Statistics/Data Analysis

```
      name:  <unnamed>
       log:  C:\Users\hortalav\Dropbox\Research\_Submitted\RestrictChoice\RestrictChoi
> ce (shared)\NewApproach(June2013)\Replication files\replication_table_1.smcl
  log type:  smcl
 opened on:  19 Apr 2016, 09:20:08

1 .
2 . ** IMPORT TEXT DATA CREATED BY MATLAB **
3 . import delimited results_simulation_RC_bootstrap_A2.txt, delimiter(comma) varnames(1
  > ) case(preserve) clear
  (12 vars, 1000000 obs)

4 . save results_simulation_RC_bootstrap_A2.dta, replace
  file results_simulation_RC_bootstrap_A2.dta saved

5 . import delimited results_simulation_RC_bootstrap_B2.txt, delimiter(comma) varnames(1
  > ) case(preserve) clear
  (28 vars, 1000000 obs)

6 . save results_simulation_RC_bootstrap_B2.dta, replace
  file results_simulation_RC_bootstrap_B2.dta saved

7 . use results_simulation_RC_bootstrap_A2.dta, clear

8 . merge 1:1 step using results_simulation_RC_bootstrap_B2.dta

      Result                           # of obs.
      -----------------------------------------
      not matched                             0
      matched                         1,000,000  (_merge==3)
      -----------------------------------------


9 . drop _merge

10. save results_simulation_RC_bootstrap_2.dta, replace
  file results_simulation_RC_bootstrap_2.dta saved

11.
12. ** CREATE AND RENAME VARIABLES **
13. use results_simulation_RC_bootstrap_2.dta, clear

14. rename cost OLD_cost

15. gen cost = round(p*alpha*ln(T1_NR)+(1-p)*alpha*ln(T2_NR)-p*alpha*ln(T1_R)-(1-p)*alph
  > a* ln(T2_R),0.000000001)

16. gen cost_d = (cost>0)

17. replace cost_d =  -1 if cost<0
  (279055 real changes made)

18. tab cost_d

     cost_d |      Freq.     Percent        Cum.
------------+-----------------------------------
         -1 |    279,055       27.91       27.91
          0 |    554,213       55.42       83.33
          1 |    166,732       16.67      100.00
------------+-----------------------------------
      Total |  1,000,000      100.00
```

```
19. gen sigma_dif = abs(sigma_1-sigma_2)

20. gen mu_dif    = abs(   mu_1-   mu_2)

21. gen w_1=mu_1+(sigma_1^2)/2

22. gen w_2=mu_2+(sigma_2^2)/2

23. gen w_dif = abs(w_1-w_2)

24. gen y2 = y^2

25. gen no_diff_NR  = (t1_NR==t2_NR)

26. gen no_diff_R  = (t1_R==t2_R)

27. tab cost_d no_diff_NR
```

cost_d	no_diff_NR 0	1	Total
-1	**279,055**	**0**	**279,055**
0	**0**	**554,213**	**554,213**
1	**166,732**	**0**	**166,732**
Total	**445,787**	**554,213**	**1,000,000**

```
28. tab no_diff_NR no_diff_R
```

no_diff_NR	no_diff_R 0	1	Total
0	**133,959**	**311,828**	**445,787**
1	**0**	**554,213**	**554,213**
Total	**133,959**	**866,041**	**1,000,000**

```
29.
30. /* In 55% of our observations there is no difference between the policies
  > adopted by the median voter in the two states of the worls (when no restr.).
  > This almost  perfectly coincides with the observations when the costs of restr
  > is zero (there are 12 observations in which it is not). */
31.
32.
33. ** TABLE 1 **
34. sum cost y y2 alpha abst_1 p  mu_1 mu_2 sigma_1 sigma_2 A B w_dif if cost!=0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
cost	**445787**	**-.1191845**	**.37876**	**-3.376392**	**3.463336**
y	**445787**	**.5009529**	**.2886652**	**5.00e-06**	**.999996**
y2	**445787**	**.3342813**	**.2983952**	**2.50e-11**	**.999992**
alpha	**445787**	**.6056389**	**.2199777**	**.000014**	**.999993**
abst_1	**445787**	**.6280014**	**.3599294**	**0**	**1**
p	**445787**	**.4998344**	**.2887228**	**2.00e-06**	**.999987**
mu_1	**445787**	**5.064289**	**.7620091**	**4.00001**	**6.999984**
mu_2	**445787**	**5.937222**	**.7642616**	**4.000021**	**7**
sigma_1	**445787**	**.6549535**	**.4071636**	**0**	**1.499998**
sigma_2	**445787**	**.8555449**	**.4435903**	**5.00e-06**	**1.5**
A	**445787**	**.746447**	**.4360519**	**9.00e-06**	**1.499995**
B	**445787**	**.8893961**	**.3841119**	**.000047**	**1.5**
w_dif	**445787**	**1.174097**	**.7908221**	**9.54e-07**	**4.063451**

```
35. corr cost y y2 alpha abst_1 p  mu_1 mu_2 sigma_1 sigma_2 A B w_dif if cost!=0
  (obs=445787)

             |     cost        y       y2    alpha   abst_1        p     mu_1     mu_2
>   sigma_1  sigma_2        A        B    w_dif
-------------+------------------------------------------------------------------------
             |
        cost |   1.0000
           y |   0.3291   1.0000
          y2 |   0.3408   0.9683   1.0000
       alpha |   0.0020  -0.0017  -0.0017   1.0000
      abst_1 |  -0.1304   0.0568   0.0469  -0.1926   1.0000
           p |  -0.4942   0.0018   0.0010  -0.0020   0.0033   1.0000
        mu_1 |   0.0570  -0.0001   0.0000   0.1140  -0.4243   0.0001   1.0000
        mu_2 |  -0.0572   0.0013   0.0009  -0.1186   0.4259  -0.0001   0.1951   1.0000
     sigma_1 |  -0.0055  -0.0003   0.0001   0.0304  -0.0147   0.0017  -0.0921   0.0914
>    1.0000
     sigma_2 |   0.0175  -0.0012  -0.0009   0.1590  -0.3194  -0.0002   0.1134  -0.1133
>    0.0263   1.0000
           A |  -0.0953   0.0004   0.0006   0.1415   0.0136  -0.0012  -0.0117   0.0090
>   -0.0070  -0.0120   1.0000
           B |   0.0651  -0.0017  -0.0017   0.4158   0.0464   0.0002   0.0040  -0.0090
>   -0.0015  -0.1070  -0.0911   1.0000
       w_dif |  -0.0935   0.0028   0.0025  -0.1099   0.4217   0.0004  -0.4298   0.4338
>   -0.2125   0.2390   0.0118  -0.0664   1.0000

36. reg cost  y alpha abst_1 p  mu_1 mu_2 sigma_1 sigma_2 A B if cost!=0

      Source |       SS       df       MS              Number of obs =  445787
-------------+------------------------------           F( 10,445776) =28602.85
       Model |  24995.9084    10  2499.59084           Prob > F      =  0.0000
    Residual |  38956.1797445776  .087389585           R-squared     =  0.3909
-------------+------------------------------           Adj R-squared =  0.3908
       Total |  63952.0881445786  .143459167           Root MSE      =  .29562

------------------------------------------------------------------------------
        cost |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
           y |   .4466225   .0015387   290.26   0.000     .4436068    .4496383
       alpha |   -.087082   .0023694   -36.75   0.000     -.091726    -.082438
      abst_1 |  -.1916004   .0017548  -109.19   0.000    -.1950396   -.1881611
           p |  -.6486035   .0015335  -422.95   0.000    -.6516091   -.6455978
        mu_1 |  -.0087415   .0007375   -11.85   0.000     -.010187    -.007296
        mu_2 |   .0085725   .0007361    11.65   0.000     .0071298    .0100152
     sigma_1 |  -.0082207   .0011133    -7.38   0.000    -.0104027   -.0060386
     sigma_2 |  -.0169631   .0010762   -15.76   0.000    -.0190724   -.0148537
           A |  -.0687842   .0010444   -65.86   0.000    -.0708312   -.0667371
           B |   .0849295   .0013188    64.40   0.000     .0823447    .0875143
       _cons |   .1434157   .0048257    29.72   0.000     .1339574    .1528739
------------------------------------------------------------------------------

37. outreg using RestrictChoice_Simulation.tex, replace bdec(4) se tex varlabels starlev
  > els(10 5 1) sigsymbols(+,*,**) ctitle("", "(1)")
  (note: file RestrictChoice_Simulation.tex not found)

------------------------
                     (1)
------------------------
y                  0.4466
                  (0.0015)**
alpha             -0.0871
                  (0.0024)**
abst_1            -0.1916
                  (0.0018)**
p                 -0.6486
                  (0.0015)**
mu_1              -0.0087
                  (0.0007)**
mu_2               0.0086
                  (0.0007)**
sigma_1           -0.0082
                  (0.0011)**
```

sigma_2	**-0.0170**
	(0.0011)**
A	**-0.0688**
	(0.0010)**
B	**0.0849**
	(0.0013)**
Constant	**0.1434**
	(0.0048)**
R2	**0.39**
N	**445,787**

+ p<0.1; * p<0.05; ** p<0.01

38. reg cost y y2 alpha abst_1 p mu_1 mu_2 sigma_1 sigma_2 A B if cost!=0

Source	SS	df	MS		
Model	**25419.8189**	**11**	**2310.89263**	Number of obs =	**445787**
				F(11,445775) =	**26734.43**
Residual	**38532.2692445775**	**.08643883**		Prob > F =	**0.0000**
				R-squared =	**0.3975**
				Adj R-squared =	**0.3975**
Total	**63952.0881445786**	**.143459167**		Root MSE =	**.294**

cost	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
y	**.0317932**	**.0061181**	**5.20**	**0.000**	**.019802**	**.0437845**
y2	**.4140666**	**.0059127**	**70.03**	**0.000**	**.4024779**	**.4256554**
alpha	**-.0862844**	**.0023565**	**-36.62**	**0.000**	**-.0909031**	**-.0816657**
abst_1	**-.1861728**	**.0017469**	**-106.57**	**0.000**	**-.1895967**	**-.182749**
p	**-.6482758**	**.0015252**	**-425.05**	**0.000**	**-.6512651**	**-.6452865**
mu_1	**-.007499**	**.0007337**	**-10.22**	**0.000**	**-.008937**	**-.006061**
mu_2	**.0073553**	**.0007323**	**10.04**	**0.000**	**.00592**	**.0087905**
sigma_1	**-.0078929**	**.0011072**	**-7.13**	**0.000**	**-.0100631**	**-.0057228**
sigma_2	**-.0162284**	**.0010704**	**-15.16**	**0.000**	**-.0183263**	**-.0141304**
A	**-.0689432**	**.0010387**	**-66.37**	**0.000**	**-.0709791**	**-.0669074**
B	**.0845708**	**.0013116**	**64.48**	**0.000**	**.082**	**.0871416**
_cons	**.2092849**	**.0048907**	**42.79**	**0.000**	**.1996992**	**.2188705**

39. outreg using RestrictChoice_Simulation.tex, merge bdec(4) se tex varlabels starlevel
> s(10 5 1) sigsymbols(+,*,**) ctitle("", "(2)")

	(1)	(2)
y	**0.4466**	**0.0318**
	(0.0015)**	**(0.0061)****
alpha	**-0.0871**	**-0.0863**
	(0.0024)**	**(0.0024)****
abst_1	**-0.1916**	**-0.1862**
	(0.0018)**	**(0.0017)****
p	**-0.6486**	**-0.6483**
	(0.0015)**	**(0.0015)****
mu_1	**-0.0087**	**-0.0075**
	(0.0007)**	**(0.0007)****
mu_2	**0.0086**	**0.0074**
	(0.0007)**	**(0.0007)****
sigma_1	**-0.0082**	**-0.0079**
	(0.0011)**	**(0.0011)****
sigma_2	**-0.0170**	**-0.0162**
	(0.0011)**	**(0.0011)****
A	**-0.0688**	**-0.0689**
	(0.0010)**	**(0.0010)****
B	**0.0849**	**0.0846**
	(0.0013)**	**(0.0013)****
y2		**0.4141**
		(0.0059)**
Constant	**0.1434**	**0.2093**
	(0.0048)**	**(0.0049)****
R2	**0.39**	**0.40**
N	**445,787**	**445,787**

+ p<0.1; * p<0.05; ** p<0.01

40. reg cost y y2 alpha abst_1 p mu_1 mu_2 sigma_1 sigma_2 A B w_dif if cost!=0

Source	SS	df	MS		
Model	**25600.9356**	**12**	**2133.4113**	Number of obs =	**445787**
Residual	**38351.1525445774**	**.086032726**		F(12,445774) =	**24797.67**
				Prob > F =	**0.0000**
Total	**63952.0881445786**	**.143459167**		R-squared =	**0.4003**
				Adj R-squared =	**0.4003**
				Root MSE =	**.29331**

cost	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
y	**.0316625**	**.0061037**	**5.19**	**0.000**	**.0196995**	**.0436256**
y2	**.4144024**	**.0058988**	**70.25**	**0.000**	**.4028409**	**.4259639**
alpha	**-.087941**	**.0023513**	**-37.40**	**0.000**	**-.0925494**	**-.0833326**
abst_1	**-.1849641**	**.001743**	**-106.12**	**0.000**	**-.1883803**	**-.1815479**
p	**-.6481276**	**.0015216**	**-425.95**	**0.000**	**-.6511099**	**-.6451454**
mu_1	**-.0379991**	**.0009888**	**-38.43**	**0.000**	**-.0399371**	**-.0360612**
mu_2	**.0379127**	**.0009886**	**38.35**	**0.000**	**.0359752**	**.0398502**
sigma_1	**-.0388359**	**.0012942**	**-30.01**	**0.000**	**-.0413725**	**-.0362993**
sigma_2	**.0169127**	**.0012892**	**13.12**	**0.000**	**.0143858**	**.0194395**
A	**-.0688337**	**.0010363**	**-66.42**	**0.000**	**-.0708648**	**-.0668026**
B	**.0832971**	**.0013088**	**63.64**	**0.000**	**.0807318**	**.0858624**
w_dif	**-.0473235**	**.0010314**	**-45.88**	**0.000**	**-.049345**	**-.045302**
_cons	**.2309694**	**.004902**	**47.12**	**0.000**	**.2213616**	**.2405772**

41. outreg using RestrictChoice_Simulation.tex, merge bdec(4) se tex varlabels starlevel
> s(10 5 1) sigsymbols(+,*,**) ctitle("", "(3)")

	(1)	(2)	(3)
y	**0.4466**	**0.0318**	**0.0317**
	(0.0015)**	**(0.0061)****	**(0.0061)****
alpha	**-0.0871**	**-0.0863**	**-0.0879**
	(0.0024)**	**(0.0024)****	**(0.0024)****
abst_1	**-0.1916**	**-0.1862**	**-0.1850**
	(0.0018)**	**(0.0017)****	**(0.0017)****
p	**-0.6486**	**-0.6483**	**-0.6481**
	(0.0015)**	**(0.0015)****	**(0.0015)****
mu_1	**-0.0087**	**-0.0075**	**-0.0380**
	(0.0007)**	**(0.0007)****	**(0.0010)****
mu_2	**0.0086**	**0.0074**	**0.0379**
	(0.0007)**	**(0.0007)****	**(0.0010)****
sigma_1	**-0.0082**	**-0.0079**	**-0.0388**
	(0.0011)**	**(0.0011)****	**(0.0013)****
sigma_2	**-0.0170**	**-0.0162**	**0.0169**
	(0.0011)**	**(0.0011)****	**(0.0013)****
A	**-0.0688**	**-0.0689**	**-0.0688**
	(0.0010)**	**(0.0010)****	**(0.0010)****
B	**0.0849**	**0.0846**	**0.0833**
	(0.0013)**	**(0.0013)****	**(0.0013)****
y2		**0.4141**	**0.4144**
		(0.0059)**	**(0.0059)****
w_dif			**-0.0473**
			(0.0010)**
Constant	**0.1434**	**0.2093**	**0.2310**
	(0.0048)**	**(0.0049)****	**(0.0049)****
R2	**0.39**	**0.40**	**0.40**
N	**445,787**	**445,787**	**445,787**

+ p<0.1; * p<0.05; ** p<0.01

```
42.
43. log close
        name:  <unnamed>
         log:  C:\Users\hortalav\Dropbox\Research\_Submitted\RestrictChoice\RestrictChoi
  > ce (shared)\NewApproach(June2013)\Replication files\replication_table_1.smcl
    log type:  smcl
   closed on:  19 Apr 2016, 09:21:10
```