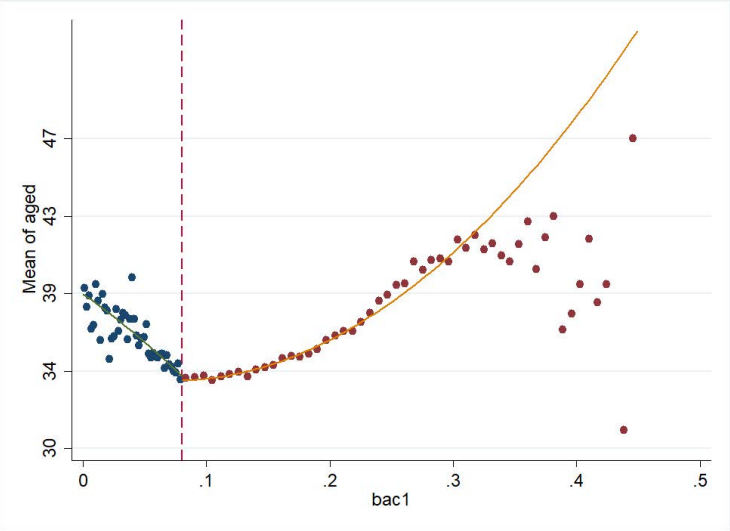

Plotting mean of aged, conditional on bac1.

n = 214558

Bin #1: [0,.0018604650746944] (n = 1747) (mean = 38.79107040641099)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = 37.74418604651163)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = 38.39512195121952)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = 36.5575221238938)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = 36.77235772357724)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = 39.01694915254237)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = 38.11206896551724)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = 35.95454545454545)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = 38.47272727272728)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = 37.71942446043165)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = 37.55038759689923)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = 34.90476190476191)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = 36.01307189542484)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = 36.15204678362573)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = 37.65555555555556)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = 36.42285714285714)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = 37.07389162561577)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = 37.42307692307692)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = 37.29245283018868)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = 35.97297297297298)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = 37.10091743119266)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = 39.36036036036036)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = 37.11071428571429)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = 36.18181818181818)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = 35.65695792880259)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = 36.02191780821918)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = 36.11873350923483)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = 36.82964601769911)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = 35.17567567567568)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = 34.97614314115308)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = 35.21354166666666)

Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = 35.04012345679013)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = 34.97837150127226)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = 35.16079295154185)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = 35.19251336898396)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = 34.38779527559055)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
35.11120996441281)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =
34.60423197492163)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
34.48979591836735)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = 34.24315514993481)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = 34.15833835039133)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
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Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
33.76620616365569)
Bin #1: [.08,.0870961538644937] (n = 7516) (mean = 33.86455561468866)
Bin #2: (.0870961538644937,.0941923077289874] (n = 8836) (mean = 33.90006790402897)
Bin #3: (.0941923077289874,.1012884615934811] (n = 9669) (mean = 33.99658703071673)
Bin #4: (.1012884615934811,.1083846154579748] (n = 10403) (mean =
33.72863597039316)
Bin #5: (.1083846154579748,.1154807693224685] (n = 10849) (mean =
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Bin #6: (.1154807693224685,.1225769231869622] (n = 11032) (mean =
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Bin #7: (.1225769231869622,.1296730770514559] (n = 11176) (mean =
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Bin #8: (.1296730770514559,.1367692309159496] (n = 11318) (mean =
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Bin #9: (.1367692309159496,.1438653847804433] (n = 11281) (mean =
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Bin #10: (.1438653847804433,.150961538644937] (n = 11104) (mean =
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Bin #11: (.150961538644937,.1580576925094307] (n = 11942) (mean =
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Bin #12: (.1580576925094307,.1651538463739244] (n = 9820) (mean =
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Bin #13: (.1651538463739244,.1722500002384181] (n = 9268) (mean =
35.07919723780751)
Bin #14: (.1722500002384181,.1793461541029118] (n = 8405) (mean =
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Bin #15: (.1793461541029118,.1864423079674055] (n = 7425) (mean =
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Bin #16: (.1864423079674055,.1935384618318992] (n = 6904) (mean =
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Bin #17: (.1935384618318992,.2006346156963929] (n = 5882) (mean =
35.92417545052703)
Bin #18: (.2006346156963929,.2077307695608866] (n = 5054) (mean = 36.1810447170558)
Bin #19: (.2077307695608866,.2148269234253803] (n = 4234) (mean =

36.42158715162967)
Bin #20: (.2148269234253803,.221923077289874] (n = 3642) (mean = 36.43108182317408)
Bin #21: (.221923077289874,.2290192311543677] (n = 3441) (mean = 36.94042429526301)
Bin #22: (.2290192311543677,.2361153850188614] (n = 2402) (mean =
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Bin #23: (.2361153850188614,.2432115388833551] (n = 1976) (mean = 38.0915991902834)
Bin #24: (.2432115388833551,.2503076927478488] (n = 1584) (mean =
38.41287878787879)
Bin #25: (.2503076927478488,.2574038466123425] (n = 1313) (mean =
38.95277989337395)
Bin #26: (.2574038466123425,.2645000004768362] (n = 1075) (mean =
39.05302325581396)
Bin #27: (.2645000004768362,.2715961543413299] (n = 789) (mean = 40.24081115335869)
Bin #28: (.2715961543413299,.2786923082058236] (n = 664) (mean = 39.7816265060241)
Bin #29: (.2786923082058236,.2857884620703173] (n = 530) (mean = 40.35471698113208)
Bin #30: (.2857884620703173,.292884615934811] (n = 425) (mean = 40.43058823529412)
Bin #31: (.292884615934811,.2999807697993047] (n = 348) (mean = 40.25862068965517)
Bin #32: (.2999807697993047,.3070769236637984] (n = 303) (mean = 41.44554455445545)
Bin #33: (.3070769236637984,.3141730775282921] (n = 223) (mean = 41.00896860986547)
Bin #34: (.3141730775282921,.3212692313927858] (n = 170) (mean = 41.68823529411765)
Bin #35: (.3212692313927858,.3283653852572795] (n = 133) (mean = 40.92481203007519)
Bin #36: (.3283653852572795,.3354615391217732] (n = 90) (mean = 41.24444444444445)
Bin #37: (.3354615391217732,.3425576929862669] (n = 102) (mean = 40.56862745098039)
Bin #38: (.3425576929862669,.3496538468507606] (n = 75) (mean = 40.26666666666667)
Bin #39: (.3496538468507606,.3567500007152543] (n = 41) (mean = 41.19512195121951)
Bin #40: (.3567500007152543,.363846154579748] (n = 30) (mean = 42.46666666666667)
Bin #41: (.363846154579748,.3709423084442417] (n = 17) (mean = 39.8235294117647)
Bin #42: (.3709423084442417,.3780384623087354] (n = 19) (mean = 41.57894736842106)
Bin #43: (.3780384623087354,.3851346161732291] (n = 20) (mean = 42.75)
Bin #44: (.3851346161732291,.3922307700377228] (n = 4) (mean = 36.5)
Bin #45: (.3922307700377228,.3993269239022165] (n = 5) (mean = 37.4)
Bin #46: (.3993269239022165,.4064230777667102] (n = 3) (mean = 39)
Bin #47: (.4064230777667102,.4135192316312039] (n = 2) (mean = 41.5)
Bin #48: (.4135192316312039,.4206153854956976] (n = 1) (mean = 38)
Bin #49: (.4206153854956976,.4277115393601913] (n = 1) (mean = 39)
Bin #50: (.4277115393601913,.434807693224685] (n = 0) (mean = .)
Bin #51: (.434807693224685,.4419038470891787] (n = 1) (mean = 31)
Bin #52: (.4419038470891787,.4490000009536743] (n = 1) (mean = 47)

*quesition7---

```
. gen bac1_c = bac1 - 0.08
. gen baccbac1_c = bacc*bac1_c
. gen bac1_c2 = bac1^2
. gen bac1_c3 = bac1*bac1*bac1gen bac1_c = bac1 - 0.08

. sum bac1_c

    Variable |        Obs        Mean    Std. Dev.       Min        Max
```

```
-------------+------------------------------------------------------------
      bac1_c |    214,558    .0617345    .0539008       -.08       .369


. xi: reg recidivism male white age acc bac1 if bac1>=0.03 & bac1<=0.13, robust

Linear regression                               Number of obs     =     89,967
                                                F(5, 89961)       =      61.93
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0031
                                                Root MSE          =     .30857

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0331526   .0023292    14.23   0.000     .0285874    .0377178
       white |   .0161118   .0028028     5.75   0.000     .0106183    .0216052
        aged |  -.0008381   .0000849    -9.87   0.000    -.0010045   -.0006716
         acc |   .0047692   .0034524     1.38   0.167    -.0019975    .0115358
        bac1 |  -.0754879   .0482512    -1.56   0.118    -.1700597    .0190839
       _cons |   .1025354   .0062892    16.30   0.000     .0902086    .1148622
------------------------------------------------------------------------------

. xi: reg recidivism male white age acc i.bacc*bac1 if bac1>=0.03 & bac1<=0.13,
robust
i.bacc            _Ibacc_0-1          (naturally coded; _Ibacc_0 omitted)
i.bacc*bac1       _IbacXbac1_#        (coded as above)

Linear regression                               Number of obs     =     89,967
                                                F(7, 89959)       =      51.13
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0036
                                                Root MSE          =     .30849

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0331803   .0023289    14.25   0.000     .0286157    .0377449
       white |   .0162238   .0028024     5.79   0.000     .0107311    .0217166
        aged |  -.0008537    .000085   -10.05   0.000    -.0010203   -.0006872
         acc |   .0042096    .003452     1.22   0.223    -.0025562    .0109754
    _Ibacc_1 |  -.0590663   .0152111    -3.88   0.000    -.0888798   -.0292528
        bac1 |  -.0428678   .1866322    -0.23   0.818    -.4086651    .3229296
_IbacXbac1_1 |   .4380899   .2037978     2.15   0.032     .0386482    .8375316
       _cons |   .1093521    .013144     8.32   0.000     .0835899    .1351142
------------------------------------------------------------------------------

. xi: reg recidivism male white age acc bacc##(c.bac1_c c.bac1_c2) if bac1>=0.03 &
```

```
bac1<=0.13, robust

Linear regression                               Number of obs     =     89,967
                                                F(9, 89957)       =      40.23
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0037
                                                Root MSE          =     .30848

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0332123   .0023288    14.26   0.000      .028648    .0377767
       white |   .0162247   .0028024     5.79   0.000     .0107321    .0217173
        aged |  -.0008538    .000085   -10.05   0.000    -.0010203   -.0006872
         acc |   .0041839   .0034514     1.21   0.225    -.0025807    .0109485
      1.bacc |  -.2238005   .0925514    -2.42   0.016    -.4052004   -.0424005
      bac1_c |   2.902053     1.6372     1.77   0.076    -.3068418    6.110949
     bac1_c2 |  -24.71687   13.73897    -1.80   0.072    -51.64513    2.211387
             |
bacc#c.bac1_c |
          1  |  -4.210134   2.111312    -1.99   0.046    -8.348286   -.0719823
             |
bacc#c.bac1_c2 |
          1  |   32.73074   15.10452     2.17   0.030     3.126027    62.33546
             |
       _cons |   .2583356   .0848328     3.05   0.002     .0920642    .4246071
------------------------------------------------------------------------------


. xi: reg recidivism male white age acc bac1_c if bac1>=0.03 & bac1<=0.13, robust

Linear regression                               Number of obs     =     89,967
                                                F(5, 89961)       =      61.93
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0031
                                                Root MSE          =     .30857

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0331526   .0023292    14.23   0.000     .0285874    .0377178
       white |   .0161118   .0028028     5.75   0.000     .0106183    .0216052
        aged |  -.0008381   .0000849    -9.87   0.000    -.0010045   -.0006716
         acc |   .0047692   .0034524     1.38   0.167    -.0019975    .0115358
      bac1_c |  -.0754879   .0482512    -1.56   0.118    -.1700597    .0190839
       _cons |   .0964963   .0042602    22.65   0.000     .0881464    .1048463
------------------------------------------------------------------------------
```

```
. xi: reg recidivism male white age acc i.bacc*bac1_c if bac1>=0.03 & bac1<=0.13,
robust
i.bacc            _Ibacc_0-1         (naturally coded; _Ibacc_0 omitted)
i.bacc*bac1_c     _IbacXbac1__#      (coded as above)

Linear regression                               Number of obs     =     89,967
                                                F(7, 89959)       =      51.13
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0036
                                                Root MSE          =     .30849

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0331803   .0023289    14.25   0.000     .0286157    .0377449
       white |   .0162238   .0028024     5.79   0.000     .0107311    .0217166
        aged |  -.0008537    .000085   -10.05   0.000    -.0010203   -.0006872
         acc |   .0042096    .003452     1.22   0.223    -.0025562    .0109754
    _Ibacc_1 |  -.0240191   .0043529    -5.52   0.000    -.0325507   -.0154875
      bac1_c |  -.0428678   .1866322    -0.23   0.818    -.4086652    .3229296
_IbacXbac1__1 |   .4380899   .2037978     2.15   0.032     .0386482    .8375316
       _cons |   .1059227   .0053549    19.78   0.000     .0954271    .1164182
------------------------------------------------------------------------------

. xi: reg recidivism male white age acc bacc##(c.bac1_c c.bac1_c2) if bac1>=0.03 &
bac1<=0.13, robust

Linear regression                               Number of obs     =     89,967
                                                F(9, 89957)       =      40.23
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0037
                                                Root MSE          =     .30848

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0332123   .0023288    14.26   0.000      .028648    .0377767
       white |   .0162247   .0028024     5.79   0.000     .0107321    .0217173
        aged |  -.0008538    .000085   -10.05   0.000    -.0010203   -.0006872
         acc |   .0041839   .0034514     1.21   0.225    -.0025807    .0109485
      1.bacc |  -.2238005   .0925514    -2.42   0.016    -.4052004   -.0424005
      bac1_c |   2.902053     1.6372     1.77   0.076    -.3068418    6.110949
     bac1_c2 |  -24.71687   13.73897    -1.80   0.072    -51.64513    2.211387
             |
 bacc#c.bac1_c |
          1  |  -4.210134   2.111312    -1.99   0.046    -8.348286   -.0719823
             |
bacc#c.bac1_c2 |
```

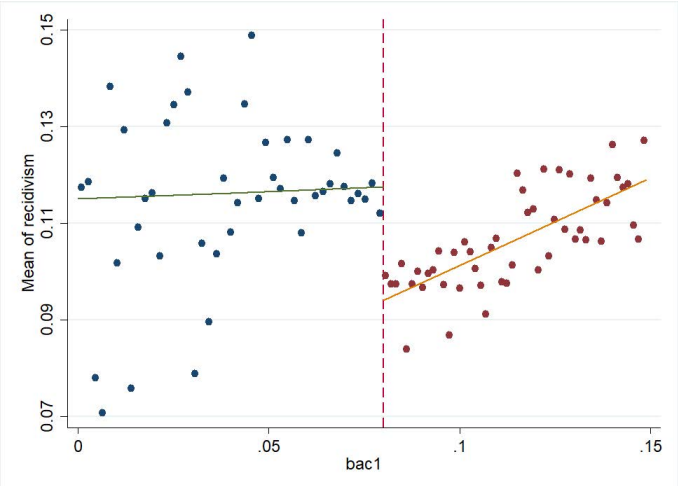
```
           1  |   32.73074   15.10452     2.17   0.030     3.126027    62.33546
              |
        _cons |   .2583356   .0848328     3.05   0.002     .0920642    .4246071
------------------------------------------------------------------------------


. xi: reg recidivism male white age acc bac1_c if bac1>=0.055 & bac1<=0.105, robust

Linear regression                               Number of obs     =     46,957
                                                F(5, 46951)       =      37.80
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0036
                                                Root MSE          =      .3063

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0357643   .0031666    11.29   0.000     .0295578    .0419708
       white |   .0174948   .0038134     4.59   0.000     .0100204    .0249692
        aged |  -.0007526   .0001154    -6.52   0.000    -.0009787   -.0005265
         acc |   .0043439   .0049664     0.87   0.382    -.0053904    .0140782
      bac1_c |  -.4758923   .1117794    -4.26   0.000    -.6949815   -.2568032
       _cons |   .0904025   .0056624    15.97   0.000     .0793042    .1015009
------------------------------------------------------------------------------

. xi: reg recidivism male white age acc i.bacc*bac1_c if bac1>=0.055 & bac1<=0.105,
robust
i.bacc            _Ibacc_0-1          (naturally coded; _Ibacc_0 omitted)
i.bacc*bac1_c     _IbacXbac1__#       (coded as above)

Linear regression                               Number of obs     =     46,957
                                                F(7, 46949)       =      29.17
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0040
                                                Root MSE          =     .30625

------------------------------------------------------------------------------
             |               Robust
   recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+----------------------------------------------------------------
         male |   .0357191   .0031666    11.28   0.000     .0295126    .0419256
        white |   .0175942   .0038129     4.61   0.000     .0101209    .0250675
         aged |  -.0007579   .0001154    -6.57   0.000     -.000984   -.0005318
          acc |   .0042208   .0049681     0.85   0.396    -.0055168    .0139584
     _Ibacc_1 |  -.0205774   .0057465    -3.58   0.000    -.0318406   -.0093142
       bac1_c |  -.1955582   .3825057    -0.51   0.609    -.9452749    .5541585
_IbacXbac1__1 |   .5470655   .4493585     1.22   0.223    -.3336838    1.427815
        _cons |   .0976074   .0069612    14.02   0.000     .0839634    .1112514
------------------------------------------------------------------------------
```

```
. xi: reg recidivism male white age acc bacc##(c.bac1_c c.bac1_c2) if bac1>=0.055 &
bac1<=0.105, robust

Linear regression                               Number of obs     =     46,957
                                                F(9, 46947)       =      22.78
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0040
                                                Root MSE          =     .30626

------------------------------------------------------------------------------
             |               Robust
  recidivism |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        male |   .0357529   .0031666    11.29   0.000     .0295463    .0419596
       white |   .0175921   .0038126     4.61   0.000     .0101193    .0250649
        aged |  -.0007582   .0001154    -6.57   0.000    -.0009844    -.000532
         acc |   .0042334    .004968     0.85   0.394     -.005504    .0139709
      1.bacc |  -.4702096   .4369911    -1.08   0.282    -1.326718    .3862993
     bac1_c |   6.167045   8.119768     0.76   0.448    -9.747818    22.08191
    bac1_c2 |  -46.06441    58.7465    -0.78   0.433    -161.2084    69.07958
            |
 bacc#c.bac1_c |
          1  |  -10.52059   10.60942    -0.99   0.321     -31.3152    10.27402
            |
bacc#c.bac1_c2 |
          1  |   71.26729   69.20719     1.03   0.303    -64.37981    206.9144
            |
       _cons |   .3891242   .3720196     1.05   0.296    -.3400396    1.118288
------------------------------------------------------------------------------
```

*---

*question8---

```
. cmogram recidivism bac1 if bac1<0.15, cut(0.08) scatter line(0.08) lfit
```



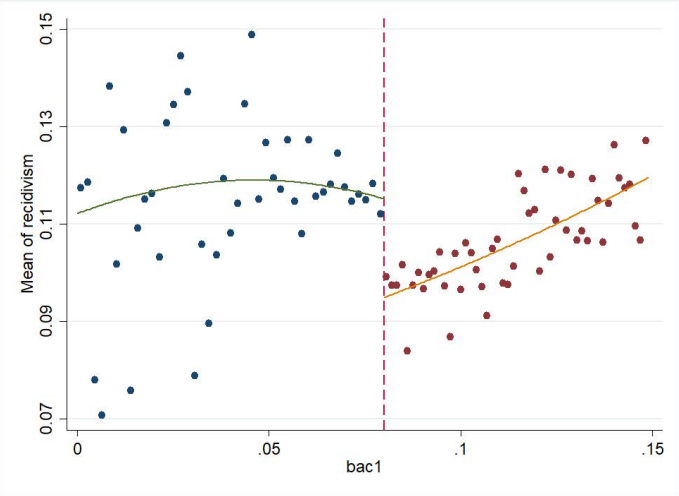
Plotting mean of recidivism, conditional on bac1.

n = 124642

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .1173440183171151)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .1186046511627907)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .0780487804878049)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .0707964601769911)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .1382113821138211)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .1016949152542373)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .1293103448275862)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .0757575757575758)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .1090909090909091)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .1151079136690648)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .1162790697674419)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .1031746031746032)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .130718954248366)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .1345029239766082)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .1444444444444444)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .1371428571428572)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .0788177339901478)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .1057692307692308)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .089622641509434)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .1036036036036036)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .1192660550458716)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .1081081081081081)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .1142857142857143)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .1346801346801347)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .1488673139158576)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .1150684931506849)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .1266490765171504)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .1194690265486726)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .1171171171171171)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .1272365805168986)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .1145833333333333)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .1080246913580247)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .1272264631043257)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .1156387665198238)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .1165775401069519)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .1181102362204724)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
.1245551601423488)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =

.1175548589341693)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.1147079521463758)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .1160365058670144)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .1149909692956051)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.1182490051165435)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.1121147715196599)
Bin #1: [.08,.0813800000786781] (n = 979) (mean = .0990806945863126)
Bin #2: (.0813800000786781,.0827600001573562] (n = 1099) (mean = .097361237488626)
Bin #3: (.0827600001573562,.0841400002360343] (n = 2134) (mean = .0974695407685098)
Bin #4: (.0841400002360343,.0855200003147124] (n = 1053) (mean = .1016144349477683)
Bin #5: (.0855200003147124,.0869000003933905] (n = 1084) (mean = .0839483394833948)
Bin #6: (.0869000003933905,.0882800004720686] (n = 2383) (mean = .0973562736047)
Bin #7: (.0882800004720686,.0896600005507467] (n = 1270) (mean = .1)
Bin #8: (.0896600005507467,.0910400006294248] (n = 2463) (mean = .096630125862769)
Bin #9: (.0910400006294248,.0924200007081029] (n = 1265) (mean = .0996047430830039)
Bin #10: (.0924200007081029,.093800000786781] (n = 1325) (mean = .100377358490566)
Bin #11: (.093800000786781,.0951800008654591] (n = 2621) (mean = .1041587180465471)
Bin #12: (.0951800008654591,.0965600009441372] (n = 1327) (mean =
.0972117558402412)
Bin #13: (.0965600009441372,.0979400010228153] (n = 1325) (mean =
.0867924528301887)
Bin #14: (.0979400010228153,.0993200011014934] (n = 2839) (mean =
.1039098274040155)
Bin #15: (.0993200011014934,.1007000011801715] (n = 1388) (mean =
.0965417867435159)
Bin #16: (.1007000011801715,.1020800012588496] (n = 2912) (mean =
.1061126373626374)
Bin #17: (.1020800012588496,.1034600013375277] (n = 1479) (mean =
.1041244083840433)
Bin #18: (.1034600013375277,.1048400014162058] (n = 1520) (mean =
.1006578947368421)
Bin #19: (.1048400014162058,.1062200014948839] (n = 3005) (mean = .097171381031614)
Bin #20: (.1062200014948839,.107600001573562] (n = 1447) (mean = .0912232204561161)
Bin #21: (.107600001573562,.1089800016522401] (n = 1506) (mean = .1049136786188579)
Bin #22: (.1089800016522401,.1103600017309182] (n = 3025) (mean =
.1067768595041322)
Bin #23: (.1103600017309182,.1117400018095963] (n = 1564) (mean =
.0978260869565217)
Bin #24: (.1117400018095963,.1131200018882744] (n = 3139) (mean =
.0974832749283211)
Bin #25: (.1131200018882744,.1145000019669525] (n = 1501) (mean =
.1012658227848101)
Bin #26: (.1145000019669525,.1158800020456306] (n = 1620) (mean =
.1203703703703704)
Bin #27: (.1158800020456306,.1172600021243087] (n = 3097) (mean =
.1168873103002906)
Bin #28: (.1172600021243087,.1186400022029868] (n = 1550) (mean = .112258064516129)

```
Bin #29: (.1186400022029868,.1200200022816649] (n = 3135) (mean =
.1129186602870813)
Bin #30: (.1200200022816649,.121400002360343] (n = 1666) (mean = .1002400960384154)
Bin #31: (.121400002360343,.1227800024390211] (n = 1584) (mean = .1212121212121212)
Bin #32: (.1227800024390211,.1241600025176992] (n = 3225) (mean =
.1032558139534884)
Bin #33: (.1241600025176992,.1255400025963773] (n = 1589) (mean =
.1107614852108244)
Bin #34: (.1255400025963773,.1269200026750554] (n = 1570) (mean =
.1210191082802548)
Bin #35: (.1269200026750554,.1283000027537335] (n = 3210) (mean =
.1087227414330218)
Bin #36: (.1283000027537335,.1296800028324116] (n = 1582) (mean =
.1201011378002529)
Bin #37: (.1296800028324116,.1310600029110897] (n = 3170) (mean =
.1066246056782334)
Bin #38: (.1310600029110897,.1324400029897678] (n = 1639) (mean =
.1086028065893838)
Bin #39: (.1324400029897678,.1338200030684459] (n = 1604) (mean =
.1066084788029925)
Bin #40: (.1338200030684459,.135200003147124] (n = 3268) (mean = .1193390452876377)
Bin #41: (.135200003147124,.1365800032258021] (n = 1637) (mean = .1148442272449603)
Bin #42: (.1365800032258021,.1379600033044802] (n = 1665) (mean =
.1063063063063063)
Bin #43: (.1379600033044802,.1393400033831583] (n = 3161) (mean =
.1142043657070547)
Bin #44: (.1393400033831583,.1407200034618364] (n = 1656) (mean = .126207729468599)
Bin #45: (.1407200034618364,.1421000035405145] (n = 3232) (mean =
.1194306930693069)
Bin #46: (.1421000035405145,.1434800036191926] (n = 1567) (mean =
.1174218251435865)
Bin #47: (.1434800036191926,.1448600036978707] (n = 1609) (mean =
.1180857675574891)
Bin #48: (.1448600036978707,.1462400037765488] (n = 3077) (mean =
.1095222619434514)
Bin #49: (.1462400037765488,.1476200038552269] (n = 1594) (mean =
.1066499372647428)
Bin #50: (.1476200038552269,.1490000039339066] (n = 3272) (mean =
.1271393643031785)

. cmogram recidivism bac1 if bac1<0.15, cut(0.08) scatter line(0.08) qfit
```



Plotting mean of recidivism, conditional on bac1.

n = 124642

Bin #1: [0,.0018604650746944] (n = 1747) (mean = .1173440183171151)
Bin #2: (.0018604650746944,.0037209301493888] (n = 430) (mean = .1186046511627907)
Bin #3: (.0037209301493888,.0055813952240832] (n = 205) (mean = .0780487804878049)
Bin #4: (.0055813952240832,.0074418602987776] (n = 113) (mean = .0707964601769911)
Bin #5: (.0074418602987776,.009302325373472] (n = 123) (mean = .1382113821138211)
Bin #6: (.009302325373472,.0111627904481664] (n = 118) (mean = .1016949152542373)
Bin #7: (.0111627904481664,.0130232555228608] (n = 116) (mean = .1293103448275862)
Bin #8: (.0130232555228608,.0148837205975552] (n = 66) (mean = .0757575757575758)
Bin #9: (.0148837205975552,.0167441856722496] (n = 110) (mean = .1090909090909091)
Bin #10: (.0167441856722496,.018604650746944] (n = 139) (mean = .1151079136690648)
Bin #11: (.018604650746944,.0204651158216384] (n = 129) (mean = .1162790697674419)
Bin #12: (.0204651158216384,.0223255808963328] (n = 126) (mean = .1031746031746032)
Bin #13: (.0223255808963328,.0241860459710272] (n = 153) (mean = .130718954248366)
Bin #14: (.0241860459710272,.0260465110457216] (n = 171) (mean = .1345029239766082)
Bin #15: (.0260465110457216,.027906976120416] (n = 90) (mean = .1444444444444444)
Bin #16: (.027906976120416,.0297674411951104] (n = 175) (mean = .1371428571428572)
Bin #17: (.0297674411951104,.0316279062698048] (n = 203) (mean = .0788177339901478)
Bin #18: (.0316279062698048,.0334883713444992] (n = 208) (mean = .1057692307692308)
Bin #19: (.0334883713444992,.0353488364191936] (n = 212) (mean = .089622641509434)
Bin #20: (.0353488364191936,.037209301493888] (n = 222) (mean = .1036036036036036)
Bin #21: (.037209301493888,.0390697665685824] (n = 218) (mean = .1192660550458716)
Bin #22: (.0390697665685824,.0409302316432768] (n = 111) (mean = .1081081081081081)
Bin #23: (.0409302316432768,.0427906967179712] (n = 280) (mean = .1142857142857143)
Bin #24: (.0427906967179712,.0446511617926656] (n = 297) (mean = .1346801346801347)
Bin #25: (.0446511617926656,.04651162686736] (n = 309) (mean = .1488673139158576)
Bin #26: (.04651162686736,.0483720919420544] (n = 365) (mean = .1150684931506849)
Bin #27: (.0483720919420544,.0502325570167488] (n = 379) (mean = .1266490765171504)
Bin #28: (.0502325570167488,.0520930220914432] (n = 452) (mean = .1194690265486726)
Bin #29: (.0520930220914432,.0539534871661376] (n = 222) (mean = .1171171171171171)
Bin #30: (.0539534871661376,.055813952240832] (n = 503) (mean = .1272365805168986)
Bin #31: (.055813952240832,.0576744173155264] (n = 576) (mean = .1145833333333333)
Bin #32: (.0576744173155264,.0595348823902208] (n = 648) (mean = .1080246913580247)
Bin #33: (.0595348823902208,.0613953474649152] (n = 786) (mean = .1272264631043257)
Bin #34: (.0613953474649152,.0632558125396096] (n = 908) (mean = .1156387665198238)
Bin #35: (.0632558125396096,.065116277614304] (n = 935) (mean = .1165775401069519)
Bin #36: (.065116277614304,.0669767426889984] (n = 508) (mean = .1181102362204724)
Bin #37: (.0669767426889984,.0688372077636928] (n = 1124) (mean =
.1245551601423488)
Bin #38: (.0688372077636928,.0706976728383872] (n = 1276) (mean =

.1175548589341693)
Bin #39: (.0706976728383872,.0725581379130816] (n = 1421) (mean =
.1147079521463758)
Bin #40: (.0725581379130816,.074418602987776] (n = 1534) (mean = .1160365058670144)
Bin #41: (.074418602987776,.0762790680624704] (n = 1661) (mean = .1149909692956051)
Bin #42: (.0762790680624704,.0781395331371648] (n = 1759) (mean =
.1182490051165435)
Bin #43: (.0781395331371648,.0799999982118607] (n = 1882) (mean =
.1121147715196599)
Bin #1: [.08,.0813800000786781] (n = 979) (mean = .0990806945863126)
Bin #2: (.0813800000786781,.0827600001573562] (n = 1099) (mean = .097361237488626)
Bin #3: (.0827600001573562,.0841400002360343] (n = 2134) (mean = .0974695407685098)
Bin #4: (.0841400002360343,.0855200003147124] (n = 1053) (mean = .1016144349477683)
Bin #5: (.0855200003147124,.0869000003933905] (n = 1084) (mean = .0839483394833948)
Bin #6: (.0869000003933905,.0882800004720686] (n = 2383) (mean = .0973562736047)
Bin #7: (.0882800004720686,.0896600005507467] (n = 1270) (mean = .1)
Bin #8: (.0896600005507467,.0910400006294248] (n = 2463) (mean = .096630125862769)
Bin #9: (.0910400006294248,.0924200007081029] (n = 1265) (mean = .0996047430830039)
Bin #10: (.0924200007081029,.093800000786781] (n = 1325) (mean = .100377358490566)
Bin #11: (.093800000786781,.0951800008654591] (n = 2621) (mean = .1041587180465471)
Bin #12: (.0951800008654591,.0965600009441372] (n = 1327) (mean =
.0972117558402412)
Bin #13: (.0965600009441372,.0979400010228153] (n = 1325) (mean =
.0867924528301887)
Bin #14: (.0979400010228153,.0993200011014934] (n = 2839) (mean =
.1039098274040155)
Bin #15: (.0993200011014934,.1007000011801715] (n = 1388) (mean =
.0965417867435159)
Bin #16: (.1007000011801715,.1020800012588496] (n = 2912) (mean =
.1061126373626374)
Bin #17: (.1020800012588496,.1034600013375277] (n = 1479) (mean =
.1041244083840433)
Bin #18: (.1034600013375277,.1048400014162058] (n = 1520) (mean =
.1006578947368421)
Bin #19: (.1048400014162058,.1062200014948839] (n = 3005) (mean = .097171381031614)
Bin #20: (.1062200014948839,.107600001573562] (n = 1447) (mean = .0912232204561161)
Bin #21: (.107600001573562,.1089800016522401] (n = 1506) (mean = .1049136786188579)
Bin #22: (.1089800016522401,.1103600017309182] (n = 3025) (mean =
.1067768595041322)
Bin #23: (.1103600017309182,.1117400018095963] (n = 1564) (mean =
.0978260869565217)
Bin #24: (.1117400018095963,.1131200018882744] (n = 3139) (mean =
.0974832749283211)
Bin #25: (.1131200018882744,.1145000019669525] (n = 1501) (mean =
.1012658227848101)
Bin #26: (.1145000019669525,.1158800020456306] (n = 1620) (mean =
.1203703703703704)
Bin #27: (.1158800020456306,.1172600021243087] (n = 3097) (mean =
.1168873103002906)
Bin #28: (.1172600021243087,.1186400022029868] (n = 1550) (mean = .112258064516129)

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Bin #29: (.1186400022029868,.1200200022816649] (n = 3135) (mean =
.1129186602870813)
Bin #30: (.1200200022816649,.121400002360343] (n = 1666) (mean = .1002400960384154)
Bin #31: (.121400002360343,.1227800024390211] (n = 1584) (mean = .1212121212121212)
Bin #32: (.1227800024390211,.1241600025176992] (n = 3225) (mean =
.1032558139534884)
Bin #33: (.1241600025176992,.1255400025963773] (n = 1589) (mean =
.1107614852108244)
Bin #34: (.1255400025963773,.1269200026750554] (n = 1570) (mean =
.1210191082802548)
Bin #35: (.1269200026750554,.1283000027537335] (n = 3210) (mean =
.1087227414330218)
Bin #36: (.1283000027537335,.1296800028324116] (n = 1582) (mean =
.1201011378002529)
Bin #37: (.1296800028324116,.1310600029110897] (n = 3170) (mean =
.1066246056782334)
Bin #38: (.1310600029110897,.1324400029897678] (n = 1639) (mean =
.1086028065893838)
Bin #39: (.1324400029897678,.1338200030684459] (n = 1604) (mean =
.1066084788029925)
Bin #40: (.1338200030684459,.135200003147124] (n = 3268) (mean = .1193390452876377)
Bin #41: (.135200003147124,.1365800032258021] (n = 1637) (mean = .1148442272449603)
Bin #42: (.1365800032258021,.1379600033044802] (n = 1665) (mean =
.1063063063063063)
Bin #43: (.1379600033044802,.1393400033831583] (n = 3161) (mean =
.1142043657070547)
Bin #44: (.1393400033831583,.1407200034618364] (n = 1656) (mean = .126207729468599)
Bin #45: (.1407200034618364,.1421000035405145] (n = 3232) (mean =
.1194306930693069)
Bin #46: (.1421000035405145,.1434800036191926] (n = 1567) (mean =
.1174218251435865)
Bin #47: (.1434800036191926,.1448600036978707] (n = 1609) (mean =
.1180857675574891)
Bin #48: (.1448600036978707,.1462400037765488] (n = 3077) (mean =
.1095222619434514)
Bin #49: (.1462400037765488,.1476200038552269] (n = 1594) (mean =
.1066499372647428)
Bin #50: (.1476200038552269,.1490000039339066] (n = 3272) (mean =
.1271393643031785)
```

```
. log close
```

```
      name:  <unnamed>
       log:  Z:\OneDrive - The University of Texas at Austin\學習小札\2020
UTAustin\2021 Sp_Causal Inference\RDD
>  Replication\RDD_yh23469.log
  log type:  text
 closed on:  18 Feb 2021, 00:52:52
-------------------------------------------------------------------------------
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