

```
2 . * import data
3 . import excel "overconfidence measure.xlsx", ///
             sheet ("overconfidence measure") firstrow
4.
5 . * count overconfident and not overconfident households in the learning set
6 . count if overconfidence == 1
7 . count if overconfidence == 0
    7,506
9 . * generate key variables
10. *** age
11. gen age2 = age^2
12. *** income
13. gen logincome = log(income)
14. gen logincome2 = logincome^2
15. *** financial literacy measure (measured by factor analysis score and normalized)
16. **** factor analysis
17. gen interest_q_c = interest_q == 1
18. gen inflation_q_c = inflation_q == 1
19. gen bond q c = bond q == 1
20. gen mortgage q c = mortgage q == 1
21. gen mutual q c = mutual q == 1
22. factor *q_c, pcf
  (obs=80, 164)
  Factor analysis/correlation
                                                          Number of obs =
                                                                                    80,164
      Method: principal-component factors
                                                          Retained factors =
      Rotation: (unrotated)
                                                          Number of params =
      ______
           Factor | Eigenvalue Difference Proportion Cumulative

      Factor1 | 2.08551
      1.15877
      0.4171
      0.4171

      Factor2 | 0.92674
      0.22666
      0.1853
      0.6025

      Factor3 | 0.70008
      0.00584
      0.1400
      0.7425

      Factor4 | 0.69424
      0.10083
      0.1388
      0.8813

      Factor5 | 0.59341
      0.01187
      1.0000

       Factor5 | 0.59341 . 0.1187 1.0000
```

LR test: independent vs. saturated: chi2(10) = 4.7e+04 Prob>chi2 = 0.0000

Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Uniqueness
interest_q_c   inflation_~c   bond_q_c   mortgage_q_c   mutual_q_c	0.6435   0.7315   0.4972   0.6508   0.6824	0.5859 0.4649 0.7528 0.5765 0.5344

23. predict score
 (regression scoring assumed)

Scoring coefficients (method = regression)

Variable	Factor1
interest_q_c   inflation_~c   bond_q_c   mortgage_q_c   mutual_q_c	0.30857 0.35075 0.23839 0.31204 0.32719

- 24. \*\*\*\* normalization
- 25. summ score

```
Variable | Obs Mean Std. Dev. Min Max score | 80,164 -1.84e-09 1 -2.030406 1.336009
```

26. gen fin\_lit = (score - r(min)) / (r(max) - r(min))

27.

28. \* summary statistics

> [aw=weights], statistics(p10 p50 p90 mean sd N) columns(statistics)

Summary statistics: p10 p50 p90 mean sd count

for variables: retire\_dummy precaution\_dummy fin\_par\_dummy female\_dummy age nonwh

> ite\_dummy ma

> rital\_dummy income high\_school\_dummy college\_dummy fin\_lit overconfidence\_bnb overco
> nfidence\_for

> nfidence\_for

> est overconfidence\_knn overconfidence\_logit overconfidence\_mlp overconfidence\_svm

!	e(p10)	e(p50)	e(p90)	e(mean)	e(sd)	e(count)
retire dummy	0	0	1	.3089863	.4620784	80164
precaution~y	0	Ö	1	.4490168	.497397	80164
fin par du~y	0	0	1	.313935	.4640932	80164
female dummy	0	1	1	.5136688	.4998162	80164
age	20	50	70	46.34164	16.52453	80164
nonwhite d~y	0	0	1	.3500791	.4769974	80164
marital du~y	0	1	1	.5226527	.4994897	80164
income	7500	42500	125000	62054.31	49231.67	80164
high_schoo~y	1	1	1	.9537342	.2100614	80164
college_du~y	0	0	1	.3553699	.4786282	80164
fin_lit	.2138178	.6296108	1	.5800545	.2993637	80164
overconfid~b	.0097383	.187493	.590684	.2468887	.2308618	80164
overconfi~st	.0286683	.2029464	.4551141	.2335589	.1703746	80164
overconfid~n	0	.1546392	.4639175	.2026388	.1999288	80164
overconfi~it	.0018099	.1132302	.7885393	.2639741	.3010764	80164
overconfid~p	.0108795	.1687191	.3531788	.1894704	.1537241	80164
overconfid~m	.0000437	.1333883	.9999974	.3923306	.4262681	80164

```
31. estout using "Output/sum stat.tex", ///
 cells("p10 p50 p90 mean(fmt(a3)) sd(fmt(a3)) count(label(#Obs.))") ///
varlabels(`e(var)') sty(tex) replace
   (output written to Output/sum stat.tex)
33. local household X "age age2 logincome logincome2 female dummy nonwhite dummy marital
     dummy high
   > school dummy college dummy"
35. * baseline regressions with svm
36. *** retirement readiness
37. **** without state dummies
38. logit retire dummy overconfidence svm fin lit `household X' i.year [pw=weights]
                         log pseudolikelihood = -49564.375
log pseudolikelihood = -43077.119
   Iteration 0:
   Iteration 1:
                         log pseudolikelihood = -42834.139
   Iteration 2:
                         log pseudolikelihood = -42832.904
log pseudolikelihood = -42832.904
   Iteration 3:
   Iteration 4:
                                                                                 Number of obs = 80,164
Wald chi2(13) = 7573.09
Prob > chi2 = 0.0000
Pseudo R2 = 0.1358
   Logistic regression
   Log pseudolikelihood = -42832.904
   ______
                                                          Robust
           retire dummy |
                                           Coef. Std. Err.
                                                                                                          [95% Conf. Interval]
                                                                                 z P>|z|

        overconfidence_svm | .816695
        .0361885
        22.57
        0.000
        .7457669
        .8876231

        fin_lit | 1.903958
        .0576561
        33.02
        0.000
        1.790955
        2.016962

        age | .1289217
        .004202
        30.68
        0.000
        .1206859
        .1371575

        age2 | -.0017136
        .0000445
        -38.52
        0.000
        -.0018008
        -.0016264

        logincome | -1.721525
        .2383722
        -7.22
        0.000
        -2.188726
        -1.254324

        logincome2 | .109213
        .0112258
        9.73
        0.000
        .0872109
        .1312152

        female_dummy | -.1376402
        .0200817
        -6.85
        0.000
        -.1769996
        -.0982808

        nonwhite_dummy | .0914407
        .0226265
        4.04
        0.000
        .0470935
        .1357879

        marital_dummy | .000152
        .0229813
        -0.01
        0.995
        -.0451945
        .0448904

        high_school_dummy | .2834624
        .0210729
        13.45
        0.000
        .2421603
        .3247645

   ______
                          year |
                                      .0212984 .0246373 0.86 0.387 -.0269899 .0695866
.0735256 .025168 2.92 0.003 .0241971 .122854
                        2015 | 2018 |
   _cons | 1.193582 1.258919 0.95 0.343 -1.273855 3.661018
39. scalar r2 = e(r2 p)
40. margins, dydx(overconfidence svm fin lit) post
                                                                                Number of obs = 80,164
   Average marginal effects
  Model VCE : Robust
  Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_svm fin_lit
                                                Delta-method
                                         dy/dx Std. Err. z P>|z| [95% Conf. Interval]
```

```
41. outreg2 using "Output/SVM", tex word replace addstat(Pseudo R-squared, r2) ///
   addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
ctitle("Readiness")
                                ctitle("Readiness")
     Output/SVM.tex
     Output/SVM.rtf
     dir : seeout
43. **** with state dummies
44. logit retire_dummy overconfidence_svm fin_lit `household_X' i.year i.state_cate [pw=
     > weights]
     Iteration 0: log pseudolikelihood = -49564.375
Iteration 1: log pseudolikelihood = -43021.121
Iteration 2: log pseudolikelihood = -42774.304
     Iteration 3:
                                              log pseudolikelihood = -42773.022
     Iteration 4: log pseudolikelihood = -42773.022
                                                                                                                                                   Number of obs = 80,164
Wald chi2(63) = 7665.16
Prob > chi2 = 0.0000
Pseudo R2 = 0.1370
     Logistic regression
     Log pseudolikelihood = -42773.022
                                                                                                          Robust
                    retire dummy | Coef. Std. Err.
                                                                                                                                                    z P>|z| [95% Conf. Interval]
    year |
                                            2015 | .0210039 .0246237 0.85 0.394 -.0272576 .0692655
2018 | .0721174 .0251832 2.86 0.004 .0227593 .1214756
                             state cate |

      cate |

      2 |
      .156949
      .0851227
      1.84
      0.065
      -.0098885
      .3237865

      3 |
      -.0878468
      .0897561
      -0.98
      0.328
      -.2637655
      .088072

      4 |
      -.1424664
      .0902189
      -1.58
      0.114
      -.3192922
      .0343593

      5 |
      -.134816
      .085408
      -1.58
      0.114
      -.3022127
      .0325807

      6 |
      -.1029941
      .0861838
      -1.20
      0.232
      -.2719112
      .0659231

      7 |
      -.0666407
      .0874753
      -0.76
      0.446
      -.2380892
      .1048079

      8 |
      -.1575095
      .0869825
      -1.81
      0.070
      -.3279921
      .0129731

      9 |
      .0272461
      .0874748
      0.31
      0.755
      -.1442013
      .1986935

      10 |
      -.1155964
      .0911484
      -1.27
      0.205
      -.294244
      .0630512

      11 |
      .026699
      .0859033
      0.31
      0.756
      -.1416683
      .1950663

      12 |
      -.024613
      .0886361
      -0.28
      0.781
      -.1983367
      .0911225

      14 |
      -.0787

    13 | -.0787176
    .0866547
    -0.91
    0.364
    -.2485577
    .0911225

    14 | -.0748481
    .0845539
    -0.89
    0.376
    -.2405708
    .0908746

    15 | -.1040199
    .0866736
    -1.20
    0.230
    -.2738969
    .0658572

    16 | -.0523651
    .0866898
    -0.60
    0.546
    -.222274
    .1175437

    17 | -.0121392
    .0880243
    -0.14
    0.890
    -.1846636
    .1603852

    18 | -.103553
    .0872747
    -1.19
    0.235
    -.2746083
    .0675023

    19 | -.0389663
    .0865241
    -0.45
    0.652
    -.2085505
    .1306179

    20 | -.0211924
    .0860164
    -0.25
    0.805
    -.1897814
    .1473966

    21 | -.0964227
    .0871644
    -1.11
    0.269
    -.2672618
    .0744164

    22 | -.1874438
    .0893267
    -2.10
    0.036
    -.3625209
    -.0123667

    23 | -.0635689
    .0875257
    -0.73
    0.468
    -.2351161
    .1079783

    24 | -.0846434
    .0866836
    -0.98
    0.329
    -.2545402
    .0852534
```

Log pseudolikelihood = -46959.305

```
_cons | 1.528607 1.261835 1.21 0.226 -.9445441 4.001758
                                                     1.21 0.226 -.9445441 4.001758
45. scalar r2 = e(r2 p)
46. margins, dydx(overconfidence svm fin lit) post
                                                       Number of obs = 80,164
  Average marginal effects
  Model VCE : Robust
  Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_svm fin_lit
                                 Delta-method

'd-- Std Err. z P>|z| [95% Conf. Interval]
                             dy/dx Std. Err.
  _____
  overconfidence_svm | .1470628 .0063708 23.08 0.000 .1345763 .1595493 fin_lit | .3386193 .0099472 34.04 0.000 .3191231 .3581155
47. outreg2 using "Output/SVM", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
ctitle("Readiness")
  Output/SVM.tex
  Output/SVM.rtf
  dir : seeout
49. *** precautionary saving
50. **** without state dummies
51. logit precaution dummy overconfidence svm fin lit `household X' i.year [pw=weights]
 Iteration 0: log pseudolikelihood = -55147.986
Iteration 1: log pseudolikelihood = -47021.181
Iteration 2: log pseudolikelihood = -46959.508
Iteration 3: log pseudolikelihood = -46959.305
Iteration 4: log pseudolikelihood = -46959.305
                                                       Number of obs = 80,164
Wald chi2(13) = 8585.62
Prob > chi2 = 0.0000
Pseudo R2 = 0.1485
  Logistic regression
```

precaution_dummy	Coef.	Robust Std. Err.	z	P> z	[95% Conf.	Interval]		
overconfidence_svm fin_lit age age2 logincome logincome2 female_dummy nonwhite_dummy marital_dummy high_school_dummy college_dummy year 2015 2018	.8158523 1.581582 1187597 .0014338 -2.254087 .1422843 1706091 .0035496 .0333558 .4094395 .351746	.0213744 .0604101 .020296	24.40 30.41 -30.27 34.64 -9.55 12.71 -8.91 0.16 1.56 6.78 17.33	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.872 0.119 0.000 0.000	.7503133 1.479631 1264504 .0013526 -2.716559 .1203487 208135 0395942 0085372 .291038 .3119666	.8813913 1.683533 -1111069 .0015149 -1.791614 .16422 1330832 .0466933 .0752488 .5278411 .3915255		
_cons	7.653026	1.23882	6.18	0.000	5.224983	10.08107		
52. scalar r2 = e(r2_p)  53. margins, dydx(overconfidence_svm fin_lit) post  Average marginal effects Number of obs = 80,164  Model VCE : Robust  Expression : Pr(precaution_dummy), predict() dy/dx w.r.t. : overconfidence svm fin lit								
		Delta-method Std. Err.		P> z	[95% Conf.	Interval]		
overconfidence_svm fin_lit	.1636849 .3173136	.0065689 .0100917	24.92 31.44	0.000	.1508101 .2975342	.1765597		

_												_
0.	verconfidence_svm fin_lit		.163684 .317313	-			24.92 31.44		.1508101 .2975342		.17655	
54.	outreg2 using "O	utput	<b></b> /svm",	tex	word	append	addstat	(Pseudo	R-squared,	r2)	///	

```
addtext (Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
           ctitle("Precaution")
Output/SVM.tex
Output/SVM.rtf
dir : seeout
```

```
55.
56. **** with state dummies
```

57. logit precaution\_dummy overconfidence\_svm fin\_lit `household\_X' i.year i.state\_cate > [pw=weights]

```
log pseudolikelihood = -55147.986
log pseudolikelihood = -46927.598
log pseudolikelihood = -46863.052
Iteration 0:
Iteration 1:
Iteration 2:
                          log pseudolikelihood = -46862.848
log pseudolikelihood = -46862.848
Iteration 3:
Iteration 4:
```

```
Number of obs = 80,164
Wald chi2(63) = 8744.55
Prob > chi2 = 0.0000
Pseudo R2 = 0.1502
Logistic regression
Log pseudolikelihood = -46862.848
```

```
_cons | 7.424866 1.24284 5.97 0.000 4.988943 9.860788
58. scalar r2 = e(r2 p)
59. margins, dydx(overconfidence svm fin lit) post
                                              Number of obs = 80,164
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(precaution dummy), predict()
 dy/dx w.r.t. : overconfidence_svm fin_lit
                              Delta-method
                       dy/dx Std. Err. z P>|z| [95% Conf. Interval]

      overconfidence_svm | fin_lit |
      .1641869 .0065632 .0000 .000 .1513233 .1770505 .318754 .0100938 .31.58 .0.000 .2989705 .3385375

60. outreg2 using "Output/SVM", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
> ctitle("Precaution")
 Output/SVM.tex
 Output/SVM.rtf
 dir : seeout
62. *** financial market participation
63. **** without state dummies
64. logit fin_par_dummy overconfidence_svm fin_lit `household_X' i.year [pw=weights]
              log pseudolikelihood = -49879.082
log pseudolikelihood = -41045.732
log pseudolikelihood = -40561.136
 Iteration 0:
 Iteration 1:
 Iteration 2:
              log pseudolikelihood = -40553.349
log pseudolikelihood = -40553.341
 Iteration 3:
 Iteration 4:
 Iteration 5:
              log pseudolikelihood = -40553.341
                                              Number of obs = 80,164
Wald chi2(13) = 9325.48
Prob > chi2 = 0.0000
P2 = 0.1870
 Logistic regression
 Log pseudolikelihood = -40553.341
 ______
                                  Robust
 fin_par_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 year |
             _cons | 3.371651 1.510611
                                            2.23 0.026
                                                            .4109075 6.332395
```

```
65. scalar r2 = e(r2 p)
66. margins, dydx(overconfidence_svm fin_lit) post
                                                                              Number of obs = 80,164
   Average marginal effects
   Model VCE
                     : Robust
   Expression : Pr(fin_par_dummy), predict()
   dy/dx w.r.t. : overconfidence_svm fin_lit
                                                  Delta-method
                                       dy/dx Std. Err.
                                                                            z P>|z| [95% Conf. Interval]

      overconfidence_svm | fin_lit |
      .1453818 .0064814 .0064814 .0000 .000 .1326785 .1580851 .3743549 .0102025 .36.69 .0000 .3543584 .3943513

67. outreg2 using "Output/SVM", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
> ctitle("Participation")
   Output/SVM.tex
   Output/SVM.rtf
   dir : seeout
68.
69. **** with state dummies
70. logit fin_par_dummy overconfidence_svm fin_lit `household_X' i.year i.state_cate [pw
   Iteration 0:
                          log pseudolikelihood = -49879.082
  Iteration 0: log pseudolikelihood = -49879.082

Iteration 1: log pseudolikelihood = -40928.154

Iteration 2: log pseudolikelihood = -40433.726
   Iteration 3: log pseudolikelihood = -40425.741
Iteration 4: log pseudolikelihood = -40425.733
Iteration 5: log pseudolikelihood = -40425.733
                                                                             Number of obs = 80,164
Wald chi2(63) = 9525.92
Prob > chi2 = 0.0000
Pseudo R2 = 0.1895
   Logistic regression
   Log pseudolikelihood = -40425.733
   fin_par_dummy | Coef. Std. Err.
                                                                              z P>|z|
                                                                                                      [95% Conf. Interval]
  year |
                       2015 | -.2467334 .024898 -9.91 0.000 -.2955327 -.1979342
2018 | -.1788977 .0256589 -6.97 0.000 -.2291881 -.1286072
               state cate |

      cate |
      2 | .2090832 .0916312 2.28 0.023 .0294894 .3886771

      3 | .0185529 .0936498 0.20 0.843 -.1649973 .2021032

      4 | .0570024 .0948774 0.60 0.548 -.1289539 .2429587

      5 | .2980283 .0915758 3.25 0.001 .118543 .4775135

      6 | .1416425 .0946387 1.50 0.134 -.0438459 .3271309

      7 | .2497414 .0919219 2.72 0.007 .0695777 .4299051

      8 | .1605386 .092268 1.74 0.082 -.0203034 .3413805

      9 | .3409827 .0932237 3.66 0.000 .1582675 .5236978

      10 | .2110412 .0953513 2.21 0.027 .024156 .3979264
```

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 31 31 33 33 34 35 36 37 38 40 41 42 43 44 44 45 46 46 46 46 46 46 46 46 46 46 46 46 46	.1514504 .6444628 .0998976 .0999543 0607039 .2057484 .160525 .0115383 .1096258 .13977 .0747308 .1384066 .0371959 .1963038 .0875 .2820159 .1963038 .0875 .2820159 .1490966 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .010499 .0067701 .1936386 .0074211 .1058208 .2429181 .0593955 -0128892 .0426999 .1998548 .176447 .2498825 -0421549	.0943059 .0929305 .0912758 .0881979 .094142 .091451 .0931117 .0939004 .0942158 .093623 .09382 .0934455 .0946514 .0930615 .0954221 .0934734 .0920522 .091387 .0950174 .0920522 .0919221 .0944519 .0897536 .0935235 .0907685 .0936002 .0954697 .09507676 .0952026 .0914345 .09507676 .0952026 .0914345 .09507676 .0952026 .091897 .094073 .0941236 .0941236 .09426 .09426 .09426 .09426 .09426 .09426 .09426 .09426 .094	1.61 6.93 1.09 1.13 -0.64 2.25 1.72 0.12 1.16 1.49 0.80 1.48 0.39 2.11 0.64 0.94 3.06 1.62 0.11 1.38 3.82 -0.00 2.27 1.77 0.39 1.78 1.39 1.79 1.79 1.79 1.79 1.79 1.79 1.79 1.7	0.108 0.000 0.274 0.257 0.519 0.024 0.085 0.902 0.245 0.135 0.426 0.139 0.6935 0.524 0.349 0.002 0.912 0.941 0.0935 0.941 0.0935 0.999 0.0169 0.0999 0.026 0.0697 0.0697 0.0533 0.0653	0333858 .4623224078999807291042452188 .0265077021970517250320750338043727610915304474331483176 .013906612628580957046 .1013216031491917573161736488 .01347460552261 .16738191834681 .027752401757691496960163345053345053386708339051285506 .0650168245989319300414167980173580083390512855060650168245989319300414167980173580083121076933225969	.3362865 .8266032 .2787949 .2728191 .123811 .3849892 .3430206 .1955797 .2942855 .3232676 .2586145 .321556 .2227093 .378701 .2477619 .2707046 .4627103 .3296852 .1967297 .1871892 .3738025 .3150186 .5192096 .1831372 .3835582 .3493289 .2245382 .3493289 .34932
-						
-						
50	.2298824	.0925706	2.48	0.013	.0484474	.4113173
51	.1788317	.0922549	1.94	0.053	0019846	.359648
_cons	2.70012	1.512109	1.79	0.074	2635603	5.6638

71. scalar r2 =  $e(r2_p)$ 

72. margins, dydx(overconfidence\_svm fin\_lit) post

Average marginal effects Model VCE : Robust Number of obs = 80,164

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_svm fin\_lit

		Delta-method				
	dy/dx	Std. Err.	Z	P> z	[95% Conf.	Interval]
overconfidence_svm   fin_lit		.006472	22.90 36.74	0.000	.1355537	.1609235

```
73. outreg2 using "Output/SVM", tex word append addstat(Pseudo R-squared, r2) ///
 addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
ctitle("Participation")
         ctitle("Participation")
 Output/SVM.tex
 Output/SVM.rtf
 dir : seeout
75. * baseline regressions with forest
76. *** retirement readiness
77. **** without state dummies
78. logit retire dummy overconfidence forest fin lit `household X' i.year [pw=weights]
            log pseudolikelihood = -49564.375
log pseudolikelihood = -43215.127
 Iteration 0:
 Iteration 1:
 Iteration 2:
            log pseudolikelihood = -42980.814
             log pseudolikelihood = -42979.726
log pseudolikelihood = -42979.726
 Iteration 3:
                                       Iteration 4:
 Logistic regression
 Log pseudolikelihood = -42979.726
                                       Pseudo R2
                               Robust
        retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 overconfidence_forest | 2.513298 .1380537 18.21 0.000
                                                      2.242718
                                                               2.78387
 > 8
            fin lit | 2.345917 .083484 28.10 0.000
                                                      2.182291 2.50954
 > 3
               age | .1311476 .0041967 31.25 0.000
                                                       .1229223 .139372
 > 9
               age2 | -.0017358 .0000445 -39.04
                                              0.000
                                                      -.001823 -.001648
 > 7
          logincome | -1.603136 .2391316 -6.70
                                              0.000
                                                      -2.071825
                                                               -1.13444
 > 7
                                                       .0819557 .126077
          logincome2 | .1040166 .0112558
                                        9.24
                                              0.000
 > 5
        female dummy | -.1444433 .0200204
                                        -7.21
                                              0.000
                                                      -.1836826
                                                               -.105204
 > 1
      nonwhite dummy | .111174 .022577
                                        4.92
                                              0.000
                                                       .0669239
                                                                 .15542
 > 4
                      .0260629 .0229093 1.14
       marital dummy |
                                              0.255
                                                       -.0188384 .070964
    high school_dummy |
                                        5.36
                                              0.000
                                                       .2244447 .483349
                      .3538971 .0660484
 > 5
                      .2749477 .0210347 13.07 0.000
       college dummy |
                                                       .2337204
                                                                 .316174
 > 9
               year |
              2015 |
                      .0317486 .024593
                                        1.29 0.197 -.0164527 .079949
 > 9
                     .0834438 .0251434
                                        3.32 0.001
                                                                 .13272
              2018
                                                      .0341636
 > 4
              > 7
 ______
```

> 1

```
79. scalar r2 = e(r2 p)
80. margins, dydx(overconfidence forest fin lit) post
                                       Number of obs = 80,164
 Average marginal effects
 Model VCE
          : Robust
 Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_forest fin_lit
 ______
 > -
                             Delta-method
                       dy/dx Std. Err. z P>|z| [95% Conf. Interval
 > ]
 overconfidence_forest | .4519643 .0245658 18.40 0.000
                                                      .4038163
                                                                .500112
            fin lit | .4218643 .0146306 28.83 0.000 .3931889 .450539
 ______
Output/Forest.tex
 Output/Forest.rtf
 dir : seeout
83. **** with state dummies
84. logit retire_dummy overconfidence forest fin lit `household X' i.year i.state cate [
 > pw=weights]
 Iteration 0: log pseudolikelihood = -49564.375
Iteration 1: log pseudolikelihood = -43160.623
Iteration 2: log pseudolikelihood = -42922.761
            log pseudolikelihood = -42921.634
 Iteration 3:
 Iteration 4:
             log pseudolikelihood = -42921.634
                                       Number of obs = 80,164
Wald chi2(63) = 7523.53
Prob > chi2 = 0.0000
Pseudo R2 = 0.1340
 Logistic regression
                                                         0.1340
 Log pseudolikelihood = -42921.634
                                       Pseudo R2
 > -
                               Robust
        retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 > 1
          ______
 overconfidence forest | 2.534455 .1386142 18.28 0.000
                                                     2.262776 2.80613
 > 4
            fin lit | 2.340297 .083715 27.96 0.000
                                                      2.176219 2.50437
 > 6
               age | .1310412 .004201 31.19 0.000
                                                      .1228075 .139274
 > 9
              age2 | -.0017329 .0000445 -38.93
                                              0.000 -.0018202 -.001645
 > 7
          logincome | -1.667528 .2396889 -6.96
                                              0.000
                                                      -2.13731 -1.19774
 > 6
          logincome2 | .1072781 .0112906
                                        9.50
                                              0.000
                                                      .0851489
                                                                .129407
 > 4
        female dummy | -.1525271 .020093 -7.59
                                              0.000 -.1919087 -.113145
       nonwhite_dummy | .1373511 .0242121 5.67 0.000
                                                     .0898963 .184805
 > 8
      marital dummy | .0229803 .0231478 0.99 0.321 -.0223885 .068349
```

	32	1	0298899	.0889998	-0.34	0.737	2043263	.144546
> 5	33	ı	0562447	.0847276	-0.66	0.507	2223078	.109818
> 3	34	ı	0656188	.0876199	-0.75	0.454	2373507	.106113
> 1	35	ı	.1051965	.0860096	1.22	0.221	0633792	.273772
> 2	36	i	052403	.0865994	-0.61	0.545	2221348	.117328
> 7	37		.0067692	.0877697	0.08	0.939	1652562	.178794
> 5	38		.0534743	.0816768	0.65	0.513	1066093	
> 9	39		1567953	.0894405	-1.75	0.080	3320956	
> 5	40		0648148	.0866813	-0.75	0.455	2347069	
> 4								
> 7	41		.0589106		0.68	0.495	1103794	
> 1	42	ı	.1554934		1.82	0.068	0117342	
> 1	43	I	0064975	.0871927	-0.07	0.941	1773921	.164397
> 4	44		2275315	.0844459	-2.69	0.007	3930425	062020
> 5	45	-	.2226191	.0852635	2.61	0.009	.0555057	.389732
> 9	46	1	0150417	.0848248	-0.18	0.859	1812954	.151211
> 8	47	1	.0097155	.086791	0.11	0.911	1603917	.179822
> 6	48	1	0404426	.0819404	-0.49	0.622	2010427	.120157
> 8	49	1	036219	.0872858	-0.41	0.678	207296	.13485
	50	1	.0160538	.0864002	0.19	0.853	1532875	.185395
> 2	51	1	.1358341	.0843964	1.61	0.108	0295798	.301247
> 9		1						
> 4	_cons	ı	.2605829	1.268498	0.21	0.837	-2.225628	2.74679
> -								

85. scalar r2 =  $e(r2_p)$ 

86. margins, dydx(overconfidence\_forest fin\_lit) post

Average marginal effects Number of obs = 80,164 Model VCE : Robust

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_forest fin\_lit

> -							
> ]		dy/dx			P> z	-	Interval
<pre>&gt; - overconfidence &gt; 3</pre>					0.000		.503274
	fin_lit	.4201725	.0146548	28.67	0.000	.3914496	.448895
> -							

```
87. outreg2 using "Output/Forest", tex word append addstat(Pseudo R-squared, r2) ///
> addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
> ctitle("Readiness")
         ctitle("Readiness")
 Output/Forest.tex
 Output/Forest.rtf
 dir : seeout
89. *** precautionary saving
90. ***** without state dummies
91. logit precaution_dummy overconfidence_forest fin_lit `household_X' i.year [pw=weight
              log pseudolikelihood = -55147.986
 Iteration 0:
              log pseudolikelihood = -47229.322
 Iteration 1:
 Iteration 2:
              \log pseudolikelihood = -47177.807
               log pseudolikelihood = -47177.613
log pseudolikelihood = -47177.613
 Iteration 3:
 Iteration 4:
                                             Number of obs = 80,164
Wald chi2(13) = 8523.28
Prob > chi2 = 0.0000
 Logistic regression
                                            Prob > chi2
                                                                 0.0000
0.1445
 Log pseudolikelihood = -47177.613
                                            Pseudo R2
                                                            =
                                   Robust
     precaution dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
      ______
 overconfidence_forest | 2.343607 .1341338 17.47 0.000
                                                              2.08071 2.60650
              fin_lit | 1.934716 .0785121 24.64 0.000
                                                            1.780835 2.08859
 > 7
                 age | -.1162048 .0039052 -29.76 0.000 -.1238589 -.108550
 > 7
                                                    0.000
                age2 | .0014082 .0000412
                                             34.18
                                                             .0013275 .001488
 > 9
           logincome | -2.1534 .2362137 -9.12
                                                    0.000
                                                             -2.61637 -1.69042
 > 9
          logincome2 | .137887 .011206 12.30 0.000
                                                             .1159236 .159850
 > 4
         female dummy | -.1779134
                                  .0191071
                                             -9.31
                                                    0.000
                                                             -.2153626 -.140464
 > 2
       nonwhite dummy | .0249162 .0219686
                                             1.13
                                                    0.257
                                                             -.0181415 .067973
 > 8
                         .0577233 .0212866 2.71
                                                             .0160024 .099444
        marital dummy |
                                                    0.007
                                             7.33
     high school_dummy |
                         .440866 .060151
                                                    0.000
                                                             .3229723 .558759
                         .342259 .0202919 16.87 0.000
                                                              .3024876 .382030
        college_dummy |
 > 3
                 year |
                2015 |
                         .1999625 .0233471
                                             8.56 0.000
                                                             .1542031
                                                                         .24572
 > 2
                         .2996423 .0238416 12.57 0.000
                                                             .2529136
                2018 I
                                                                         .34637
 > 1
               _cons | 6.55009 1.240861 5.28 0.000 4.118046 8.98213
 > 3
  ______
```

```
92. scalar r2 = e(r2 p)
93. margins, dydx(overconfidence forest fin lit) post
 Average marginal effects
                                            Number of obs = 80,164
 Model VCE
            : Robust
 Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_forest fin_lit
 > -
                                Delta-method
                          dy/dx Std. Err. z P>|z| [95% Conf. Interval
 > ]
  _______
 overconfidence_forest | .4728167 .0267893 17.65 0.000
                                                             .4203105
                                                                        .525322
              fin lit | .390324 .01552 25.15 0.000 .3599054 .420742
 > 5
  ______
94. outreg2 using "Output/Forest", tex word append addstat(Pseudo R-squared, r2) ///
> addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
> ctitle("Precaution")
          ctitle("Precaution")
 Output/Forest.tex
 Output/Forest.rtf
 dir : seeout
96. **** with state dummies
97. logit precaution dummy overconfidence forest fin lit `household X' i.year i.state ca
 > te [pw=weigh
 > ts]
               log pseudolikelihood = -55147.986
 Iteration 0:
             log pseudolikelihood = -47146.567
 Iteration 1:
 Iteration 2:
              log pseudolikelihood = -47093.111
              log pseudolikelihood = -47092.914
log pseudolikelihood = -47092.914
 Iteration 3:
 Iteration 4:
                                            Number of obs = 80,164
Wald chi2(63) = 8673.93
Prob > chi2 = 0.0000
Pseudo R2 = 0.1461
 Logistic regression
 Log pseudolikelihood = -47092.914
                                                                 0.1461
                                                            =
                                            Pseudo R2
  _____
                                   Robust
     precaution_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 > -
 overconfidence_forest | 2.314882 .1345342 17.21 0.000
                                                              2.0512 2.57856
 > 4
              fin lit | 1.92505 .0785985 24.49 0.000
                                                               1.771
                                                                       2.07910
 > 1
                 age | -.1163228 .0039113 -29.74 0.000 -.1239888 -.108656
                                                   0.000
                age2 | .0014073 .0000413 34.10
                                                             .0013264
                                                                       .001488
 > 1
            logincome | -2.098385 .2368483 -8.86
                                                            -2.562599 -1.63417
                                                   0.000
 > 1
           logincome2 | .1351617 .0112448 12.02
                                                   0.000
                                                             .1131222 .157201
 > 2
          female_dummy | -.1764312 .0191517 -9.21 0.000
                                                            -.2139679 -.138894
 > 4
       nonwhite dummy | -.0136752 .0233935 -0.58 0.559
                                                            -.0595257 .032175
 > 3
```

2.99 0.003

.0222093 .106461

marital dummy | .0643355 .0214934

> 7								
	32		0824219	.0853918	-0.97	0.334	2497867	.084942
> 9	33	1	.1367393	.0826014	1.66	0.098	0251565	.298635
> 1	34	1	.0081351	.08443	0.10	0.923	1573446	.173614
> 8	35	1	.1048357	.0835215	1.26	0.209	0588634	.268534
> 8	36		1013072	.0837449	-1.21	0.226	2654442	.062829
> 8	37		212813	.0846588	-2.51	0.012	3787412	046884
> 7								
> 2	38	1	1248055	.0794294	-1.57	0.116	2804843	.030873
> 4	39	-	0134055	.0837005	-0.16	0.873	1774554	.150644
> 8	40		0415937	.0837569	-0.50	0.619	2057542	.122566
> 9	41	-	0066109	.0837163	-0.08	0.937	1706918	.157469
> 2	42	-	0458596	.0830948	-0.55	0.581	2087225	.117003
> 7	43	-	1804593	.0835865	-2.16	0.031	3442859	016632
	44	1	1038328	.0820967	-1.26	0.206	2647395	.057073
> 8	45	1	0896378	.084407	-1.06	0.288	2550724	.075796
> 8	46	1	2307035	.0829705	-2.78	0.005	3933227	068084
> 2	47	1	2300293	.0845364	-2.72	0.007	3957175	064341
> 1	48		0111845	.0797353	-0.14	0.888	1674628	.145093
> 9	49	'	1508309	.082578	-1.83	0.068	3126808	.011019
> 1		'						
> 4	50	- 1	1611484	.0834269	-1.93	0.053	3246621	.002365
> 5	51		0952803	.0827116	-1.15	0.249	2573921	.066831
	_cons		6.353047	1.244823	5.10	0.000	3.913239	8.79285
> 4	_ 							
> -								

98. scalar r2 =  $e(r2_p)$ 

99. margins, dydx(overconfidence\_forest fin\_lit) post

Average marginal effects Model VCE : Robust Number of obs = 80,164

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_forest fin\_lit

> -		dy/dx	Delta-method Std. Err.	Z	P> z	[95% Conf.	Interval
> - overconfidence > 6	+ e_forest		.0268111	17.38	0.000	.4134232	.518520
> 7	fin_lit	.3875011	.0155052	24.99	0.000	.3571115	.417890
\ _							

```
ctitle("Precaution")
 Output/Forest.tex
 Output/Forest.rtf
 dir : seeout
102 *** financial market participation
103 **** without state dummies
104 logit fin par dummy overconfidence forest fin lit `household X' i.year [pw=weights]
            log pseudolikelihood = -49879.082
log pseudolikelihood = -41146.33
log pseudolikelihood = -40683.933
 Iteration 0:
 Iteration 1:
 Iteration 2:
 Iteration 3:
             log pseudolikelihood = -40676.094
              log pseudolikelihood = -40676.088
log pseudolikelihood = -40676.088
 Iteration 4:
                                         Number of obs = 80,164
Wald chi2(13) = 9423.23
The chi2 = 0.0000
= 0.1845
 Iteration 5:
 Logistic regression
 Log pseudolikelihood = -40676.088
                                         Pseudo R2
 > -
                                 Robust
        fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 _____
 overconfidence_forest | 2.761251 .1434357 19.25 0.000
                                                         2.480122 3.04237
             fin lit | 2.722952 .0892971 30.49 0.000
                                                         2.547933 2.89797
 > 1
                age | -.0766216 .0042805 -17.90 0.000 -.0850113 -.06823
 > 2
               age2 | .0009515 .0000444 21.45
                                                0.000
                                                         .0008646
                                                                    .001038
 > 4
           logincome | -1.706463 .2828075 -6.03
                                                0.000
                                                        -2.260755 -1.1521
 > 7
          logincome2 | .1235255 .0131456
                                          9.40
                                                0.000
                                                         .0977606 .149290
 > 4
        female dummy | -.2626843
                                .0203219 -12.93
                                                0.000
                                                         -.3025145
                                                                   -.22285
 > 4
       nonwhite dummy | -.0637016
                                .0239848 -2.66
                                                0.008
                                                         -.1107109
                                                                  -.016692
 > 2
        marital dummy | -.0094062 .0231455 -0.41
                                                                  .035958
                                                0.684
                                                        -.0547705
                                          8.53
    high school dummy |
                        .70187 .0823012
                                                0.000
                                                         .5405626 .863177
 > 4
        college_dummy | .4244826 .0215361 19.71 0.000
                                                         .3822726 .466692
 > 5
                year |
               2\overline{0}15 | -.2362005 .0248599 -9.50 0.000 -.2849251 -.187475
 > 9
                                                        -.2182083 -.117855
               2018 | -.168032 .0256006
                                          -6.56 0.000
 > 8
              _cons | 1.499968 1.526559 0.98 0.326 -1.492032 4.49196
 > 8
 ______
```

```
105 \text{ scalar } r2 = e(r2 p)
106 margins, dydx(overconfidence forest fin lit) post
  Average marginal effects
                                               Number of obs = 80,164
 Model VCE
            : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_forest fin_lit
  > -
                                   Delta-method
                            dy/dx Std. Err. z P>|z| [95% Conf. Interval
  > ]
  _____
  overconfidence_forest | .4658792 .0239905 19.42 0.000
                                                                  .4188586
                                                                             .512899
               fin lit | .4594174 .0146881 31.28 0.000 .4306293 .488205
  > 5
  ______
107 outreg2 using "Output/Forest", tex word append addstat(Pseudo R-squared, r2) ///
> addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
> ctitle("Participation")
          ctitle("Participation")
 Output/Forest.tex
 Output/Forest.rtf
 dir : seeout
109 **** with state dummies
110 logit fin_par_dummy overconfidence_forest fin_lit `household_X' i.year i.state cate
 > [pw=weights]
 Iteration 0: log pseudolikelihood = -49879.082 Iteration 1: log pseudolikelihood = -41037.585
              log pseudolikelihood = -40568.624
 Iteration 2:
               log pseudolikelihood = -40560.677
  Iteration 3:
              log pseudolikelihood = -40560.669
log pseudolikelihood = -40560.669
  Iteration 4:
  Iteration 5:
                                               Number of obs = 80,164
Wald chi2(63) = 9620.41
Prob > chi2 = 0.0000
Pseudo R2 = 0.1868
 Logistic regression
  Log pseudolikelihood = -40560.669
                                                                =
                                                                      0.1868
                                               Pseudo R2
                                      Robust
         fin_par_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
  > -
  overconfidence forest | 2.794253 .1440588 19.40 0.000
                                                                2.511903 3.07660
  > 3
               fin lit | 2.730436 .0895357
                                                30.50
                                                       0.000
                                                                 2.554949
                                                                            2.90592
  > 3
                  age | -.0769716 .0042904 -17.94
                                                       0.000 -.0853805 -.068562
                 age2 | .0009518 .0000445 21.40
                                                       0.000
                                                                            .001038
                                                                 .0008646
  > 9
            logincome | -1.597484 .2832194 -5.64
                                                                 -2.152584 -1.04238
                                                       0.000
  > 5
            logincome2 | .1177919 .0131745
                                                8.94
                                                       0.000
                                                                 .0919703 .143613
  > 4
          female_dummy | -.269546 .0203971 -13.21 0.000
                                                                -.3095236
                                                                           -.229568
  > 4
       nonwhite dummy | -.1158022 .0257979 -4.49 0.000
                                                                -.1663653 -.065239
  > 2
        marital dummy | .0039938 .0234181 0.17 0.865 -.0419048 .049892
```

> 2								
	32		.1664897	.0942466	1.77	0.077	0182302	.351209
> 6	33		.3216513	.0897237	3.58	0.000	.1457961	.497506
> 6	34	ı	.0304371	.0929482	0.33	0.743	151738	.212612
> 2	35	ı	.216434	.0904802	2.39	0.017	.039096	.39377
> 2	36	i I	.1937158		2.08	0.037	.0112701	.376161
> 4	37	' 	.0907415	.0950189	0.95	0.340	0954921	
> 1		'						
> 4	38	I	.1715765	.0881664	1.95	0.052	0012264	
> 8	39		.1560035	.0933	1.67	0.095		.33886
> 7	40		.1446564	.0915253	1.58	0.114	03473	.324042
> 4	41	-	.1060773	.0949133	1.12	0.264	0799494	.29210
> 7	42	-	.2702388	.0902751	2.99	0.003	.0933029	.447174
> 6	43	1	0309551	.0949792	-0.33	0.744	2171108	.155200
	44	1	.0026372	.0915947	0.03	0.977	1768852	.182159
> 6	45	1	.0564018	.093682	0.60	0.547	1272115	.240015
> 2	46	ı	.2581874	.0928494	2.78	0.005	.0762059	.440168
> 8	47	ı	.1822026	.0935446	1.95	0.051	0011415	.365546
> 7	48	ı	.2744499	.0877805	3.13	0.002	.1024033	.446496
> 5	49		.0233157	.0935835	0.25	0.803	1601046	.206736
> 1	50	'	.2540488		2.76	0.006	.0735199	.434577
> 8		'						
> 3	51	 	.1989135	.0917751	2.17	0.030	.0190377	.378789
	_cons		.8384644	1.528815	0.55	0.583	-2.157957	3.83488
> 6 	_ 							
> -								

111 scalar r2 =  $e(r2_p)$ 

112 margins, dydx(overconfidence\_forest fin\_lit) post

Average marginal effects Number of obs = 80,164

Model VCE : Robust

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_forest fin\_lit

> -		2 .	Delta-method Std. Err.			-	
> - overconfidence > 4						.4227962	
· -	fin_lit	.4591034	.014678	31.28	0.000	.4303351	.487871
> -							

```
113 outreg2 using "Output/Forest", tex word append addstat(Pseudo R-squared, r2) ///

addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///

ctitle("Participation")
           ctitle("Participation")
  Output/Forest.tex
 Output/Forest.rtf
  dir : seeout
115 * baseline regressions with logistic
116 *** retirement readiness
117 **** without state dummies
118 logit retire_dummy overconfidence_logit fin_lit `household_X' i.year [pw=weights]
                 log pseudolikelihood = -49564.375
  Iteration 0:
                log pseudolikelihood = -43121.69
 Iteration 1:
  Iteration 2:
                log pseudolikelihood = -42835.392
  Iteration 3:
                 log pseudolikelihood = -42833.818
  Iteration 4:
                 log pseudolikelihood = -42833.818
                                                     Number of obs = 80,164
Wald chi2(13) = 7181.99
Prob > chi2 = 0.0000
Prod R2 = 0.1358
  Logistic regression
  Log pseudolikelihood = -42833.818
                                         Robust
         retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 vear |
                  2015 | .0272257 .0245598 1.11 0.268 -.0209106 .075362
2018 | .0769086 .0250839 3.07 0.002 .027745 .1260722
  __cons | -.636983 1.277494 -0.50 0.618 -3.140825
                                                                                     1.866859
119 scalar r2 = e(r2 p)
120 margins, dydx (overconfidence logit fin lit) post
                                                     Number of obs = 80,164
  Average marginal effects
 Model VCE : Robust
 Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_logit fin_lit
                                     Delta-method
                                                     z P>|z| [95% Conf. Interval]
                              dy/dx Std. Err.

      overconfidence logit | .3110365
      .0138558
      22.45
      0.000
      .2838796
      .3381934

      fin_lit | .2479829
      .0074147
      33.44
      0.000
      .2334503
      .2625154
```

Log pseudolikelihood = -42782.416

Robust retire dummy | Coef. Std. Err. P>|z| [95% Conf. Interval] Z 
 overconfidence logit | 1.725498
 .0786109
 21.95
 0.000
 1.571424
 1.879573

 fin\_lit | 1.365199
 .0429013
 31.82
 0.000
 1.281114
 1.449284

 age | .1957658
 .0052894
 37.01
 0.000
 .1853987
 .2061329

 age2 | -.0022338
 .0000515
 -43.35
 0.000
 -.0023348
 -.0021328

 logincome | -1.954296
 .2414259
 -8.09
 0.000
 -2.427482
 -1.48111

 logincome2 | .1299021
 .0113942
 11.40
 0.000
 .1075698
 .1522344

 female\_dummy | -.1417161
 .0200577
 -7.07
 0.000
 -.1810284
 -.1024038

 nonwhite\_dummy | .1147134
 .0241766
 4.74
 0.000
 .067328
 .1620987

 marital\_dummy | .0133468
 .0231797
 -0.58
 0.565
 -.0587781
 .0320846

 high\_school\_dummy | .3274136
 .0659818
 4.96
 0.000
 .1980916
 .4567356

 college\_dummy | .2732351
 .0211367
 12.93
 0.000
 .2318078
 .3146623

 2015
 .0269561
 .0245452
 1.10
 0.272
 -.0211516
 .0750639

 2018
 .0755545
 .0251024
 3.01
 0.003
 .0263548
 .1247543
 state cate | .3001341 .1014563 .0362418 .026073 
 9 |
 .018509
 .0873979
 0.21
 0.832
 -.1527878

 10 |
 -.1109199
 .0912043
 -1.22
 0.224
 -.289677

 11 |
 .0407137
 .0859467
 0.47
 0.636
 -.1277386

 12 |
 -.039709
 .0887545
 -0.45
 0.655
 -.2136647

 13 |
 -.1010895
 .0869029
 -1.16
 0.245
 -.2714161

 14 |
 -.0721365
 .0842447
 -0.86
 0.392
 -.237253

 15 |
 -.077298
 .0870599
 -0.89
 0.375
 -.2479323

 16 |
 -.0546412
 .0867365
 -0.63
 0.529
 -.2246415

 17 |
 -.0097546
 .0879706
 -0.11
 0.912
 -.1821738
 .0678372 .209166 .1342466 .0692371 .09298 .0933362 .1153592 -.1821738 .1626647 .0804817 

 18
 -.0908833
 .0874327
 -1.04
 0.299
 -.2622482

 19
 -.0409736
 .0866906
 -0.47
 0.636
 -.2108841

 20
 -.0325703
 .086058
 -0.38
 0.705
 -.2012408

 .128937 .1361002 .1007001 .1802995 

```
    30 | -.0488337
    .086913
    -0.56
    0.574
    -.21918
    .1215126

    31 | -.1828542
    .0884151
    -2.07
    0.039
    -.3561445
    -.0095638

    32 | -.0718896
    .0894651
    -0.80
    0.422
    -.247238
    .1034588

    33 | -.044995
    .0846517
    -0.53
    0.595
    -.2109093
    .1209193

    34 | -.0829751
    .0879526
    -0.94
    0.345
    -.255359
    .0894086

                                                                                                                                                                                                                             .1209193

    34 | -.0829751
    .0879526
    -0.94
    0.345
    -.255359
    .0894088

    35 | .0672303
    .0864065
    0.78
    0.437
    -.1021233
    .236584

    36 | -.0648494
    .0869608
    -0.75
    0.456
    -.2352895
    .1055906

    37 | -.0601035
    .0879531
    -0.68
    0.494
    -.2324884
    .1122814

    38 | .0409087
    .0819329
    0.50
    0.618
    -.1196769
    .2014942

    39 | -.1562914
    .0902433
    -1.73
    0.083
    -.333165
    .0205822

    40 | -.1120783
    .0868546
    -1.29
    0.197
    -.2823101
    .0581535

    41 | .0113337
    .0866577
    0.13
    0.896
    -.1585122
    .1811796

    42 | .123177
    .0857826
    1.44
    0.151
    -.0449539
    .2913079

                                                                                                                                                                                                                        .236584

      41 |
      .0113337
      .0866577
      0.13
      0.896
      -.1585122
      .1811796

      42 |
      .123177
      .0857826
      1.44
      0.151
      -.0449539
      .2913079

      43 |
      -.0178715
      .0875885
      -0.20
      0.838
      -.1895419
      .1537989

      44 |
      -.2406006
      .0848703
      -2.83
      0.005
      -.4069434
      -.0742578

      45 |
      .1960962
      .0851946
      2.30
      0.021
      .0291178
      .3630745

      46 |
      -.0885447
      .0850126
      -1.04
      0.298
      -.2551664
      .0780769

      47 |
      -.0060738
      .0872701
      -0.07
      0.945
      -.1771201
      .1649725

      48 |
      -.0574747
      .0823569
      -0.70
      0.485
      -.2188913
      .1039419

      49 |
      -.0829518
      .0876868
      -0.95
      0.344
      -.2548148
      .0889112

      50 |
      -.0044558
      .0863471
      -0.05
      0.959
      -.173693
      .1647814

      51 |
      .0914695
      .0849787
      1.08
      0.282
      -.0750856
      .2580246

     _cons | -.3097018 1.280505 -0.24 0.809 -2.819445 2.200041
                                                                                                                                                                                                                             2.200041
125 scalar r2 = e(r2 p)
126 margins, dydx(overconfidence logit fin lit) post
                                                                                                                                           Number of obs = 80,164
     Average marginal effects
     Model VCE : Robust
     Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_logit fin_lit
                                                                                                Delta-method
-- Std Err. z P>|z| [95% Conf. Interval]
                                                                              dy/dx Std. Err.
     127 outreg2 using "Output/Logit", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
> ctitle("Readiness")
     Output/Logit.tex
     Output/Logit.rtf
     dir : seeout
129 *** precautionary saving
130 **** without state dummies
131 logit precaution dummy overconfidence logit fin lit `household X' i.year [pw=weights
    Iteration 0: log pseudolikelihood = -55147.986
Iteration 1: log pseudolikelihood = -46830.467
Iteration 2: log pseudolikelihood = -46761.155
                                           log pseudolikelihood = -46760.915
log pseudolikelihood = -46760.915
     Iteration 3:
     Iteration 4:
                                                                                                                                         Number of obs = 80,164
Wald chi2(13) = 8461.95
Prob > chi2 = 0.0000
Pseudo R2 = 0.1521
     Logistic regression
     Log pseudolikelihood = -46760.915
```

Log pseudolikelihood = -46668.704

   precaution_dummy 	Coef.		Z	P> z	[95% Conf.	Interval]
overconfidence_logit   fin_lit   age   age2   logincome   logincome2   female_dummy   nonwhite_dummy   marital_dummy   high_school_dummy   college_dummy	0397724 .0008686 -2.966183 .1872949 1573347 0422377 .019281 .40089	.08165 .0392212 .0048874 .0000462 .2445281 .0117133 .0192023 .0233175 .0215126 .0593955 .0205157	26.77 28.70 -8.14 18.79 -12.13 15.99 -8.19 -1.81 0.90 6.75 17.14	0.000 0.000 0.000 0.000 0.000 0.000 0.070 0.370 0.000	2.025862 1.048581 0493516 .0007779 -3.445449 .1643372 1949705 0879392 0228828 .284477 .311512	2.345924 1.202325 0301932 .0009592 -2.486917 .2102526 1196989 .0034637 .0614449 .517303 .3919322
year   2015   2018	.1980151 .2994421	.0235141	8.42 12.49	0.000	.1519284 .2524582	.2441018
state_cate   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   33   34   35   36   37   38   39   40   41   42   43   44   45   46   47   48   49   50   51   50   51	074176514172930683333 .0478115083189313856051932480646935 .08074460089343 .13097461926282 .0847246196741209871121745016033117203267512335324583470544490926733 .032924721968561871167098836601427711130271113777841161503 .14485830758347054490926733 .0013483071836210654072719468129373300134830758347052720607039711880984112866107147230072862458520164852016782189328517067821893285	.0855991 .0852203 .08439 .0832787 .0845335 .0845335 .0854465 .0835033 .0863744 .086084 .0851796 .0859214 .08414714 .0845492 .0839023 .0835738 .0835738 .0835738 .0835251 .0846539 .0846539 .0846539 .0846539 .0841887 .0832096 .08420734 .0841075 .0847797 .0841352 .08551213 .085851213 .08585127 .0858517 .0836908 .0836908 .0836908 .0836908 .083764	-0.87 -1.66 -0.81 -0.98 -1.62 -2.31 -0.794 -1.52 -2.04 -2.33 -1.18 -2.09 -0.40 -2.77 -2.90 -1.12 -2.61 -1.34 -1.62 -1.37 -1.34 -1.62 -1.37 -1.62	0.386 0.096 0.418 0.566 0.325 0.105 0.021 0.454 0.325 0.105 0.0229 0.0239 0.0239 0.0337 0.696 0.004 0.527 0.263 0.004 0.023 0.023 0.039 0.039 0.039 0.039 0.039 0.039 0.039 0.045 0.040 0.05 0.	24194763087582337346115411824887230603273569114233986208797691758834037428435755770749565362454626315673383033197249419638133990625411753322333412549951132059525601263849167347977726368421804423277929130461312844165016853717353090921947270863143901242861269166369924000912166142233931223393122353181927376592737659273765927376592737659273765927376592737659273765927376592737659273765927376592737659273765927376592734512464449741286771740912352016733445532959816	.0935946 .0252994 .097068 .2110347 .0824934 .0289116 -0295845 .1045993 .2494662 .1580147 .2993775 -0276988 .2444056 -0310278 .0657343 0107 .1310151 0679976 079916 .1144362 .0696486 .1979542 .0701632 -0544544 -0262557 .0660111 .1518881 .0518748 .0290563 .0521159 .3065702 .3065702 .163672 .1587849 .2358672 .0577818 -1048813 .0273802 .1636732 .0883396 .111173 .093137 -0230149 .0480338 .0591569 -1370074 -0788363 .1412726 -0066011 .0310891

```
_cons | 7.910875 1.262738 6.26 0.000 5.435955 10.3858
138 scalar r2 = e(r2 p)
139 margins, dydx (overconfidence logit fin lit) post
                                                                                    Number of obs = 80,164
   Average marginal effects
   Model VCE : Robust
   Expression : Pr(precaution dummy), predict()
   dy/dx w.r.t. : overconfidence_logit fin_lit
                                                           Delta-method
                                                dy/dx Std. Err. z P>|z| [95% Conf. Interval]
   140 outreg2 using "Output/Logit", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
                   ctitle("Precaution")
   Output/Logit.tex
   Output/Logit.rtf
   dir : seeout
142 *** financial market participation
143 **** without state dummies
144 logit fin_par_dummy overconfidence_logit fin_lit `household_X' i.year [pw=weights]
                          log pseudolikelihood = -49879.082
log pseudolikelihood = -40939.209
log pseudolikelihood = -40528.389
   Iteration 0:
   Iteration 1:
   Iteration 2:
                          log pseudolikelihood = -40522.191
   Iteration 3:
                            log pseudolikelihood = -40522.186
   Iteration 4:
   Iteration 5:
                          log pseudolikelihood = -40522.186
                                                                                     Number of obs = 80,164
Wald chi2(13) = 9529.44
Prob > chi2 = 0.0000
P2 = 0.1876
   Logistic regression
   Log pseudolikelihood = -40522.186
                                                                  Robust
             fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence logit | 1.911523
        .0849451
        22.50
        0.000
        1.745034
        2.078012

        fin_lit | 1.629716
        .0446733
        36.48
        0.000
        1.542158
        1.717274

        age | -.0101015
        .0052732
        -1.92
        0.055
        -.0204368
        .0002338

        age2 | .0004635
        .00005
        9.26
        0.000
        .003654
        .0005615

        logincome | -2.239663
        .2881881
        -7.77
        0.000
        -2.804502
        -1.674825

        logincome2 | .1579518
        .0134697
        11.73
        0.000
        .1315516
        .1843519

        female_dummy | -.2531105
        .0203487
        -12.44
        0.000
        -.2929933
        -.2132277

        nonwhite_dummy | -.0839876
        .0239238
        -3.51
        0.000
        -.1308775
        -.0370977

        marital_dummy | -.0494227
        .0231737
        -2.13
        0.033
        -.0948424
        -.0040031

        high_school_dummy | .6684093
        .0816368
        8.19
        0.000
        .508404
        .8284146

        college_dummy | .4328773
        .0215904
        20.05
        0.000
        .390561
        .4751936

                              year |
                             _cons |
                                             2.18397 1.543037
                                                                                     1.42 0.157 -.8403257 5.208266
```

```
145 \text{ scalar } r2 = e(r2 p)
146 margins, dydx(overconfidence_logit fin_lit) post
                                                                                                                   Number of obs = 80,164
    Average marginal effects
    Model VCE
                              : Robust
    Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_logit fin_lit
                                                                                Delta-method
                                                               dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    Output/Logit.tex
    Output/Logit.rtf
    dir : seeout
148
149 **** with state dummies
150 logit fin par dummy overconfidence logit fin lit `household X' i.year i.state cate [
    > pw=weights]
    Iteration 0:
                                      log pseudolikelihood = -49879.082
    Iteration 0: log pseudolikelihood = -49879.082 Iteration 1: log pseudolikelihood = -40828.527
                                    log pseudolikelihood = -40410.78
    Iteration 2:
                                    log pseudolikelihood = -40404.472
log pseudolikelihood = -40404.466
    Iteration 3:
    Iteration 4:
    Iteration 5: log pseudolikelihood = -40404.466
                                                                                                                  Number of obs = 80,164
Wald chi2(63) = 9725.53
Prob > chi2 = 0.0000
Pseudo R2 = 0.1900
    Logistic regression
    Log pseudolikelihood = -40404.466
                                                                                        Robust
                                                                Coef. Std. Err.
                               par_dummy | Coef. Std. Err. z P>|z| [95% Conf. Inter
    fin_par_dummy |
                                                                                                                                                           [95% Conf. Interval]

        overconfidence logit | 1.930738
        .0855775
        22.56
        0.000
        1.763009
        2.098467

        fin_lit | 1.626159
        .0449575
        36.17
        0.000
        1.538044
        1.714274

        age | -.0096953
        .0053027
        -1.83
        0.067
        -.0200883
        .0006977

        age2 | .0004578
        .0000503
        9.11
        0.000
        .0003593
        .0005563

        logincome | -2.123619
        .2886372
        -7.36
        0.000
        -2.689337
        -1.5579

        logincome2 | .1519442
        .0135007
        11.25
        0.000
        .1254834
        .178405

        female_dummy | -.2588235
        .0204246
        -12.67
        0.000
        -.298855
        -.218792

        nonwhite_dummy | -.1379197
        .0257406
        -5.36
        0.000
        -.1883705
        -.087469

        marital_dummy | -.0348451
        .0234475
        -1.49
        0.137
        -.0808014
        .0111111

        high_school_dummy | .664598
        .0819876
        8.11
        0.000
        .5039053
        .8252906

        college_dummy | .4221904
        .0217455
        19.42
        0.000
        .37957
        .4648109

                                          year |
                                       2015 | -.2396286 .0250043 -9.58 0.000 -.2886362 -.190621
2018 | -.1730896 .0257457 -6.72 0.000 -.2235502 -.1226291
                            state cate |

      cate |

      2 | .1791937 .0922435
      1.94 0.052 -.0016003 .3599876

      3 | .0318155 .0938704 0.34 0.735 -.1521672 .2157981

      4 | .0626985 .095254 0.66 0.510 -.123996 .249393

      5 | .2885954 .0915747 3.15 0.002 .1091124 .4680784

      6 | .1668512 .094679 1.76 0.078 -.0187163 .3524187

      7 | .2709419 .0923199 2.93 0.003 .0899982 .4518857

      8 | .1591414 .0925447 1.72 0.086 -.0222429 .3405256

      9 | .3342978 .0933745 3.58 0.000 .1512872 .5173085

      10 | .2160986 .0956469 2.26 0.024 .0286341 .403563

                                                                                                                                                                                    .3599876
```

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 40 41 42 43 44 45 46 46 47 48 48 48 48 48 48 48 48 48 48 48 48 48	.1602028   .6289565   .0777879   .0958377   -0323237   -0323237   .2025899   .1672044   .0209636   .1070784   .1334149   .0954016   .1346549   .0493264   .20771587   .0408463   .0953376   .2637546   .1492178   .017528   -0006478   .2070221   .1248852   .3344386   .0101591   .1770142   .1827133   .0260876   .157762   .156675   .1000377   .0624254   .2378293   -00395229   -0132497   .027419   .1786833   .1642247   .2542746   -0272762   .2389857   .151278	.0943721 .0930651 .0917354 .0881515 .0947685 .0947685 .09416531 .0931886 .0942446 .0942738 .0936023 .0941487 .0935263 .0941487 .0945263 .0941487 .0945552 .093766 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924783 .0924865 .0924865 .0950878 .0910027 .0936154 .0957296 .0887464 .0942464 .09424314 .09424314 .09424314 .09424314 .094273 .0944725 .0936025 .0939352 .0945202 .0925202 .0927131	1.70 6.76 0.85 1.09 -0.34 2.21 1.79 0.22 1.14 1.43 1.01 1.43 2.22 0.43 1.02 2.85 1.61 0.18 -0.01 2.24 1.31 3.71 0.11 1.95 0.27 1.78 1.66 2.62 -0.41 -0.14 0.29 1.74 2.85 1.66 2.62 -0.41 -0.29 1.74 2.85 1.66 2.62 -0.41 -0.29 1.74 2.85 1.66 2.62 -0.41 -0.29 1.74 2.85 1.66 2.62 -0.64 -0.66 2.62 -0.66	0.090 0.000 0.396 0.277 0.733 0.027 0.073 0.824 0.256 0.154 0.311 0.151 0.602 0.0669 0.309 0.004 0.107 0.854 0.025 0.189 0.025 0.189 0.051 0.785 0.075 0.075 0.075 0.075 0.075 0.075 0.096 0.309 0.096 0.309 0.0772 0.010 0.0100 0.0100	0247631 .4465523 1020101 076936 2180665 .0229532 015442 1637525 0776948 0500423 0891265 0493361 1359416 .0245982 1462424 0884404 .0825637 0320362 169408 1824963 .0261439 0614835 .1578405 1729906 0015484 0007695 1615389 0161775 0280446 0807325 1234748 .059717 0280446 0807325 1234748 .059717 029165 .0806168 2113857 .0049603 0209165 .0806168 2113857 .0576495 0304363	.3451687 .8113607 .257586 .2686115 .1534191 .3822266 .3498508 .2056797 .2918517 .3168721 .2799297 .3186458 .2345945 .3897191 .227935 .2791157 .4449454 .3304719 .204464 .1812006 .3879004 .3112538 .5110366 .1933088 .3555767 .3661961 .2137141 .3317014 .3413946 .288078 .2483255 .4159416 .1481295 .1669636 .2119937 .3623269 .3493659 .4279323 .1568334 .4203219 .3329923
_cons	1.489997	1.545258	0.96	0.335	-1.538654	4.518648

151 scalar r2 =  $e(r2_p)$ 

152 margins, dydx(overconfidence\_logit fin\_lit) post

Average marginal effects Model VCE : Robust Number of obs = 80,164

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_logit fin\_lit

	dy/dx	Delta-method Std. Err.		P> z	[95% Conf.	Interval]
overconfidence_logit fin_lit		.0140983 .0072512	22.88 37.47	0.000	.2949404 .2574739	.3502046

```
153 outreg2 using "Output/Logit", tex word append addstat(Pseudo R-squared, r2) ///
  addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) //
ctitle("Participation")
                     ctitle("Participation")
   Output/Logit.tex
   Output/Logit.rtf
   dir : seeout
155 * baseline regressions with Bernoulli NB
156 *** retirement readiness
157 **** without state dummies
158 logit retire_dummy overconfidence bnb fin lit `household X' i.year [pw=weights]
                              log pseudolikelihood = -49564.375
log pseudolikelihood = -43442.257
   Iteration 0:
   Iteration 1:
   Iteration 2:
                              log pseudolikelihood = -43231.037
                              log pseudolikelihood = -43230.28
log pseudolikelihood = -43230.28
   Iteration 3:
   Iteration 4:
                                                                                                Number of obs = 80,164
Wald chi2(13) = 7394.20
Prob > chi2 = 0.0000
Prod R2 = 0.1278
   Logistic regression
   Log pseudolikelihood = -43230.28
                                                                      Robust
             retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_bnb |
        .2302462
        .0830801
        2.77
        0.006
        .0674122
        .3930802

        fin_lit |
        1.04705
        .039953
        26.21
        0.000
        .9687436
        1.125357

        age |
        .1288175
        .0041721
        30.88
        0.000
        .1206403
        .1369946

        age2 |
        -.0017158
        .0000443
        -38.77
        0.000
        -.0018025
        -.001629

        logincome |
        -1.422639
        .237793
        -5.98
        0.000
        -1.888704
        -.9565731

        logincome2 |
        .0956505
        .0111932
        8.55
        0.000
        .0737121
        .1175888

        female_dummy |
        -.1895596
        .0213212
        -8.89
        0.000
        -.2313485
        -.1477707

        nonwhite_dummy |
        .0764263
        .0273375
        2.80
        0.005
        .0228458
        .1300068

        marital_dummy |
        .0480697
        .0242838
        1.98
        0.048
        .0004742
        .0956651

        high_school_dummy |
        .4386485
        .0688203
        6.37
        0.000
        .3037631
        .5735339

        college_dummy |

    year |
                                             .030854 .0245513 1.26 0.209 -.0172656 .0789736
.0739669 .0250563 2.95 0.003 .0248575 .1230762
                             2015
                             2018 |
   _cons | .2298901 1.259799
                                                                                              0.18 0.855 -2.239271
                                                                                                                                                       2.699051
159 scalar r2 = e(r2 p)
160 margins, dydx (overconfidence bnb fin lit) post
                                                                                                 Number of obs = 80,164
   Average marginal effects
   Model VCE : Robust
   Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb fin_lit
                                                                Delta-method
                                                                                               z P>|z| [95% Conf. Interval]
                                                    dy/dx Std. Err.

      overconfidence_bnb | .0416694
      .015043
      2.77
      0.006
      .0121856
      .0711532

      fin_lit | .1894924
      .0070836
      26.75
      0.000
      .1756088
      .203376
```

retire_dummy	Coef.	Std. Err.	z	P> z	[95% Conf.	Interval]
overconfidence_bnb fin_lit age age2 logincome logincome2 female_dummy nonwhite_dummy marital_dummy high_school_dummy college_dummy	3391891 1.043771 1.288863 0017148 -1.469463 .0980823 2089583 .0829981 .0571705 .4576127 .3377758	.091009 .040086 .0041767 .0000443 .2383072 .011226 .02169 .0289757 .0247008 .0692669 .0255087	3.73 26.04 30.86 -38.70 -6.17 8.74 -9.63 2.86 2.31 6.61 13.24	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.004 0.021 0.000	.1608147 .9652042 .1207002 0018017 -1.936536 .0760798 25147 .0262068 .0087578 .3218521 .2877797	.5175635 1.122338 .1370724 001628 -1.002389 .1200847 1664466 .1397894 .1055832 .5933733 .3877719
year 2015 2018	.0299792	.0245361	1.22	0.222	0181107 .0230561	.078069 .1213559
state_cate 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	.1505137   .0884375  0884375  1509443  1769101  0932906  0446552  1537437  002409  1518651   .0337853  0244601  1018248  0830355  0970689  0481063  0277537  093314  0668942  0217222  0901459  1919906  0840397  0888146   .0098004  0893171   .1707574   .0073248  0073248  1900035	.0851812 .0895644 .0897495 .0850082 .086761 .0879138 .0870146 .0872877 .0908559 .0857929 .0896246 .0865961 .0872529 .0877439 .0872529 .0877439 .0872529 .0877439 .0872529 .0877439 .0865961 .0865606 .0861923 .087071 .086887 .0869704 .086887 .085034 .0855207 .0865564 .08859904	1.77 -0.99 -1.68 -2.08 -1.08 -0.51 -1.77 -0.03 -1.67 0.39 -0.27 -1.17 -0.99 -1.12 -0.55 -0.32 -1.07 -0.77 -0.25 -1.04 -2.15 -0.97 -1.02 0.12 -1.04 2.00 0.08 -2.14	0.077 0.323 0.093 0.037 0.282 0.611 0.077 0.978 0.095 0.694 0.785 0.241 0.324 0.262 0.581 0.752 0.285 0.440 0.801 0.301 0.032 0.334 0.307 0.908 0.298 0.098	016438426398053268501343523226333912169633242892173489732993931343656200121127205112481649266794121911891997285264236623654981906562608018367283925449862591115686322576125 .003139816232263644215	.3174657 .0871056 .0249616 -0102971 .0767579 .1276526 .0168017 .1686717 .0262092 .2019362 .1512009 .0684014 .0820939 .0726564 .1229062 .1442211 .0776087 .1027615 .1472115 .0805101 -0166974 .0864192 .0814807 .176464 .0789782 .3383749 .1769723 -0155856

dir : seeout

Logistic regression

Log pseudolikelihood = -47425.061

Number of obs = 80,164 Wald chi2(13) = 8480.14 Prob > chi2 = 0.0000 Pseudo R2 = 0.1400

Logistic regression

Log pseudolikelihood = -47337.53

precaution_dummy	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]		
overconfidence_bnb fin_lit age	1174308 .0014176 -1.951479 .1284339 2232632 0151107 .0845685 .5244841	.003889 .0000411 .2349652 .0111453	-30.20 34.53 -8.31 11.52 -10.96 -0.58 3.72 8.40	0.001 0.000 0.000 0.000 0.000 0.000 0.565 0.000 0.000	.0998997 .6737064 -1250532 .0013371 -2.412002 .1065896 2631992 0665396 .0399602 .4021352 .3486968	.3983765 .8192967 -1098085 .001498 -1.490956 .1502782 -1833272 .0363182 .1291769 .6468329 .4421987		
year 2015 2018		.0233139	8.52 12.19	0.000	.1528459	.2442349		
_cons	6.624745	1.23619	5.36	0.000	4.201857	9.047634		
172 scalar r2 = e(r2_p)  173 margins, dydx(overconfidence_bnb fin_lit) post  Average marginal effects Number of obs = 80,164  Model VCE : Robust  Expression : Pr(precaution_dummy), predict() dy/dx w.r.t. : overconfidence bnb fin lit								
		Delta-method Std. Err.		P>   z	[95% Conf.	Interval]		
overconfidence_bnb fin_lit		.015464	3.27 20.34	0.001	.020263 .1369307	.0808807		
174 outreg2 using "Output/BNB", tex word append addstat(Pseudo R-squared, r2) /// > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) /// > ctitle("Precaution") Output/BNB.tex Output/BNB.rtf dir: seeout								
175 176 ***** with state dummies 177 logit precaution_dummy overconfidence_bnb fin_lit `household_X' i.year i.state_cate > [pw=weights]								
Iteration 1: log programmer log prog	oseudolikeliho oseudolikeliho oseudolikeliho oseudolikeliho oseudolikeliho	pod = -47374 pod = -47337 pod = -47337	.546 '.646 '.531					

Number of obs = 80,164 Wald chi2(63) = 8632.45 Prob > chi2 = 0.0000 Pseudo R2 = 0.1416

precaution dummy	Coef.	Robust Std. Err.	z	P> z	[95% Conf.	Intervall
overconfidence bnb   fin_lit   age   age2   logincome   logincome2   female_dummy   nonwhite_dummy   marital_dummy   high_school_dummy   college_dummy	.1505793 .7410953 117656 .0014178 -1.899005 .1257776 2112606 0347121 .0810686 .5054013 .3767209	.0850133 .0372433 .0038956 .0000411 .2355516 .0111816 .0208179 .0278354 .0231903 .0629482 .0245875	1.77 19.90 -30.20 34.47 -8.06 11.25 -10.15 -1.25 3.50 8.03 15.32	0.077 0.000 0.000 0.000 0.000 0.000 0.000 0.212 0.000 0.000	0160438 .6680998 1252912 .0013372 -2.360677 .1038621 252063 0892685 .0356164 .3820252 .3285302	.3172024 .8140908 1100208 .0014984 -1.437332 .1476932 1704582 .0198442 .1265208 .6287775 .4249115
year   2015   2018	.2009886 .2931278	.0233278	8.62 12.31	0.000	.1552669 .2464627	.2467103
state_cate   2	0836481752394092295 .0054073125207159042519972370992819 .03995870172486 .09823412184013 .06040742304049121044821073930464022056150623727822788816082073512690540080374093747824400714199775411796430476964131788216262911255066 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338027596 .1134338	.0854466 .084926 .0838919 .0855068 .0835761 .0859988 .085829 .0851979 .08685829 .0851979 .086839484 .0816145 .0840142 .0842761 .0836406 .0836406 .083647 .0845633 .0860546 .0837585 .0830969 .0837585 .0830969 .08456668 .0824394 .0856679 .084688 .082731 .0845886 .082731 .0842804 .0856679 .0848371 .0848371 .0848371 .0848871 .0848384	-0.98 -2.06 -1.10 0.07 -1.47 -1.86 -2.39 -1.15 0.47 -0.20 1.13 -2.60 0.47 -1.44 -2.55 -0.65 -0.67 -2.84 -1.40 -1.56 -1.90 -1.47 -0.33 -2.66 -1.90 -1.47 -1.37 -0.366 -1.66 -1.90 -1.665 -1.62 -3.62 -1.665 -1.62 -3.62 -1.665	0.328 0.328 0.039 0.271 0.948 0.141 0.063 0.017 0.248 0.642 0.840 0.258 0.009 0.459 0.005 0.0151 0.012 0.579 0.502 0.005 0.0151 0.0124 0.259 0.001 0.124 0.259 0.001 0.118 0.0574 0.118 0.058 0.141 0.058 0.141 0.058 0.141 0.058 0.098 0.001 0.006 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0	25112033416913256720215652182917635326632836352992678364128263184233307195523829372099554139506962862233742843210334922013349220737528848361722012566147404553360216282871121397422969747330535229329290487158193389410804693031447444011932625732179964265505921461312545551379236637923663126231302249546577094220085220715383858637367663019758	.08382430087874 .0721301 .1673364 .0413496 .00854790359176 .0692727 .2081804 .1497361 .26842340538655 .22036890657401 .04413330471943 .1175304 .107892607192111131405 .0865905 .0346728 .1561261 .069119207558990393346728 .1561261 .06911920755835 .1381974 .2025384811290350422797 .2755835 .1381974 .2188476 .205384811290350155877 .1095536 .0650168113893073130505014840089487 .029135613836830893528091939106107990462964025169

```
_cons | 6.532046 1.240323 5.27 0.000 4.101058 8.963034
178 scalar r2 = e(r2 p)
179 margins, dydx(overconfidence bnb fin lit) post
                                                                                                   Number of obs = 80,164
   Average marginal effects
   Model VCE
                         : Robust
   Expression : Pr(precaution dummy), predict()
   dy/dx w.r.t. : overconfidence_bnb fin_lit
                                                              Delta-method
                                                    dy/dx Std. Err. z P>|z| [95% Conf. Interval]

      overconfidence_bnb | fin_lit |
      .0304946 .0172222 1.77 0.077 -.0032602 .0642494

      20.13 0.000 .1354701 .1646962

180 outreg2 using "Output/BNB", tex word append addstat(Pseudo R-squared, r2) ///
   addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
                      ctitle("Precaution")
   Output/BNB.tex
   Output/BNB.rtf
   dir : seeout
182 *** financial market participation
183 **** without state dummies
184 logit fin_par_dummy overconfidence_bnb fin_lit `household_X' i.year [pw=weights]
   Iteration 0: log pseudolikelihood = -49879.082
Iteration 1: log pseudolikelihood = -41327.413
Iteration 2: log pseudolikelihood = -40932.942
                              log pseudolikelihood = -40926.269
log pseudolikelihood = -40926.266
   Iteration 3:
   Iteration 4:
                                                                                                  Number of obs = 80,164
Wald chi2(13) = 9443.80
Prob > chi2 = 0.0000
Pseudo R2 = 0.1795
   Logistic regression
   Log pseudolikelihood = -40926.266
           | Robust fin_par_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_bnb | -.2989289
        .0941265
        -3.18
        0.001
        -.4834135
        -.1144443

        fin_lit | 1.200872
        .0416762
        28.81
        0.000
        1.119189
        1.282556

        age | -.0798302
        .0042604
        -18.74
        0.000
        -.0881805
        -.0714799

        age2 | .0009799
        .0000442
        22.18
        0.000
        .0008933
        .0010665

        logincome | -1.579352
        .2812412
        -5.62
        0.000
        -2.130575
        -1.02813

        logincome2 | .1173799
        .0130748
        8.98
        0.000
        .0917538
        .1430059

        female_dummy | -.2560624
        .0220394
        -11.62
        0.000
        -.2992588
        -.212866

        nonwhite_dummy | -.0035675
        .0292749
        -0.12
        0.993
        -.069453
        .0538103

        marital_dummy | -.0435942
        .0249292
        -1.75
        0.080
        -.0924546
        .0052662

        high_school_dummy | .3823383
        .0842101
        7.71
        0.000
        .4839351
        .8140325

        college_dummy | .3823383
        .0262672
        14.56
        0.000
        .3308555
        .433821

                               year |
                             2015 | -.2353391 .0248167 -9.48 0.000 -.283979 -.1866991
2018 | -.1755437 .025512 -6.88 0.000 -.2255462 -.1255412
    _cons | 2.609686 1.518599 1.72 0.086 -.3667124 5.586085
                                                                                               1.72 0.086 -.3667124 5.586085
```

```
185 \text{ scalar } r2 = e(r2 p)
186 margins, dydx(overconfidence bnb fin lit) post
                                           Number of obs = 80,164
 Average marginal effects
 Model VCE
           : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb fin_lit
                           Delta-method
                     dy/dx Std. Err.
                                          z P>|z| [95% Conf. Interval]
 187 outreg2 using "Output/BNB", tex word append addstat(Pseudo R-squared, r2) ///
       addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
ctitle("Participation")
 Output/BNB.tex
 Output/BNB.rtf
 dir : seeout
189 **** with state dummies
190 logit fin par dummy overconfidence bnb fin lit `household X' i.year i.state cate [pw
 > =weights]
 Iteration 0:
              log pseudolikelihood = -49879.082
 Iteration 1:
             log pseudolikelihood = -41224.975
             log pseudolikelihood = -40824.275
 Iteration 2:
             log pseudolikelihood = -40817.531
log pseudolikelihood = -40817.527
 Iteration 3:
 Iteration 4:
                                           Number of obs = 80,164
Wald chi2(63) = 9654.63
Prob > chi2 = 0.0000
Pseudo R2 = 0.1817
 Logistic regression
 Log pseudolikelihood = -40817.527
                               Robust
     fin_par_dummy | Coef. Std. Err.
                                           z P>|z| [95% Conf. Interval]
 vear |
             2015 | -.2319397 .0248355 -9.34 0.000 -.2806163 -.1832631
2018 | -.1714866 .0255689 -6.71 0.000 -.2216007 -.1213726
        state_cate |
```

cons | 1.898995 1.520892 1.25 0.212 -1.081899 4.879889

191 scalar  $r2 = e(r2_p)$ 

192 margins, dydx(overconfidence bnb fin lit) post

Average marginal effects Number of obs = 80,164

Model VCE : Robust

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence bnb fin lit

		Delta-method				
1	dy/dx	Std. Err.	Z	P> z	[95% Conf.	<pre>Interval]</pre>
+-						
overconfidence bnb	0452397	.0176551	-2.56	0.010	0798431	0106363
fin <sup>-</sup> lit	.2034012	.0069373	29.32	0.000	.1898043	.2169982

		Delta-method Std. Err.		P> z	[95% Conf.	Interval]
overconfidence_knn   fin_lit	.1794221 .2342434	.0160224 .0081296	11.20 28.81	0.000	.1480189 .2183098	.2108254

```
201 outreg2 using "Output/KNN", tex word replace addstat(Pseudo R-squared, r2) ///
    > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
                            ctitle("Readiness")
     Output/KNN.tex
    Output/KNN.rtf
     dir : seeout
203 **** with state dummies
204 logit retire_dummy overconfidence_knn fin_lit `household_X' i.year i.state_cate [pw=
     > weights]
    Iteration 0: log pseudolikelihood = -49564.375
Iteration 1: log pseudolikelihood = -43314.697
Iteration 2: log pseudolikelihood = -43085.77
     Iteration 3:
                                       log pseudolikelihood = -43084.731
     Iteration 4: log pseudolikelihood = -43084.731
                                                                                                                              Number of obs = 80,164
Wald chi2(63) = 7324.86
Prob > chi2 = 0.0000
Pseudo R2 = 0.1307
     Logistic regression
     Log pseudolikelihood = -43084.731
                                                                                           Robust
                 retire dummy | Coef. Std. Err.
                                                                                                                               z P>|z| [95% Conf. Interval]
   year |
                                      2015 | .0305185 .0244992 1.25 0.213 -.0174991 .0785361
2018 | .0745994 .0250572 2.98 0.003 .0254882 .1237107
                         state cate |
                                                   5
                                              6

    6 | -.122/519
    .086017
    -1.43
    0.154
    -.2913421
    .0458382

    7 | -.0726139
    .0872869
    -0.83
    0.405
    -.2436932
    .0984653

    8 | -.1765732
    .0865889
    -2.04
    0.041
    -.3462843
    -.0068621

    9 | -.0098813
    .087382
    -0.11
    0.910
    -.1811469
    .1613843

    10 | -.1340561
    .0907157
    -1.48
    0.139
    -.3118556
    .0437434

    11 | .0355328
    .085788
    0.41
    0.679
    -.1326085
    .2036741

    12 | -.0732164
    .0881899
    -0.83
    0.406
    -.2460656
    .0996327

    13 | -.1216074
    .0863626
    -1.41
    0.159
    -.2908749
    .0476601

    14 | -.0942653
    .0841431
    -1.12
    0.263
    -.2591827
    .0706522

                                                   -1.12 0.263 -.2591827 .0706522
-1.25 0.210 -.2778772 .0610296
-0.96 0.335 -.2527312 .0860779
                                           14 |
                                           15
                                                                                                                                                                    -.2527312
                                           16
                                                                                                                                                                                                        .129806

      17 | -.041773
      .087542
      -0.48
      0.633
      -.2133521
      .129806

      18 | -.1017863
      .0870844
      -1.17
      0.242
      -.2724685
      .0688959

      19 | -.0492561
      .0864674
      -0.57
      0.569
      -.2187292
      .120217

      20 | -.0439206
      .0856652
      -0.51
      0.608
      -.2118213
      .1239801

      21 | -.1078653
      .086665
      -1.24
      0.213
      -.2777256
      .061995

      22 | -.2136162
      .0888949
      -2.40
      0.016
      -.387847
      -.0393854

      23 | -.0778592
      .087017
      -0.89
      0.371
      -.2484093
      .0926909

      24 | -.103769
      .0864357
      -1.20
      0.230
      -.2731799
      .0656419

      25 | .0112893
      .0851195
      0.13
      0.894
      -.1555419
      .1781204

      26 | -.0956833
      .0858686
      -1.11
      0.265
      -.2639828
      .0726161

      27 | .1418795
      .0849994
      1.67
      0.095
      -.0247161
      .3084752

      28 | -.0201861
      .0859788
      -0.23
      0.814
      -.1887015
      .1483293

      29 | -.207016
      .0888024
      -2.33<
                                           17
```

```
    30 | -.0744861
    .0863134
    -0.86
    0.388
    -.2436572
    .094685

    31 | -.2138915
    .0882345
    -2.42
    0.015
    -.3868279
    -.0409551

    32 | -.084583
    .0891435
    -0.95
    0.343
    -.2593011
    .0901351

    33 | -.0652085
    .0846116
    -0.77
    0.441
    -.2310442
    .1006271

    34 | -.0989124
    .0875638
    -1.13
    0.259
    -.2705343
    .0727094

        34 | -.0989124
        .0875638
        -1.13
        0.259
        -.2705343
        .0727094

        35 | .0497565
        .0859022
        0.58
        0.562
        -.1186088
        .2181218

        36 | -.0925676
        .0866088
        -1.07
        0.285
        -.2623177
        .0771824

        37 | -.0706753
        .0875852
        -0.81
        0.420
        -.2423391
        .1009885

        38 | .0051183
        .0815238
        0.06
        0.950
        -.1546653
        .164902

        39 | -.1932659
        .0895604
        -2.16
        0.031
        -.3688011
        -.0177307

        40 | -.1391013
        .0864436
        -1.61
        0.108
        -.3085277
        .0303252

        41 | .004571
        .0864541
        0.05
        0.958
        -.164876
        .174018

        42 | .0969706
        .0852777
        1.14
        0.255
        -.0701706
        .2641118

        43 | -.0383545
        .0871569
        -0.44
        0.660
        -.2091789
        .13247

        44 | -.2670304
        .0844052
        -3.16
        0.002
        -.4324615
        -.1015992

        45 | .164233
        .085212
        1.93
        0.054
        <td

    49 | -.1122228
    .0870042
    -1.29
    0.197
    -.2827479
    .0583023

    50 | -.0365512
    .0860057
    -0.42
    0.671
    -.2051193
    .132017

    51 | .076193
    .0845306
    0.90
    0.367
    -.0894839
    .2418698

    __cons | 1.544486 1.27572 1.21 0.226 -.9558792 4.044851
                                                                                                                 1.21 0.226 -.9558792 4.044851
205 \text{ scalar r2} = e(r2 p)
206 margins, dydx(overconfidence knn fin lit) post
                                                                                                                     Number of obs = 80,164
    Average marginal effects
    Model VCE : Robust
    Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_knn fin_lit
                                                                     Delta-method

Std Err. z P>|z| [95% Conf. Interval]
                                                              dy/dx Std. Err.
    _____
    207 outreg2 using "Output/KNN", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
ctitle("Readiness")
    Output/KNN.tex
    Output/KNN.rtf
    dir : seeout
209 *** precautionary saving
210 **** without state dummies
211 logit precaution dummy overconfidence knn fin lit `household X' i.year [pw=weights]
                                   log pseudolikelihood = -55147.986
log pseudolikelihood = -47379.921
log pseudolikelihood = -47336.892
log pseudolikelihood = -47336.748
log pseudolikelihood = -47336.748
    Iteration 0:
    Iteration 1:
    Iteration 2:
    Iteration 3:
    Iteration 4:
                                                                                                                    Number of obs = 80,164
Wald chi2(13) = 8310.70
Prob > chi2 = 0.0000
Pseudo R2 = 0.1416
    Logistic regression
    Log pseudolikelihood = -47336.748
```

Log pseudolikelihood = -47243.956

   precaution dummy	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Intervall
+						
overconfidence_knn   fin lit	.9296792 .9731724	.0843411 .0424229	11.02 22.94	0.000	.7643736 .8900251	1.094985 1.05632
age		.0041032	-25.84	0.000	1140547	0979706
age2		.0000421	31.93	0.000	.0012626	.0014277
logincome		.2388437	-9.57	0.000	-2.754606	-1.818356
logincome2		.011366	12.97	0.000	.1251173	.1696711
female_dummy   nonwhite dummy		.0191029 .023288	-9.83 -0.66	0.000 0.506	2252972 0611148	1504151 .0301726
marital dummy		.0213926	2.99	0.003	.0220045	.1058619
high_school_dummy		.0598807	7.64	0.000	.3403257	.5750537
college_dummy	.3468908	.0203779	17.02	0.000	.3069508	.3868308
year						
2015   2018	.2006809 .2954167	.0233425	8.60 12.40	0.000	.1549304 .2487238	.2464314
2010	.2934107	.0230233	12.40	0.000	.2407230	.3421090
state_cate   2	0992744	.0848858	-1.17	0.242	2656476	.0670987
3	1754445	.0847696	-2.07	0.038	3415898	0092991
4	1003089	.0836448	-1.20	0.230	2642496	.0636318
5	.010843	.0828049	0.13	0.896	1514517	.1731377
6 I 7 I	1389924 170272	.0843996 .0851012	-1.65 -2.00	0.100 0.045	3044127 3370672	.0264279
8	2074234	.0831795	-2.49	0.043	3704522	0443946
9	1040088	.0860761	-1.21	0.227	2727148	.0646973
10		.0858636	0.56	0.575	120096	.2164832
11   12	0158413 .083493	.0851103 .0854672	-0.19 0.98	0.852 0.329	1826545 0840198	.1509719
13	2233887	.0835559	-2.67	0.008	3871554	0596221
14	.0580351	.0814294	0.71	0.476	1015635	.2176338
15	234191	.0838471	-2.79	0.005	3985282	0698537
16   17	1353902 217992	.0834558 .0831007	-1.62 -2.62	0.105 0.009	2989605 3808663	.0281801 0551176
18	0480088	.0834336	-0.58	0.565	2115356	.115518
19	0477244	.0835214	-0.57	0.568	2114234	.1159745
20   21	2440103 2844583	.0838824 .0843553	-2.91 -3.37	0.004 0.001	4084169 4497916	0796038 119125
22	0878257	.0857379	-1.02	0.306	2558689	.0802176
23	1247585	.0824931	-1.51	0.130	286442	.036925
24	0113894	.0833973	-0.14	0.891	1748451	.1520662
25   26	0923427 2440951	.0831171 .0838919	-1.11 -2.91	0.267 0.004	2552492 4085201	.0705638
27	2106656	.081353	-2.59	0.010	3701146	0512166
28	1286373	.0836693	-1.54	0.124	2926261	.0353514
29	0565002	.0845554	-0.67	0.504	2222258	.1092254
30   31	1427823 1737135	.0833452	-1.71 -2.05	0.087 0.041	3061359 3401839	.0205713
32	1346223	.0852047	-1.58	0.114	3016204	.0323759
33	.122654	.0823627	1.49	0.136	038774	.2840819
34   35	0260266 .0482442	.0846177 .0831694	-0.31 0.58	0.758 0.562	1918743 1147649	.1398211
36	1411934	.0835892	-1.69	0.091	3050253	.0226384
37	2865417	.0844195	-3.39	0.001	4520009	1210825
38	1748641	.0792317	-2.21	0.027	3301554	0195728
39   40	0506489 1116673	.0835561 .0834348	-0.61 -1.34	0.544 0.181	2144158 2751965	.1131181
41	0581386	.0835384	-0.70	0.486	2218709	.1055937
42	1025132	.08286	-1.24	0.216	2649159	.0598895
43   44	2134585 1437171	.0838086 .0820109	-2.55 -1.75	0.011 0.080	3777204 3044556	0491966 .0170214
44   45	143/1/1	.0820109	-1.75 -1.75	0.080	312279	.0173634
46	3149338	.0827475	-3.81	0.000	4771159	1527517
47	2599085	.0848402	-3.06	0.002	4261923	0936248
48   49	0688311 2248615	.0795922 .0821776	-0.86 -2.74	0.387 0.006	2248289 3859265	.0871667
50 I	2155748	.0830934	-2.74 -2.59	0.000	3784349	0527147
51	1538407	.0826109	-1.86	0.063	3157551	.0080736

```
_cons | 7.58657 1.255214 6.04 0.000 5.126395 10.04674
218 scalar r2 = e(r2 p)
219 margins, dydx(overconfidence knn fin lit) post
                                                                                            Number of obs = 80,164
   Average marginal effects
   Model VCE : Robust
   Expression : Pr(precaution dummy), predict()
   dy/dx w.r.t. : overconfidence_knn fin_lit
                                                          Delta-method
                                                dy/dx Std. Err. z P>|z| [95% Conf. Interval]
   overconfidence_knn | .1879053 .0169744 11.07 0.000 .1546361 .2211746
fin_lit | .1966961 .0084266 23.34 0.000 .1801804 .2132119
220 outreg2 using "Output/KNN", tex word append addstat(Pseudo R-squared, r2) ///
   addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
ctitle("Precaution")
   Output/KNN.tex
   Output/KNN.rtf
   dir : seeout
222 *** financial market participation
223 **** without state dummies
224 logit fin_par_dummy overconfidence_knn fin_lit `household_X' i.year [pw=weights]
                            log pseudolikelihood = -49879.082
log pseudolikelihood = -41226.463
log pseudolikelihood = -40806.914
   Iteration 0:
   Iteration 1:
   Iteration 2:
                            log pseudolikelihood = -40799.615
   Iteration 3:
                               log pseudolikelihood = -40799.609
   Iteration 4:
   Iteration 5:
                            log pseudolikelihood = -40799.609
                                                                                           Number of obs = 80,164
Wald chi2(13) = 9209.06
Prob > chi2 = 0.0000
Prob P2 = 0.1820
   Logistic regression
   Log pseudolikelihood = -40799.609
   ______
                                                                   Robust
           fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_knn |
        1.295709
        .0969058
        13.37
        0.000
        1.105777
        1.485641

        fin_lit |
        1.602989
        .0490767
        32.66
        0.000
        1.5068
        1.699177

        age |
        -.0590647
        .0046274
        -12.76
        0.000
        -.0681342
        -.0499953

        age2 |
        .000831
        .0000463
        17.94
        0.000
        .0007402
        .0009218

        logincome |
        -1.787947
        .2874656
        -6.22
        0.000
        -2.351369
        -1.224524

        logincome2 |
        .1320792
        .0133318
        9.91
        0.000
        .1059493
        .1582091

        female_dummy |
        -.2734561
        .0202716
        -13.49
        0.000
        -.3131877
        -.2337246

        nonwhite_dummy |
        -.0679766
        .0238533
        -2.85
        0.004
        -.1147281
        -.0212251

        marital_dummy |
        -.017178
        .0230353
        -0.75
        0.456
        -.0623263
        .0279704

        high_school_dummy |
        .7065413
        .0814922
        8.67
        0.000
        .5468194
        .8662632

        college_dummy |<
                             year |

    2015
    -.2380084
    .024814
    -9.59
    0.000
    -.286643
    -.1893739

    2018
    -.1752209
    .0255347
    -6.86
    0.000
    -.2252679
    -.1251739

                            _cons | 1.919293 1.571448
                                                                                        1.22 0.222 -1.160687 4.999274
```

```
225 scalar r2 = e(r2 p)
226 margins, dydx(overconfidence knn fin lit) post
                                                                                                                                                                       Number of obs = 80,164
      Average marginal effects
      Model VCE
                                            : Robust
      Expression : Pr(fin_par_dummy), predict()
      dy/dx w.r.t. : overconfidence knn fin lit
                                                                                                             Delta-method
                                                                                    dy/dx Std. Err.
                                                                                                                                                                   z P>|z| [95% Conf. Interval]

      overconfidence_knn | fin_lit |
      .2191838 .0162764 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .0080203 .2711637 .0080203 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .2711637 .0080203 .0080203 .0080203 .0080203 .0080200 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .008020 .0080
227 outreg2 using "Output/KNN", tex word append addstat(Pseudo R-squared, r2) ///
      > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
> ctitle("Participation")
      Output/KNN.tex
      Output/KNN.rtf
      dir : seeout
228
229 **** with state dummies
230 logit fin par dummy overconfidence knn fin lit `household X' i.year i.state cate [pw
      > =weights]
      Iteration 0:
                                                        log pseudolikelihood = -49879.082
     Iteration 0: log pseudolikelihood = -49879.082
Iteration 1: log pseudolikelihood = -41119.674
Iteration 2: log pseudolikelihood = -40694.531
      Iteration 3: log pseudolikelihood = -40687.142
Iteration 4: log pseudolikelihood = -40687.135
Iteration 5: log pseudolikelihood = -40687.135
                                                                                                                                                                      Number of obs = 80,164
Wald chi2(63) = 9405.30
Prob > chi2 = 0.0000
Pseudo R2 = 0.1843
      Logistic regression
      Log pseudolikelihood = -40687.135
      fin_par_dummy | Coef. Std. Err.
                                                                                                                                                                        z P>|z|
                                                                                                                                                                                                                           [95% Conf. Interval]

        overconfidence_knn |
        1.29985
        .097153
        13.38
        0.000
        1.109433
        1.490266

        fin_lit |
        1.597228
        .0493081
        32.39
        0.000
        1.500585
        1.69387

        age |
        -.0593289
        .0046388
        -12.79
        0.000
        -.0684208
        -.0502371

        age2 |
        .0008304
        .0000464
        17.88
        0.000
        .0007394
        .0009214

        logincome |
        -1.673075
        .2876776
        -5.82
        0.000
        -2.236913
        -1.109237

        logincome2 |
        .1260622
        .0133523
        9.44
        0.000
        .0998921
        .1522323

        female_dummy |
        -.2794592
        .020345
        -13.74
        0.000
        -.3193346
        -.2395838

        nonwhite_dummy |
        -.1213169
        .0256584
        -4.73
        0.000
        -.1716064
        -.0710274

        marital_dummy |
        -.0027144
        .0233174
        -0.12
        0.907
        -.0484157
        .042987

        high_school_dummy |
        .7026113
        .0818019
        8.59
        0.000
        .5422826
        .86294

        college_dummy |</td
                                                      year |
                                                 2015 | -.2344459 .0248436 -9.44 0.000 -.2831384 -.1857534
2018 | -.1710004 .0255987 -6.68 0.000 -.2211729 -.1208279
                                 state cate |
```

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	.1545148 .5911036 .0574759 .0742219 -0651057 .172731 .1299742 .0096688 .0946894 .1242311 .062687 .1088745 .0236889 .1722289 .0409834 .0751749 .2422964 .1235827 -0146069 -0208632 .1784409 .1137554 .3124032 -00615482 .1543634 .0130417 .1227864 .117294 .0729439 .0533671 .2121535 -0617935 -002809 .1655328 .1472179 .2159114 -0517344	.0945357 .0926016 .0913784 .0881346 .0943889 .0912725 .0927857 .0941677 .0942776 .09351 .093858 .0935044 .0944625 .0931628 .0956962 .0935798 .0919545 .0919545 .0921763 .0921059 .0921763 .0921763 .0921059 .0945069 .0898276 .0933728 .0921763 .0921059 .0934321 .0956962 .0937754 .0937754 .0952911 .0952911 .0952911 .0952911 .0943085 .0937754 .0937754 .0937754 .0937837 .0935837 .0935837 .0935837 .0923367	1.63 6.38 0.84 -0.69 1.89 1.40 0.10 1.03 0.67 1.16 0.25 1.85 0.43 0.80 2.63 1.34 -0.15 -0.23 1.94 1.20 3.48 -0.78 1.65 0.14 1.39 0.56 2.34 -0.69 1.25 0.17 1.25 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.1	0.102 0.000 0.529 0.400 0.490 0.058 0.161 0.918 0.315 0.184 0.244 0.802 0.065 0.668 0.422 0.008 0.179 0.878 0.053 0.229 0.001 0.948 0.075 0.099 0.164 0.210 0.427 0.575 0.019 0.575 0.019 0.058 0.119 0.210 0.0575 0.019 0.058 0.075 0.075 0.019 0.058 0.075 0.019 0.058 0.075 0.019 0.058 0.075 0.019 0.058 0.057 0.059 0.057	0307718 .4096078 1216225 0985186 2501046 0061599 0518824 1748965 090912 0590452 1213257 0743907 1614541 0103668 1465776 1082382 .0619999 0566449 2004471 2015254 0020833 0714747 .1363444 1891489 0160967 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0287601 1736697 0169165 0376233 .0431334 235155 .0218368	.3398015 .7725993 .2365742 .2469625 .1198932 .3516219 .3118309 .1942341 .2794701 .2075074 .2466997 .2921398 .208832 .3548247 .2285444 .258598 .422593 .3038103 .1712333 .159799 .3589651 .2989856 .488462 .1768656 .3391932 .3374869 .1997531 .2957655 .3008847 .2528102 .2398268 .3895972 .1249737 .1417828 .1835154 .3479821 .3320591 .3886894 .1316863 .3837124
51   cons	1.28836	.0922347	1.50	0.134	0425012 -1.792929	.3190521

231 scalar r2 =  $e(r2_p)$ 

232 margins, dydx(overconfidence\_knn fin\_lit) post

Average marginal effects Model VCE : Robust Number of obs = 80,164

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_knn fin\_lit

		Delta-method Std. Err.	z	P> z	[95% Conf.	Interval]
overconfidence_knn   fin_lit	.2191511	.0162631 .0080455	13.48 33.47	0.000	.187276 .2535193	.2510261

```
233 outreg2 using "Output/KNN", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
> ctitle("Participation")
         ctitle("Participation")
 Output/KNN.tex
 Output/KNN.rtf
 dir : seeout
235 * baseline regressions with MLP
236 *** retirement readiness
237 **** without state dummies
238 logit retire_dummy overconfidence mlp fin lit `household X' i.year [pw=weights]
 Iteration 0:
              log pseudolikelihood = -49564.375
             log pseudolikelihood = -43328.437
 Iteration 1:
 Iteration 2:
             log pseudolikelihood = -43117.141
 Iteration 3:
              \log pseudolikelihood = -43116.377
 Iteration 4:
              log pseudolikelihood = -43116.377
                                           Number of obs = 80,164
Wald chi2(13) = 7459.30
Prob > chi2 = 0.0000
Prodo R2 = 0.1301
 Logistic regression
 Log pseudolikelihood = -43116.377
                               Robust
     retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 year |
                    .0317957 .0245824 1.29 0.196 -.0163849 .0799763
.0803577 .0251124 3.20 0.001 .0311383 .1295772
             2015
             2018 |
 _cons | -.3260928 1.267816
                                         -0.26 0.797 -2.810966 2.158781
239 scalar r2 = e(r2 p)
240 margins, dydx(overconfidence mlp fin lit) post
                                           Number of obs = 80,164
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp fin_lit
                            Delta-method
                                          z P>|z| [95% Conf. Interval]
                       dy/dx Std. Err.
```

```
241 outreg2 using "Output/MLP", tex word replace addstat(Pseudo R-squared, r2) ///
   > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
                     ctitle("Readiness")
   Output/MLP.tex
   Output/MLP.rtf
   dir : seeout
243 **** with state dummies
244 logit retire dummy overconfidence mlp fin lit `household X' i.year i.state cate [pw=
   > weights]
   Iteration 0: log pseudolikelihood = -49564.375
Iteration 1: log pseudolikelihood = -43276.686
Iteration 2: log pseudolikelihood = -43062.125
   Iteration 3:
                             log pseudolikelihood = -43061.332
   Iteration 4: log pseudolikelihood = -43061.332
                                                                                               Number of obs = 80,164
Wald chi2(63) = 7548.81
Prob > chi2 = 0.0000
Pseudo R2 = 0.1312
   Logistic regression
   Log pseudolikelihood = -43061.332
                                                                    Robust
             retire dummy | Coef. Std. Err.
                                                                                               z P>|z| [95% Conf. Interval]

        overconfidence_mlp | 1.362958
        .1104679
        12.34
        0.000
        1.146445
        1.579471

        fin_lit | 1.26786
        .0442993
        28.62
        0.000
        1.181035
        1.354685

        age | .125982
        .004188
        30.08
        0.000
        .1177736
        .1341903

        age2 | -.0016986
        .0000444
        -38.27
        0.000
        -.0017856
        -.0016116

        logincome | -1.549357
        .2398775
        -6.46
        0.000
        -2.019508
        -1.079206

        logincome2 | .1085062
        .0113316
        9.58
        0.000
        .0862967
        .1307156

        female_dummy | -.167755
        .020065
        -8.36
        0.000
        -2070818
        -.1284283

        nonwhite_dummy | .1361431
        .0241601
        5.64
        0.000
        .0887901
        .1834961

        marital_dummy | .0189582
        .0231263
        0.82
        0.412
        -.0263684
        .0642849

        high_school_dummy | .3530581
        .0657918
        5.37
        0.000
        .2241086
        .4820075

        college_dummy | .2766053
        .0211689
        13.07
        0.000
        .23551149
        .3180957

                              year |
                            2015 | .0312069 .0245714 1.27 0.204 -.0169521 .0793659
2018 | .0788305 .0251311 3.14 0.002 .0295745 .1280866
                                state cate |
                                       -.2558748 .0742373
                                14
                                                                                                                                                      .0593622
                                15
                                                                                                                            -.279494
                                                                                                                           -.2488456
                                                                                                                                                     .0902539
                                16
                                                                                                                                                     .1287311
                                17
                                                                                                                            -.215227
                                      18
                                19
                                 20
                                 21
                                 22
                                 23
```

```
    30 | -.0753001
    .0864615
    -0.87
    0.384
    -.2447614
    .0941613

    31 | -.2074484
    .0884805
    -2.34
    0.019
    -.380867
    -.0340298

    32 | -.0840857
    .0890884
    -0.94
    0.345
    -.2586957
    .0905243

    33 | -.0691774
    .0848674
    -0.82
    0.415
    -.2355145
    .0971597

    34 | -.1015027
    .0875709
    -1.16
    0.246
    -.2731386
    .0701332

                    _cons | .0266003 1.270696 0.02 0.983 -2.463918 2.517118
                                                          0.02 0.983 -2.463918 2.517118
245 scalar r2 = e(r2 p)
246 margins, dydx(overconfidence mlp fin lit) post
                                                            Number of obs = 80,164
  Average marginal effects
  Model VCE : Robust
  Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp fin_lit
                                   Delta-method

Std Err. z P>|z| [95% Conf. Interval]
                                dy/dx Std. Err.
  ______
  247 outreg2 using "Output/MLP", tex word append addstat(Pseudo R-squared, r2) ///
 addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
             ctitle("Readiness")
  Output/MLP.tex
  Output/MLP.rtf
  dir : seeout
249 *** precautionary saving
250 **** without state dummies
251 logit precaution dummy overconfidence mlp fin lit `household X' i.year [pw=weights]
                  log pseudolikelihood = -55147.986
log pseudolikelihood = -47406.625
log pseudolikelihood = -47367.896
log pseudolikelihood = -47367.769
log pseudolikelihood = -47367.769
  Iteration 0:
  Iteration 1:
  Iteration 2:
  Iteration 3:
  Iteration 4:
                                                            Number of obs = 80,164
Wald chi2(13) = 8432.91
Prob > chi2 = 0.0000
Pseudo R2 = 0.1411
  Logistic regression
  Log pseudolikelihood = -47367.769
```

precaution_dummyoverconfidence_mlp	I						
overconfidence_mlp	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]	
_age age2 logincome	.9003593  1196864   .0014289   -2.024902   .1367543  1942353	.0411129 .0039007 .0000411 .2366421 .0112534	21.90 -30.68 34.78 -8.56 12.15 -10.19	0.000 0.000 0.000 0.000 0.000	.7492259 .8197796 1273317 .0013483 -2.488712 .1146981 2315968 0146206 .0146724 .3308723 .308044	1120411 .0015094 -1.561092 .1588105 1568739 .0712805 .0979234	
year 2015 2018		.0233203	8.56 12.38	0.000	.15382 .2478222	.245234	
_cons	6.391966	1.244496	5.14	0.000	3.952798	8.831134	
252 scalar r2 = e(r2_j	p)						
253 margins, dydx(ove:	rconfidence_m	lp fin_lit) p	ost				
	Average marginal effects Number of obs = 80,164 Model VCE : Robust						
Expression : Pr(p: dy/dx w.r.t. : over	confidence_mlr	ofin_lit 		P> z	 [95% Conf.	Interval]	
overconfidence_mlp fin_lit	+	.0213712 .0082096	9.07 22.23	0.000	.1519676 .166426	.2357412	
254 outreg2 using "Output/MLP", tex word append addstat(Pseudo R-squared, r2) ///  > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///  > ctitle("Precaution")  Output/MLP.tex Output/MLP.rtf dir : seeout  255 256 ***** with state dummies 257 logit precaution_dummy overconfidence_mlp fin_lit `household_X' i.year i.state_cate							
dir: seeout  255 256 ***** with state of		fidence_mlp f	in_lit `	household	_X' i.year i	.state_cate	
dir: seeout  255 256 ***** with state of the		Dod = -55147. Dod = -47316. Dod = -47275 Dod = -47275.	986 211 .43 294	household	_X' i.year i	.state_cate	

precaution_dummy	   Coef. +	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]
overconfidence_mlp	.9502053	.1061808	8.95	0.000	.7420948	1.158316
fin_lit	.9076694	.041278	21.99	0.000	.826766	.9885728
age	1197598	.0039076	-30.65	0.000	1274185	1121011
age2	.0014275   -1.96464	.0000412	34.68 -8.28	0.000	.0013468 -2.429612	.0015081 -1.499668
logincome logincome2	1 .1337379	.0112917	11.84	0.000	.1116066	.1558693
female dummy	1915978	.0191056	-10.03	0.000	2290441	1541516
nonwhite dummy	0123948	.0233318	-0.53	0.595	0581243	.0333347
marital_dummy	.0637862	.0214481	2.97	0.003	.0217486	.1058238
high_school_dummy	.4537332	.0599004	7.57	0.000	.3363306	.5711358
college_dummy	.3472319 	.0204142	17.01	0.000	.3072209	.3872429
year 2015	   .2014329	.0233412	8.63	0.000	.1556851	.2471808
2018	.2977038	.0238324	12.49	0.000	.2509931	.3444145
state_cate						
2	0955102	.0848815	-1.13	0.260	2618748	.0708544
3	1793932 0963294	.0848683 .0838117	-2.11 -1.15	0.035 0.250	3457321 2605974	0130544 .0679386
4 5	.013363	.0828809	0.16	0.230	1490806	.1758066
6	1356018	.084487	-1.61	0.108	3011933	.0299897
7	1685127	.0850865	-1.98	0.048	3352793	0017461
8	2074723	.0831603	-2.49	0.013	3704635	0444812
9	1056861	.08612	-1.23	0.220	2744782 1199319	.063106 .2165667
10 11	.0483174	.0858431 .0853189	0.56 -0.19	0.574 0.851	1832383	.1512058
12	.0821372	.085412	0.96	0.336	0852672	.2495416
13	2233745	.0836155	-2.67	0.008	3872579	0594912
14	.0600448	.0815235	0.74	0.461	0997382	.2198279
15	234339	.0838965	-2.79	0.005	398773	069905
16 17	1328738  2181295	.0835744	-1.59 -2.62	0.112	2966766 3814618	.030929
18	0497362	.0836243	-0.59	0.552	2136368	.1141644
19	0472996	.0836647	-0.57	0.572	2112793	.1166802
20	2450557	.0839172	-2.92	0.003	4095304	0805809
21	2841633	.0844148	-3.37	0.001	4496132	1187134
22 23	0870795  1271088	.0858083 .0825715	-1.01 -1.54	0.310 0.124	2552606 2889459	.0811016
24	0141043	.0835454	-0.17	0.124	1778503	.1496416
25	0896047	.0832223	-1.08	0.282	2527174	.0735081
26	2428726	.0838872	-2.90	0.004	4072884	0784568
27	2075566	.0815182	-2.55	0.011	3673294	0477838
28	1277427	.0836424	-1.53	0.127	2916788 2159854	.0361934
29 30	0499957 1457022	.0846902 .0833661	-0.59 -1.75	0.555 0.081	3090967	.1159941
31	1709412	.0849592	-2.01	0.044	3374582	0044243
32	1358743	.0851637	-1.60	0.111	3027921	.0310436
33	.124333	.0825407	1.51	0.132	0374438	.2861098
34	0267701	.0846393	-0.32	0.752	1926601	.1391199
35 36	.0501238  1395578	.0832053	0.60 -1.67	0.547 0.096	1129556 3037725	.2132033
37	12809234	.0844443	-3.33	0.001	4464311	1154156
38	173214	.079294	-2.18	0.029	3286274	0178007
39	0523889	.0837134	-0.63	0.531	2164641	.1116864
40	1109947	.0835843	-1.33	0.184	2748168	.0528275
41 42	0554196  1015111	.083592 .0829853	-0.66 -1.22	0.507 0.221	2192569 2641593	.1084176
43	1013111  2152012	.0837776	-1.22 -2.57	0.221	3794023	0510001
44	1399833	.0820632	-1.71	0.088	3008242	.0208577
45	1431451	.0842249	-1.70	0.089	3082229	.0219326
46	3104131	.0828294	-3.75	0.000	4727558	1480705
47 48	2574432 0669342	.0848565	-3.03 -0.84	0.002 0.401	4237588 2230519	0911276 .0891834
4 8 4 9	0669342  2245735	.0822436	-0.84 -2.73	0.401	2230519 385768	063379
50	2168823	.0833408	-2.60	0.009	3802273	0535373
51	1499919	.0826314	-1.82	0.069	3119464	.0119626

```
_cons | 6.202866 1.248091 4.97 0.000 3.756653 8.649079
258 scalar r2 = e(r2 p)
259 margins, dydx(overconfidence mlp fin lit) post
                                              Number of obs = 80,164
 Average marginal effects
 Model VCE
           : Robust
 Expression : Pr(precaution dummy), predict()
 dy/dx w.r.t. : overconfidence_mlp fin_lit
                             Delta-method
                        dy/dx Std. Err. z P>|z| [95% Conf. Interval]
 overconfidence_mlp | .1921501 .021426 8.97 0.000 .1501559 .2341443
fin_lit | .1835485 .0082236 22.32 0.000 .1674305 .1996666
260 outreg2 using "Output/MLP", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
          ctitle("Precaution")
 Output/MLP.tex
 Output/MLP.rtf
 dir : seeout
262 *** financial market participation
263 **** without state dummies
264 logit fin_par_dummy overconfidence_mlp fin_lit `household_X' i.year [pw=weights]
             log pseudolikelihood = -49879.082
log pseudolikelihood = -41314.153
log pseudolikelihood = -40915.587
 Iteration 0:
 Iteration 1:
 Iteration 2:
              log pseudolikelihood = -40908.802
log pseudolikelihood = -40908.798
 Iteration 3:
 Iteration 4:
                                             Number of obs = 80,164
Wald chi2(13) = 9464.98
Prob > chi2 = 0.0000
Pseudo R2 = 0.1798
 Logistic regression
 Log pseudolikelihood = -40908.798
     | Robust fin_par_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 year |
             _cons | 1.639994 1.5347 1.07 0.285 -1.367962 4.64795
                                                                        4.64795
```

265 scalar r2 = e(r2 p)266 margins, dydx(overconfidence mlp fin lit) post Number of obs = 80,164 Average marginal effects Model VCE : Robust Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_mlp fin\_lit \_\_\_\_\_\_ Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval] 

 overconfidence\_mlp | fin\_lit |
 .1202316 .0197618 .0197618 .0076438 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .0076480 .007640 267 outreg2 using "Output/MLP", tex word append addstat(Pseudo R-squared, r2) /// > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, No) ///
> ctitle("Participation") Output/MLP.tex Output/MLP.rtf dir : seeout 268 269 \*\*\*\* with state dummies 270 logit fin par dummy overconfidence mlp fin lit `household X' i.year i.state cate [pw > =weights] log pseudolikelihood = -49879.082
log pseudolikelihood = -41208.01 Iteration 0: Iteration 1: log pseudolikelihood = -40803.512 Iteration 2: log pseudolikelihood = -40796.663
log pseudolikelihood = -40796.659 Iteration 3: Iteration 4: Iteration 5: log pseudolikelihood = -40796.659 Number of obs = 80,164 Wald chi2(63) = 9664.07 Prob > chi2 = 0.0000 Pseudo R2 = 0.1821 Logistic regression Log pseudolikelihood = -40796.659fin\_par\_dummy | Robust Coef. Std. Err. z P>|z| [95% Conf. Interval] 

 overconfidence\_mlp | .709135
 .1167704
 6.07
 0.000
 .4802693
 .9380007

 fin\_lit | 1.371151
 .0463532
 29.58
 0.000
 1.280301
 1.462002

 age | -.0806954
 .0042723
 -18.89
 0.000
 -.0890689
 -.0723219

 age2 | .0009783
 .0000443
 22.10
 0.000
 .0008915
 .0010651

 h

agez	.0005705	.0000443	22.10	0.000	.00000113	.0010031
logincome	-1.421828	.2835435	-5.01	0.000	-1.977563	8660933
logincome2	.1130499	.0131757	8.58	0.000	.087226	.1388739
female dummy	2871609	.0203533	-14.11	0.000	3270527	2472692
nonwhite dummy	1129283	.0257314	-4.39	0.000	163361	0624956
marital dummy	.001401	.023384	0.06	0.952	0444307	.0472327
		.0816355	8.65	0.000		.8659055
high_school_dummy	.7059028				.5459	
college_dummy	.4205245	.021664	19.41	0.000	.3780638	.4629852
year						
2015	2323634	.0248367	-9.36	0.000	2810426	1836843
2018	1694494	.0255856	-6.62	0.000	2195964	1193025
state cate	· 					
	.1599581	.0918199	1.74	0.081	0200057	.3399218
3	0077202	.0937768	-0.08	0.934	1915194	.176079
4	.0382758	.0949647	0.40	0.687	1478517	.2244033
5	.2590211	.0915307	2.83	0.005	.0796242	.4384181
6	.1173584	.0944561	1.24	0.214	0677722	.302489
7	.2378936	.0919433	2.59	0.010	.057688	.4180991
8	.1392081	.0921643	1.51	0.131	0414306	.3198468
9	.2972259	.0933325	3.18	0.001	.1142977	.4801542
10	.1858535	.095302	1.95	0.051	000935	.372642
10			,,			

11 12 13 14 16 17 18 19 20 22 22 24 22 26 27 28 29 30 31 32 33 33 33 44 44 44 45 46 47 48 49 49 50 50 50 50 50 50 50 50 50 50 50 50 50	.1506633   .5806084   .0508621   .0700598  0700598  0709388   .1684326   .126713   .0039784   .0896395   .1169729   .0555965   .1025781   .0192715   .160335   .0405155   .0714462   .2394419   .1190539  011836  0282662   .1710607   .1072722   .3146724  0110498   .1586726   .149453   .0161997   .1204663   .1093542   .0674751   .0528511   .2074749  0685632  0388444  0020864   .1635786   .1510387   .2106365   .193849   .193849   .193849   .193849	.0946531 .0924239 .0911806 .0880422 .0944503 .0911997 .0927408 .0942562 .0943758 .0932798 .0938313 .093257 .0944323 .093163 .0957182 .0935243 .0919871 .0919466 .0919861 .0919496 .0919861 .0919861 .0919496 .0943278 .0905007 .0935869 .0950784 .0881481 .093623 .0952425 .0952425 .0904896 .0953087 .0919662 .0938228 .0929612 .0942254 .0881481 .0936828 .0929612 .0942254 .0881481 .0934838 .0923674 .0934838	1.59 6.28 0.56 0.80 -0.75 1.37 0.04 0.95 1.10 0.72 0.76 2.60 -0.31 1.84 -0.12 1.75 1.60 0.17 1.37 0.55 -0.74 -0.74 -0.75 -0.74 -0.75	0.111 0.000 0.577 0.426 0.452 0.065 0.172 0.966 0.342 0.210 0.554 0.271 0.838 0.085 0.672 0.445 0.009 0.195 0.901 0.759 0.063 0.255 0.000 0.110 0.865 0.172 0.243 0.461 0.579 0.022 0.472 0.472 0.673 0.982 0.789 0.078 0.079	0348534 .399460912784851024997256112901031560550556180760409533336065852212830950802022165812302226121470887111857905915050608025197865120855570091572077607 .13818881943394018705403397417015050523007074143511211291338207030118725536492190948185975801862190336396 .03786942415996 .0128121041961	.33618 .761756 .2295728 .2426193 .1141253 .3471807 .3084816 .1887171 .2746126 .2997981 .2395026 .2853584 .2043553 .3429312 .2281198 .2547504 .4197332 .2989102 .1741932 .1520233 .3512786 .2921513 .4911561 .1722398 .3360507 .3328799 .20255 .2932333 .2928518 .2470631 .239523 .3848312 .1182384 .141406 .181803 .3457792 .3357171 .3834035 .1248501 .3748858 .3186103
_cons	.9939862	1.5358	0.65	0.517	-2.016126	4.004099

 $271 \text{ scalar r2} = e(r2_p)$ 

272 margins, dydx(overconfidence\_mlp fin\_lit) post

Number of obs = 80,164 Average marginal effects

Model VCE : Robust

Expression : Pr(fin\_par\_dummy), predict()
dy/dx w.r.t. : overconfidence\_mlp fin\_lit

	Delta-method Std. Err.	z	P> z	[95% Conf.	Interval]
overconfidence_mlp   fin_lit	.0197478 .0076708	6.07 30.22	0.000	.0811933 .2167952	.1586032

```
273 outreg2 using "Output/MLP", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Demo. chars., Yes, Year dummies, Yes, State dummies, Yes) ///
> ctitle("Participation")
          ctitle("Participation")
 Output/MLP.tex
 Output/MLP.rtf
 dir : seeout
275 * generate financial literacy indicators and intersactions
276 summ fin lit, d
                        fin lit
     Percentiles Smallest
       0
  1%
                      0
  5%
                           0
     .2148639
                           0 Obs 80,164
0 Sum of Wgt. 80,164
 10%
 25%
        .4286817
                     50% .6489536
 75% .8434286
 90%
        1
 95%
 99%
277 gen fin low dummy = fin lit == 0
278 gen fin high dummy = fin lit == 1
279
280 local household_X "age age2 logincome logincome2 female_dummy nonwhite_dummy marital
 > dummy high
 > school dummy college dummy"
281 * heterogeneous effects with SVM
282 *** retirement readiness
283 **** without state dummies
284 logit retire dummy overconfidence svm `household X' ///
         i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
 Iteration 0: log pseudolikelihood = -2789.9313 Iteration 1: log pseudolikelihood = -2523.4958
             log pseudolikelihood = -2490.6582
 Iteration 2:
               log pseudolikelihood = -2490.4484
 Iteration 3:
 Iteration 4:
              log pseudolikelihood = -2490.4484
                                            Number of obs = 5,886
Wald chi2(62) = 393.81
Prob > chi2 = 0.0000
Pseudo R2 = 0.1073
 Logistic regression
 Log pseudolikelihood = -2490.4484
                                Robust
      retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 vear |
             state cate |
```

234567891112314151671892122342567289313334536	.145863  5453679  4420412  2597584  5183322  3323804  2194603   .1146066  0234205  5310593   -1.110257   -1.154214  5396608  5184133  5553717  239818   0.214749  6226202  418799  5306773  0569725  1333938  6638552  6914424  8491005  1578985  1578985	.3723517 .4013869 .373313 .3052929 .3762672 .3656087 .3863395 .3535738 .33837102 .5120594 .6614067 .333875 .3929789 .4149019 .3932032 .3648424 .3667435 .3958877 .3712084 .3623179 .3324517 .3712084 .3623179 .3498023 .4439074 .3621703 .4439074 .3621703 .4136073 .3937882 .3937882 .3945167 .3715123 .3954382	0.39 -1.36 -1.18 -0.85 -1.38 -0.91 -0.57 0.32 -0.07 -1.59 -2.17 -1.75 -1.62 -1.32 -1.34 -0.61 -1.70 -1.06 -1.70 -1.98 -2.16 -0.40 -1.72 -1.98 -2.169 -0.41 -0.47 -1.54 -0.27 -0.92 -2.42 -1.80	0.695 0.174 0.236 0.395 0.168 0.363 0.570 0.746 0.945 0.112 0.030 0.106 0.187 0.181 0.542 0.953 0.090 0.290 0.153 0.085 0.088 0.085 0.088 0.085 0.088 0.089 0.153 0.091 0.091 0.683 0.724 0.359 0.105 0.091	5839329 -1.332072 -1.1737218581215 -1.255802 -1.04896976671857838546866393 -1.185119 -2.113875 -2.450547 -1.194044 -1.288638 -1.368564 -1.010482693603 -1.341424 -1.194725 -1.25823276710257849872 -1.418778 -1.377042 -1.6191989517673 -1.6208968578781 -1.004935 -1.1837488796225881575 -1.728528211668 -1.486586	.8756589 .241336 .2896389 .3386048 .2191381 .3841996 .5377512 .8075986 .6397982 .1230007 -1066394 .1421192 .1147222 .2518112 .257821 .5308461 .7365528 .0961839 .3571265 .1968778 .6531576 .5181996 .0910679 0058425 0790034 .6359703 .1191887 .5618032 .6163761 .1406634 .6639991 .3198197 1820428 .6351345 .0635033
	•					
	•					
21	5306773	.3712084	-1.43	0.153	-1.258232	.1968778
	•					
	6914424	.3498023	-1.98	0.048	-1.377042	0058425
	•					
	•					
	•					
37	4106119	.3666774	-1.12	0.263	-1.129286	.3080627
38	55547	.3511891	-1.58	0.114	-1.243788	.132848
39 40	6128855 947349	.3515297 .4091988	-1.74 -2.32	0.081 0.021	-1.301871 -1.749364	.0761001 1453341
41	14968628	.3625426	-1.37	0.021	-1.207433	.2137076
42	2271335	.4223421	-0.54	0.591	-1.054909	.6006418
43 44	1959383 5442095	.3719228 .3234729	-0.53 -1.68	0.598 0.092	9248935 -1.178205	.5330169 .0897858
45	7581171	.4382344	-1.73	0.092	-1.617041	.1008065
46	4738922	.4180492	-1.13	0.257	-1.293254	.3454691
47	0243301	.3372116	-0.07	0.942	6852527	.6365925
48 49	3740306 2882712	.3231456 .3819265	-1.16 -0.75	0.247 0.450	-1.007384 -1.036833	.2593231 .4602909
50	5934886	.4104516	-1.45	0.148	-1.397959	.2109819
51	1518541	.3999344	-0.38	0.704	9357111	.632003
_cons	   3.846737	5.180303	0.74	0.458	-6.30647	13.99994

285 scalar  $r2 = e(r2_p)$ 

286 margins, dydx(overconfidence\_svm) post

Number of obs = 5,886 Average marginal effects

Model VCE : Robust

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_svm

overconfidence\_svm | .0891389 .0173037 5.15 0.000 .0552242 .1230535

```
287 outreg2 using "Output/SVM het", tex word replace addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
   > s, Yes) ///
                   ctitle("Readiness")
   Output/SVM het.tex
   Output/SVM het.rtf
   dir : seeout
289 **** with state dummies
290 logit retire_dummy overconfidence svm `household X' ///
  > i.year i.state_cate if fin_high dummy == 1 [pw=weights]
                         log pseudolikelihood = -7639.91
log pseudolikelihood = -6385.0227
log pseudolikelihood = -6374.7023
   Iteration 0:
   Iteration 1:
   Iteration 2:
                          log pseudolikelihood = -6374.6849
log pseudolikelihood = -6374.6849
   Iteration 3:
   Iteration 4:
                                                                                    Number of obs = 12,539
Wald chi2(62) = 1610.17
Prob > chi2 = 0.0000
Peaudo R2 = 0.1656
   Logistic regression
   Log pseudolikelihood = -6374.6849
                                                             Robust
           retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
  2015 | .0246029 .058949 0.42 0.676 -.090935 .1401409
2018 | .0896111 .0622006 1.44 0.150 -.0322998 .2115221
                 state cate |
                                  -.0323737 .2135637 -0.15 0.880 -.4509508 .3862034

-.1582828 .2259027 -0.70 0.484 -.601044 .2844784

-.5110383 .2309006 -2.21 0.027 -.9635951 -.0584815

-.3919976 .2216957 -1.77 0.077 -.8265131 .042518

-.0985468 .221926 -0.44 0.657 -.5335138 .3364202

-.0419608 .2167452 -0.19 0.846 -.4667736 .382852

-.2908806 .2168102 -1.34 0.180 -.7158207 .1340596

-.0939281 .2244949 -0.42 0.676 -.53393 .3460738

-.4466735 .2529976 -1.77 0.077 -.9425398 .0491927

-.3115312 .2326276 -1.34 0.181 -.7674729 1444104
                               5
                               6
                              7
                              8
                              9
                             10

    10
    -.4400735
    .2529976
    -1.77
    0.077
    -.9425398
    .0491927

    11
    -.3115312
    .2326276
    -1.34
    0.181
    -.7674729
    .1444104

    12
    -.3266794
    .2101846
    -1.55
    0.120
    -.7386336
    .0852748

    13
    -.2721757
    .2194617
    -1.24
    0.215
    -.7023127
    .1579613

    14
    -.0629177
    .2128742
    -0.30
    0.768
    -.4801434
    .354308

    15
    .2609201
    .2258667
    1.16
    0.248
    -.1817706
    .7036108

    16
    -.1077481
    .2197713
    -0.49
    0.624
    -.5384918
    .3229957

    17
    -.1888318
    .2174206
    -.087
    0.325
    -.6140684
    .3232048

                                                                                                              -.5384918
-.6146

    17
    -.1888318
    .2174206
    -0.87
    0.385

    18
    .050718
    .2312318
    0.22
    0.826

    19
    -.0501707
    .2652049
    -0.19
    0.850

                                                                                                                                     .2373048
                                                                                                             -.6149684
                                                                                                                                   .5039239
                                                                                                               -.402488
                                                                                                              -.5699628
                                                                                                                                     .4696214
                             -.2016452
                                                                                                              -.6568315
                                                                                                                                  .2227946
                                                                                                                                     .2948293
                                                                                                              -.5543262
                                                                                                             -.7788546
                                                                                                                                     .1280119
```

```
    30 | -.1856214
    .2100246
    -0.88
    0.377
    -.5972621
    .2260193

    31 | -.3332388
    .2276522
    -1.46
    0.143
    -.779429
    .1129513

    32 | -.5181139
    .2267439
    -2.29
    0.022
    -.9625238
    -.0737039

    33 | -.1040539
    .222812
    -0.47
    0.640
    -.5407575
    .3326497

    34 | -.0888807
    .2241072
    -0.40
    0.692
    -.5281227
    .3503613

    34 | -.0000000/
    .2241072
    -0.40
    0.692
    -.5281227
    .3503613

    35 | .2386663
    .216544
    1.10
    0.270
    -.1857522
    .6630849

    36 | -.1751828
    .2330965
    -0.75
    0.452
    -.6320435
    .2816779

    37 | -.2036641
    .2192717
    -0.93
    0.353
    -.6334287
    .2261006

    38 | -.1067231
    .2104908
    -0.51
    0.612
    -.5192776
    .3058313

    39 | -.1912508
    .2306326
    -0.83
    0.407
    -.6432823
    .2607807

    40 | -.386785
    .2183833
    -1.77
    0.077
    -.8148084
    .0412384

    41 | -.3308056
    .2306397
    -1.43
    0.151
    -.7828511
    .12124

    42 | .0059793
    .2105065
    .0.03
    0.977
    -.4066059
    .4195645

      41 | -.3308056
      .2306397
      -1.43
      0.151
      -.7828511
      .12124

      42 | .0059793
      .2105065
      0.03
      0.977
      -.4066058
      .4185645

      43 | -.1543325
      .2350879
      -0.66
      0.512
      -.6150964
      .3064315

      44 | -.439959
      .2292545
      -1.92
      0.055
      -.8892896
      .0093717

      45 | .1561533
      .2149169
      0.73
      0.467
      -.2650761
      .5773828

      46 | -.2351487
      .2104302
      -1.12
      0.264
      -.6475844
      .177287

      47 | -.3357507
      .2207562
      -1.52
      0.128
      -.7684249
      .0969235

      48 | -.3351389
      .2125064
      -1.58
      0.115
      -.7516438
      .0813661

      49 | .1887294
      .2306981
      0.82
      0.413
      -.2634307
      .6408894

      50 | -.1897932
      .2153226
      -0.88
      0.378
      -.6118177
      .2322313

      51 | .2203659
      .2110356
      1.04
      0.296
      -.1932563
      .633988

    _cons | 1.280345 3.937349 0.33 0.745 -6.436718 8.997407
                                                                                                                0.33 0.745 -6.436718 8.997407
291 scalar r2 = e(r2 p)
292 margins, dydx (overconfidence svm) post
                                                                                                                   Number of obs = 12,539
    Average marginal effects
    Model VCE : Robust
    Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_svm
                                                            Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    ______
    overconfidence svm | 4.571753 8.69171 0.53 0.599 -12.46369 21.60719
    293 outreg2 using "Output/SVM_het", tex word append addstat(Pseudo R-squared, r2) ///
                         addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
    > ctitle("Readiness")
    Output/SVM het.tex
    Output/SVM het.rtf
    dir : seeout
295 *** precautionary saving
296 ***** low true literacy subgroup
297 logit precaution_dummy overconfidence_svm `household X' ///
                        i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                                       log pseudolikelihood = -3717.9486
    Iteration 0:
   Iteration 0: log pseudolikelihood = -3717.9486

Iteration 1: log pseudolikelihood = -3392.2648

Iteration 2: log pseudolikelihood = -3378.3449
                                    log pseudolikelihood = -3378.2828
log pseudolikelihood = -3378.2828
    Iteration 3:
    Iteration 4:
                                                                                                                  Number of obs = 5,886

Wald chi2(62) = 412.46

Prob > chi2 = 0.0000

Pseudo R2 = 0.0914
    Logistic regression
    Log pseudolikelihood = -3378.2828
```

precaution_dummy	Coef.	Robust Std. Err.	Z 	P> z	[95% Conf.	Interval]
overconfidence_svm   age   age2   logincome   logincome2   female_dummy   nonwhite_dummy   marital_dummy   high_school_dummy   college_dummy	.8409267 0962719 .0010887 -1.797202 .1084284 1274553 0363413 .2107295 .4069285 .3840695	.1158745 .0138303 .0001557 .8337212 .0405283 .0769039 .0813041 .0825989 .1391718 .086529	7.26 -6.96 6.99 -2.16 2.68 -1.66 -0.45 2.55 2.92 4.44	0.000 0.000 0.000 0.031 0.007 0.097 0.655 0.011 0.003 0.000	.61381691233787 .0007836 -3.431265 .028994327818421956945 .0488387 .1341568 .2144759	1.068036 0691651 .0013938 1631379 .1878625 .0232736 .1230118 .3726204 .6797002 .5536631
year   2015   2018	.0396936 .071096	.0960226	0.41	0.679 0.447	1485072 1123498	.2278945
state_cate   2   3   4   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32   24   25   26   27   28   29   30   31   32   33   34   35   36   37   38   39   40   41   42   43   44   45   46   47   48   49   50   51   50   51	.19626232786184498628422694390563589400542098080555609430165537882193478092229742105877889915475670313081862767767319374658101728435813585509737241230123434042341550323 -1.12353511693874841083 .1749273136380323520180712045 .386535520912978710222315594174467065890007237469714912797520186237469714912797734127559799347626697722544476266977225444762669772254447626697722544	.3404072 .3193811 .3040652 .2686454 .3241758 .3277518 .3399477 .3082654 .2913101 .2871185 .3426916 .341548 .2827581 .3384171 .3448013 .3107224 .3088771 .3026095 .3411237 .313011 .3232493 .2876185 .3015697 .2846747 .3132521 .4220851 .3316834 .3138347 .327779 .29868444 .3339462 .2588243 .278185 .323988 .2999124 .3324552 .3032304 .2985369 .3190141 .2972806 .3753021 .3033443 .2985369 .3190141 .2972806 .3753021 .3033443 .2985369 .3190141 .2972806 .3753021 .3033443 .2985369 .3190141 .2972806 .3753021 .3033443 .2985369 .3190141 .2972806 .3753021 .3033443 .2708881 .3591487 .3637421 .3151183 .2830967 .3142178 .3395116 .3737413	0.58 -0.87 -1.64 -0.84 -1.35 -1.80 -1.24 -0.18 -1.32 -0.67 -0.37 -1.38 -0.67 -0.37 -1.38 -0.90 -1.70 -1.70 -1.70 -1.70 -1.70 -1.70 -1.53 -1.54 -1.55 -1.54 -1.55 -1.54 -1.55 -1.54 -1.55 -	0.564 0.383 0.101 0.398 0.176 0.072 0.216 0.857 0.140 0.501 0.708 0.020 0.168 0.674 0.370 0.291 0.089 0.007 0.070 0.195 0.318 0.156 0.079 0.090 0.123 0.123 0.090 0.123 0.090 0.138 0.090 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	47092359045938 -1.0945857534353 -1.074429 -1.231782 -1.08726665975 -1.0011239415637 -1.01947289916386600658 -1.452277 -1.151468739823288216469124784 -1.249607 -1.457072 -1.219067936133989232019621863 -1.164286 -1.9508077670261 -1.0992134675079 -1.63171880266277424881616437124846937969471 -1.5226229099148 -1.329792 -1.2142578665683 -1.4875978665683 -1.48759783201366800589 -1.438045 -1.272721 -1.023132 -1.338811 -1.460561 -1.588863	. 8634481 .3473571 .0973285 .2996353 .1963167 .0529812 .2453045 .5486283 .1407918 .1839199 .3238539 .4396799 .4483258 -1257061 .2001277 .4781861 .3286112 .2737291 .087573 230091 .0480472 .1913099 .2898114 .1537181 .10636399 2962635 .5331488 .1309963 .8173624 4608965 .529902 .2720846 .4740281 1.02154 .3786878 219422 .2787265 1595491 .0362556 .2987501 0164401 .3570742 .381803 0302085 .1531221 .2121091 .2121091 .2121091 .21210924 1563988 1296996 1238243
_cons	6.904204	4.268348	1.62	0.106	-1.461603	15.27001

```
______
298 scalar r2 = e(r2_p)
299 margins, dydx(overconfidence svm) post
                                                                                                     Number of obs = 5,886
    Average marginal effects
   Model VCE : Robust
   Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_svm
    ______
                                                          Delta-method
   | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    overconfidence_svm | .1420772 .0192702 7.37 0.000 .1043083 .1798461
                                                   _____
300 outreg2 using "Output/SVM het", tex word append addstat(Pseudo R-squared, r2) ///
                       addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
    > s, Yes) ///
                      ctitle("Precaution")
    Output/SVM het.tex
   Output/SVM het.rtf
    dir : seeout
302 **** high true literacy subgroup
303 logit precaution_dummy overconfidence_svm `household X' ///
            i.year i.state cate if fin high dummy == 1 [pw=weights]
   Iteration 0: log pseudolikelihood = -6836.5088
Iteration 1: log pseudolikelihood = -5975.4256
Iteration 2: log pseudolikelihood = -5952.0346
Iteration 3: log pseudolikelihood = -5951.9234
    Iteration 4: log pseudolikelihood = -5951.9234
                                                                                                       Number of obs = 12,539
Wald chi2(62) = 1075.11
Prob > chi2 = 0.0000
Pseudo R2 = 0.1294
    Logistic regression
                                                                                                                                                      0.0000
0.1294
    Log pseudolikelihood = -5951.9234
                                                                           Robust
       precaution dummy | Coef. Std. Err.
                                                                                                       z P>|z| [95% Conf. Interval]

        overconfidence_svm | -47.36356 age | -.1099329 age | -.1099329 age | -.1099329 age | -.0013493 age | -.0014243 age | -.
       year |
                               2015 | .3143199 .0606343 5.18 0.000 .195479 .4331609
2018 | .361954 .0648606 5.58 0.000 .2348295 .4890785
                     state cate |
```

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 50 50 50 50 50 50 50 50 50 50 50	.0100026   .3310795   .0010967   .2598896   .0976108   .310301   .2104771   .1990445   .0583721  2657797  0704283   .412419   .154553   .2243713  1264413   .1738317   .3110476   .049323   .207248  0604042   .032894   .186382   .1961368   .0734052   .2896336  0427341  0025788  0545651   .1142336   .1327355   .0317085   .4589432  0351536   .0790404  0286677   .0075827   .0075827   .0075827   .0552901   .3136056   .3099085  1080944   .2346683	.2629921 .2412438 .2366056 .2362628 .2523643 .2414093 .2392606 .2571817 .264737 .2348921 .249782 .2541225 .2390718 .2560733 .247516 .2324297 .2348811 .224297 .2348811 .2546394 .2272516 .245941 .2440249 .2499451 .2471211 .2350212 .2459479 .2496508 .25757183 .236812 .236812 .237577 .2491669 .2373479 .2331661 .2465223 .2375776 .2652126 .2335882 .2360417	0.04 1.37 0.00 1.10 0.39 1.29 0.88 0.77 0.22 -1.11 -0.30 1.65 0.61 0.94 -0.49 0.70 1.34 0.21 0.81 -0.27 0.13 0.76 0.79 0.29 1.22 -0.17 -0.01 -0.23 0.46 0.55 0.12 1.94 -0.14 0.32 -0.12 0.03 -0.22 1.32 1.37 -0.46 0.99	0.970 0.170 0.996 0.271 0.699 0.199 0.379 0.439 0.267 0.764 0.099 0.543 0.621 0.482 0.181 0.416 0.790 0.894 0.429 0.769 0.222 0.864 0.992 0.864 0.992 0.864 0.992 0.992 0.892 0.993	50545251417496462641720317739701411628526258465130502254605038734605253080830771447343518244200962833583112909144506241103552918361505809144914162918979290345741647821751342533270848692735151982367815533893144723609005199954222314093177493861244941435342651520379209898756591892279649	.5254578 .8039085 .4648352 .7229563 .5922357 .7834547 .6794192 .7031114 .577248 .2030457 .3899517 .9019828 .6526241 .6929434 .3754531 .6589543 .7666014 .5096816 .706332 .3850007 .5149295 .664662 .6826193 .5632887 .7544013 .4478025 .4817696 .4060679 .5962827 .6044023 .5357778 .9230862 .4719159 .5673985 .4365257 .4645798 .4278847 .7792491 .8297157 .3497301 .6973015
_cons	  7034266 	4.125589	-0.17	0.865	-8.789432	7.382579

304 scalar  $r2 = e(r2_p)$ 

305 margins, dydx(overconfidence\_svm) post

Number of obs = 12,539 Average marginal effects

Model VCE : Robust

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_svm

		Delta-method Std. Err.	z	P> z	[95% Conf.	Interval]
overconfidence_svm	-8.442329	11.09044	-0.76	0.447	-30.1792	13.29454

```
306 outreg2 using "Output/SVM het", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
                  ctitle("Precaution")
   Output/SVM het.tex
    Output/SVM het.rtf
   dir : seeout
308 *** financial market participation
309 ***** low true literacy subgroup
310 logit fin par dummy overconfidence svm `household X' ///
                       i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                                  log pseudolikelihood = -2155.857
   Iteration 0:
                               log pseudolikelihood = -1905.0814
log pseudolikelihood = -1804.7657
log pseudolikelihood = -1801.6322
   Iteration 1:
    Iteration 2:
    Iteration 3:
                                log pseudolikelihood = -1801.6139
    Iteration 4:
   Iteration 5:
                                log pseudolikelihood = -1801.6139
                                                                                                      Number of obs = 5,886
Wald chi2(62) = 484.52
Prob > chi2 = 0.0000
Provide R2 = 0.1643
   Logistic regression
    Log pseudolikelihood = -1801.6139
                                                                          Robust
           fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
    ______
   year |
                              .1265379
                                                                                                                                                              -.0435465
                                         state cate |
                                     5
                                     6
                                     7
                                     8
                                     9
                                   10
                                   11 |

      11 | -.1864
      .4745254
      -0.39
      0.694
      -1.116453
      .7436527

      12 | -.7491941
      .6908011
      -1.08
      0.278
      -2.103139
      .6047511

      13 | -1.028697
      .6104911
      -1.69
      0.092
      -2.225237
      .1678436

      14 | -.2272504
      .416894
      -0.55
      0.586
      -1.044348
      .5898469

      15 | -1.472881
      .6796587
      -2.17
      0.030
      -2.804988
      -.1407747

      16 | -.2743002
      .5364458
      -0.51
      0.609
      -1.325715
      .7771142

      17 | -1689321
      .5069988
      -0.33
      0.739
      -1.162631
      .8247673

      18 | .0660344
      .463135
      0.14
      0.887
      -.8416936
      .9737624

      19 | -.6641061
      .5437067
      -1.22
      0.222
      -1.729752
      .4015394

      20 | .0935581
      .5106583
      0.18
      0.855
      -.9073138
      1.09443

      21 | .3282411
      .4439903
      0.74
      0.460
      -.5419639
      1.198446

      22 | -.5053212
      .5346484
      -0.95
      0.345
      -1.553213
      .5425703

    21
    -.3282411
    .4439903
    0.74
    0.460
    -.5419639
    1.198446

    22
    -.5053212
    .5346484
    -0.95
    0.345
    -1.553213
    .5425703

    23
    -.2316924
    .431807
    0.54
    0.592
    -.6146338
    1.078018

    24
    -.1978958
    .4933374
    -0.40
    0.688
    -1.164819
    .7690277

    25
    -.4537652
    .4823087
    -0.94
    0.347
    -1.399073
    .4915425

    26
    .2351686
    .4508618
    0.52
    0.602
    -.6485042
    1.118841

    27
    .4113289
    .5106439
    0.81
    0.421
    -.5895147
    1.412173
```

```
        32
        -.0733819
        .5527107
        -0.13
        0.894
        -1.156675
        1.009911

        33
        .3446542
        .3899155
        0.88
        0.377
        -.4195661
        1.108874

        34
        -.1874565
        .4753709
        -0.39
        0.693
        -1.119166
        .7442534

        35
        .4015105
        .442252
        0.91
        0.364
        -.4652874
        1.268308

        36
        -.1773783
        .482976
        -0.37
        0.713
        -1.123994
        .7692374

        37
        .1386774
        .4638672
        0.30
        0.765
        -.7704856
        1.04784

        38
        .3904325
        .4615946
        0.85
        0.398
        -.5142763
        1.295141

        39
        .0844025
        .4307076
        0.20
        0.845
        -.7597689
        .9285739

        40
        -.485852
        .5003094
        -0.97
        0.331
        -1.46644
        .4947364

        41
        .3144611
        .4460298
        0.71
        0.481
        -.5597412
        1.188663

        42
        -.1567137
        .51839
        -0.30
        0.762
        -1.172739</td
                               cons | -9.116505 6.85163 -1.33 0.183 -22.54545 4.312442
311 scalar r2 = e(r2 p)
312 margins, dydx(overconfidence svm) post
                                                                                                 Number of obs = 5,886
   Average marginal effects
   Model VCE : Robust
   Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_svm
                                        | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval]
                                                  -----
   overconfidence svm | .0553843 .0154457 3.59 0.000 .0251113 .0856572
313 outreg2 using "Output/SVM_het", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
   > s, Yes) ///
> ctitle("Participation")
   Output/SVM het.tex
   Output/SVM het.rtf
   dir : seeout
314
315 **** high true literacy subgroup
316 logit fin par dummy overconfidence svm `household X' ///
                     i_year i.state cate if fin high dummy == \overline{1} [pw=weights]
                               log pseudolikelihood = -7436.5574
   Iteration 0:
   Iteration 1:
                               log pseudolikelihood = -6650.7799
   Iteration 2: log pseudolikelihood = -6646.7758

Iteration 3: log pseudolikelihood = -6646.7745

Iteration 4: log pseudolikelihood = -6646.7745
                                                                                                  Number of obs = 12,539
Wald chi2(62) = 981.09
Prob > chi2 = 0.0000
Pseudo R2 = 0.1062
   Logistic regression
   Log pseudolikelihood = -6646.7745
```

```
______
317 scalar r2 = e(r2_p)
318 margins, dydx(overconfidence svm) post
                                          Number of obs = 12,539
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_svm
                        Delta-method
 | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
 overconfidence_svm | -.9727424 10.82264 -0.09 0.928 -22.18472 20.23924
319 outreg2 using "Output/SVM het", tex word append addstat(Pseudo R-squared, r2) ///
         addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
         ctitle("Participation")
 Output/SVM het.tex
 Output/SVM het.rtf
 dir : seeout
320
321 * heterogeneous effects with random forest
322 *** retirement readiness
323 **** without state dummies
324 logit retire_dummy overconfidence_forest `household_X' ///
         i.year i.state cate if fin low dummy == 1 [pw=weights]
             log pseudolikelihood = -2789.9313
log pseudolikelihood = -2475.3895
 Iteration 0:
 Iteration 1:
             log pseudolikelihood = -2436.6106
 Iteration 2:
              log pseudolikelihood = -2436.3326
 Iteration 3:
              \log p pseudolikelihood = -2436.3325
 Iteration 4:
                                           Number of obs = 5,886

Wald chi2(62) = 447.29

Prob > chi2 = 0.0000

Prob > chi2 = 0.1267
 Logistic regression
 Log pseudolikelihood = -2436.3325
 _____
                                  Robust
        retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 overconfidence forest | 1.995012 .1981491 10.07 0.000
                                                           1.606647 2.38337
                age | .0201082 .0182775 1.10 0.271
                                                           -.015715 .055931
 > 4
               age2 | -.0004564 .0002118
                                            -2.16 0.031
                                                          -.0008714 -.000041
 > 3
           logincome | -1.573368 1.007137 -1.56 0.118
                                                           -3.547321 .400585
 > 5
          logincome2 | .0931244 .0485983
                                            1.92
                                                  0.055
                                                           -.0021266 .188375
 > 3
        female dummy | -.1501362 .0925789 -1.62 0.105
                                                           -.3315875
                                                                      .031315
 > 1
       nonwhite_dummy | .1650713 .0961631
                                                            -.023405
                                            1.72
                                                  0.086
                                                                      .353547
 > 5
       marital dummy | .4948536 .1029978
                                            4.80
                                                  0.000
                                                           .2929817 .696725
    high_school_dummy | .5310203 .1928055 2.75 0.006
                                                          .1531284 .908912
       college_dummy | .4354846 .1009152 4.32 0.000
                                                           .2376944 .633274
 > 8
```

. 0	34		9263591	.3921302	-2.36	0.018	-1.69492	15779
> 8	35		.0354094	.3771291	0.09	0.925	70375	.774568
> 7	36		6225687	.3961255	-1.57	0.116	-1.39896	.15382
> 3	37		3516251	.3778147	-0.93	0.352	-1.092128	.388878
> 1	38		5266497	.3599293	-1.46	0.143	-1.232098	.178798
> 8	39		6090867	.3660405	-1.66	0.096	-1.326513	.108339
> 6	40		8008969	.407099	-1.97	0.049	-1.598796	002997
> 4	41	ı	35499	.3528296	-1.01	0.314	-1.046523	.336543
> 3	42	1	1430676	.4339654	-0.33	0.742	9936243	
> 9	43	·	1487127	.3690274	-0.40	0.687	8719932	.574567
> 7	44	'	474535	.330949	-1.43	0.152	-1.123183	
> 1	45	1	6349807	.4604501	-1.38	0.168	-1.537446	
> 5	46	1						
> 5			3296871	.4171243	-0.79	0.429	-1.147236	
> 1	47		04707	.3427589	-0.14	0.891	718865	.624725
> 8	48		256064	.3275233	-0.78	0.434	8979978	.385869
> 2	49		0918944	.3804823	-0.24	0.809	8376261	.653837
> 1	50		503077	.4255737	-1.18	0.237	-1.337186	.331032
> 1	51		0474477	.3988383	-0.12	0.905	8291564	.734261
· -	cons		2.798025	5 203018	0.54	0.591	-7.399703	12.9957
> 5	_							
> -								
325 scalar r2 =	e(r2_p)							
326 margins, dyd	lx (overc	onf	idence_fore	st) post				
Average margin Model VCE :	nal effe Robust		;		Number o	of obs	= 5,88	36
Expression :	Pr(ret	ire	dummy), pr	edict()				

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_forest

| Delta-method | dy/dx Std. Err. z P>|z| [95% Conf. Interval > ] \_\_\_\_\_\_\_ overconfidence\_forest | .2240655 .021605 10.37 0.000 .1817205 .266410

> 5 \_\_\_\_\_

> -

```
327 outreg2 using "Output/Forest het", tex word replace addstat(Pseudo R-squared, r2) //
 > /
         addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
 > s, Yes) ///
         ctitle("Readiness")
 Output/Forest_het.tex
 Output/Forest_het.rtf
 dir : seeout
328
329 **** with state dummies
330 logit retire dummy overconfidence forest `household X' ///
         i.year i.state_cate if fin_high_dummy == 1 [pw=weights]
              log pseudolikelihood = -7639.91
 Iteration 0:
 Iteration 1:
              log pseudolikelihood = -6348.6023
 Iteration 2:
              log pseudolikelihood = -6336.7917
              log pseudolikelihood = -6336.7667
 Iteration 3:
 Iteration 4:
              log pseudolikelihood = -6336.7667
                                          Number of obs = 12,539
Wald chi2(62) = 1635.44
 Logistic regression
                                          Prob > chi2
                                                              0.0000
                                                         =
 Log pseudolikelihood = -6336.7667
                                          Pseudo R2
                                                               0.1706
                                 Robust
         retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval
 > ]
 age | .1996205 .0129492 15.42
                                                 0.000
                                                          .1742405
                                                                    .225000
 > 4
                age2 | -.0025303
                                 .000127 -19.93
                                                  0.000
                                                          -.0027791
                                                                    -.002281
 > 5
           logincome | -1.864495
                                                          -3.247738
                                .7057494
                                          -2.64
                                                  0.008
                                                                    -.481251
 > 2
                                                                    .175769
          logincome2 | .112555
                                .0322531
                                           3.49
                                                  0.000
                                                             .04934
 > 9
        female dummy | .0286454 .0511859
                                            0.56
                                                  0.576
                                                           -.071677 .128967
 > 9
       nonwhite_dummy | .1491855
                                 .071077
                                            2.10
                                                           .0098771
                                                                      .28849
                                                  0.036
       marital dummy | -.0453676 .0609682 -0.74
                                                  0.457
                                                          -.164863 .074127
    high school dummy | .1541677
                                .4034458
                                           0.38
                                                  0.702
                                                           -.6365714
                                                                     .944906
 > 9
        college dummy |
                        .2258308
                                 .0547579
                                            4.12
                                                  0.000
                                                           .1185072
                                                                      .333154
 > 4
                year |
               2015 |
                        .0167751 .0591703 0.28 0.777 -.0991967
                                                                     .132746
 > 8
               2018
                        .09143 .0623771
                                           1.47 0.143
                                                          -.030827 .213686
 > 9
           state cate |
                                                                    .43417
                 2 |
                      .0109401
                                .2159402
                                           0.05
                                                  0.960
                                                          -.4122948
 > 5
                  3 | -.1212485
                                 .2300591
                                           -0.53
                                                  0.598
                                                          -.572156
                                                                      .32965
 > 9
                  4 | -.5169526
                                 .2346054
                                           -2.20
                                                   0.028
                                                           -.9767707
                                                                     -.057134
 > 4
                  5 | -.3339494
                                .2239005
                                           -1.49
                                                  0.136
                                                          -.7727864
                                                                    .104887
                  6 | -.0820522 .2239419
                                           -0.37 0.714
                                                          -.5209703 .356865
 > 8
```

7 | -.0291122 .2198913 -0.13 0.895

> 7

-.4600912

.401866

```
-.8191822 .083557
                 44 | -.3678122 .230295 -1.60 0.110
 > 8
                                                 0.344
                 45 | .2061948 .2178341
                                           0.95
                                                          -.2207521
                                                                     .633141
 > 8
                 46 | -.203054 .2121974 -0.96
                                                 0.339
                                                          -.6189533
                                                                     .212845
 > 3
                                                         -.7431587 .126455
                 47 | -.3083515 .2218445 -1.39
                                                 0.165
 > 8
                 48 | -.3072364 .2145502 -1.43
                                                 0.152
                                                          -.727747
                                                                     .113274
 > 2
                      .2129233 .2319457
                                           0.92
                                                 0.359
                                                          -.2416819
                 49 |
                                                                     .667528
 > 5
                 50 | -.1549555 .217882 -0.71 0.477
                                                          -.5819964 .272085
 > 4
                 51 | .2180175 .2117164 1.03 0.303 -.1969391 .632974
 > 1
                      3.504827 3.891332 0.90 0.368 -4.122045 11.131
               _cons |
 > 7
 > -
331 scalar r2 = e(r2 p)
332 margins, dydx(overconfidence forest) post
 Average marginal effects
                                         Number of obs = 12,539
 Model VCE : Robust
 Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence forest
 ______
                           Delta-method
                        dy/dx Std. Err.
                                            z P>|z| [95% Conf. Interval
 > ]
      ______
 333 outreg2 using "Output/Forest het", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
         ctitle("Readiness")
 Output/Forest het.tex
 Output/Forest het.rtf
 dir : seeout
335 *** precautionary saving
336 ***** low true literacy subgroup
337 logit precaution_dummy overconfidence_forest `household_X' ///
         i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
             log pseudolikelihood = -3717.9486
 Iteration 0:
             log pseudolikelihood = -3339.3215
 Iteration 1:
             log pseudolikelihood = -3325.4509
log pseudolikelihood = -3325.3851
 Iteration 2:
 Iteration 3:
             log pseudolikelihood = -3325.3851
 Iteration 4:
                                          Number of obs = 5,886
Wald chi2(62) = 480.52
Prob > chi2 = 0.0000
Pseudo R2 = 0.1056
 Logistic regression
 Log pseudolikelihood = -3325.3851
```

> 3

20 | -.5266506 .3367019

-1.56 0.118

-1.186574

.133272

> 9	21	ı	7762086	.3217167	-2.41	0.016	-1.406762	145655
> 3	22	I	4713641	.3280712	-1.44	0.151	-1.114372	.171643
> 6	23	ı	3236362	.2972816	-1.09	0.276	9062974	.25902
> 5	24	ı	196108	.3147051	-0.62	0.533	8129187	.420702
> 7	25	ı	2613692	.2923009	-0.89	0.371	8342684	.3115
> 3	26	ı	4956681	.3145681	-1.58	0.115	-1.11221	.120874
> 2	27	ı	-1.101057	.4430067	-2.49	0.013	-1.969334	232779
> 8	28	ı	0557815	.338489	-0.16	0.869	7192078	.607644
> 8	29	ı	4162472	.3180095	-1.31	0.191	-1.039534	.2070
> 4	30	ı	.2384561	.3232249	0.74	0.461	395053	.871965
> 1	31	ı	8687563	.3008656	-2.89	0.004	-1.458442	279070
> 6	32	ı	084855	.3535307	-0.24	0.810	7777625	.608052
> 6	33	i	2847474	.2672019	-1.07	0.287	8084535	.238958
> 8	34	i	0139291	.2829802	-0.05	0.961	5685601	.540701
> 9	35	i	.5093844	.3277309	1.55	0.120	1329565	1.15172
> 5	36	·	1352302	.3093989	-0.44	0.662	7416409	.471180
> 4	37	i	8240401	.3395102	-2.43	0.015	-1.489468	158612
> 3	38	·	2880193	.3158038	-0.91	0.362	9069835	.330944
> 8	39	·	7450696	.3082955	-2.42	0.016	-1.349318	140821
> 5	40		4660642	.3207664	-1.45	0.146	-1.094755	.162626
> 4	41		1681139	.3001956	-0.56	0.575	7564865	.420258
> 7	42		6770455	.3753488	-1.80	0.071	-1.412716	.058624
> 7	43		2138924	.29895	-0.72	0.474	7998237	.372038
> 9	44		0782135	.2759535	-0.28	0.777	6190724	.462645
> 4	45		5981305	.3757717	-1.59	0.111	-1.334629	.138368
> 5	46		4456954	.3628147	-1.23	0.219	-1.156799	.265408
> 3	47	i	4267911	.3170546	-1.35	0.178	-1.048207	.194624
> 5	48		3771083	.2907898	-1.30	0.195	9470458	.192829
> 3	49	' 	6155179	.3218641	-1.91	0.056	-1.24636	.015324
> 2	50	' 	7129492	.3458204	-2.06	0.039	-1.390745	035153
> 7		' 	7913704	.3793628	-2.09	0.039	-1.534908	04783
> 3	J.I	1	• / / 10 / 04	. 3 / 33020	2.03	0.057	1.004000	.01103
> 4	_cons	 	5.840412	4.276094	1.37	0.172	-2.540578 	14.221

> -

```
338 scalar r2 = e(r2 p)
339 margins, dydx(overconfidence forest) post
                                            Number of obs = 5,886
 Average marginal effects
 Model VCE
            : Robust
 Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_forest
                                Delta-method
                          dy/dx Std. Err. z P>|z| [95% Conf. Interval
 _____
 overconfidence_forest | .3130962 .0261947 11.95 0.000
                                                             .2617555
                                                                          .36443
340 outreg2 using "Output/Forest_het", tex word append addstat(Pseudo R-squared, r2) /// > addtext(Sample, Low \overline{L}it., Demo. chars., Yes, Year dummies, Yes, State dummie
 > s, Yes) ///
 > ctitle("Precaution")
 Output/Forest_het.tex
 Output/Forest het.rtf
 dir : seeout
341
342 **** high true literacy subgroup
343 logit precaution_dummy overconfidence_forest `household_X' ///
> i.year i.state_cate if fin_high_dummy == 1 [pw=weights]
               log pseudolikelihood = -6836.5088
 Iteration 0:
               log pseudolikelihood = -5924.5432
log pseudolikelihood = -5900.4482
 Iteration 1:
 Iteration 2:
 Iteration 3:
               log pseudolikelihood = -5900.3585
               log pseudolikelihood = -5900.3585
 Iteration 4:
                                            Number of obs = 12,539
Wald chi2(62) = 1128.52
Prob > chi2 = 0.0000
 Logistic regression
                                                                 0.0000
0.1369
 Log pseudolikelihood = -5900.3585
                                             Pseudo R2
                                   Robust
     precaution_dummy | Coef. Std. Err. z P>|z|
                                                             [95% Conf. Interval
 > ]
         _____
 > -
 > 4
                 age | -.1229549 .0137828 -8.92 0.000 -.1499687 -.095941
 > 1
                age2 |
                       .0015178 .0001367
                                             11.10
                                                    0.000
                                                              .0012498
                                                                         .001785
 > 7
           logincome | -.734722 .756477 -0.97
                                                    0.331
                                                              -2.21739 .747945
                                                              .0023927 .139230
                                              2.03
          logincome2 |
                         .0708114 .0349081
                                                    0.043
 > 1
        female_dummy | .0956493 .0542543
                                                              -.010687
                                              1.76
                                                    0.078
                                                                         .201985
 > 7
       nonwhite dummy | -.1878196 .0736315
                                              -2.55
                                                    0.011
                                                              -.3321347 -.043504
        marital_dummy | -.0516529 .0611873 -0.84
                                                    0.399
                                                              -.1715777
                                                                        .06827
     high school dummy | .6991928 .3173372
                                              2.20 0.028
                                                              .0772234 1.32116
 > 2
        college dummy | .3012457 .0572254
                                              5.26 0.000
                                                              .189086 .413405
```

```
> 6
                   34 I
                           .1098273
                                      .2505073
                                                  0.44
                                                         0.661
                                                                  -.3811579
                                                                               .600812
 > 4
                                                  1.30
                   35 |
                           .3070672
                                      .2355599
                                                         0.192
                                                                  -.1546217
                                                                               .76875
 > 6
                      -.0273401
                                      .2504835
                                                 -0.11
                                                         0.913
                                                                  -.5182788
                                                                               .463598
                   36
 > 6
                                      .2470734
                   37
                      -.0007925
                                                 -0.00
                                                        0.997
                                                                  -.4850473
                                                                               .483462
 > 4
                                      .2361026
                   38
                          -.0009937
                                                 -0.00
                                                         0.997
                                                                  -.4637462
                                                                               .461758
 > 9
                           .1043858
                                      .2423093
                                                  0.43
                                                         0.667
                                                                  -.3705318
                                                                               .579303
                   39
                      > 3
                   40
                           .1568896
                                      .2411174
                                                  0.65
                                                         0.515
                                                                  -.3156919
                                                                               .629471
 > 1
                   41
                           .046894
                                      .256072
                                                  0.18
                                                         0.855
                                                                  -.4549979
                                                                               .548785
 > 8
                                      .2361578
                                                  1.95
                                                         0.052
                                                                  -.0031455
                   42
                           .4597152
                                                                               .922575
 > 9
                                      .2601889
                                                 -0.07
                                                         0.945
                                                                  -.5278019
                                                                               .492119
                   43
                           -.017841
                       > 8
                   44
                           .1389478
                                      .2494863
                                                  0.56
                                                         0.578
                                                                  -.3500364
                                                                               .62793
                      > 2
                   45
                           .0201689
                                      .2381033
                                                  0.08
                                                         0.932
                                                                  -.446505
                                                                               .486842
 > 7
                   46
                           .040713
                                      .2317496
                                                 0.18
                                                         0.861
                                                                  -.4135079
                                                                               .49493
 > 4
                   47
                          -.0208412
                                      .2467807
                                                 -0.08
                                                        0.933
                                                                  -.5045226
                                                                               .462840
 > 2
                                      .2402212
                   48
                           .3455324
                                                 1.44
                                                        0.150
                                                                  -.1252924
                                                                               .816357
 > 3
                   49
                           .3386216
                                      .2642539
                                                 1.28
                                                         0.200
                                                                  -.1793066
                                                                               .856549
 > 8
                         -.0633619
                                     .2329156
                                                 -0.27
                                                        0.786
                                                                  -.5198681
                   50
                                                                              .393144
 > 3
                   51
                           .2225435 .2355893
                                               0.94
                                                        0.345
                                                                  -.2392031 .684290
 > 1
                         1.155775 4.105135
                                                 0.28 0.778
                                                                 -6.890142 9.20169
                 cons
 > 2
 > -
344 scalar r2 = e(r2 p)
345 margins, dydx(overconfidence forest) post
                                               Number of obs = 12,539
 Average marginal effects
 Model VCE
            : Robust
 Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_forest
 > -
                                   Delta-method
                                                    z P>|z| [95% Conf. Interval
                             dy/dx Std. Err.
 > ]
 > -
 overconfidence_forest | -1.986493 .2310554 -8.60 0.000 -2.439354 -1.53363
 > 3
```

\_\_\_\_\_\_

> 4

```
346 outreg2 using "Output/Forest het", tex word append addstat(Pseudo R-squared, r2) ///
 > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
         ctitle("Precaution")
 Output/Forest het.tex
 Output/Forest het.rtf
 dir : seeout
348 *** financial market participation
349 ***** low true literacy subgroup
350 logit fin_par_dummy overconfidence forest `household X' ///
          i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
 Iteration 0:
               log pseudolikelihood = -2155.857
 Iteration 1:
              log pseudolikelihood = -1876.7716
              log pseudolikelihood = -18/6. 7/16
log pseudolikelihood = -1767.9429
 Iteration 2:
               log pseudolikelihood = -1764.3106
 Iteration 3:
              log pseudolikelihood = -1764.2862
 Iteration 4:
              log pseudolikelihood = -1764.2862
 Iteration 5:
                                             Number of obs = 5,886
Wald chi2(62) = 548.65
Prob > chi2 = 0.0000
 Logistic regression
                                                                  0.1816
 Log pseudolikelihood = -1764.2862
                                             Pseudo R2
 > -
                                   Robust
       fin par dummy |
                          Coef. Std. Err.
                                               z P>|z| [95% Conf. Interval
 > -
 overconfidence_forest | 1.880565 .2305222 8.16 0.000
                                                               1.42875
                                                                         2.3323
 > 8
                age | -.074413 .0199277 -3.73 0.000 -.1134706 -.035355
 > 4
                 age2 | .0009551 .0002222
                                              4.30 0.000
                                                              .0005197 .001390
 > 6
           logincome | .5636194 1.290018
                                                    0.662
                                                             -1.96477 3.09200
                                              0.44
 > 9
          logincome2 | .0133869 .0609377
                                              0.22
                                                    0.826
                                                              -.1060488 .132822
 > 6
        female dummy | -.3364116 .1094828
                                              -3.07 0.002
                                                              -.5509939
                                                                        -.121829
 > 2
       nonwhite dummy | -.2270784 .1243131 -1.83
                                                    0.068
                                                              -.4707276 .016570
 > 8
        marital dummy | .0922947 .1229422
                                              0.75
                                                    0.453
                                                             -.1486676 .333256
    high school dummy | .9245211 .2692974
                                              3.43 0.001
                                                              .3967079 1.45233
 > 4
                         .4042863 .1219347
        college dummy |
                                              3.32 0.001
                                                              .1652988 .643273
 > 9
                 year |
                2015 | -.1885093 .1367377 -1.38 0.168
                                                             -.4565104
                                                                         .079491
 > 7
                                              -2.22 0.027
                2018 | -.3010881 .1358959
                                                             -.5674392
                                                                         -.03473
 > 7
           state cate |
                         .343484 .4615679
                                              0.74 0.457
                                                             -.5611725 1.24814
                  2 |
 > 1
                   3 | -.1007374 .4757178
                                              -0.21 0.832
                                                             -1.033127
                                                                         .831652
 > 4
                   4 | -.3309875
                                  .4954799 -0.67 0.504
                                                              -1.30211
                                                                         .640135
 > 3
                   5 | .3371809
                                  .4027802
                                              0.84
                                                    0.403
                                                             -.4522538 1.12661
 > 6
                   6 | .2455511 .4838727
                                              0.51 0.612
                                                             -.7028219 1.19392
```

7 | -.0759886 .4782231 -0.16 0.874 -1.013289 .861311

> 5	8	1	29316	.5468784	-0.54	0.592	-1.365022	.778701
> 9	9	1	.5335606	.4193565	1.27	0.203	288363	1.35548
> 4	10	1	0626342	.4659898	-0.13	0.893	9759575	.850689
> 1	11	1	1225966	.4726624	-0.26	0.795	-1.048998	.803804
> 7	12	1	681132	.7050737	-0.97	0.334	-2.063051	.700787
> 1	13	1	-1.083757	.6199909	-1.75	0.080	-2.298916	.131403
> 2	14	1	0844319	.4163867	-0.20	0.839	9005349	.731671
> 1	15	1	-1.496947	.6872649	-2.18	0.029	-2.843962	149932
> 9	16	1	1445555	.5301181	-0.27	0.785	-1.183568	.894456
> 9	17	1	1789583	.5090551	-0.35	0.725	-1.176688	.818771
> 4	18	1	.1250341	.4621191	0.27	0.787	7807027	1.03077
> 1	19	1	5817604	.5459279	-1.07	0.287	-1.651759	.488238
> 7	20	1	.1851262	.5153499	0.36	0.719	8249411	1.19519
> 3	21	1	.4185025	.4389083	0.95	0.340	4417419	1.27874
> 7	22	1	4124891	.5296548	-0.78	0.436	-1.450593	.625615
> 2	23	1	.2884798	.4375106	0.66	0.510	5690252	1.14598
> 5	24	1	0734154	.4777905	-0.15	0.878	-1.009868	.863036
> 8	25	1	3267492	.4866458	-0.67	0.502	-1.280558	.62705
> 9	26	1	.2884174	.4478736	0.64	0.520	5893989	1.16623
> 4	27	1	.4649792	.5159028	0.90	0.367	5461718	1.4761
> 3	28	1	.9482354	.4629575	2.05	0.041	.0408555	1.85561
> 5	29	1	.0640754	.4943048	0.13	0.897	9047442	1.03289
> 5	30	1	.0542781	.4715633	0.12	0.908	869969	.978525
> 1	31	1	4078727	.4525226	-0.90	0.367	-1.294801	.479055
> 4	32	1	0826245	.5736351	-0.14	0.885	-1.206929	1.04167
> 9	33	1	.259807	.3882035	0.67	0.503	5010578	1.02067
> 2	34	-	1479475	.4695702	-0.32	0.753	-1.068288	.772393
> 2	35	1	.478367	.4482248	1.07	0.286	4001375	1.35687
> 1	36	1	0938226	.4650901	-0.20	0.840	-1.005382	.817737
> 2	37	-	.1774145	.4640938	0.38	0.702	7321927	1.08702
> 2	38	-	.4250024	.4717038	0.90	0.368	49952	1.34952
> 5	39	1	.0853464	.4360342	0.20	0.845	7692649	.939957
> 6	40	1	3917825	.4974247	-0.79	0.431	-1.366717	.583151
> 9	41	1	.4381103	.4371188	1.00	0.316	4186267	1.29484
> 7	42	1	0316607	.5085933	-0.06	0.950	-1.028485	.96516
> 4	43	1	.0160474	.507399	0.03	0.975	9784364	1.01053

```
> 1
                  44 | -.2055981 .4202893 -0.49 0.625
                                                               -1.02935 .618153
 > 8
                  45 | .0018221
                                     .609465
                                               0.00
                                                      0.998
                                                                -1.192707 1.19635
 > 2
                  46 | .447942 .4759467
                                               0.94
                                                      0.347
                                                               -.4848965
                                                                            1.3807
 > 8
                  47 | -.2090456 .4795406 -0.44 0.663
                                                               -1.148928 .730836
 > 8
                  48 | .2977755 .4198359
                                               0.71 0.478
                                                               -.5250878 1.12063
 > 9
                  49 | -.1461171 .4830537 -0.30 0.762
                                                               -1.092885 .800650
 > 7
                  50 | -.4050063 .5330772 -0.76 0.447
                                                               -1.449818 .639805
 > 8
                  51 | .4279807 .5434598 0.79 0.431
                                                               -.6371809 1.49314
 > 2
                _cons | -10.10369 6.850407 -1.47 0.140 -23.53024 3.32286
 > 3
351 scalar r2 = e(r2 p)
352 margins, dydx(overconfidence forest) post
                                       Number of obs = 5,886
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_forest
 > -
                             Delta-method
                      | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval
         ______
 > -
 overconfidence_forest | .1457323 .0177159 8.23 0.000 .1110097 .180454
 _____
353 outreg2 using "Output/Forest_het", tex word append addstat(Pseudo R-squared, r2) /// > addtext(Sample, Low \overline{L}it., Demo. chars., Yes, Year dummies, Yes, State dummie
 > s, Yes) ///
 > ctitle("Participation")
 Output/Forest_het.tex
 Output/Forest_het.rtf
 dir : seeout
354
355 **** high true literacy subgroup
356 logit fin_par_dummy overconfidence forest `household X' ///
          i.year i.state_cate if fin_high_dummy == 1 [pw=weights]
              log pseudolikelihood = -7436.5574
log pseudolikelihood = -6606.722
 Iteration 0:
 Iteration 1:
              log pseudolikelihood = -6602.7616
log pseudolikelihood = -6602.7603
 Iteration 2:
 Iteration 3:
 Iteration 4: log pseudolikelihood = -6602.7603
                                              Number of obs = 12,539
Wald chi2(62) = 991.51
Prob > chi2 = 0.0000
Pseudo R2 = 0.1121
 Logistic regression
 Log pseudolikelihood = -6602.7603
```

> 4	21	ı	.3262415	.2174586	1.50	0.134	0999696	.752452
> 5	22	I	.4963776	.2154999	2.30	0.021	.0740056	.918749
> 6	23	1	.2191826	.2183246	1.00	0.315	2087258	.647090
> 9	24	ı	.1441353	.2071502	0.70	0.487	2618717	.550142
> 3	25	ı	.0658824	.2311081	0.29	0.776	3870812	.51884
> 6	26	ı	.3148666	.2144554	1.47	0.142	1054582	.735191
> 5	27	ı	.4510394	.2049878	2.20	0.028	.0492707	.852808
> 2	28	ı	.2128415	.2044397	1.04	0.298	1878529	.61353
> 6	29	ı	.2804437	.2193259	1.28	0.201	1494271	.710314
> 6	30	ı	.0551644	.1982219	0.28	0.781	3333433	.443672
> 1	31	ı	.8136944	.2190657	3.71	0.000	.3843335	1.24305
> 5	32	ı	.1763702	.2146283	0.82	0.411	2442934	.597033
> 9	33	ı	.3933432	.2143612	1.83	0.067	026797	.813483
> 4	34	ı	.6004024	.2246633	2.67	0.008	.1600705	1.04073
> 4	35	ı	.4385052	.2063261	2.13	0.034	.0341135	.842896
> 9	36	ı	.3664138	.2230771	1.64	0.100	0708093	.803636
> 9	37	ı	.1273092	.2181572	0.58	0.560	300271	.554889
> 5	38	ı	.3289474	.2045847	1.61	0.108	0720312	.729925
> 9	39	ı	.5146215	.2167183	2.37	0.018	.0898614	.939381
> 6	40	i	.4089934	.2082145	1.96	0.049	.0009004	.817086
> 4	41	i	.0317988	.2200552	0.14	0.885	3995015	.463099
> 1	42	i	.605748	.2071984	2.92	0.003	.1996466	1.01184
> 9	43	·	.1978648	.2252706	0.88	0.380	2436575	.63938
> 7	44	·	.0834331	.2161448	0.39	0.699	340203	.507069
> 2	45	i	.1721668	.2080438	0.83	0.408	2355916	.579925
> 1	46	i	.2599077	.2061606	1.26	0.207		.66397
> 5	47		.4146284	.2120865	1.95	0.051	0010535	.830310
> 2	48		.5731425	.2085093	2.75	0.006	.1644719	.981813
> 2	49		.2945631	.2253678	1.31	0.191	1471496	.736275
> 8	50	'	.4894627	.2086006	2.35	0.019	.080613	.898312
> 4	51	' 	.279991	.204321	1.37	0.171	1204707	.680452
> 8	31	1	• 2 / 3 3 3 1	.201021	1.5/	0.1/1	• 1201/0/	.000132
> 9	_cons		.8832905	4.229112	0.21	0.835	-7.405618	9.17219
/ J								

> -

```
357 scalar r2 = e(r2 p)
358 margins, dydx(overconfidence forest) post
 Average marginal effects
                                              Number of obs = 12,539
 Model VCE : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_forest
                                  Delta-method
                           dy/dx Std. Err. z P>|z| [95% Conf. Interval
 > ]
 _____
 ______
359 outreg2 using "Output/Forest_het", tex word append addstat(Pseudo R-squared, r2) ///
        addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
 > ctitle("Participation")
 Output/Forest_het.tex
 Output/Forest_het.rtf
 dir : seeout
360
361 * heterogeneous effects with logistic
362 *** retirement readiness
363 **** without state dummies
364 logit retire dummy overconfidence logit `household X' ///
          i.year i.state cate if fin low dummy == 1 [pw=weights]
               log pseudolikelihood = -2789.9313
              log pseudolikelihood = -2490.3841
 Iteration 1:
              log pseudolikelihood = -2452.1474
 Iteration 2:
              log pseudolikelihood = -2451.8604
log pseudolikelihood = -2451.8603
 Iteration 3:
 Iteration 4:
                                              Number of obs = 5,886
Wald chi2(62) = 421.09
Prob > chi2 = 0.0000
Pseudo R2 = 0.1212
 Logistic regression
 Log pseudolikelihood = -2451.8603
                                   Robust
 retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
                                                              [95% Conf. Interval]
 year |
                year | 2015 | .0728449 .1182405 0.62 0.538 -.1589023 .3045921 2018 | .0626927 .1172459 0.53 0.593 -.167105 .2924904
           state cate |
                  2 | .1777672 .3728123 0.48 0.633 -.5529314
3 | -.4548463 .3984414 -1.14 0.254 -1.235777
4 | -.4396549 .3807606 -1.15 0.248 -1.185932
5 | -.2070045 .3082597 -0.67 0.502 -.8111824
                  2 | .1777672
                                                                          .9084658
.3260845
                                                                          .3066222
.3971733
```

6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 40 40 41 41 42 43 44 45 46 47 47 48 48 49 40 40 40 40 40 40 40 40 40 40 40 40 40	4189843  2867248  2386758   .0717451  0000909  4835566   -1.120281   -1.240278  4436981  5545013  518928  2938835   .0627576  5971266  3931348  482291   .0042708  1223646  6035472  6569219  7970302  1980177  756805  1371949  1832521  3734  1302609  3384235  94507  0845037  0845037  0845037  5668524  6076032  3789504  4321184  1424486  1535328  451232  8789504  4321184  1424486  1535328  94507	.3767273 .3700326 .3873353 .359352 .3379077 .344529 .5466897 .6952822 .3379047 .4008749 .4176726 .4077232 .3648418 .3752134 .4018203 .3719031 .3664787 .3800452 .3599134 .3970126 .4330006 .4448071 .365919 .3385154 .4017252 .3164717 .3938209 .3771921 .395208 .3767161 .3633341 .3665094 .40327 .3558137 .4291253 .3734875 .3306561 .44219549 .345402 .3291711 .3848487 .4248657 .4017347	-1.11 -0.77 -0.62 0.20 -0.00 -1.40 -2.05 -1.78 -1.31 -1.38 -1.24 -0.72 0.17 -1.59 -0.98 -1.30 0.01 -0.37 -1.59 -1.83 -2.01 -0.46 -1.70 -0.38 -0.43 -1.10 -0.32 -1.07 -2.40 -0.22 -1.65 -1.03 -1.56 -1.66 -2.18 -1.21 -0.33 -0.41 -1.56 -1.66 -2.18 -1.21 -0.33 -0.41 -1.56 -1.66 -2.18 -1.21 -0.33 -0.41 -1.56 -1.66 -2.18 -1.21 -0.33 -0.41 -1.56 -1.66 -2.18 -1.21 -0.33 -0.41 -1.56 -1.66 -2.18 -1.21 -0.33	0.266 0.438 0.538 0.842 1.000 0.160 0.040 0.074 0.189 0.167 0.214 0.471 0.863 0.112 0.328 0.194 0.991 0.714 0.112 0.068 0.045 0.647 0.089 0.707 0.668 0.270 0.668 0.270 0.112 0.091 0.285 0.016 0.285 0.016 0.290 0.746 0.285 0.016 0.290 0.305 0.119 0.029 0.740 0.681 0.123 0.097 0.029 0.740 0.681 0.123 0.119	-1.157356 -1.011975997839163257196623778 -1.158821 -2.191774 -2.603006 -1.105979 -1.340202 -1.337551 -1.0930066523191 -1.332531 -1.180688 -1.2117467140143775673 -1.348422 -1.362339 -1.575161 -1.046683 -1.6246668524519 -1.019357 -1.03687891762799586967 -1.7169458237866 -1.442429 -1.125069 -1.278974 -1.325949 -1.669345 -1.129598351878855549 -1.158644 -1.578434	.3193876 .4385257 .5204876 .7760622 .662196 .1917079 -0487893 .1224499 .2185829 .231199 .2996952 .5052392 .7778343 .1382781 .3944186 .246087 .7225559 .5309438 .1413277 .0484953 -0188997 .6506479 .1149454 .5780647 .125559 .5309438 .1413277 .0484953 -0188997 .6528526 .290078 .6571061 .2818497 -1731951 .6547792 .1236643 .3516313 .1452694 .1107421 -0885557 .2652637 .6986215 .5784893 .1375039 .1807563 .3757845 .6472055 .3380239 .568154 .2447968 .6582219
_cons	4.957186	5.239217	0.95	0.344	-5.311492	15.22586

365 scalar  $r2 = e(r2_p)$ 

366 margins, dydx(overconfidence\_logit) post

Average marginal effects Model VCE : Robust Number of obs = 5,886

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_logit

		Delta-method Std. Err.	z	P> z	[95% Conf.	Interval]
overconfidence_logit	.15026	.0164521	9.13	0.000	.1180145	.1825055

```
367 outreg2 using "Output/Logit het", tex word replace addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
   > s, Yes) ///
                    ctitle("Readiness")
   Output/Logit het.tex
   Output/Logit het.rtf
   dir : seeout
369 **** with state dummies
370 logit retire dummy overconfidence logit `household X' ///
   > i.year i.state_cate if fin_high dummy == 1 [pw=weights]
                              log pseudolikelihood = -7639.91
log pseudolikelihood = -6382.2866
   Iteration 0:
   Iteration 1:
   Iteration 2:
                              log pseudolikelihood = -6372.2604
   Iteration 3:
                                 log pseudolikelihood = -6372.2433
                               log pseudolikelihood = -6372.2433
   Iteration 4:
                                                                                                  Number of obs = 12,539
Wald chi2(62) = 1616.86
Prob > chi2 = 0.0000
Proudo R2 = 0.1659
   Logistic regression
   Log pseudolikelihood = -6372.2433
                                                                           Robust
                 retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
    ______

        overconfidence_logit | -.5964871
        .3380396
        -1.76
        0.078
        -1.259033
        .0660584

        age | .1984382
        .0143869
        13.79
        0.000
        .1702404
        .2266359

        age2 | -.0025023
        .0001373
        -18.23
        0.000
        -.0027714
        -.0022333

        logincome | -1.795316
        .718311
        -2.50
        0.012
        -3.20318
        -.3874525

        logincome2 | .1115473
        .032731
        3.41
        0.001
        .0473957
        .1756988

        female_dummy | -.0209651
        .0505882
        -0.41
        0.679
        -.1201162
        .078186

        nonwhite_dummy | .103585
        .0705985
        1.47
        0.142
        -.0347856
        .2419555

        marital_dummy | .0334499
        .0609211
        -0.55
        0.583
        -.1528531
        .0859532

        high_school_dummy | .3001139
        .3927838
        0.76
        0.445
        -.4697282
        1.069956

        college_dummy | .2867698
        .0541588
        5.29
        0.000
        .1806205
        .3929191

    2015
    .022607
    .059004
    0.38
    0.702
    -.0930387
    .1382527

    2018
    .0892571
    .062245
    1.43
    0.152
    -.0327409
    .2112551

                                                                                                                                                           .3919807
                       state cate |
                                                                        .2138324 -0.13 0.899 -.4462267
.2262578 -0.69 0.493 -.5985333
                                                   -.027123
                                       3 | -.1550762
                                       -.0613791
.0412866
.3361486
                                       .3870955
                                                                                                                                                              .1313978
                                                                                                                                                               .3401126
                                     .233132 -1.78 0.075
11 | -.3149725 .2329711 -1.35 0.176
12 | -.3192713 .2106226 -1.52 0.130
13 | -.2729253 .220009 -1.24
                                                                                                                                                              .0447486
                                                                                                                                   -.7715875
-.732084
-.704135
                                                                                                                                                              .1416425
                                                                           .220009 -1.24 0.215
                                                                                                                                                               .1582844
                                                                        .220039 -1.24 0.213 -.704135
.2129936 -0.30 0.764 -.4814152
.2260395 1.10 0.273 -.1953703
.2199008 -0.46 0.642 -.5331666
                                     14 | -.0639555
15 | .247659
                                                                                                                                    -.4814152
                                                                                                                                                              .3535043
                                     15 | .247659
16 | -.102169
                                                                                                                                                               .6906883
                                                     -.102169
                                                                                                                                                              .3288286
                                                                                                                                    -.5331666

    16
    -.102169
    .2199008
    -0.46
    0.642
    -.5331666

    17
    -.1909712
    .2173214
    -0.88
    0.380
    -.6169133

    18
    .057155
    .2313112
    0.25
    0.805
    -.3962067

    19
    -.0493917
    .266639
    -0.19
    0.853
    -.5719945

    20
    .2291263
    .2153519
    1.06
    0.287
    -.1929558

    21
    -.2091286
    .2252581
    -0.93
    0.353
    -.6506264

    22
    -.1294785
    .2166572
    -0.60
    0.550
    -.5541188

    23
    -.3246116
    .2318053
    -1.40
    0.161
    -.7789417

    24
    -.3612708
    .2116838
    -1.71
    0.088
    -.7761634

                                                                                                                                                                .234971
                                                                                                                                                              .5105167
                                                                                                                                                              .473211
.6512083
                                                                                                                                                              .2323693
                                                                                                                                                               .2951619
                                                                                                                                                               .1297184
                                     24 | -.3612708
                                                                        .0536218
                                                                                                                                                             .4462548
.0956804
.5719223
```

.4277848 .141922

```
_cons | 2.547109 4.017675 0.63 0.526 -5.327388 10.42161
                                                    0.63 0.526 -5.327388 10.42161
371 scalar r2 = e(r2 p)
372 margins, dydx (overconfidence logit) post
                                                   Number of obs = 12,539
  Average marginal effects
 Model VCE : Robust
 Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_logit
                              Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval]
 overconfidence_logit | -.1159212 .0656066 -1.77 0.077 -.2445079 .0126654
373 outreg2 using "Output/Logit_het", tex word append addstat(Pseudo R-squared, r2) ///
           addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
  > es, Yes) ///
 > ctitle("Readiness")
 Output/Logit het.tex
 Output/Logit het.rtf
  dir : seeout
375 *** precautionary saving
376 ***** low true literacy subgroup
377 logit precaution dummy overconfidence logit `household X' ///
           i.year i.state cate if fin low dummy == 1 [pw=weights]
                 log pseudolikelihood = -3717.9486
  Iteration 0:
 Iteration 0: log pseudolikelihood = -3717.9486
Iteration 1: log pseudolikelihood = -3354.1863
Iteration 2: log pseudolikelihood = -3341.8282
                log pseudolikelihood = -3341.7754
log pseudolikelihood = -3341.7754
  Iteration 3:
 Iteration 4:
                                                    Number of obs = 5,886
Wald chi2(62) = 454.09
Prob > chi2 = 0.0000
Pseudo R2 = 0.1012
 Logistic regression
 Log pseudolikelihood = -3341.7754
                                                   Pseudo R2
```

precaution_dummy	   Coef. +	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]
overconfidence_logit	1.281021 0606457 .0008678 -2.389704 .1432019 1050395 022547 .1926725 .4012831 .3852764	.1235835 .0144366 .0001601 .8468509 .0412785 .0776982 .0821685 .0837884 .138967	10.37 -4.20 5.42 -2.82 3.47 -1.35 -0.27 2.30 2.89 4.39	0.000 0.000 0.000 0.005 0.001 0.176 0.784 0.021 0.004 0.000	1.038802 0889409 .0005541 -4.049502 .0622975 2573252 1835944 .0284502 .1289128 .2132102	1.52324 0323504 .0011815 7299072 .2241063 .0472462 .1385004 .3568947 .6736534
year 2015 2018	     .0096342   .064571	.0975609	0.10 0.68	0.921 0.494	1815816 1206541	.20085 .2497962
state_cate  2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50		.3453243 .3228834 .3035844 .2723143 .324502 .3342128 .3392536 .3123811 .2924744 .2923267 .3460777 .3537294 .2862283 .3437727 .3189393 .3117399 .3063538 .3384399 .3166241 .3254292 .2958381 .2958381 .3254292 .2958381 .312391 .312391 .312391 .312391 .312391 .312391 .324614 .3254292 .2958381 .3201709 .3224735 .3001277 .3577312 .2958381 .32670641 .2827797 .32670641 .2827797 .32670641 .2827797 .32670641 .2827797 .32670641 .3267441 .3161907 .3267441 .32674	0.68  0.664 -1.59 -0.67 -1.07 -1.35 -0.33 -1.16 -0.94 -0.75 -0.10 -2.34 -1.31 -0.47 -0.92 -1.70 -2.56 -1.62 -0.82 -1.62 -2.59 -0.32 -1.62	0.494 0.512 0.521 0.521 0.506 0.287 0.096 0.177 0.248 0.450 0.919 0.018 0.019 0.019 0.019 0.0224 0.335 0.091 0.0239 0.010 0.747 0.145 0.010 0.0145 0.0	45060158402689 -1.07741471504639816574 -1.211619 -1.125422714744897497899106782 -1.0033029603328590188 -1.47577 -1.12749577610578551998837632 -1.237151 -1.430749 -1.1814379339378587707799339971 -1.126284 -2.1028257702632 -1.094481447725 -1.5086888700771514889395096 -1.340491 -1.514889395096 -1.340491 -1.1675328277283 -1.4133981962756543012 -1.396634 -1.262074 -1.09833789 -1.325377 -1.46736	.2497962 .9030449 .4254109 .1126152 .3524063 .2903669 .0984706 .20777666 .1714997 .2352215 .353298 .426261 .5318062 -1300133 .2224999 .4741132 .366799 .3171218 .0895088 -1896047 .0942222 .220285 .3474724 .2180141 .1076827 -2900509 .5552607 .1605657 .8163002 -3322077 .5212656 .2571106 .25753985 1.034899 .4330425 -1874953 .299935 -13874953 .299935 -13874953 .299935 -13874953 .299935 -13874953 .299935 -13874953 .299935 -13874953 .299935 -1493478 -0469728 .3645423 .4153262 .0522993 .1647217 .210296 .1493478 -0627624 -1173903
51 _cons	847403     8.272495	.3796321 4.307146	-2.23 1.92	0.026	-1.591468 1693568	1033378 16.71435

```
______
378 scalar r2 = e(r2_p)
379 margins, dydx(overconfidence logit) post
                                                               Number of obs = 5,886
  Average marginal effects
  Model VCE : Robust
  Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_logit
  ______
                                        Delta-method
  dy/dx Std. Err. z P>|z| [95% Conf. Interval]
  overconfidence_logit | .2129741 .0198276 10.74 0.000 .1741128 .2518354
                                  _____
380 outreg2 using "Output/Logit_het", tex word append addstat(Pseudo R-squared, r2) /// > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
  > s, Yes) ///
             ctitle("Precaution")
  Output/Logit_het.tex
Output/Logit_het.rtf
  dir : seeout
382 **** high true literacy subgroup
383 logit precaution_dummy overconfidence_logit `household X' ///
      i.year i.state cate if fin high dummy == 1 [pw=weights]
                    log pseudolikelihood = -6836.5088
  Iteration 0:
                   log pseudolikelihood = -5973.9286
log pseudolikelihood = -5950.9262
  Iteration 1:
  Iteration 2:
  Iteration 3:
                    log pseudolikelihood = -5950.7945
  Iteration 4:
                   log pseudolikelihood = -5950.7945
                                                                Number of obs = 12,539
Wald chi2(62) = 1078.08
Prob > chi2 = 0.0000
Pseudo R2 = 0.1296
  Logistic regression
  Log pseudolikelihood = -5950.7945
                                                 Robust
                                   Coef. Std. Err.
                                                                  z P>|z|
      precaution dummy |
                                                                                      [95% Conf. Interval]
  year |

      2015
      .3129376
      .0606736
      5.16
      0.000
      .1940194
      .4318557

      2018
      .3605815
      .0647934
      5.57
      0.000
      .2335887
      .4875742

               state cate |

      cate |

      2 | .1247438 .238798 .0.52 .0.601 .3432917 .5927794

      3 | .1651503 .237927 .0.69 .488 .301178 .6314787

      4 | .2324316 .2537229 .0.92 .0.360 .2648562 .7297194

      5 | .0371515 .2400731 .0.15 .0.877 .-.433383 .507686

      6 | .3074314 .2386396 .1.29 .0.198 .-.1602937 .7751565

      7 | .2657794 .2487918 .1.07 .0.285 .-.2218435 .7534024

      8 | .272275 .2529225 .1.08 .0.282 ...223444 .767994

      9 | -.1015519 .2377368 .0.43 .0.669 ...5675074 .3644036

      10 | .2329828 .2699942 .0.86 .0.388 ...2961961 .7621617

                                                                                                    .5927794
.6314787
.7297194
.507686
.7751565
```

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.3374315  0004679   .2577913   .0857436   .3144479   .2063632   .2020358   .0576612  2602117  0644917   .412255   .1531758   .223734  1260654   .1694735   .3085557   .050811   .2049661  0618843   .033139   .1827055   .2006716	.2416696 .2366393 .236043 .2521573 .241936 .2395991 .2582502 .2644657 .2396169 .2352033 .2502218 .2543909 .2396033 .2564734 .2479688 .2323696 .2349838 .2553919 .2271379 .2453499 .2453498 .2453498 .2453498 .2453498	1.40 -0.00 1.09 0.34 1.30 0.86 0.78 0.22 -1.09 -0.27 1.65 0.60 0.93 -0.49 0.68 1.33 0.22 0.80 -0.27 0.14 0.75 0.81	0.163 0.998 0.275 0.734 0.194 0.389 0.434 0.827 0.278 0.784 0.099 0.547 0.350 0.623 0.494 0.184 0.829 0.422 0.785 0.893 0.420	1362323 4642724 2048444 4084756 1597381 2632424 3041253 4606821 7298521 5254816 0781707 3454211 2458744 3165364 1468804 4097489 2955928 5070664 447737 2951451 2868626	.8110953 .4633366 .720427 .5799629 .7886338 .6759689 .7081968 .5760046 .2094287 .3964983 .9026806 .6517727 .693347 .3766132 .6554834 .7639918 .5113708 .705525 .3832977 .514015 .660556
35 36 37 38 39 40 41 42 43 44	.2892048  0439259   .0010568  0501689   .1034363   .1363896   .0324018   .4613107  0382175   .0628171  0207572	.2371337 .2506321 .2470508 .2350526 .2451201 .2410798 .257358 .2372555 .2587664 .2478506	1.22 -0.18 0.00 -0.21 0.42 0.57 0.13 1.94 -0.15 0.25 -0.09	0.223 0.861 0.997 0.831 0.673 0.572 0.900 0.052 0.883 0.800 0.931	1755687 5351558 4831538 5108635 3769904 3361181 4720106 0037015 5453902 4229612 4872613	.7539783 .4473039 .4852675 .4105258 .5838629 .6088973 .5368142 .9263229 .4683253 .5485954
46 47 48 49 50 51	.0084021  0510089   .3143235   .3094402  1136961   .2334884  0829342	.2335883 .246627 .2378462 .2653937 .2339885 .2359128	0.04 -0.21 1.32 1.17 -0.49 0.99	0.971 0.836 0.186 0.244 0.627 0.322	4494226 534389 1518464 2107218 572305 2288922	.4662268 .4323712 .7804934 .8296022 .3449129 .695869

384 scalar  $r2 = e(r2_p)$ 

385 margins, dydx(overconfidence\_logit) post

Average marginal effects Model VCE : Robust Number of obs = 12,539

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_logit

	l .	Delta-method Std. Err.		P> z	[95% Conf.	Interval]
overconfidence_logit	0864328	.0579773	-1.49	0.136	2000662	.0272006

dir : seeout

Iteration 0: Iteration 1:

394

```
        28 | .9014324
        .4651722
        1.94
        0.053
        -.0102884
        1.813153

        29 | .0080286
        .5003594
        0.02
        0.987
        -.9726578
        .988715

        30 | .0175038
        .4739089
        0.04
        0.971
        -.9113407
        .9463482

        31 | -.4635824
        .4588482
        -1.01
        0.312
        -1.362908
        .4357436

        32 | -.1773623
        .5817956
        -0.30
        0.760
        -1.317661
        .9629362

        33 | .2932202
        .3970501
        0.74
        0.460
        -.4849838
        1.071424

        34 | -.1595132
        .4715506
        -0.34
        0.735
        -1.083735
        .7647091

        35 | .3908996
        .4520488
        0.86
        0.387
        -.4950997
        1.276899

        36 | -.1050671
        .4761303
        -0.22
        0.825
        -1.038265
        .8281311

        37 | .1597995
        .4729185
        0.34
        0.735
        -.7671036
        1.086703

        38 | .399639
        .4799311
        0.83
        0.405
        -.5410087
        1.340287

        39 | .1027727
        .4422681
        0.23
        0.816
        -
                                                  . .0175038
31 | -.4635824
32 | -.1773623
33 | .2932202
34 | -.1595132
35 | .3908000

    39 |
    .1027727
    .4422681
    0.23
    0.816
    -.7640369
    .9696023

    40 |
    -.4531551
    .4985154
    -0.91
    0.363
    -1.430227
    .5239172

    41 |
    .3821709
    .4396743
    0.87
    0.385
    -.4795748
    1.243917

    42 |
    -.0153579
    .5111336
    -0.03
    0.976
    -1.017161
    .9864455

    43 |
    .0262443
    .5134777
    0.05
    0.959
    -.9801535
    1.032642

    44 |
    -.2216345
    .4247236
    -0.52
    0.602
    -1.054078
    .6108085

    45 |
    -.0489541
    .6021131
    -0.08
    0.935
    -1.229074
    1.131166

    46 |
    .3479566
    .4824438
    0.72
    0.471
    -.5976159
    1.293529

    47 |
    -.1767558
    .4923095
    -0.36
    0.720
    -1.141665
    7881531

    47
    -.1767558
    .4923095
    -0.36
    0.720
    -1.141665
    .7881531

    48
    .2599167
    .4259687
    0.61
    0.542
    -.5749667
    1.0948

    49
    -.2163228
    .4911168
    -0.44
    0.660
    -1.178894
    .7462484

                                                    50 | -.4772893 .5428439 -0.88 0.379 -1.541244
51 | .3870842 .5392654 0.72 0.473 -.6698566
                                                                                                                                                                                                                             .5866651
                                                                       .3870842
                                                                                                                                                                                                                           1.444025
                                                 cons | -8.402699 6.920661
                                                                                                                                         -1.21 0.225
                                                                                                                                                                                       -21.96694
                                                                                                                                                                                                                          5.161546
391 scalar r2 = e(r2 p)
392 margins, dydx (overconfidence logit) post
                                                                                                                                      Number of obs = 5,886
     Average marginal effects
     Model VCE : Robust
     Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_logit
                                                             | Delta-method | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
     overconfidence logit | .0929301 .0117728 7.89 0.000 .0698558 .1160044
393 outreg2 using "Output/Logit_het", tex word append addstat(Pseudo R-squared, r2) ///
     > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
     > s, Yes) ///
> ctitle("Participation")
     Output/Logit het.tex
     Output/Logit_het.rtf
395 **** high true literacy subgroup
396 logit fin par dummy overconfidence logit `household X' ///
                              i.year i.state cate if fin high dummy == 1 [pw=weights]
                                           log pseudolikelihood = -7436.5574
                                          log pseudolikelihood = -6649.5522
     Iteration 2: log pseudolikelihood = -6645.6997
Iteration 3: log pseudolikelihood = -6645.6986
Iteration 4: log pseudolikelihood = -6645.6986
                                                                                                                                        Number of obs = 12,539
Wald chi2(62) = 978.57
Prob > chi2 = 0.0000
Pseudo R2 = 0.1063
     Logistic regression
     Log pseudolikelihood = -6645.6986
```

fin_par_dummy	   Coef.	Robust Std. Err.	Z 	P> z	[95% Conf.	Interval]
overconfidence_logit age   age2   logincome   logincome2   female_dummy   nonwhite_dummy   marital_dummy   high_school_dummy   college_dummy	3884601 0668434 .0008827 7899518 .0760849 1133104 0487313 0288697 .8902557 .3798729	.3521446 .0140991 .0001339 .771535 .0351681 .0486784 .0694042 .056332 .3803579	-1.10 -4.74 6.59 -1.02 2.16 -2.33 -0.70 -0.51 2.34 7.30	0.270 0.000 0.000 0.306 0.031 0.020 0.483 0.608 0.019 0.000	-1.078651 094477 .0006202 -2.302133 .0071566 2087182 184761 1392783 .1447678 .2779054	.3017306 0392097 .0011452 .722229 .1450131 0179025 .0872984 .081539 1.635744 .4818404
year   2015   2018	231778 1859418	.0568	-4.08 -3.08	0.000	3431039 3043376	120452 0675459
state_cate 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	.3861606 .4065784 .4601113 .3210319 .4468612 .7304765 .4733513 .4229097 .5488384 .3488044 .9065939 .4380289 .4646588 .2902718 .5658394 .5588661 .2765084 .2677181 .2403728 .2941088 .4982834 .1790009 .1317402 .0631998 .3019736 .4317524 .2217524 .2875944 .0504798 .8019553 .1901276 .3765333 .5720098 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .4231668 .3526575 .133548 .2920521 .5139018 .39336 .0245393 .3945987 .5497192 .27290238	.2073647 .2084656 .2202844 .207589 .2118689 .2171645 .2159434 .2180439 .2428994 .2341884 .2171851 .210535 .205101 .2194914 .2086367 .2131468 .2240108 .24619 .2097214 .2165457 .216382 .219266 .20778315 .2328054 .2150019 .205193 .2046706 .2194866 .1986228 .2227881 .2134349 .2227881 .2080391 .2080391 .2080391 .2198902 .2079821 .2234436 .2079821 .2234436 .2079821 .2079821 .2079821 .2079821 .2079821 .2079821 .2079821 .2079821 .20798391 .2079821 .20798602 .2071383 .2130491 .2085801 .2271057 .2093717 .2093717 .2053859	1.86 1.95 2.09 1.55 2.11 3.36 2.19 4.17 2.27 1.32 2.27 1.32 2.27 2.62 1.30 0.82 0.63 71.40 2.10 81.31 0.25 1.35 0.82 0.63 71.40 2.57 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 0.85 1.35 1.35 1.35 1.35 1.35 1.35 1.35 1.3	0.063 0.051 0.037 0.122 0.035 0.001 0.028 0.052 0.024 0.136 0.000 0.037 0.023 0.186 0.007 0.277 0.227 0.277 0.252 0.174 0.021 0.414 0.526 0.786 0.160 0.035 0.279 0.190 0.379 0.279 0.190 0.379 0.078 0.078 0.079	02026680020067 .02836180858351 .0316059 .304842 .050110044486 .07276431101963 .4809189 .0253879 .06266831399234 .1569188 .14110611625447214805417067361303129 .07418252507526275602139309041194223 .029585179394614259143388137 .370359123359780417914 .1353533 .0178394086725429421631066229 .084386301438914064404 .19887732511363950131261859616865720229698 .14090981722124 .03468861125251	.7925879 .8151634 .8918608 .727899 .8621166 1.156111 .8965926 .8502679 1.024912 .8078051 1.332269 .8506698 .8666494 .720467 .9747599 .9766262 .7155616 .7502417 .6514191 .7185306 .9223843 .6087544 .5390825 .51949 .7233695 .8339267 .6228994 .7177802 .4397733 1.233552 .6138529 .794858 1.00866 .8284942 .7920404 .5613123 .6907271 .9434174 .801109 .4555189 1.014152 .624747 .4516529 .5529374 .6433098 .8121673 .9585286 .718025727
_cons	6756069	4.322165	-0.16	0.876	-9.146895	7.795681

```
397 scalar r2 = e(r2_p)
398 margins, dydx(overconfidence logit) post
                                                                            Number of obs = 12,539
   Average marginal effects
  Model VCE : Robust
  Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_logit
   ______
                                                Delta-method
   dy/dx Std. Err. z P>|z| [95% Conf. Interval]
   overconfidence_logit | -.079636 .0721576 -1.10 0.270 -.2210623 .0617904
                                        399 outreg2 using "Output/Logit_het", tex word append addstat(Pseudo R-squared, r2) ///
                 addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
   > es, Yes) ///
             ctitle("Participation")
  Output/Logit_het.tex
Output/Logit_het.rtf
   dir : seeout
400
401 * heterogeneous effects with Bernoulli NB
402 *** retirement readiness
403 ***** without state dummies
404 logit retire dummy overconfidence bnb `household X' ///
                 i.year i.state cate if fin low dummy == 1 [pw=weights]
  Iteration 0: log pseudolikelihood = -2789.9313 Iteration 1: log pseudolikelihood = -2498.6395
                       log pseudolikelihood = -2459.4245
log pseudolikelihood = -2459.0311
log pseudolikelihood = -2459.0307
   Iteration 2:
   Iteration 3:
   Iteration 4:
   Iteration 5: log pseudolikelihood = -2459.0307
                                                                             Number of obs = 5,886
Wald chi2(62) = 439.69
Prob > chi2 = 0.0000
Pseudo R2 = 0.1186
   Logistic regression
                                                                                                                  0.1186
   Log pseudolikelihood = -2459.0307
                                                                             Pseudo R2
   ______
                                                       Robust
   retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_bnb
        1.198446
        .1377043
        8.70
        0.000
        .9285507
        1.468342

        age
        .0198325
        .0181724
        1.09
        0.275
        -.0157848
        .0554499

        age2
        -.000448
        .0002112
        -2.12
        0.034
        -.000862
        -.0000341

        logincome
        -1.23592
        1.0084
        -1.23
        0.220
        -3.212349
        .740508

        logincome2
        .0781187
        .0486676
        1.61
        0.108
        -.017268
        .1735053

        female_dummy
        -.3130714
        .09287
        -3.37
        0.001
        -.4950932
        -.1310496

        nonwhite_dummy
        -.0062377
        .0984694
        -0.06
        0.949
        -.1992342
        .1867587

        marital_dummy
        .6406854
        .1033887
        6.20
        0.000
        .4380472
        .8433235

        high_school_dummy
        .8341516
        .1932785
        4.32
        0.000
        .4553327
        1.21297

        college_dummy
        .6630901
        .1015652
        6.53
        0.000
        .464026
        .8621542

                         year |
                       state cate |
```

8 9 10 11 2 13 14 15 16 17 18 19 20 1 22 22 24 5 6 7 8 9 0 13 2 3 3 4 5 6 7 8 9 0 4 1 2 4 3 4 4 4 5 6 7 8 9 5 10 10 10 10 10 10 10 10 10 10 10 10 10	1690707 .049108808777225185999334686 -1.08220438836985393208539320853932082389891 .098701642759731971324257737 .0669871673707510393663486583728490957273664880211052950167342460434 .008671245801319711169 .045621462089854188113585290745801319711169 .045621462089854188113585290764346517252153348006708397164102461747616208092851465065162630948461184206	.3888716 .3594322 .3345242 .3403853 .5443053 .694365 .3409073 .4045079 .4214747 .4082808 .3652038 .3753031 .4048981 .3737279 .3728106 .3326085 .3832788 .3573264 .3966474 .434802 .4472916 .3625415 .4396226 .3415832 .4008572 .3120455 .3931764 .385071 .3963766 .3814115 .3665919 .3687336 .4087271 .355168 .3415832 .4008572 .3120455 .3931764 .385071 .3963766 .3814115 .3665919 .3687336 .4087271 .355168 .34103374 .3700269 .3329475 .4623105 .4226947 .3431441 .334858 .3816032 .4296821	-0.43 0.14 -0.26 -1.52 -1.71 -1.56 -1.14 -1.33 -0.90 -0.59 0.27 -1.71 -0.79 -1.14 0.18 -0.50 -1.33 -1.78 -2.11 -0.22 -1.49 -0.30 -0.72 -1.47 -0.47 -1.57 -1.57 -1.60 -1.75 -1.77 -0.98 -0.12 -1.75 -1.77 -1.10 -1.60 -1.75 -1.77 -1.85 -1.34 -0.67 -0.98 -0.99 -0.31 -1.34	0.664 0.793 0.128 0.086 0.119 0.255 0.182 0.369 0.558 0.787 0.430 0.255 0.857 0.615 0.183 0.0760 0.826 0.137 0.760 0.970 0.471 0.981 0.906 0.117 0.272 0.110 0.084 0.117 0.084 0.014 0.014 0.014 0.017 0.017 0.084 0.017 0.084 0.017 0.084 0.017 0.084 0.096 0.097 0	93124565536547434276 -1.185742 -2.000287 -2.443135 -1.056536 -1.332142 -1.204941 -1.0392056170853 -1.37834 -1.113299 -1.15826766370848192714 -1.261606 -1.335212 -1.61479479236 -1.5415568210979878378491553417769943 -1.166364 -1.3747287091039 -1.397782 -1.166364 -1.303798 -1.36617 -1.526306 -1.04412594701548893419 -1.270041 -1.526921 -1.113613737712696579428663491 -1.376632	.5931035 .7535831 .5678832 .1485439 .1333502 .2787263 .2797962 .2535001 .4472285 .8144873 .0928209 .4738726 .3067195 .7976824 .48453 .240819 .065482 0598701 .7564689 .2117953 .6000388 .8449104 .4234473 .7943368 .1535849 205687415 .1332162 .0792395 .0758752 .3287415 .1332162 .0792395 .0758752 .348112 .7790754 .561137 .035089 .285303 .5433199 .6073874 .346825 .6295079
50 51 cons	5344711   .0100646   1.336462	.4296821 .4074904 5.208583	-1.24 0.02 0.26	0.214 0.980 0.797	-1.376632 7886019 -8.872172	.3076903 .8087311 11.5451
	1 1.550402	5.20000	0.20	0.131	0.0/21/2	TT.017I

 $405 \text{ scalar r2} = e(r2_p)$ 

406 margins, dydx(overconfidence\_bnb) post

Average marginal effects Model VCE : Robust Number of obs = 5,886

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_bnb

	   dy/dx	Delta-method Std. Err.		P> z	[95% Conf.	Interval]
overconfidence_bnb	.1354903	.0152429	8.89	0.000	.1056147	.1653659

```
407 outreg2 using "Output/BNB het", tex word replace addstat(Pseudo R-squared, r2) ///
    > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
    > s, Yes) ///
                          ctitle("Readiness")
    Output/BNB het.tex
    Output/BNB het.rtf
    dir : seeout
409 **** with state dummies
410 logit retire_dummy overconfidence bnb `household X' ///
   > i.year i.state_cate if fin_high dummy == 1 [pw=weights]
                                   log pseudolikelihood = -7639.91
log pseudolikelihood = -6361.6215
log pseudolikelihood = -6350.2548
    Iteration 0:
    Iteration 1:
    Iteration 2:
                                    log pseudolikelihood = -6350.2317
log pseudolikelihood = -6350.2317
    Iteration 3:
    Iteration 4:
                                                                                                                   Number of obs = 12,539
Wald chi2(62) = 1619.08
Prob > chi2 = 0.0000
Peoudo R2 = 0.1688
    Logistic regression
    Log pseudolikelihood = -6350.2317
                                                                                    Robust
                retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_bnb | -1.531155
        .297177
        -5.15
        0.000
        -2.113611
        -.9486986

        age | .2086881
        .0130151
        16.03
        0.000
        .1831789
        .2341972

        age2 | -.0025958
        .0001278
        -20.31
        0.000
        -.0028463
        -.0023453

        logincome | -1.76198
        .7108694
        -2.48
        0.013
        -3.155259
        -.3687018

        logincome2 | .1101458
        .0324816
        3.39
        0.001
        .046483
        .1738086

        female_dummy | .0540741
        .0516003
        1.05
        0.295
        -.0470607
        .1552089

        nonwhite_dummy | .2149963
        .0738315
        2.91
        0.004
        .0702892
        .3597035

        marital_dummy | .0932893
        .0614783
        -1.52
        0.129
        -.2137845
        .027206

        high_school_dummy | .070623
        .4137891
        0.02
        0.986
        -.8039495
        .818074

        college_dummy | .1701136
        .0570215
        2.98
        0.003
        .0583536
        .2818737

    2015 | .0213879 .0590091 0.36 0.717 -.0942677 .1370435
2018 | .0966231 .0622819 1.55 0.121 -.0254473 .2186934
                       state cate |
                                               -.1008363 .2162172 -0.47 0.641 -.5246142 .3229416

-.2043364 .2298316 -0.89 0.374 -.654798 .2461252

-.5532101 .234239 -2.36 0.018 -1.01231 -.09411

-.3542503 .2248207 -1.58 0.115 -.7948906 .0863901

-.1596813 .2243087 -0.71 0.477 -.5993182 .2799557

-.0835137 .2205358 -0.38 0.705 -.5157559 .3487285

-.3367498 .2186479 -1.54 0.124 -.7652918 .0917922

-.1228674 .2264879 -0.54 0.587 -.5667755 .3210406
                                          5
                                          6
                                          7
                                          8
                                          9
                                        10 | -.4547168 .2552237 -1.78 0.075 -.9549462 .0455125

    10
    -.4547168
    .2552237
    -1.78
    0.075
    -.9549402
    .0433123

    11
    -.3238705
    .2371043
    -1.37
    0.172
    -.7885864
    .1408454

    12
    -.4341078
    .2136609
    -2.03
    0.042
    -.8528754
    -.0153402

    13
    -.3395458
    .2228364
    -1.52
    0.128
    -.7762972
    .0972056

    14
    -.0930006
    .2162003
    -0.43
    0.667
    -.5167453
    .3307441

    15
    .2163129
    .2293262
    0.94
    0.346
    -.2331583
    .6657841

    14
    -.0930006
    .2162003
    -0.43
    0.667

    15
    .2163129
    .2293262
    0.94
    0.346

    16
    -.1763117
    .2221481
    -0.79
    0.427

                                                                                                                                                                                    .2590905
                                                                                                                                                       -.6117139
                                               .202206
                                       17
                                                                                                                                                                                       .4832636
                                        18
                                                                                                                                                                                       .4914457
                                        19
                                                                                                               0.76 0.446 -.2603034 .5917413
                                                     .1657189 .2173623 0.76 0.446 -.2603034 .5917413 
-.248424 .2275206 -1.09 0.275 -.6943562 .1975082 
-.1844575 .2189121 -0.84 0.399 -.6135173 .2446023 
-.314473 .234993 -1.34 0.181 -.7750509 .1461048
                                        20 I
                                        21 |
```

```
    30 | -.2579752
    .2126936
    -1.21
    0.225
    -.674847
    .1588967

    31 | -.418016
    .2304073
    -1.81
    0.070
    -.869606
    .033574

    32 | -.5948936
    .2294679
    -2.59
    0.010
    -1.044642
    -.1451447

    33 | -.073138
    .2245731
    -0.33
    0.745
    -.5132932
    .3670172

    34 | -.0910349
    .2273316
    -0.40
    0.689
    -.5365967
    .3545269

        34 | -.0910349
        .2273316
        -0.40
        0.689
        -.5365967
        .3545269

        35 | .1899452
        .2195806
        0.87
        0.387
        -.2404249
        .6203153

        36 | -.2176065
        .2364398
        -0.92
        0.357
        -.6810201
        .245807

        37 | -.2435516
        .2214707
        -1.10
        0.271
        -.6776261
        .190523

        38 | -.1287041
        .2142681
        -0.60
        0.548
        -.5486619
        .2912536

        39 | -.2272055
        .2322683
        -0.98
        0.328
        -.682443
        .2280321

        40 | -.4545743
        .2204962
        -2.06
        0.039
        -.8867389
        -.0224096

        41 | -.372779
        .2336827
        -1.60
        0.111
        -.8307887
        .0852307

        42 | -.0654719
        .2133724
        -0.31
        0.759
        -.4836741
        .3527304

        43 | -.1690946
        .2371112
        -0.71
        0.476
        -.633824
        .2956348

        44 | -.3903022
        .2310326
        -1.69
        0.091
        -.8431178
        .0625135

        45 | .0929895
        .2176276
        0.43
        0.669

    _cons | 2.544458 3.922883 0.65 0.517 -5.144251 10.23317
                                                                                                         0.65 0.517 -5.144251 10.23317
411 scalar r2 = e(r2 p)
412 margins, dydx (overconfidence bnb) post
                                                                                                            Number of obs = 12,539
    Average marginal effects
    Model VCE : Robust
    Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb
                                                         Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    ______
    overconfidence bnb | -.2963391 .0569947 -5.20 0.000 -.4080467 -.1846315
413 outreg2 using "Output/BNB_het", tex word append addstat(Pseudo R-squared, r2) ///
                       addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
    > ctitle("Readiness")
    Output/BNB het.tex
    Output/BNB het.rtf
    dir : seeout
415 *** precautionary saving
416 ***** low true literacy subgroup
417 logit precaution_dummy overconfidence_bnb `household X' ///
                       i.year i.state cate if fin low dummy == 1 [pw=weights]
    Iteration 0:
                                    log pseudolikelihood = -3717.9486
   Iteration 0: log pseudolikelihood = -3717.9486

Iteration 1: log pseudolikelihood = -3371.331

Iteration 2: log pseudolikelihood = -3359.7709
                                  log pseudolikelihood = -3359.7279
log pseudolikelihood = -3359.7279
    Iteration 3:
    Iteration 4:
                                                                                                           Number of obs = 5,886
Wald chi2(62) = 445.49
Prob > chi2 = 0.0000
Pseudo R2 = 0.0963
    Logistic regression
    Log pseudolikelihood = -3359.7279
```

```
______
418 scalar r2 = e(r2_p)
419 margins, dydx(overconfidence bnb) post
                                                                                                         Number of obs = 5,886
    Average marginal effects
   Model VCE : Robust
   Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb
    ______
                                                            Delta-method
   | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    overconfidence_bnb | .1883458 .0197576 9.53 0.000 .1496215 .2270701
                                                    ______
420 outreg2 using "Output/BNB het", tex word append addstat(Pseudo R-squared, r2) ///
                        addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
    > s, Yes) ///
                       ctitle("Precaution")
   Output/BNB_het.tex
Output/BNB_het.rtf
    dir : seeout
422 **** high true literacy subgroup
423 logit precaution_dummy overconfidence bnb `household X' ///
          i.year i.state cate if fin high dummy == 1 [pw=weights]
   Iteration 0: log pseudolikelihood = -6836.5088
Iteration 1: log pseudolikelihood = -5937.1014
Iteration 2: log pseudolikelihood = -5914.1866
Iteration 3: log pseudolikelihood = -5914.1011
    Iteration 4: log pseudolikelihood = -5914.1011
                                                                                                           Number of obs = 12,539
Wald chi2(62) = 1091.22
Prob > chi2 = 0.0000
Pseudo R2 = 0.1349
    Logistic regression
    Log pseudolikelihood = -5914.1011
                                                                             Robust
      precaution dummy | Coef. Std. Err.
                                                                                                           z P>|z| [95% Conf. Interval]

        overconfidence_bnb | age | -.1117907
        .0136346
        -8.20
        0.000
        -2.416996
        -1.316824

        age | -.1117907
        .0136346
        -8.20
        0.000
        -.1385141
        -.0850673

        age2 | .0014327
        .0001358
        10.55
        0.000
        .0011666
        .0016988

        logincome | -.6632499
        .7656713
        -0.87
        0.386
        -2.163938
        .8374382

        logincome2 | .070561
        .0353227
        2.00
        0.046
        .0013299
        .1397922

        female_dummy | .1444087
        .0559028
        2.58
        0.010
        .0348411
        .2539763

        nonwhite_dummy | -.0952331
        .0774845
        -1.23
        0.219
        -.2470999
        .0566337

        marital_dummy | -.1184078
        .0621458
        -1.91
        0.057
        -.2402113
        .0033956

        high_school_dummy | .520859
        .3273406
        1.59
        0.112
        -.1207169
        1.162435

        college_dummy | .2200118
        .061042
        3.60
        0.000
        .1003716
        .3396519

       year |
                                2015 | .3124048 .0608386 5.13 0.000 .1931634 .4316462
2018 | .3718273 .0653156 5.69 0.000 .2438111 .4998435
                     state cate |

      2 | .0215789
      .2391829
      0.09
      0.928
      -.447211
      .4903688

      3 | .0983185
      .2393584
      0.41
      0.681
      -.3708153
      .5674524

      4 | .1857645
      .2539483
      0.73
      0.464
      -.3119652
      .6834941

      5 | .1006037
      .2421114
      0.42
      0.678
      -.373926
      .5751334

      6 | .215779
      .239054
      0.90
      0.367
      -.2527583
      .6843163

      7 | .1995015
      .248767
      0.80
      0.423
      -.2880729
      .687076

      8 | .2028787
      .2536404
      0.80
      0.424
      -.2942475
      .7000048

      9 | -.1328834
      .2386723
      -0.56
      0.578
      -.6006725
      .3349057

      10 | .2626343
      .2769689
      0.95
      0.343
      -.2802147
      .8054833
```

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	003542   .1847513  0906908   .2160595   .0355035   .2061653   .1498371   .1547095   .0785568  3484029  1200022   .3259221   .1767394   .1477921  1848409   .1290262   .2211667  0412024   .1459165	.2634878 .2424958 .2362325 .2370591 .2548915 .2409165 .2405367 .2564843 .2649151 .2391465 .2391465 .23960554 .2553736 .239868 .2578095 .2489324 .232927 .23594 .2597628	-0.01 0.76 -0.38 0.91 0.14 0.86 0.62 0.60 -1.46 -0.51 1.30 0.69 0.62 -0.72 0.52 0.95 -0.17	0.989 0.446 0.701 0.362 0.889 0.392 0.533 0.546 0.767 0.145 0.611 0.193 0.489 0.538 0.473 0.604 0.342 0.861 0.574	51996872905317553698248567846407462660224321606234799054406672817121458266221652615323783732234066901382358724235363350363643632092	.5128846 .6600342 .3723163 .6806868 .5350815 .6783529 .6212803 .6574095 .5977808 .1203156 .3426578 .8171057 .6772625 .6179248 .3204564 .6169247 .67769265 .4212315
31	08074	.2450688	-0.33	0.742	561066	.399586
32	.078733	.245356	0.32	0.748	402156	.559622
33	.2502923	.2559208	0.98	0.328	2513033	.7518879
34	.0695014	.2520371	0.28	0.783	4244823	.5634851
35	.2144644	.237514	0.90	0.367	2510545	.6799833
36	1045125	.2512302	-0.42	0.677	5969148	.3878897
37	0692111	.2479661	-0.28	0.780	5552157	.4167935
38	1005456	.2376244	-0.42	0.672	5662809	.3651896
39	.063641	.2447638	0.26	0.795	4160872	.5433691
40	.0335913	.2414626	0.14	0.889	436667	.5068493
41 42 43 44 45 46	031671   .3460402  0544431   .1060073  1225997  084009	.2577599 .2370332 .2631219 .2517422 .2370158 .2339098	-0.12 1.46 -0.21 0.42 -0.52 -0.36	0.902 0.144 0.836 0.674 0.605 0.719	5368711 1185363 5701526 3873984 5871421 5424638	.473529 .8106166 .4612664 .599413 .3419427
47	0481156	.2501193	-0.19	0.847	5383405	.4421093
48	.255234	.2416027	1.06	0.291	2182986	.7287665
49	.2701404	.264888	1.02	0.308	2490304	.7893113
50	1821863	.2335149	-0.78	0.435	6398671	.2754945
51	.1111847	.2362425	0.47	0.638	3518421	.5742115
_cons	.2771577	4.157928	0.07	0.947	-7.872232	8.426548

 $424 \text{ scalar r2} = e(r2_p)$ 

425 margins, dydx(overconfidence\_bnb) post

Number of obs = 12,539 Average marginal effects

Model VCE : Robust

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_bnb

		Delta-method	. – – – – – – l				
	dy/dx	Std. Err.	Z	P> z	[95% Conf.	Interval]	
overconfidence_bnb	32996	.0489298	-6.74	0.000	4258606	2340594	

```
426 outreg2 using "Output/BNB het", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
                  ctitle("Precaution")
   Output/BNB het.tex
    Output/BNB het.rtf
   dir : seeout
428 *** financial market participation
429 ***** low true literacy subgroup
430 logit fin par dummy overconfidence bnb `household X' ///
                        i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                                 log pseudolikelihood = -2155.857
   Iteration 0:
                                log pseudolikelihood = -1894.2416
log pseudolikelihood = -1778.2325
log pseudolikelihood = -1774.3699
   Iteration 1:
    Iteration 2:
    Iteration 3:
                                 log pseudolikelihood = -1774.3602
    Iteration 4:
   Iteration 5:
                                 log pseudolikelihood = -1774.3602
                                                                                                           Number of obs = 5,886
Wald chi2(62) = 546.98
Prob > chi2 = 0.0000
Proudo R2 = 0.1770
   Logistic regression
    Log pseudolikelihood = -1774.3602
                                                                             Robust
           fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_bnb |
        1.142936
        .1518863
        7.52
        0.000
        .8452447
        1.440628

        age |
        -.0761354
        .0198416
        -3.84
        0.000
        -.1150243
        -.0372465

        age2 |
        .0009794
        .0002213
        4.43
        0.000
        .0005457
        .0014131

        logincome |
        .8794049
        1.293332
        0.68
        0.497
        -1.655479
        3.414289

        logincome2 |
        -.0005752
        .0610902
        -0.01
        0.992
        -.1203098
        .1191594

        female dummy |
        -.4762429
        .1108485
        -4.30
        0.000
        -.6935019
        -.2589839

        nonwhite dummy |
        -.3831952
        .1258604
        -3.04
        0.002
        -.6298772
        -.1365133

        marital_dummy |
        .2199481
        .1245236
        1.77
        0.077
        -.0241135
        .4640098

        high_school_dummy |
        1.193868
        .2641973
        4.52
        0.000
        .6760511
        1.711686

        college_dummy |
        .60417
        .1216756
        4.97
        0.000
        .3656902
        .8426498

                                  year |
                                state cate |
                                       5
                                       6
                                       7
                                      8
                                      9
                                     1.0
                                     11

    11
    -.1937/33
    .4774285
    -0.41
    0.685
    -1.129516
    .7419694

    12
    -.5864078
    .7109112
    -0.82
    0.409
    -1.979768
    .8069526

    13
    -1.088902
    .6349062
    -1.72
    0.086
    -2.333295
    .1554915

    14
    -.0904169
    .4260426
    -0.21
    0.832
    -.9254451
    .7446112

    15
    | -1.532081
    .6952773
    -2.20
    0.028
    -2.8948
    -.1693627

    16
    | -.1122513
    .5386167
    -0.21
    0.835
    -1.167921
    .9434181

    17
    | -.1957599
    .5150187
    -0.38
    0.704
    -1.205178
    .8136581

    18
    | .1018517
    .4685034
    -0.22
    0.828
    -.8163981
    1.020102

    19
    | -6852552
    .5514504
    -1.24
    0.214
    -1.766078
    3955677
```

```
cons | -11.43989 6.868511
                                                  -1.67 0.096 -24.90192 2.022145
431 scalar r2 = e(r2 p)
432 margins, dydx (overconfidence bnb) post
                                                   Number of obs = 5,886
  Average marginal effects
 Model VCE : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb
                    | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval]
  overconfidence bnb | .0886977 .0116725 7.60 0.000 .0658201 .1115754
433 outreg2 using "Output/BNB het", tex word append addstat(Pseudo R-squared, r2) ///
  > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
  > s, Yes) ///
> ctitle("Participation")
 Output/BNB het.tex
 Output/BNB het.rtf
 dir : seeout
435 **** high true literacy subgroup
436 logit fin par dummy overconfidence bnb `household X' ///
           i.year i.state cate if fin high dummy == \overline{1} [pw=weights]
                log pseudolikelihood = -7436.5574
 Iteration 0:
  Iteration 1:
                log pseudolikelihood = -6627.2765
 Iteration 2: log pseudolikelihood = -6623.5353

Iteration 3: log pseudolikelihood = -6623.5343

Iteration 4: log pseudolikelihood = -6623.5343
                                                   Number of obs = 12,539
Wald chi2(62) = 977.56
Prob > chi2 = 0.0000
Pseudo R2 = 0.1093
  Logistic regression
 Log pseudolikelihood = -6623.5343
```

```
______
437 scalar r2 = e(r2_p)
438 margins, dydx(overconfidence bnb) post
                                        Number of obs = 12,539
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_bnb
 ______
                       Delta-method
 | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
 overconfidence_bnb | -.2881489 .0537407 -5.36 0.000 -.3934787 -.1828191
439 outreg2 using "Output/BNB het", tex word append addstat(Pseudo R-squared, r2) ///
         addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
       ctitle("Participation")
 Output/BNB_het.tex
Output/BNB_het.rtf
 dir : seeout
441 * heterogeneous effects with KNN
442 *** retirement readiness
443 **** without state dummies
444 logit retire dummy overconfidence knn `household X' ///
         i.year i.state cate if fin low dummy == \overline{1} [pw=weights]
 Iteration 0: log pseudolikelihood = -2789.9313 Iteration 1: log pseudolikelihood = -2497.3152
            log pseudolikelihood = -2460.1484
 Iteration 2:
             log pseudolikelihood = -2459.8244
 Iteration 3:
            log pseudolikelihood = -2459.8244
 Iteration 4:
                                         Number of obs = 5,886
Wald chi2(62) = 429.25
Prob > chi2 = 0.0000
Pseudo R2 = 0.1183
 Logistic regression
 Log pseudolikelihood = -2459.8244
 ______
 | Robust retire_dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
 year |
2015 |
                   .0740949 .1181147 0.63 0.530 -.1574056 .3055955
.0698815 .1169761 0.60 0.550 -.1593874 .2991504
        state cate |
              2 |
```

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 50 50 50 50 50 50 50 50 50 50 50 50	. 0421504 0472635 5320156 -1.162799 -1.26416 4894151 59631 5440083 3401024 .0299368 6394279 4371245 5130448 040571 1705777 6444245 6658277 8906705 2259432 78308 1901135 2313656 4235941 134092 3952283 9747707 0901799 6964107 4541554 609669 6582941 919133 4475579 2175229 1876837 919133 4475579 2175229 1876837 5578982 7224413 4914096 0839449 0839449 0839449 0839449 0839449 0839449 0839449 0839449 0839449 0839449 3819871 2343401 6238656 1580063	.3574721 .3370871 .3423607 .5449611 .6937956 .3406111 .3994165 .4102432 .4047036 .3650375 .3756106 .4011724 .3745786 .371362 .3337017 .3812245 .3595301 .3969822 .4245685 .4426894 .365184 .4276842 .3390112 .4001538 .3137064 .3927445 .3763256 .3977239 .3763256 .3977239 .3769659 .3617513 .367579 .4063089 .3582455 .4298522 .3695585 .3309219 .4524198 .4178955 .3440531 .3314079 .3815046 .4196535 .4037385	0.12 -0.14 -1.55 -2.13 -1.82 -1.44 -1.49 -1.33 -0.84 -1.70 -1.09 -1.37 -0.11 -0.51 -1.69 -1.85 -2.24 -0.53 -1.77 -0.52 -0.54 -1.25 -0.34 -1.26 -2.48 -1.75 -1.26 -1.25 -0.51 -1.60 -1.60 -1.60 -1.169 -1.60 -1.37 -0.11	0.906 0.888 0.120 0.033 0.068 0.151 0.135 0.185 0.401 0.935 0.089 0.276 0.171 0.913 0.609 0.091 0.064 0.025 0.595 0.077 0.603 0.589 0.211 0.738 0.208 0.013 0.811 0.080 0.228 0.092 0.073 0.024 0.212 0.613 0.612 0.092 0.110 0.240 0.807 0.249 0.539 0.137 0.696	6584827079421 -1.20303 -2.230903 -2.623974 -1.157001 -1.379152 -1.34807 -1.1333076855235 -1.375611 -1.223408 -1.2472057684271824621 -1.391611 -1.370494 -1.668741 -1.058082 -1.650735905861 -1.069611 -1.0880449183791 -1.010082 -1.7445368277645 -1.475935 -1.192995 -1.318087 -1.378736 -1.715484 -1.149706 -1.060018912005 -1.206493 -1.609168 -1.310477582766 -1.0315359820753 -1.4463719493192	.7427829 .6134151 .1389991 -0946945 .0956546 .1781704 .1865319 .2600535 .4531021 .745397 .0967554 .349159 .2211158 .6872851 .4834656 .1027617 .0388385 -1125996 .6061958 .0845752 .525634 .6068801 .2408556 .650195 .219625 -2050057 .6474046 .0831138 .2846842 .099527 .0621475 -1227823 .2545904 .624972 .5366376 .0906969 .1642852 .32765604 .5133951 .1986401 .6333066
_cons	   7.55321	5.240002	1.44	0.149	-2.717005	17.82343

445 scalar r2 = e(r2 p)

446 margins, dydx(overconfidence\_knn) post

Number of obs = 5,886 Average marginal effects

Model VCE : Robust

Expression : Pr(retire\_dummy), predict()
dy/dx w.r.t. : overconfidence\_knn

Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval] overconfidence\_knn | .1416691 .0162831 8.70 0.000 .1097548 .1735834

```
447 outreg2 using "Output/KNN het", tex word replace addstat(Pseudo R-squared, r2) //
     > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
     > s, Yes) ///
                                ctitle("Readiness")
     Output/KNN het.tex
     Output/KNN het.rtf
     dir : seeout
449 **** with state dummies
450 logit retire_dummy overconfidence knn `household X' ///
    > i.year i.state cate if fin high dummy == 1 [pw=weights]
                                           log pseudolikelihood = -7639.91
log pseudolikelihood = -6375.5119
log pseudolikelihood = -6365.6071
     Iteration 0:
     Iteration 1:
     Iteration 2:
                                             log pseudolikelihood = -6365.5909
log pseudolikelihood = -6365.5909
     Iteration 3:
     Iteration 4:
                                                                                                                                             Number of obs = 12,539
Wald chi2(62) = 1631.47
Prob > chi2 = 0.0000
Records R2 = 0.1668
     Logistic regression
     Log pseudolikelihood = -6365.5909
                                                                                                      Robust
                    retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_knn | -1.592743
        .4716061
        -3.38
        0.001
        -2.517074
        -.6684122

        age | .1969091
        .0133378
        14.76
        0.000
        .1707675
        .2230506

        age2 | -.002491
        .0001297
        -19.21
        0.000
        -.0027451
        -.0022368

        logincome | -2.228105
        .7315378
        -3.05
        0.002
        -3.661893
        -.7943174

        logincome2 | .1294947
        .0332091
        3.90
        0.000
        .064406
        .1945834

        female_dummy | -.0156456
        .0506878
        -0.31
        0.758
        -.1149918
        .0837007

        nonwhite_dummy | .1079649
        .0706902
        1.53
        0.127
        -.0305854
        .2465152

        marital_dummy | .0390997
        .0609652
        -0.64
        0.521
        -.1585893
        .08039

        high_school_dummy | .2842262
        .3913911
        0.73
        0.468
        -.4828863
        1.051339

        college_dummy | .2812361
        .0542557
        5.18
        0.000
        .174897
        .3875752

      2015 | .0210262 .0591034 0.36 0.722 -.0948143 .1368667
2018 | .088688 .0622918 1.42 0.155 -.0334016 .2107776
                            state cate |

      2 | -.0266341
      .2139719
      -0.12
      0.901
      -.4460113
      .3927432

      3 | -.1648551
      .2274466
      -0.72
      0.469
      -.6106423
      .2809321

      4 | -.515951
      .2327382
      -2.22
      0.027
      -.9721095
      -.0597925

      5 | -.3994415
      .2222375
      -1.80
      0.072
      -.8350191
      .036136

      6 | -.1075786
      .2227709
      -0.48
      0.629
      -.5442015
      .3290444

      7 | -.0446057
      .2179498
      -0.20
      0.838
      -.4717795
      .3825681

      8 | -.2997388
      .2168361
      -1.38
      0.167
      -.7247298
      .1252522

      9 | -.0974755
      .2249663
      -0.43
      0.665
      -.5384013
      .3434503

      10 | -.4557386
      .2536657
      -1.80
      0.072
      -.9529143
      .041437

      11 | -.328022
      .2331406
      -1.41
      0.159
      -.7849691
      .1289251

                                                11 | -.328022 .2331406 -1.41 0.159
12 | -.3239017 .211108 -1.53 0.125
13 | -.2854587 .2206276 -1.29 0.196
                                                                                                                                                                                       -.7849691 .1289251
-.7376658 .0898625
                                                                                                                                                                                                                               .0898625
                                                                                                                                                                                       -.7178808
                                                                                                                                                                                                                               .1469634
                                                13 | -.2634367 .2206276 1.23 0.136

14 | -.0699286 .2137659 -0.33 0.744

15 | .2388174 .227125 1.05 0.293

16 | -.1014392 .2198964 -0.46 0.645
                                                                                                                                                                                        -.4889021 .3490449
-.2063394 .6839743
-.5324282 .3295499
                                                                                                                                                                                                                             .3295499
                                                         .233585
                                                                                                                                                                                        -.6179616
                                                17
                                                                                                                                                                                       -.4019867
-.5857912
                                                 18
                                                                                                                                                                                                                               .4620119
                                                 19
                                                                                                                                        1.04 0.297 -.1979226 .6474514
                                                 20 I
                                                                                                                                       -0.94 0.346 -.6569323 .2304344
-0.64 0.525 -.5632958 .2873469
-1.42 0.156 -.7850419 .1255318
                                                 21 |
                                                 22
                                                                                                                                                                                       -.7850419
                                                                                                                                                                                                                              .1255318
                                                 23

    23
    -3297551
    .2322935
    -1.42
    0.156
    -.7850419
    .1253318

    24
    -3666401
    .2117392
    -1.73
    0.083
    -.7816413
    .048361

    25
    -.010896
    .2305351
    -0.05
    0.962
    -.4627364
    .4409445

    26
    -.3512933
    .2267118
    -1.55
    0.121
    -.7956402
    .0930536

    27
    .1553915
    .2109546
    0.74
    0.461
    -.258072
    .568855

    28
    -.0002642
    .2173767
    -0.00
    0.999
    -.4263148
    .4257863

    29
    -.3206325
    .2326447
    -1.38
    0.168
    -.7766078
    .1353428
```

```
    30 | -.1916215
    .2103952
    -0.91
    0.362
    -.6039886
    .2207456

    31 | -.3350677
    .228693
    -1.47
    0.143
    -.7832978
    .1131623

    32 | -.5358533
    .2276134
    -2.35
    0.019
    -.9819674
    -.0897392

    33 | -.1079999
    .2242606
    -0.48
    0.630
    -.5475427
    .3315429

    34 | -.0857009
    .2248069
    -0.38
    0.703
    -.5263144
    .3549126

                                                                                                                                            .54/5427 .3315429
-.5263144 .3540100

        34 | -.0857009
        .2248069
        -0.38
        0.703
        -.5263144
        .3549126

        35 | .2322933
        .2166914
        1.07
        0.284
        -.192414
        .6570005

        36 | -.1887312
        .233396
        -0.81
        0.419
        -.6461789
        .2687165

        37 | -.1948947
        .2196189
        -0.89
        0.375
        -.6253398
        .2355503

        38 | -.0896592
        .2112309
        -0.42
        0.671
        -.5036641
        .3243457

        39 | -.2152161
        .2307083
        -0.93
        0.351
        -.6673959
        .2369638

        40 | -.3856375
        .2178372
        -1.77
        0.077
        -.8125906
        .0413156

        41 | -.3324581
        .2311623
        -1.44
        0.150
        -.7855278
        .1206116

        42 | .0067266
        .2110239
        0.03
        0.975
        -.4068727
        .4203259

        43 | -.169784
        .2355717
        -0.72
        0.471
        -.631496
        .291928

        44 | -.4280176
        .2297113
        -1.86
        0.062
        -.8782434
        .0222082

        45 | .1714962
        .2158193
        0.79
        0.427

    _cons | 5.224509 4.094618 1.28 0.202 -2.800795 13.24981
                                                                                                        1.28 0.202 -2.800795 13.24981
451 \text{ scalar } r2 = e(r2 p)
452 margins, dydx(overconfidence knn) post
                                                                                                           Number of obs = 12,539
    Average marginal effects
   Model VCE : Robust
   Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_knn
                                                       Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    ______
    overconfidence knn | -.309041 .0911879 -3.39 0.001 -.4877659 -.130316
453 outreg2 using "Output/KNN_het", tex word append addstat(Pseudo R-squared, r2) ///
                       addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
   > ctitle("Readiness")
   Output/KNN het.tex
   Output/KNN het.rtf
    dir : seeout
455 *** precautionary saving
456 ***** low true literacy subgroup
457 logit precaution_dummy overconfidence_knn `household X' ///
                      i.year i.state cate if fin low dummy == 1 [pw=weights]
                                    log pseudolikelihood = -3717.9486
   Iteration 0:
   Iteration 0: log pseudolikelihood = -3717.9486

Iteration 1: log pseudolikelihood = -3362.9587

Iteration 2: log pseudolikelihood = -3351.227
                                  log pseudolikelihood = -3351.1849
log pseudolikelihood = -3351.1849
    Iteration 3:
   Iteration 4:
                                                                                                           Number of obs = 5,886
Wald chi2(62) = 453.33
Prob > chi2 = 0.0000
Pseudo R2 = 0.0986
   Logistic regression
   Log pseudolikelihood = -3351.1849
```

```
______
458 scalar r2 = e(r2_p)
459 margins, dydx(overconfidence knn) post
                                                                                                       Number of obs = 5,886
    Average marginal effects
   Model VCE : Robust
   Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_knn
    ______
                                                           Delta-method
   | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    overconfidence_knn | .2041392 .0201058 10.15 0.000 .1647325 .2435458
                                                   _____
460 outreg2 using "Output/KNN het", tex word append addstat(Pseudo R-squared, r2) ///
                        addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
    > s, Yes) ///
                      ctitle("Precaution")
   Output/KNN_het.tex
Output/KNN_het.rtf
    dir : seeout
462 **** high true literacy subgroup
463 logit precaution_dummy overconfidence_knn `household X' ///
             i.year i.state cate if fin high dummy == 1 [pw=weights]
   Iteration 0: log pseudolikelihood = -6836.5088
Iteration 1: log pseudolikelihood = -5968.3221
Iteration 2: log pseudolikelihood = -5944.259
Iteration 3: log pseudolikelihood = -5944.1294
    Iteration 4: log pseudolikelihood = -5944.1294
                                                                                                         Number of obs = 12,539
Wald chi2(62) = 1102.22
Prob > chi2 = 0.0000
Pseudo R2 = 0.1305
    Logistic regression
    Log pseudolikelihood = -5944.1294
                                                                            Robust
       precaution dummy | Coef. Std. Err.
                                                                                                         z P>|z| [95% Conf. Interval]

        overconfidence_knn | -1.486174 age | -.1213746 age | -.1214817 age | -.
       year |
                               2015 | .3119709 .0607209 5.14 0.000 .1929602 .4309816
2018 | .3613356 .0647875 5.58 0.000 .2343545 .4883167
                     state cate |
```

464 scalar r2 = e(r2 p)

465 margins, dydx(overconfidence knn) post

Number of obs = 12,539 Average marginal effects

Model VCE : Robust

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_knn

	Delta-method						
į		Std. Err.		P> z	[95% Conf.	<pre>Interval]</pre>	
overconfidence_knn	2642313	.076214	-3.47	0.001	4136079	1148546	

```
466 outreg2 using "Output/KNN het", tex word append addstat(Pseudo R-squared, r2) ///
     > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
     > es, Yes) ///
                         ctitle("Precaution")
     Output/KNN het.tex
     Output/KNN het.rtf
     dir : seeout
468 *** financial market participation
469 ***** low true literacy subgroup
470 logit fin par dummy overconfidence knn `household X' ///
                                i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                                               log pseudolikelihood = -2155.857
     Iteration 0:
                                           log pseudolikelihood = -1890.6995
log pseudolikelihood = -1780.4325
log pseudolikelihood = -1776.6471
     Iteration 1:
     Iteration 2:
     Iteration 3:
                                            log pseudolikelihood = -1776.6385
     Iteration 4:
     Iteration 5:
                                            log pseudolikelihood = -1776.6385
                                                                                                                                              Number of obs = 5,886
Wald chi2(62) = 529.83
Prob > chi2 = 0.0000
Provide R2 = 0.1759
     Logistic regression
     Log pseudolikelihood = -1776.6385
                                                                                                       Robust
               fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
      ______

        overconfidence_knn | 1.162445
        .1585073
        7.33
        0.000
        .851776
        1.473113

        age | -.0672648
        .020168
        -3.34
        0.001
        -.1067934
        -.0277362

        age2 | .000944
        .0002234
        4.22
        0.000
        .0005061
        .0013819

        logincome | -.0224806
        1.29092
        -0.02
        0.986
        -2.552637
        2.507676

        logincome2 | .0449618
        .0609766
        0.74
        0.461
        -.0745501
        .1644737

        female_dummy | -.3640722
        .1095047
        -3.32
        0.001
        -.5786974
        -.149447

        nonwhite_dummy | -.213739
        .1244104
        -1.72
        0.086
        -.4575788
        .0301009

        marital_dummy | .1221244
        .1231829
        0.99
        0.321
        -.1193096
        .3635584

        high_school_dummy | .9681058
        .2712161
        3.57
        0.000
        .436532
        1.499679

        college_dummy | .4459186
        .1210256
        3.68
        0.000
        .2087127
        .6831245

                                              year |
                                          2015 | -.1822673 .1365409 -1.33 0.182 -.4498826
2018 | -.2996561 .1353187 -2.21 0.027 -.564876
                                                                                                                                                                                                                                   .085348
                                                                                                                                                                                                                            -.0344362
                             state cate |
                                                          1.139494
                                                    5
                                                    6
                                                    7
                                                   8
                                                   9
                                                 1.0
                                                 11

    11 | -.1947904
    .4743967
    -0.41
    0.681
    -1.124591
    .7350099

    12 | -.7766455
    .7066261
    -1.10
    0.272
    -2.161607
    .6083162

    13 | -1.225546
    .6273095
    -1.95
    0.051
    -2.45505
    .0039583

    14 | -.1759928
    .4212641
    -0.42
    0.676
    -1.001655
    .6496697

    15 | -1.546134
    .6881513
    -2.25
    0.025
    -2.894886
    -.1973821

    16 | -.2524743
    .5358626
    -0.47
    0.638
    -1.302746
    .7977972

    17 | -.2678158
    .5103045
    -0.52
    0.600
    -1.267994
    .7323626

    18 | .047142
    .4655049
    0.10
    0.919
    -.8652309
    .9595149

    19 | -.676124
    .5448197
    -1.24
    0.215
    -1.743951
    .3917031

    20 | .0967503
    .5101916
    0.19
    0.850
    -.903207
    1.096708

    21 | .3536826
    .4426721
    0.80
    0.424
    -.5139388
    1.221304

    22 | -.5123436
    .5329792
    -0.96
    0.336
    -1.556964
    .5322764

    21
    -.3536826
    .4426721
    0.80
    0.424
    -.5139388
    1.221304

    22
    -.5123436
    .5329792
    -0.96
    0.336
    -1.556964
    .5322764

    23
    .2046703
    .4402061
    0.46
    0.642
    -.6581178
    1.067458

    24
    -.1725828
    .4826307
    -0.36
    0.721
    -1.118521
    .773356

    25
    -.4367555
    .4917516
    -0.89
    0.374
    -1.400571
    .52706

    26
    .201353
    .4513094
    0.45
    0.655
    -.6831972
    1.085903

    27
    .3606636
    .5211169
    0.69
    0.489
    -.6607067
    1.382034
```

```
        31
        -.5146936
        .4573195
        -1.13
        0.260
        -1.411023
        .3816362

        32
        -.173364
        .5766985
        -0.30
        0.764
        -1.303672
        .9569443

        33
        .2336974
        .3926322
        0.60
        0.552
        -.5358477
        1.003242

        34
        -.2066479
        .4728011
        -0.44
        0.662
        -1.133321
        .7200252

        35
        .3760116
        .4503413
        0.83
        0.404
        -.5066412
        1.258664

        36
        -.1565516
        .4726676
        -0.33
        0.740
        -1.082963
        .7698598

        37
        0.844611
        .4693229
        0.18
        0.857
        -.8353948
        1.004317

        38
        1.3425481
        .4716984
        0.73
        0.468
        -.5819639
        1.26706

        39
        1.0444322
        .4390582
        0.10
        0.919
        -.8161062
        .9049705

        40
        -.4969214
        .4982582
        -1.00
        0.319
        -1.47349
        .4796468

        41
        .353884
        .4413588
        0.80
        0.423
        -.511163
                                cons | -7.12923 6.863734 -1.04 0.299
                                                                                                                                      -20.5819 6.323442
471 \text{ scalar } r2 = e(r2 p)
472 margins, dydx (overconfidence knn) post
                                                                                                   Number of obs = 5,886
    Average marginal effects
   Model VCE : Robust
   Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_knn
                                        | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    overconfidence knn | .0904818 .0122786 7.37 0.000 .0664161 .1145474
473 outreg2 using "Output/KNN_het", tex word append addstat(Pseudo R-squared, r2) ///
    > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
    > s, Yes) ///
> ctitle("Participation")
   Output/KNN het.tex
   Output/KNN het.rtf
   dir : seeout
475 **** high true literacy subgroup
476 logit fin par dummy overconfidence knn `household X' ///
                      i.year i.state cate if fin high dummy == \overline{1} [pw=weights]
                                log pseudolikelihood = -7436.5574
   Iteration 0:
    Iteration 1:
                               log pseudolikelihood = -6641.7015
   Iteration 2: log pseudolikelihood = -6638.0289
Iteration 3: log pseudolikelihood = -6638.0276
Iteration 4: log pseudolikelihood = -6638.0276
                                                                                                    Number of obs = 12,539
Wald chi2(62) = 981.34
Prob > chi2 = 0.0000
Pseudo R2 = 0.1074
    Logistic regression
   Log pseudolikelihood = -6638.0276
```

```
______
477 \text{ scalar } r2 = e(r2 p)
478 margins, dydx(overconfidence knn) post
                                                        Number of obs = 12,539
  Average marginal effects
  Model VCE : Robust
  Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_knn
  ______
                                Delta-method
  | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
  overconfidence_knn | -.3202511 .0975253 -3.28 0.001 -.5113972 -.129105
                   <del>-____</del>
479 outreg2 using "Output/KNN het", tex word append addstat(Pseudo R-squared, r2) ///
             addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
  > es, Yes) ///
           ctitle("Participation")
  Output/KNN_het.tex
Output/KNN_het.rtf
  dir : seeout
481 * heterogeneous effects with MLP
482 *** retirement readiness
483 **** without state dummies
484 logit retire dummy overconfidence mlp `household X' ///
            i.year i.state cate if fin low dummy == 1 [pw=weights]
  Iteration 0: log pseudolikelihood = -2789.9313 Iteration 1: log pseudolikelihood = -2487.9709
                 log pseudolikelihood = -2444.1885
log pseudolikelihood = -2443.7907
log pseudolikelihood = -2443.7903
  Iteration 2:
  Iteration 3:
  Iteration 4:
  Iteration 5: log pseudolikelihood = -2443.7903
                                                         Number of obs = 5,886
Wald chi2(62) = 456.16
Prob > chi2 = 0.0000
Pseudo R2 = 0.1241
  Logistic regression
                                                                                    0.1241
  Log pseudolikelihood = -2443.7903
                                                         Pseudo R2
  ______
                                         Robust
        retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]

        overconfidence_mlp | 1.295774 age | .0182602 .0183427 age | .0182602 .0183427 1.00 0.319 -.0176908 .0542112 age2 | -.0004492 .0002128 -2.11 0.035 -.0008663 -.0000321 logincome | -1.426216 1.017059 -1.40 0.161 -3.419615 .5671822 logincome2 | .0923977 .0491432 1.88 0.060 -.0039211 .1887165 female_dummy | -.1690245 .0930519 -1.82 0.069 -.351403 .0133539 nonwhite_dummy | .1780352 .0965989 1.84 0.065 -.0112951 .3673655 marital_dummy | .5101957 .1033913 4.93 0.000 .3075524 .7128389 high_school_dummy | .5596997 .1916233 2.92 0.003 .184125 .9352744 college_dummy | .4771959 .1014766 4.70 0.000 .2783054 .6760864

                  year |
                 2015 | .0722021 .118695 0.61 0.543 -.1604358 .3048401
2018 | .0726672 .1173872 0.62 0.536 -.1574074 .3027418
           state cate |
```

485 scalar r2 = e(r2 p)

486 margins, dydx(overconfidence mlp) post

Average marginal effects Number of obs = 5,886

Model VCE : Robust

Expression : Pr(retire\_dummy), predict()

dy/dx w.r.t. : overconfidence mlp

| Delta-method | dy/dx Std. Err. z P>|z| [95% Conf. Interval] | overconfidence\_mlp | .1453983 .0144946 10.03 0.000 .1169895 .1738071

\_\_cons | 2.068588 5.244527 0.39 0.693 -8.210496 12.34767

```
487 outreg2 using "Output/MLP het", tex word replace addstat(Pseudo R-squared, r2) //
  > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
  > s, Yes) ///
              ctitle("Readiness")
  Output/MLP het.tex
  Output/MLP het.rtf
  dir : seeout
489 **** with state dummies
490 logit retire_dummy overconfidence mlp `household X' ///
  > i.year i.state_cate if fin_high dummy == 1 [pw=weights]
                   log pseudolikelihood = -7639.91
log pseudolikelihood = -6361.7492
log pseudolikelihood = -6348.4995
  Iteration 0:
  Iteration 1:
  Iteration 2:
                    log pseudolikelihood = -6348.4614
log pseudolikelihood = -6348.4614
  Iteration 3:
  Iteration 4:
                                                                Number of obs = 12,539
Wald chi2(62) = 1620.38
Prob > chi2 = 0.0000
Peaudo R2 = 0.1690
  Logistic regression
  Log pseudolikelihood = -6348.4614
                                              Robust
         retire dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
  state cate |
                          5
                       6
                     .0+13361 .3252397
-.610223 .247500

    16
    -.1080482
    .2210693
    -0.49
    0.625
    -.5413361
    .3252397

    17
    -.1813155
    .2188344
    -0.83
    0.407
    -.610223
    .247592

    18
    .064051
    .2334335
    0.27
    0.784
    -.3934703
    .5215723

    19
    -.0517154
    .2676386
    -0.19
    0.847
    -.5762774
    .4728466

    20
    | .2319824
    .2172144
    1.07
    0.286
    -.19375
    .6577147

    21
    | -.206106
    .2265923
    -0.91
    0.363
    -.6502188
    .2380067

    22
    | -.1446702
    .2177375
    -0.66
    0.506
    -.5714279
    .2820874

    23
    | -.3139709
    .2339623
    -1.34
    0.180
    -.7725285
    .1445867

    24
    | -.3684769
    .2134384
    -1.73
    0.084
    -7868084
    0498546
```

```
    34 | -.0764205
    .2257681
    -0.35
    0.728
    -.520924
    .3640709

    35 | .2316146
    .2192936
    1.06
    0.291
    -.198193
    .6614222

    36 | -.1858542
    .2363229
    -0.79
    0.432
    -.6490385
    .2773301

    37 | -.2027545
    .220019
    -0.92
    0.357
    -.6339838
    .2284747

    38 | -.0854823
    .2125973
    -0.40
    0.688
    -.5021654
    .3312009

    39 | -.2256314
    .2321333
    -0.97
    0.331
    -.6806044
    .2293416

    40 | -.3822187
    .2193708
    -1.74
    0.081
    -.8121775
    .0477401

    41 | -.3368566
    .2328396
    -1.45
    0.148
    -.7932139
    .1195006

    42 | .0006179
    .2126976
    0.00
    0.998
    -.4162618
    .4174076

      41
      -.3368566
      .2328396
      -1.45
      0.148
      -.7932139
      .1195006

      42
      .0006179
      .2126976
      0.00
      0.998
      -.4162618
      .4174976

      43
      -.1657875
      .2370676
      -0.70
      0.484
      -.6304316
      .2988565

      44
      -.4179486
      .2296329
      -1.82
      0.069
      -.8680209
      .0321236

      45
      .1655213
      .2169989
      0.76
      0.446
      -.2597887
      .5908313

      46
      -.2367851
      .2121147
      -1.12
      0.264
      -.6525223
      .1789521

      47
      -.3235365
      .2220327
      -1.46
      0.145
      -.7587126
      .1116395

      48
      -.3320531
      .2137069
      -1.55
      0.120
      -.750911
      .0868047

      49
      .1894702
      .2320929
      0.82
      0.414
      -.2654234
      .6443639

      50
      -.184118
      .2171721
      -0.85
      0.397
      -.6097675
      .2415315

      51
      .2037137
      .2118147
      0.96
      0.336
      -.2114355
      .6188629

                                                                                                          0.00 0.998 -.4162618 .4174976

-0.70 0.484 -.6304316 .2988565

-1.82 0.069 -.8680209 .0321236

0.76 0.446 -.2597887 .5908313
    _cons | 3.319672 3.903887 0.85 0.395 -4.331806 10.97115
                                                                                                            0.85 0.395 -4.331806 10.97115
491 \text{ scalar } r2 = e(r2 p)
492 margins, dydx(overconfidence mlp) post
                                                                                                               Number of obs = 12,539
    Average marginal effects
    Model VCE : Robust
    Expression : Pr(retire_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp
                                                        Delta-method dy/dx Std. Err. z P>|z| [95% Conf. Interval]
    ______
    overconfidence_mlp | -.558836 .0879363 -6.36 0.000 -.7311881 -.386484
493 outreg2 using "Output/MLP_het", tex word append addstat(Pseudo R-squared, r2) ///
                        addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
    > es, Yes) ///
    > ctitle("Readiness")
    Output/MLP_het.tex
Output/MLP_het.rtf
    dir : seeout
495 *** precautionary saving
496 ***** low true literacy subgroup
497 logit precaution_dummy overconfidence_mlp `household X' ///
                       i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                                     log pseudolikelihood = -3717.9486
    Iteration 0:
   Iteration 0: log pseudolikelihood = -3717.9486
Iteration 1: log pseudolikelihood = -3356.6527
Iteration 2: log pseudolikelihood = -3344.63
                                   log pseudolikelihood = -3344.5865
log pseudolikelihood = -3344.5865
    Iteration 3:
    Iteration 4:
                                                                                                               Number of obs = 5,886
Wald chi2(62) = 460.39
Prob > chi2 = 0.0000
Pseudo R2 = 0.1004
    Logistic regression
    Log pseudolikelihood = -3344.5865
```

cons |

```
______
498 scalar r2 = e(r2_p)
499 margins, dydx(overconfidence mlp) post
                                         Number of obs = 5,886
 Average marginal effects
 Model VCE : Robust
 Expression : Pr(precaution_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp
 ______
                       Delta-method
 | dy/dx Std. Err. z P>|z| [95% Conf. Interval]
 overconfidence_mlp | .201378 .0191309 10.53 0.000 .1638821 .2388738
                    _____
500 outreg2 using "Output/MLP_het", tex word append addstat(Pseudo R-squared, r2) ///
         addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
 > s, Yes) ///
        ctitle("Precaution")
 Output/MLP_het.tex
Output/MLP_het.rtf
 dir : seeout
502 **** high true literacy subgroup
503 logit precaution_dummy overconfidence_mlp `household X' ///
   i.year i.state cate if fin high dummy == 1 [pw=weights]
 Iteration 0: log pseudolikelihood = -6836.5088
Iteration 1: log pseudolikelihood = -5934.1703
Iteration 2: log pseudolikelihood = -5909.6227
Iteration 3: log pseudolikelihood = -5909.5251
 Iteration 4: log pseudolikelihood = -5909.5251
                                         Number of obs = 12,539
Wald chi2(62) = 1134.39
Prob > chi2 = 0.0000
Pseudo R2 = 0.1356
 Logistic regression
 Log pseudolikelihood = -5909.5251
                              Robust
  precaution dummy | Coef. Std. Err.
                                         z P>|z| [95% Conf. Interval]
 year |
            2015 | .3099929 .0609035 5.09 0.000 .1906242 .4293616
2018 | .3627851 .0650636 5.58 0.000 .2352628 .4903075
        state cate |
```

504 scalar r2 = e(r2 p)

505 margins, dydx(overconfidence mlp) post

Number of obs = 12,539 Average marginal effects

Model VCE : Robust

Expression : Pr(precaution\_dummy), predict()
dy/dx w.r.t. : overconfidence\_mlp

		Delta-method				
		Std. Err.	Z	P> z	[95% Conf.	<pre>Interval]</pre>
overconfidence_mlp	5901815	.0735401	-8.03	0.000	7343175	4460455

```
506 outreg2 using "Output/MLP het", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
   > es, Yes) ///
              ctitle("Precaution")
   Output/MLP het.tex
   Output/MLP het.rtf
   dir : seeout
508 *** financial market participation
509 ***** low true literacy subgroup
510 logit fin par dummy overconfidence mlp `household X' ///
                   i.year i.state_cate if fin_low_dummy == 1 [pw=weights]
                           log pseudolikelihood = -2155.857
   Iteration 0:
   Iteration 1:
                          log pseudolikelihood = -1889.6565
                          log pseudolikelihood = -1769.0621
log pseudolikelihood = -1764.7839
   Iteration 2:
   Iteration 3:
                          log pseudolikelihood = -1764.7713
   Iteration 4:
   Iteration 5:
                          log pseudolikelihood = -1764.7713
                                                                                    Number of obs = 5,886
Wald chi2(62) = 560.00
Prob > chi2 = 0.0000
Prodo R2 = 0.1814
   Logistic regression
   Log pseudolikelihood = -1764.7713
                                                             Robust
         fin par dummy | Coef. Std. Err. z P>|z| [95% Conf. Interval]
   ______
  year |
                         .0875288
                                                                                                                                  -.0279072
                                  state cate |
                              5
                               6
                              7
                              8
                              9
                             10
                             11
                             12 |
                             13
                            14 I

    14
    -.12/223
    .4231036
    -0.30
    0.764
    -.95649
    .7020455

    15
    -1.549403
    .6957541
    -2.23
    0.026
    -2.913056
    -.1857502

    16
    -.1975152
    .5313563
    -0.37
    0.710
    -1.238954
    .8439239

    17
    -.2233605
    .513316
    -0.44
    0.663
    -1.229441
    .7827204

    18
    .072784
    .4669893
    0.16
    0.876
    -.8424982
    .9880662

    19
    -.6171549
    .5505785
    -1.12
    0.262
    -1.696269
    .4619591

    20
    .1246501
    .5128874
    0.24
    0.808
    -.8805908
    1.129891

    21
    .3813363
    .4423782
    0.86
    0.389
    -.4857091
    1.248382

    22
    .4889344
    5350099
    -0.91
    0.261
    -1.527525
    55056757

                                                                                                                                  .5596657
1.0947<sup>-1</sup>

    21
    -.3613363
    .4423762
    0.00
    0.363
    -.4637091
    1.246362

    22
    -.4889344
    .5350099
    -0.91
    0.361
    -1.537535
    .5596657

    23
    .2306577
    .4408721
    0.52
    0.601
    -.6334357
    1.094751

    24
    -.1191915
    .4790846
    -0.25
    0.804
    -1.05818
    .8197972

    25
    -.3827288
    .4909813
    -0.78
    0.436
    -1.345034
    .5795769

    26
    .2294384
    .4501069
    0.51
    0.610
    -.6527548
    1.111632

    27
    .4039637
    .5220341
    0.77
    0.439
    -.6192043
    1.427132
```

```
        31
        -.4419893
        .4545806
        -0.97
        0.331
        -1.332951
        .4489723

        32
        -.1225554
        .5764977
        -0.21
        0.832
        -1.25247
        1.007359

        33
        | .2184653
        .3951135
        0.55
        0.580
        -.5559429
        .9928735

        34
        | -.1843216
        .4742479
        -0.39
        0.698
        -1.11383
        .7451872

        35
        | .4247102
        .4524049
        0.94
        0.348
        -.4619871
        1.311408

        36
        | -.1128315
        .4675319
        -0.24
        0.809
        -1.029177
        .8035141

        37
        | .1266882
        .4665478
        0.27
        0.786
        -.7877287
        1.041105

        38
        | .365641
        .4723115
        0.77
        0.439
        -.5600724
        1.291354

        39
        | .0597444
        .4410622
        0.14
        0.892
        -.8047216
        .9242103

        40
        | -.4406176
        .5017983
        -0.88
        0.380
        -1.424124
        .9242103

        41
        | .3996997
        .4396089
        0.91
        0.363

                                cons | -11.37756 6.921158 -1.64 0.100 -24.94278 2.187663
511 \text{ scalar } r2 = e(r2 p)
512 margins, dydx(overconfidence mlp) post
                                                                                                  Number of obs = 5,886
   Average marginal effects
   Model VCE : Robust
   Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp
                                       | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval]
                                                  -----
   overconfidence mlp | .0943189 .0110886 8.51 0.000 .0725856 .1160523
513 outreg2 using "Output/MLP_het", tex word append addstat(Pseudo R-squared, r2) ///
   > addtext(Sample, Low Lit., Demo. chars., Yes, Year dummies, Yes, State dummie
   > s, Yes) ///
> ctitle("Participation")
   Output/MLP het.tex
   Output/MLP_het.rtf
   dir : seeout
514
515 **** high true literacy subgroup
516 logit fin par dummy overconfidence mlp `household X' ///
                      i.year i.state cate if fin high dummy == \overline{1} [pw=weights]
                               log pseudolikelihood = -7436.5574
   Iteration 0:
   Iteration 1:
                               log pseudolikelihood = -6619.5792
   Iteration 2: log pseudolikelihood = -6615.6214
Iteration 3: log pseudolikelihood = -6615.6202
Iteration 4: log pseudolikelihood = -6615.6202
                                                                                                   Number of obs = 12,539
Wald chi2(62) = 998.71
Prob > chi2 = 0.0000
Pseudo R2 = 0.1104
   Logistic regression
   Log pseudolikelihood = -6615.6202
```

```
______
517 \text{ scalar } r2 = e(r2 p)
518 margins, dydx(overconfidence_mlp) post
                                       Number of obs = 12,539
 Average marginal effects
 Model VCE
          : Robust
 Expression : Pr(fin_par_dummy), predict()
dy/dx w.r.t. : overconfidence_mlp
 ______
 | Delta-method
| dy/dx Std. Err. z P>|z| [95% Conf. Interval]
                      Delta-method
 overconfidence_mlp | -.5662993 .0825256 -6.86 0.000 -.7280466 -.4045521
519 outreg2 using "Output/MLP_het", tex word append addstat(Pseudo R-squared, r2) ///
         addtext(Sample, High Lit., Demo. chars., Yes, Year dummies, Yes, State dummi
 > es, Yes) ///
        ctitle("Participation")
 Output/MLP_het.tex
Output/MLP_het.rtf
 dir : seeout
520
521 * stop capturing log and translate into pdf
522 log close analysis_NFCS
     name: analysis_NFCS log: D:\0000\0000\Perspective\Analysis\analysis_log.smcl
 log type: text closed on: 2 Jun 2020, 14:14:50
                            ·----
 > -----
```