Statistics/Data analysis

```
      name:  <unnamed>
       log:  /home/elven/Documents/College/metrics_project/synth/synth_output.smcl
  log type:  smcl
 opened on:  17 May 2022, 06:07:44

1 .
2 . allsynth dose1pct repvotes2020pct black fullcollege cases_per_capita whiteevangelica
  > l catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop60
  > to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct, trunit(7)
  >  trperiod(40) gapfigure(classic, save(synthcontrolresults_dose1_gph.svg, replace)) k
  > eep(synthcontrolresults_dose1, replace) pvalues

Identifying donor pool...

Synthetic Control Method for Comparative Case Studies

First Step: Data Setup

Data Setup successful

               Treated Unit: CO
             Control Units: AL, AZ, DC, FL, GA, IA, ID, IN, KS, MS, MT, ND, NE, NH,
                            OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WY

          Dependent Variable: dose1pct
  MSPE minimized for periods: 0 1 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
Results obtained for periods: 0 1 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 52 53 54 55 56 57 58 59
                              60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76

                Predictors: repvotes2020pct black fullcollege cases_per_capita
                            whiteevangelical catholic poverty medfamilinc pop0to4pct
                            pop5to9pct pop10to14pct pop15to19pct pop60to64pct
                            pop65to69pct pop70to74pct pop75to79pct pop80to84pct
                            pop85abovepct

Unless period is specified
predictors are averaged over: 0 1 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

Second Step: Run Optimization

Optimization done

Third Step: Obtain Results

Loss: Root Mean Squared Prediction Error

------------------
   RMSPE | 2.067636
------------------

Unit Weights:
```

Co_No	Unit_Weight
AL	**0**
AZ	**0**
DC	**.246**
FL	**0**
GA	**0**
IA	**0**
ID	**0**
IN	**0**
KS	**0**
MS	**0**
MT	**0**
ND	**0**
NE	**0**
NH	**.254**
OK	**0**
PA	**0**
RI	**0**
SC	**0**
SD	**0**
TN	**0**
TX	**.304**
VA	**0**
VT	**0**
WI	**0**
WY	**.196**

Predictor Balance:

	Treated	Synthetic
repvotes2020pct	**42.1467**	**42.35994**
black	**4.635333**	**16.18293**
fullcollege	**41.00235**	**38.40863**
cases_per_capita	**.0402105**	**.0358993**
whiteevangelical	**16.41762**	**13.26409**
catholic	**18.18784**	**20.01272**
poverty	**9.429272**	**11.37261**
medfamilinc	**93187.19**	**93582.95**
pop0to4pct	**5.752328**	**6.025008**
pop5to9pct	**6.012807**	**6.028221**
pop10to14pct	**6.308905**	**5.947039**
pop15to19pct	**6.353192**	**6.219125**
pop60to64pct	**6.057702**	**6.119456**
pop65to69pct	**5.157971**	**5.089638**
pop70to74pct	**3.932786**	**3.94159**
pop75to79pct	**2.469836**	**2.611832**
pop80to84pct	**1.541385**	**1.656124**
pop85abovepct	**1.565145**	**1.793243**

Estimating synthetic controls using in-space placebo treatments for treated unit state
> code == 7. This could take awhile...

1 of 25 (donor pool unit statecode == 2 for treated unit statecode == 7)
2 of 25 (donor pool unit statecode == 5 for treated unit statecode == 7)
3 of 25 (donor pool unit statecode == 9 for treated unit statecode == 7)
4 of 25 (donor pool unit statecode == 11 for treated unit statecode == 7)
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12 of 25 (donor pool unit statecode == 34 for treated unit statecode == 7)
13 of 25 (donor pool unit statecode == 35 for treated unit statecode == 7)

```
14 of 25 (donor pool unit statecode == 36 for treated unit statecode == 7)
15 of 25 (donor pool unit statecode == 42 for treated unit statecode == 7)
16 of 25 (donor pool unit statecode == 44 for treated unit statecode == 7)
17 of 25 (donor pool unit statecode == 47 for treated unit statecode == 7)
18 of 25 (donor pool unit statecode == 48 for treated unit statecode == 7)
19 of 25 (donor pool unit statecode == 49 for treated unit statecode == 7)
20 of 25 (donor pool unit statecode == 50 for treated unit statecode == 7)
21 of 25 (donor pool unit statecode == 51 for treated unit statecode == 7)
22 of 25 (donor pool unit statecode == 54 for treated unit statecode == 7)
23 of 25 (donor pool unit statecode == 56 for treated unit statecode == 7)
24 of 25 (donor pool unit statecode == 58 for treated unit statecode == 7)
25 of 25 (donor pool unit statecode == 60 for treated unit statecode == 7)

Saving results...
(1,040 missing values generated)
(1,925 observations deleted)
```

Treated unit (statecode == 7) results:

	statec~e	t	gap	rmspe	rmspe_~k	p	N	unique_W
1926.	7	0	1.795999	.	.	.	26	1
1927.	7	1	1.667999	.	.	.	26	1
1928.	7	2	1.752999	.	.	.	26	1
1929.	7	3	1.878402	.	.	.	26	1
1930.	7	4	1.923399	.	.	.	26	1
1931.	7	5	1.982999	.	.	.	26	1
1932.	7	6	1.953401	.	.	.	26	1
1933.	7	7	1.998401	.	.	.	26	1
1934.	7	8	1.932598	.	.	.	26	1
1935.	7	9	2.002199	.	.	.	26	1
1936.	7	10	2.048002	.	.	.	26	1
1937.	7	11	2.043	.	.	.	26	1
1938.	7	12	1.981399	.	.	.	26	1
1939.	7	13	2.019801	.	.	.	26	1
1940.	7	14	1.9394	.	.	.	26	1
1941.	7	15	1.878598	.	.	.	26	1
1942.	7	16	1.948199	.	.	.	26	1
1943.	7	17	1.9424	.	.	.	26	1
1944.	7	18	1.861201	.	.	.	26	1
1945.	7	19	1.930001	.	.	.	26	1
1946.	7	20	1.854602	.	.	.	26	1
1947.	7	21	1.8988	.	.	.	26	1
1948.	7	22	1.893002	.	.	.	26	1
1949.	7	23	1.917599	.	.	.	26	1
1950.	7	24	1.9626	.	.	.	26	1
1951.	7	25	1.931399	.	.	.	26	1
1952.	7	26	1.9314	.	.	.	26	1
1953.	7	27	1.901	.	.	.	26	1
1954.	7	28	2.050999	.	.	.	26	1
1955.	7	29	2.009801	.	.	.	26	1
1956.	7	30	2.128599	.	.	.	26	1
1957.	7	31	2.248201	.	.	.	26	1
1958.	7	32	2.272799	.	.	.	26	1
1959.	7	33	2.347401	.	.	.	26	1
1960.	7	34	2.417	.	.	.	26	1
1961.	7	35	2.436599	.	.	.	26	1
1962.	7	36	2.455399	.	.	.	26	1
1963.	7	37	2.544601	.	.	.	26	1
1964.	7	38	2.544599	.	.	.	26	1
1965.	7	39	2.564202	.	.	.	26	1
1966.	7	40	2.583801	1.57744	11	.4230769	26	1

1967.	7	41	2.728	1.667932	10	.3846154	26	1
1968.	7	42	2.747602	1.70655	10	.3846154	26	1
1969.	7	43	2.772197	1.733878	10	.3846154	26	1
1970.	7	44	2.841799	1.768741	10	.3846154	26	1
1971.	7	45	2.7918	1.78089	10	.3846154	26	1
1972.	7	46	2.861403	1.802849	10	.3846154	26	1
1973.	7	47	2.935998	1.832092	9	.3461539	26	1
1974.	7	48	2.880999	1.846437	9	.3461539	26	1
1975.	7	49	2.955602	1.868201	9	.3461539	26	1
1976.	7	50	2.875199	1.875939	9	.3461539	26	1
1977.	7	51	2.975202	1.893906	9	.3461539	26	1
1978.	7	52	2.8948	1.900531	9	.3461539	26	1
1979.	7	53	2.894799	1.906209	9	.3461539	26	1
1980.	7	54	3.014401	1.922264	8	.3076923	26	1
1981.	7	55	2.989798	1.93413	8	.3076923	26	1
1982.	7	56	2.959399	1.942086	9	.3461539	26	1
1983.	7	57	2.933999	1.947194	9	.3461539	26	1
1984.	7	58	2.954403	1.953257	9	.3461539	26	1
1985.	7	59	2.979001	1.960439	8	.3076923	26	1
1986.	7	60	3.024	1.969976	8	.3076923	26	1
1987.	7	61	3.023998	1.978647	7	.2692308	26	1
1988.	7	62	3.018999	1.986252	7	.2692308	26	1
1989.	7	63	3.044402	1.994741	7	.2692308	26	1
1990.	7	64	3.044401	2.00255	7	.2692308	26	1
1991.	7	65	3.089398	2.012267	7	.2692308	26	1
1992.	7	66	3.063999	2.019896	7	.2692308	26	1
1993.	7	67	3.0894	2.028299	7	.2692308	26	1
1994.	7	68	3.109	2.037113	7	.2692308	26	1
1995.	7	69	3.134403	2.046588	7	.2692308	26	1
1996.	7	70	3.134399	2.055452	8	.3076923	26	1
1997.	7	71	3.134398	2.063762	8	.3076923	26	1
1998.	7	72	3.179399	2.073602	8	.3076923	26	1
1999.	7	73	3.1548	2.081781	8	.3076923	26	1
2000.	7	74	3.1548	2.089493	8	.3076923	26	1
2001.	7	75	3.199803	2.098653	8	.3076923	26	1
2002.	7	76	3.199799	2.107317	8	.3076923	26	1

---

allsynth is a user-written command made freely-available to the research community. Pl > ease cite the paper:

Wiltshire, Justin C., 2022. allsynth: (Stacked) Synthetic Control Bias-Correction Uti > lities for Stata. Working paper.

```
3 .
4 . matrix list e(results)

e(results)[77,4]
            t        Gap     RMSPE_p   Unique_W
 0          0  1.7959988           .          1
 1          1  1.6679988           .          1
 2          2  1.7529992           .          1
 3          3  1.8784022           .          1
 4          4  1.9233994           .          1
 5          5  1.9829993           .          1
 6          6  1.9534014           .          1
 7          7  1.9984008           .          1
 8          8  1.9325978           .          1
 9          9  2.0021994           .          1
10         10  2.0480015           .          1
11         11  2.0430005           .          1
```

12	**12**	**1.9813994**	**.**	**1**
13	**13**	**2.0198007**	**.**	**1**
14	**14**	**1.9393998**	**.**	**1**
15	**15**	**1.8785985**	**.**	**1**
16	**16**	**1.9481986**	**.**	**1**
17	**17**	**1.9424003**	**.**	**1**
18	**18**	**1.8612014**	**.**	**1**
19	**19**	**1.9300015**	**.**	**1**
20	**20**	**1.8546025**	**.**	**1**
21	**21**	**1.8987999**	**.**	**1**
22	**22**	**1.8930017**	**.**	**1**
23	**23**	**1.9175986**	**.**	**1**
24	**24**	**1.9625996**	**.**	**1**
25	**25**	**1.9313991**	**.**	**1**
26	**26**	**1.9313998**	**.**	**1**
27	**27**	**1.9010004**	**.**	**1**
28	**28**	**2.0509992**	**.**	**1**
29	**29**	**2.0098014**	**.**	**1**
30	**30**	**2.1285994**	**.**	**1**
31	**31**	**2.2482014**	**.**	**1**
32	**32**	**2.272799**	**.**	**1**
33	**33**	**2.3474007**	**.**	**1**
34	**34**	**2.4169996**	**.**	**1**
35	**35**	**2.4365993**	**.**	**1**
36	**36**	**2.4553988**	**.**	**1**
37	**37**	**2.5446012**	**.**	**1**
38	**38**	**2.5445993**	**.**	**1**
39	**39**	**2.5642018**	**.**	**1**
40	**40**	**2.5838006**	**.42307693**	**1**
41	**41**	**2.7279999**	**.38461539**	**1**
42	**42**	**2.7476025**	**.38461539**	**1**
43	**43**	**2.7721975**	**.38461539**	**1**
44	**44**	**2.841799**	**.38461539**	**1**
45	**45**	**2.7917998**	**.38461539**	**1**
46	**46**	**2.8614025**	**.38461539**	**1**
47	**47**	**2.9359984**	**.34615386**	**1**
48	**48**	**2.8809991**	**.34615386**	**1**
49	**49**	**2.9556019**	**.34615386**	**1**
50	**50**	**2.8751993**	**.34615386**	**1**
51	**51**	**2.9752016**	**.34615386**	**1**
52	**52**	**2.8947997**	**.34615386**	**1**
53	**53**	**2.894799**	**.34615386**	**1**
54	**54**	**3.014401**	**.30769232**	**1**
55	**55**	**2.9897983**	**.30769232**	**1**
56	**56**	**2.9593995**	**.34615386**	**1**
57	**57**	**2.9339991**	**.34615386**	**1**
58	**58**	**2.9544027**	**.34615386**	**1**
59	**59**	**2.979001**	**.30769232**	**1**
60	**60**	**3.0240004**	**.30769232**	**1**
61	**61**	**3.0239985**	**.26923078**	**1**
62	**62**	**3.0189986**	**.26923078**	**1**
63	**63**	**3.0444019**	**.26923078**	**1**
64	**64**	**3.0444009**	**.26923078**	**1**
65	**65**	**3.0893981**	**.26923078**	**1**
66	**66**	**3.0639987**	**.26923078**	**1**
67	**67**	**3.0894001**	**.26923078**	**1**
68	**68**	**3.109**	**.26923078**	**1**
69	**69**	**3.1344032**	**.26923078**	**1**
70	**70**	**3.1343994**	**.30769232**	**1**
71	**71**	**3.1343975**	**.30769232**	**1**
72	**72**	**3.1793995**	**.30769232**	**1**
73	**73**	**3.1547999**	**.30769232**	**1**
74	**74**	**3.1547999**	**.30769232**	**1**
75	**75**	**3.1998031**	**.30769232**	**1**
76	**76**	**3.1997993**	**.30769232**	**1**

```
5 .
6 . allsynth fullvax repvotes2020pct black fullcollege cases_per_capita whiteevangelical
  >  catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop60t
  > o64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct, trunit(7)
  > trperiod(40) gapfigure(classic, save(synthcontrolresults_fullvax_gph.svg, replace))
  > keep(synthcontrolresults_fullvax, replace) pvalues

  Identifying donor pool...
```

Synthetic Control Method for Comparative Case Studies

First Step: Data Setup

Data Setup successful

Treated Unit:	**CO**
Control Units:	**AL, AZ, DC, FL, GA, IA, ID, IN, KS, MS, MT, ND, NE, NH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WY**
Dependent Variable:	**fullvaxpct**
MSPE minimized for periods:	**0 1 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**
Results obtained for periods:	**0 1 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 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76**
Predictors:	**repvotes2020pct black fullcollege cases_per_capita whiteevangelical catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop60to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct**
Unless period is specified predictors are averaged over:	**0 1 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**

Second Step: Run Optimization

Optimization done

Third Step: Obtain Results

Loss: Root Mean Squared Prediction Error

RMSPE	**1.840802**

Unit Weights:

Co_No	Unit_Weight
AL	**0**
AZ	**0**
DC	**.172**
FL	**0**
GA	**0**
IA	**0**
ID	**0**
IN	**0**
KS	**0**
MS	**0**
MT	**0**
ND	**0**

NE	**0**
NH	**.341**
OK	**0**
PA	**0**
RI	**0**
SC	**0**
SD	**0**
TN	**0**
TX	**.403**
VA	**.007**
VT	**0**
WI	**0**
WY	**.078**

Predictor Balance:

	Treated	Synthetic
repvotes2020pct	**42.1467**	**43.08309**
black	**4.635333**	**14.47003**
fullcollege	**41.00235**	**37.34102**
cases_per_capita	**.0402105**	**.032687**
whiteevangelical	**16.41762**	**13.51393**
catholic	**18.18784**	**22.18697**
poverty	**9.429272**	**11.20439**
medfamilinc	**93187.19**	**92297.6**
pop0to4pct	**5.752328**	**5.959465**
pop5to9pct	**6.012807**	**6.047865**
pop10to14pct	**6.308905**	**6.07126**
pop15to19pct	**6.353192**	**6.37081**
pop60to64pct	**6.057702**	**6.188175**
pop65to69pct	**5.157971**	**5.097487**
pop70to74pct	**3.932786**	**3.984856**
pop75to79pct	**2.469836**	**2.635322**
pop80to84pct	**1.541385**	**1.665828**
pop85abovepct	**1.565145**	**1.786021**

Estimating synthetic controls using in-space placebo treatments for treated unit state
> code == 7. This could take awhile...

1 of 25 (donor pool unit statecode == 2 for treated unit statecode == 7)
2 of 25 (donor pool unit statecode == 5 for treated unit statecode == 7)
3 of 25 (donor pool unit statecode == 9 for treated unit statecode == 7)
4 of 25 (donor pool unit statecode == 11 for treated unit statecode == 7)
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10 of 25 (donor pool unit statecode == 31 for treated unit statecode == 7)
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12 of 25 (donor pool unit statecode == 34 for treated unit statecode == 7)
13 of 25 (donor pool unit statecode == 35 for treated unit statecode == 7)
14 of 25 (donor pool unit statecode == 36 for treated unit statecode == 7)
15 of 25 (donor pool unit statecode == 42 for treated unit statecode == 7)
16 of 25 (donor pool unit statecode == 44 for treated unit statecode == 7)
17 of 25 (donor pool unit statecode == 47 for treated unit statecode == 7)
18 of 25 (donor pool unit statecode == 48 for treated unit statecode == 7)
19 of 25 (donor pool unit statecode == 49 for treated unit statecode == 7)
20 of 25 (donor pool unit statecode == 50 for treated unit statecode == 7)
21 of 25 (donor pool unit statecode == 51 for treated unit statecode == 7)
22 of 25 (donor pool unit statecode == 54 for treated unit statecode == 7)
23 of 25 (donor pool unit statecode == 56 for treated unit statecode == 7)
24 of 25 (donor pool unit statecode == 58 for treated unit statecode == 7)
25 of 25 (donor pool unit statecode == 60 for treated unit statecode == 7)

```
Saving results...
(1,040 missing values generated)
(1,925 observations deleted)
```

Treated unit (statecode == 7) results:

	statec~e	t	gap	rmspe	rmspe_~k	p	N	unique_W
1926.	7	0	.2316	.	.	.	26	1
1927.	7	1	.2660009	.	.	.	26	1
1928.	7	2	.4756998	.	.	.	26	1
1929.	7	3	.6662006	.	.	.	26	1
1930.	7	4	.8446992	.	.	.	26	1
1931.	7	5	.8996994	.	.	.	26	1
1932.	7	6	.8789003	.	.	.	26	1
1933.	7	7	1.1325	.	.	.	26	1
1934.	7	8	1.2664	.	.	.	26	1
1935.	7	9	1.3572	.	.	.	26	1
1936.	7	10	1.430501	.	.	.	26	1
1937.	7	11	1.5073	.	.	.	26	1
1938.	7	12	1.416799	.	.	.	26	1
1939.	7	13	1.277198	.	.	.	26	1
1940.	7	14	1.319701	.	.	.	26	1
1941.	7	15	1.276898	.	.	.	26	1
1942.	7	16	1.476499	.	.	.	26	1
1943.	7	17	1.6747	.	.	.	26	1
1944.	7	18	1.724699	.	.	.	26	1
1945.	7	19	1.702102	.	.	.	26	1
1946.	7	20	1.796699	.	.	.	26	1
1947.	7	21	1.880299	.	.	.	26	1
1948.	7	22	1.906399	.	.	.	26	1
1949.	7	23	2.033699	.	.	.	26	1
1950.	7	24	2.124199	.	.	.	26	1
1951.	7	25	2.2183	.	.	.	26	1
1952.	7	26	2.270499	.	.	.	26	1
1953.	7	27	2.2132	.	.	.	26	1
1954.	7	28	2.2411	.	.	.	26	1
1955.	7	29	2.217899	.	.	.	26	1
1956.	7	30	2.2615	.	.	.	26	1
1957.	7	31	2.374402	.	.	.	26	1
1958.	7	32	2.344499	.	.	.	26	1
1959.	7	33	2.3961	.	.	.	26	1
1960.	7	34	2.399598	.	.	.	26	1
1961.	7	35	2.4109	.	.	.	26	1
1962.	7	36	2.414402	.	.	.	26	1
1963.	7	37	2.301098	.	.	.	26	1
1964.	7	38	2.391599	.	.	.	26	1
1965.	7	39	2.3131	.	.	.	26	1
1966.	7	40	2.2836	1.608016	12	.4615385	26	1
1967.	7	41	2.313798	1.62942	12	.4615385	26	1
1968.	7	42	2.201199	1.584301	12	.4615385	26	1
1969.	7	43	2.239898	1.574991	13	.5	26	1
1970.	7	44	2.2794	1.580413	13	.5	26	1
1971.	7	45	2.1793	1.561092	13	.5	26	1
1972.	7	46	2.278602	1.566791	13	.5	26	1
1973.	7	47	2.166699	1.551891	13	.5	26	1
1974.	7	48	2.156699	1.538822	13	.5	26	1
1975.	7	49	2.171098	1.530287	13	.5	26	1
1976.	7	50	2.2516	1.533285	13	.5	26	1
1977.	7	51	2.139001	1.52308	13	.5	26	1

1978.	7	52	2.287	1.529982	13	.5	26	1
1979.	7	53	2.325701	1.53983	13	.5	26	1
1980.	7	54	2.3504	1.550739	13	.5	26	1
1981.	7	55	2.405998	1.565381	13	.5	26	1
1982.	7	56	2.470999	1.584051	13	.5	26	1
1983.	7	57	2.4353	1.597645	13	.5	26	1
1984.	7	58	2.516599	1.616343	13	.5	26	1
1985.	7	59	2.524301	1.633769	13	.5	26	1
1986.	7	60	2.531202	1.650047	13	.5	26	1
1987.	7	61	2.555299	1.666564	13	.5	26	1
1988.	7	62	2.5954	1.684414	13	.5	26	1
1989.	7	63	2.637101	1.703579	13	.5	26	1
1990.	7	64	2.661901	1.722833	13	.5	26	1
1991.	7	65	2.734802	1.745271	13	.5	26	1
1992.	7	66	2.793799	1.769772	13	.5	26	1
1993.	7	67	2.7937	1.792517	12	.4615385	26	1
1994.	7	68	2.7595	1.811674	12	.4615385	26	1
1995.	7	69	2.841501	1.834275	13	.5	26	1
1996.	7	70	2.8004	1.853111	13	.5	26	1
1997.	7	71	2.900302	1.876257	13	.5	26	1
1998.	7	72	2.907998	1.898419	13	.5	26	1
1999.	7	73	2.832899	1.915367	13	.5	26	1
2000.	7	74	2.9328	1.936421	12	.4615385	26	1
2001.	7	75	2.932698	1.9563	12	.4615385	26	1
2002.	7	76	2.932601	1.9751	12	.4615385	26	1

---

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Wiltshire, Justin C., 2022. allsynth: (Stacked) Synthetic Control Bias-Correction Uti > lities for Stata. Working paper.

```
7 .
8 . matrix list e(results)

e(results)[77,4]
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 1            1  .26600093           .          1
 2            2  .47569984           .          1
 3            3  .66620058           .          1
 4            4   .8446992           .          1
 5            5  .89969939           .          1
 6            6  .87890029           .          1
 7            7  1.1324997           .          1
 8            8  1.2663997           .          1
 9            9     1.3572           .          1
10           10  1.4305012           .          1
11           11  1.5073005           .          1
12           12  1.4167994           .          1
13           13  1.2771983           .          1
14           14  1.3197007           .          1
15           15  1.2768977           .          1
16           16  1.4764992           .          1
17           17  1.6747003           .          1
18           18  1.7246989           .          1
19           19  1.7021019           .          1
20           20  1.7966988           .          1
21           21  1.8802989           .          1
22           22  1.9063987           .          1
23           23  2.0336988           .          1
24           24  2.1241994           .          1
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25	**25**	**2.2182996**	**.**	**1**
26	**26**	**2.2704985**	**.**	**1**
27	**27**	**2.2131996**	**.**	**1**
28	**28**	**2.2411001**	**.**	**1**
29	**29**	**2.2178991**	**.**	**1**
30	**30**	**2.2615004**	**.**	**1**
31	**31**	**2.3744018**	**.**	**1**
32	**32**	**2.3444991**	**.**	**1**
33	**33**	**2.3961**	**.**	**1**
34	**34**	**2.3995984**	**.**	**1**
35	**35**	**2.4108999**	**.**	**1**
36	**36**	**2.4144018**	**.**	**1**
37	**37**	**2.3010979**	**.**	**1**
38	**38**	**2.3915989**	**.**	**1**
39	**39**	**2.3130999**	**.**	**1**
40	**40**	**2.2835999**	**.46153846**	**1**
41	**41**	**2.313798**	**.46153846**	**1**
42	**42**	**2.2011986**	**.46153846**	**1**
43	**43**	**2.2398984**	**.5**	**1**
44	**44**	**2.2793996**	**.5**	**1**
45	**45**	**2.1792996**	**.5**	**1**
46	**46**	**2.2786019**	**.5**	**1**
47	**47**	**2.1666987**	**.5**	**1**
48	**48**	**2.1566989**	**.5**	**1**
49	**49**	**2.1710978**	**.5**	**1**
50	**50**	**2.2516003**	**.5**	**1**
51	**51**	**2.1390009**	**.5**	**1**
52	**52**	**2.2870004**	**.5**	**1**
53	**53**	**2.3257005**	**.5**	**1**
54	**54**	**2.3504004**	**.5**	**1**
55	**55**	**2.4059982**	**.5**	**1**
56	**56**	**2.4709988**	**.5**	**1**
57	**57**	**2.4352996**	**.5**	**1**
58	**58**	**2.5165987**	**.5**	**1**
59	**59**	**2.5243011**	**.5**	**1**
60	**60**	**2.5312023**	**.5**	**1**
61	**61**	**2.555299**	**.5**	**1**
62	**62**	**2.5954001**	**.5**	**1**
63	**63**	**2.6371009**	**.5**	**1**
64	**64**	**2.6619012**	**.5**	**1**
65	**65**	**2.734802**	**.5**	**1**
66	**66**	**2.7937994**	**.5**	**1**
67	**67**	**2.7936995**	**.46153846**	**1**
68	**68**	**2.7595**	**.46153846**	**1**
69	**69**	**2.8415012**	**.5**	**1**
70	**70**	**2.8003998**	**.5**	**1**
71	**71**	**2.9003017**	**.5**	**1**
72	**72**	**2.9079981**	**.5**	**1**
73	**73**	**2.8328991**	**.5**	**1**
74	**74**	**2.9328001**	**.46153846**	**1**
75	**75**	**2.9326982**	**.46153846**	**1**
76	**76**	**2.9326015**	**.46153846**	**1**

```
9 .
10. allsynth dDose1pct repvotes2020pct black fullcollege cases_per_capita whiteevangelic
  > al catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop6
  > 0to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct, trunit(7
  > ) trperiod(40) gapfigure(classic, save(synthcontrolresults_ddose1_gph.svg, replace))
  >  keep(synthcontrolresults_ddose, replace) pvalues

  Identifying donor pool...

_____________________________________________________________________________
  Synthetic Control Method for Comparative Case Studies
_____________________________________________________________________________
```

First Step: Data Setup

Data Setup successful

Treated Unit:	**CO**
Control Units:	**AL, AZ, DC, FL, GA, IA, ID, IN, KS, MS, MT, ND, NE, NH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WY**
Dependent Variable:	**dDose1pct**
MSPE minimized for periods:	**0 1 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**
Results obtained for periods:	**0 1 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 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76**
Predictors:	**repvotes2020pct black fullcollege cases_per_capita whiteevangelical catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop60to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct**
Unless period is specified predictors are averaged over:	**0 1 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**

Second Step: Run Optimization

Optimization done

Third Step: Obtain Results

Loss: Root Mean Squared Prediction Error

RMSPE	**.0005879**

Unit Weights:

Co_No	Unit_Weight
AL	**0**
AZ	**0**
DC	**.232**
FL	**0**
GA	**.029**
IA	**0**
ID	**0**
IN	**0**
KS	**0**
MS	**0**
MT	**0**
ND	**0**
NE	**0**
NH	**.251**
OK	**0**
PA	**0**
RI	**0**
SC	**0**
SD	**0**
TN	**0**
TX	**.311**
VA	**0**
VT	**0**
WI	**0**
WY	**.176**

Predictor Balance:

	Treated	Synthetic
repvotes2020pct	**42.1467**	**42.53357**
black	**4.635333**	**16.59663**
fullcollege	**41.00235**	**38.05004**
cases_per_capita	**.0402105**	**.0358119**
whiteevangelical	**16.41762**	**13.64801**
catholic	**18.18784**	**19.89444**
poverty	**9.429272**	**11.44496**
medfamilinc	**93187.19**	**92745.96**
pop0to4pct	**5.752328**	**6.027327**
pop5to9pct	**6.012807**	**6.045051**
pop10to14pct	**6.308905**	**5.985311**
pop15to19pct	**6.353192**	**6.251323**
pop60to64pct	**6.057702**	**6.096503**
pop65to69pct	**5.157971**	**5.064713**
pop70to74pct	**3.932786**	**3.931085**
pop75to79pct	**2.469836**	**2.604531**
pop80to84pct	**1.541385**	**1.649334**
pop85abovepct	**1.565145**	**1.775401**

```
Estimating synthetic controls using in-space placebo treatments for treated unit state
> code == 7. This could take awhile...

1 of 25 (donor pool unit statecode == 2 for treated unit statecode == 7)
2 of 25 (donor pool unit statecode == 5 for treated unit statecode == 7)
3 of 25 (donor pool unit statecode == 9 for treated unit statecode == 7)
4 of 25 (donor pool unit statecode == 11 for treated unit statecode == 7)
5 of 25 (donor pool unit statecode == 13 for treated unit statecode == 7)
6 of 25 (donor pool unit statecode == 16 for treated unit statecode == 7)
7 of 25 (donor pool unit statecode == 17 for treated unit statecode == 7)
8 of 25 (donor pool unit statecode == 19 for treated unit statecode == 7)
9 of 25 (donor pool unit statecode == 20 for treated unit statecode == 7)
10 of 25 (donor pool unit statecode == 31 for treated unit statecode == 7)
11 of 25 (donor pool unit statecode == 32 for treated unit statecode == 7)
12 of 25 (donor pool unit statecode == 34 for treated unit statecode == 7)
13 of 25 (donor pool unit statecode == 35 for treated unit statecode == 7)
14 of 25 (donor pool unit statecode == 36 for treated unit statecode == 7)
15 of 25 (donor pool unit statecode == 42 for treated unit statecode == 7)
16 of 25 (donor pool unit statecode == 44 for treated unit statecode == 7)
17 of 25 (donor pool unit statecode == 47 for treated unit statecode == 7)
18 of 25 (donor pool unit statecode == 48 for treated unit statecode == 7)
19 of 25 (donor pool unit statecode == 49 for treated unit statecode == 7)
20 of 25 (donor pool unit statecode == 50 for treated unit statecode == 7)
21 of 25 (donor pool unit statecode == 51 for treated unit statecode == 7)
22 of 25 (donor pool unit statecode == 54 for treated unit statecode == 7)
23 of 25 (donor pool unit statecode == 56 for treated unit statecode == 7)
24 of 25 (donor pool unit statecode == 58 for treated unit statecode == 7)
25 of 25 (donor pool unit statecode == 60 for treated unit statecode == 7)

Saving results...
(1,040 missing values generated)
(1,925 observations deleted)
```

Treated unit (statecode == 7) results:

	statec~e	t	gap	rmspe	rmspe_~k	p	N	unique_W
1926.	7	0	.0007786	.	.	.	26	1
1927.	7	1	-.0006055	.	.	.	26	1
1928.	7	2	.0011665	.	.	.	26	1
1929.	7	3	.0014706	.	.	.	26	1
1930.	7	4	.0003334	.	.	.	26	1
1931.	7	5	.0007936	.	.	.	26	1
1932.	7	6	-.0003839	.	.	.	26	1
1933.	7	7	.0007246	.	.	.	26	1
1934.	7	8	.000315	.	.	.	26	1
1935.	7	9	.0000965	.	.	.	26	1
1936.	7	10	.0005285	.	.	.	26	1
1937.	7	11	-.0000459	.	.	.	26	1
1938.	7	12	-.0000526	.	.	.	26	1
1939.	7	13	-.0002017	.	.	.	26	1
1940.	7	14	-.0002772	.	.	.	26	1
1941.	7	15	-.0005424	.	.	.	26	1
1942.	7	16	.000219	.	.	.	26	1
1943.	7	17	.0000916	.	.	.	26	1
1944.	7	18	-.0004129	.	.	.	26	1
1945.	7	19	.0002534	.	.	.	26	1
1946.	7	20	.0000682	.	.	.	26	1
1947.	7	21	-.0000557	.	.	.	26	1
1948.	7	22	.0002364	.	.	.	26	1
1949.	7	23	.0004696	.	.	.	26	1
1950.	7	24	.0002208	.	.	.	26	1
1951.	7	25	-.0001328	.	.	.	26	1
1952.	7	26	.000293	.	.	.	26	1
1953.	7	27	.0001138	.	.	.	26	1
1954.	7	28	.0004656	.	.	.	26	1
1955.	7	29	.0006288	.	.	.	26	1
1956.	7	30	.000944	.	.	.	26	1
1957.	7	31	.0012311	.	.	.	26	1
1958.	7	32	.0005529	.	.	.	26	1
1959.	7	33	.0007204	.	.	.	26	1
1960.	7	34	.0008615	.	.	.	26	1
1961.	7	35	.0006532	.	.	.	26	1
1962.	7	36	.0004215	.	.	.	26	1
1963.	7	37	.0007277	.	.	.	26	1
1964.	7	38	.0007845	.	.	.	26	1
1965.	7	39	.0002779	.	.	.	26	1
1966.	7	40	.0002925	.2467607	7	.2692308	26	1
1967.	7	41	.0004592	.4274532	5	.1923077	26	1
1968.	7	42	.0005462	.5717819	5	.1923077	26	1
1969.	7	43	.0006291	.7142354	2	.0769231	26	1
1970.	7	44	.0002881	.6192657	3	.1153846	26	1
1971.	7	45	.0001655	.5292234	4	.1538462	26	1
1972.	7	46	.0001567	.4637328	4	.1538462	26	1
1973.	7	47	.0004317	.4729544	3	.1153846	26	1
1974.	7	48	.0002398	.4388295	4	.1538462	26	1
1975.	7	49	.0002445	.4121906	3	.1153846	26	1
1976.	7	50	.0000191	.3748146	5	.1923077	26	1
1977.	7	51	.0001787	.3512565	5	.1923077	26	1
1978.	7	52	.0000481	.3247496	5	.1923077	26	1
1979.	7	53	.0001049	.3038188	6	.2307692	26	1
1980.	7	54	.0000947	.2852875	6	.2307692	26	1
1981.	7	55	3.35e-06	.267459	6	.2307692	26	1
1982.	7	56	.0001905	.2578829	6	.2307692	26	1
1983.	7	57	.0001942	.2495969	6	.2307692	26	1

1984.	7	58	.0001017	.2380313	6	.2307692	26	1
1985.	7	59	.0000901	.2272999	6	.2307692	26	1
1986.	7	60	-1.09e-06	.2164762	7	.2692308	26	1
1987.	7	61	.0001114	.2082641	7	.2692308	26	1
1988.	7	62	.0000585	.199638	7	.2692308	26	1
1989.	7	63	.0000907	.1923083	7	.2692308	26	1
1990.	7	64	.0002718	.1931428	7	.2692308	26	1
1991.	7	65	.0000522	.1860171	7	.2692308	26	1
1992.	7	66	.0001391	.1811956	7	.2692308	26	1
1993.	7	67	.0001381	.1766904	7	.2692308	26	1
1994.	7	68	.0001509	.1728627	7	.2692308	26	1
1995.	7	69	.000183	.1703193	7	.2692308	26	1
1996.	7	70	.0001434	.1667392	8	.3076923	26	1
1997.	7	71	.0001884	.1647284	8	.3076923	26	1
1998.	7	72	.0000778	.1602653	8	.3076923	26	1
1999.	7	73	.0001478	.1574053	9	.3461539	26	1
2000.	7	74	.0000756	.1533788	9	.3461539	26	1
2001.	7	75	.0001334	.1505444	9	.3461539	26	1
2002.	7	76	.0000914	.1471276	9	.3461539	26	1

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Wiltshire, Justin C., 2022. allsynth: (Stacked) Synthetic Control Bias-Correction Uti > lities for Stata. Working paper.

```
11.
12. matrix list e(results)

e(results)[77,4]
              t         Gap     RMSPE_p    Unique_W
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 1            1  -.00060548           .           1
 2            2   .00116648           .           1
 3            3   .00147059           .           1
 4            4   .00033343           .           1
 5            5   .00079364           .           1
 6            6  -.00038386           .           1
 7            7    .0007246           .           1
 8            8   .00031501           .           1
 9            9   .00009651           .           1
10           10    .0005285           .           1
11           11  -.00004594           .           1
12           12  -.00005261           .           1
13           13  -.00020168           .           1
14           14  -.00027716           .           1
15           15  -.00054243           .           1
16           16   .00021903           .           1
17           17   .00009157           .           1
18           18  -.00041288           .           1
19           19   .00025344           .           1
20           20   .00006819           .           1
21           21  -.00005567           .           1
22           22   .00023642           .           1
23           23   .00046957           .           1
24           24   .00022085           .           1
25           25  -.00013285           .           1
26           26   .00029304           .           1
27           27   .00011384           .           1
28           28    .0004656           .           1
29           29    .0006288           .           1
30           30   .00094397           .           1
31           31   .00123108           .           1
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32	**32**	**.00055285**	**.**	**1**
33	**33**	**.00072041**	**.**	**1**
34	**34**	**.00086154**	**.**	**1**
35	**35**	**.00065321**	**.**	**1**
36	**36**	**.00042146**	**.**	**1**
37	**37**	**.00072774**	**.**	**1**
38	**38**	**.0007845**	**.**	**1**
39	**39**	**.00027789**	**.**	**1**
40	**40**	**.00029248**	**.26923078**	**1**
41	**41**	**.00045916**	**.1923077**	**1**
42	**42**	**.00054616**	**.1923077**	**1**
43	**43**	**.00062909**	**.07692308**	**1**
44	**44**	**.00028808**	**.11538462**	**1**
45	**45**	**.0001655**	**.15384616**	**1**
46	**46**	**.00015665**	**.15384616**	**1**
47	**47**	**.00043167**	**.11538462**	**1**
48	**48**	**.00023977**	**.15384616**	**1**
49	**49**	**.0002445**	**.11538462**	**1**
50	**50**	**.00001912**	**.1923077**	**1**
51	**51**	**.0001787**	**.1923077**	**1**
52	**52**	**.00004807**	**.1923077**	**1**
53	**53**	**.00010486**	**.23076923**	**1**
54	**54**	**.00009466**	**.23076923**	**1**
55	**55**	**3.347e-06**	**.23076923**	**1**
56	**56**	**.00019048**	**.23076923**	**1**
57	**57**	**.00019415**	**.23076923**	**1**
58	**58**	**.00010173**	**.23076923**	**1**
59	**59**	**.00009007**	**.23076923**	**1**
60	**60**	**-1.090e-06**	**.26923078**	**1**
61	**61**	**.00011142**	**.26923078**	**1**
62	**62**	**.00005847**	**.26923078**	**1**
63	**63**	**.00009069**	**.26923078**	**1**
64	**64**	**.00027184**	**.26923078**	**1**
65	**65**	**.00005225**	**.26923078**	**1**
66	**66**	**.00013913**	**.26923078**	**1**
67	**67**	**.00013815**	**.26923078**	**1**
68	**68**	**.0001509**	**.26923078**	**1**
69	**69**	**.00018296**	**.26923078**	**1**
70	**70**	**.00014342**	**.30769232**	**1**
71	**71**	**.00018841**	**.30769232**	**1**
72	**72**	**.00007777**	**.30769232**	**1**
73	**73**	**.00014781**	**.34615386**	**1**
74	**74**	**.00007558**	**.34615386**	**1**
75	**75**	**.00013341**	**.34615386**	**1**
76	**76**	**.00009145**	**.34615386**	**1**

13.
14. allsynth dFullvaxpct repvotes2020pct black fullcollege cases_per_capita whiteevangel
> ical catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct po
> p60to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct, trunit
> (7) trperiod(40) gapfigure(classic, save(synthcontrolresults_dfullvax_gph.svg, repla
> ce)) keep(synthcontrolresults_dfullvax, replace) pvalues

Identifying donor pool...

Synthetic Control Method for Comparative Case Studies

First Step: Data Setup

Data Setup successful

Treated Unit: **CO**
Control Units: **AL, AZ, DC, FL, GA, IA, ID, IN, KS, MS, MT, ND, NE, NH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WY**

Dependent Variable: **dFullvaxpct**
MSPE minimized for periods: **0 1 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**
Results obtained for periods: **0 1 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 52 53 54 55 56 57 58 59
60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76

Predictors: **repvotes2020pct black fullcollege cases_per_capita whiteevangelical catholic poverty medfamilinc pop0to4pct pop5to9pct pop10to14pct pop15to19pct pop60to64pct pop65to69pct pop70to74pct pop75to79pct pop80to84pct pop85abovepct**

Unless period is specified
predictors are averaged over: **0 1 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**

Second Step: Run Optimization

Optimization done

Third Step: Obtain Results

Loss: Root Mean Squared Prediction Error

RMSPE	**.0013104**

Unit Weights:

Co_No	Unit_Weight
AL	**0**
AZ	**0**
DC	**.218**
FL	**0**
GA	**.035**
IA	**0**
ID	**0**
IN	**0**
KS	**0**
MS	**0**
MT	**0**
ND	**0**
NE	**0**
NH	**.264**
OK	**0**
PA	**0**
RI	**0**
SC	**0**
SD	**0**
TN	**0**
TX	**.358**
VA	**0**
VT	**0**
WI	**0**
WY	**.124**

Predictor Balance:

	Treated	Synthetic
repvotes2020pct	**42.1467**	**42.1365**
black	**4.635333**	**16.82942**
fullcollege	**41.00235**	**37.89992**
cases_per_capita	**.0402105**	**.0348974**
whiteevangelical	**16.41762**	**13.71724**
catholic	**18.18784**	**20.4832**
poverty	**9.429272**	**11.53861**
medfamilinc	**93187.19**	**92252.21**
pop0to4pct	**5.752328**	**6.041496**
pop5to9pct	**6.012807**	**6.070359**
pop10to14pct	**6.308905**	**6.024419**
pop15to19pct	**6.353192**	**6.303801**
pop60to64pct	**6.057702**	**6.054136**
pop65to69pct	**5.157971**	**5.011463**
pop70to74pct	**3.932786**	**3.903837**
pop75to79pct	**2.469836**	**2.586967**
pop80to84pct	**1.541385**	**1.6376**
pop85abovepct	**1.565145**	**1.755777**

Estimating synthetic controls using in-space placebo treatments for treated unit state
> code == 7. This could take awhile...

1 of 25 (donor pool unit statecode == 2 for treated unit statecode == 7)
2 of 25 (donor pool unit statecode == 5 for treated unit statecode == 7)
3 of 25 (donor pool unit statecode == 9 for treated unit statecode == 7)
4 of 25 (donor pool unit statecode == 11 for treated unit statecode == 7)
5 of 25 (donor pool unit statecode == 13 for treated unit statecode == 7)
6 of 25 (donor pool unit statecode == 16 for treated unit statecode == 7)
7 of 25 (donor pool unit statecode == 17 for treated unit statecode == 7)
8 of 25 (donor pool unit statecode == 19 for treated unit statecode == 7)
9 of 25 (donor pool unit statecode == 20 for treated unit statecode == 7)
10 of 25 (donor pool unit statecode == 31 for treated unit statecode == 7)
11 of 25 (donor pool unit statecode == 32 for treated unit statecode == 7)
12 of 25 (donor pool unit statecode == 34 for treated unit statecode == 7)
13 of 25 (donor pool unit statecode == 35 for treated unit statecode == 7)
14 of 25 (donor pool unit statecode == 36 for treated unit statecode == 7)
15 of 25 (donor pool unit statecode == 42 for treated unit statecode == 7)
16 of 25 (donor pool unit statecode == 44 for treated unit statecode == 7)
17 of 25 (donor pool unit statecode == 47 for treated unit statecode == 7)
18 of 25 (donor pool unit statecode == 48 for treated unit statecode == 7)
19 of 25 (donor pool unit statecode == 49 for treated unit statecode == 7)
20 of 25 (donor pool unit statecode == 50 for treated unit statecode == 7)
21 of 25 (donor pool unit statecode == 51 for treated unit statecode == 7)
22 of 25 (donor pool unit statecode == 54 for treated unit statecode == 7)
23 of 25 (donor pool unit statecode == 56 for treated unit statecode == 7)
24 of 25 (donor pool unit statecode == 58 for treated unit statecode == 7)
25 of 25 (donor pool unit statecode == 60 for treated unit statecode == 7)

Saving results...
(1,040 missing values generated)
(1,925 observations deleted)

Treated unit (statecode == 7) results:

	statec~e	t	gap	rmspe	rmspe_~k	p	N	unique_W
1926.	**7**	**0**	**.0014715**	**.**	**.**	**.**	**26**	**1**
1927.	**7**	**1**	**.0013001**	**.**	**.**	**.**	**26**	**1**
1928.	**7**	**2**	**.0030955**	**.**	**.**	**.**	**26**	**1**
1929.	**7**	**3**	**.0024101**	**.**	**.**	**.**	**26**	**1**
1930.	**7**	**4**	**.0011166**	**.**	**.**	**.**	**26**	**1**
1931.	**7**	**5**	**.0006814**	**.**	**.**	**.**	**26**	**1**
1932.	**7**	**6**	**.0005246**	**.**	**.**	**.**	**26**	**1**
1933.	**7**	**7**	**.0022039**	**.**	**.**	**.**	**26**	**1**

1934.	7	8	.0018816	.	.	.	26	1
1935.	7	9	.0020931	.	.	.	26	1
1936.	7	10	.0004411	.	.	.	26	1
1937.	7	11	.0009442	.	.	.	26	1
1938.	7	12	-.0006011	.	.	.	26	1
1939.	7	13	-.0009758	.	.	.	26	1
1940.	7	14	.0005478	.	.	.	26	1
1941.	7	15	.0001879	.	.	.	26	1
1942.	7	16	.0029045	.	.	.	26	1
1943.	7	17	.0023465	.	.	.	26	1
1944.	7	18	.0001289	.	.	.	26	1
1945.	7	19	.0011551	.	.	.	26	1
1946.	7	20	.0005739	.	.	.	26	1
1947.	7	21	.0008006	.	.	.	26	1
1948.	7	22	.0005609	.	.	.	26	1
1949.	7	23	.0020943	.	.	.	26	1
1950.	7	24	.0013521	.	.	.	26	1
1951.	7	25	.001503	.	.	.	26	1
1952.	7	26	.0009919	.	.	.	26	1
1953.	7	27	-.0008515	.	.	.	26	1
1954.	7	28	.0014259	.	.	.	26	1
1955.	7	29	-.0003293	.	.	.	26	1
1956.	7	30	.0005571	.	.	.	26	1
1957.	7	31	.0014392	.	.	.	26	1
1958.	7	32	-.0000707	.	.	.	26	1
1959.	7	33	.0005057	.	.	.	26	1
1960.	7	34	.000237	.	.	.	26	1
1961.	7	35	.0003181	.	.	.	26	1
1962.	7	36	.0000125	.	.	.	26	1
1963.	7	37	.0005541	.	.	.	26	1
1964.	7	38	.000479	.	.	.	26	1
1965.	7	39	-.0000889	.	.	.	26	1
1966.	7	40	-.0000436	.0011023	26	1	26	1
1967.	7	41	-.0001271	.0052314	25	.9615384	26	1
1968.	7	42	-.0001318	.0068442	25	.9615384	26	1
1969.	7	43	.0002639	.0152248	24	.9230769	26	1
1970.	7	44	.00034	.0255873	23	.8846154	26	1
1971.	7	45	.0002204	.0260173	23	.8846154	26	1
1972.	7	46	.0001759	.0248619	23	.8846154	26	1
1973.	7	47	-.0000253	.0218004	24	.9230769	26	1
1974.	7	48	-.0001915	.0217409	24	.9230769	26	1
1975.	7	49	.0001605	.0210607	24	.9230769	26	1
1976.	7	50	.0004393	.0293188	24	.9230769	26	1
1977.	7	51	.0006813	.0492992	21	.8076923	26	1
1978.	7	52	.0007675	.0717754	19	.7307692	26	1
1979.	7	53	.0003762	.0725096	19	.7307692	26	1
1980.	7	54	.0007372	.0886835	17	.6538461	26	1
1981.	7	55	.0007172	.1017786	16	.6153846	26	1
1982.	7	56	.0007653	.1157663	15	.5769231	26	1
1983.	7	57	.0004054	.1146294	15	.5769231	26	1
1984.	7	58	.000794	.1278335	15	.5769231	26	1
1985.	7	59	.0006713	.1345035	14	.5384616	26	1
1986.	7	60	.000209	.1293048	14	.5384616	26	1
1987.	7	61	.00033	.1262971	14	.5384616	26	1
1988.	7	62	.000478	.1265661	14	.5384616	26	1
1989.	7	63	.0004464	.1261073	14	.5384616	26	1
1990.	7	64	.0006746	.1316169	14	.5384616	26	1
1991.	7	65	.000543	.1331296	14	.5384616	26	1
1992.	7	66	.000186	.1289416	14	.5384616	26	1
1993.	7	67	.0002025	.125186	14	.5384616	26	1

1994.	7	68	.0005038	.1259438	14	.5384616	26	1
1995.	7	69	.000336	.1239277	14	.5384616	26	1
1996.	7	70	.0003061	.1216826	14	.5384616	26	1
1997.	7	71	.0002378	.1189049	14	.5384616	26	1
1998.	7	72	.0002785	.1166642	13	.5	26	1
1999.	7	73	.0001392	.1135633	13	.5	26	1
2000.	7	74	.0001077	.1105108	13	.5	26	1
2001.	7	75	.0001987	.1080766	14	.5384616	26	1
2002.	7	76	.0000188	.1051612	14	.5384616	26	1

---

allsynth is a user-written command made freely-available to the research community. Pl
> ease cite the paper:

Wiltshire, Justin C., 2022. allsynth: (Stacked) Synthetic Control Bias-Correction Uti
> lities for Stata. Working paper.

```
15.
16. matrix list e(results)

e(results)[77,4]
```

	t	Gap	RMSPE_p	Unique_W
0	0	.00147152	.	1
1	1	.00130009	.	1
2	2	.00309547	.	1
3	3	.0024101	.	1
4	4	.00111659	.	1
5	5	.00068135	.	1
6	6	.00052456	.	1
7	7	.00220392	.	1
8	8	.00188161	.	1
9	9	.00209308	.	1
10	10	.00044113	.	1
11	11	.00094416	.	1
12	12	-.00060114	.	1
13	13	-.00097577	.	1
14	14	.00054781	.	1
15	15	.00018787	.	1
16	16	.00290453	.	1
17	17	.00234649	.	1
18	18	.00012892	.	1
19	19	.00115515	.	1
20	20	.00057392	.	1
21	21	.00080062	.	1
22	22	.00056093	.	1
23	23	.00209428	.	1
24	24	.00135207	.	1
25	25	.00150296	.	1
26	26	.00099189	.	1
27	27	-.00085152	.	1
28	28	.00142595	.	1
29	29	-.00032934	.	1
30	30	.00055707	.	1
31	31	.00143919	.	1
32	32	-.00007072	.	1
33	33	.00050573	.	1
34	34	.00023701	.	1
35	35	.00031811	.	1
36	36	.00001254	.	1
37	37	.00055411	.	1
38	38	.00047903	.	1
39	39	-.0000889	.	1
40	40	-.0000436	1	1
41	41	-.00012706	.96153843	1
42	42	-.00013179	.96153843	1
43	43	.00026386	.92307693	1

44	**44**	**.00034004**	**.88461536**	**1**
45	**45**	**.00022042**	**.88461536**	**1**
46	**46**	**.00017586**	**.88461536**	**1**
47	**47**	**-.00002527**	**.92307693**	**1**
48	**48**	**-.00019151**	**.92307693**	**1**
49	**49**	**.00016052**	**.92307693**	**1**
50	**50**	**.00043932**	**.92307693**	**1**
51	**51**	**.00068126**	**.80769229**	**1**
52	**52**	**.00076747**	**.73076922**	**1**
53	**53**	**.0003762**	**.73076922**	**1**
54	**54**	**.00073724**	**.65384614**	**1**
55	**55**	**.00071718**	**.61538464**	**1**
56	**56**	**.0007653**	**.57692307**	**1**
57	**57**	**.00040544**	**.57692307**	**1**
58	**58**	**.00079399**	**.57692307**	**1**
59	**59**	**.00067125**	**.53846157**	**1**
60	**60**	**.00020902**	**.53846157**	**1**
61	**61**	**.00032999**	**.53846157**	**1**
62	**62**	**.00047803**	**.53846157**	**1**
63	**63**	**.00044644**	**.53846157**	**1**
64	**64**	**.0006746**	**.53846157**	**1**
65	**65**	**.000543**	**.53846157**	**1**
66	**66**	**.00018598**	**.53846157**	**1**
67	**67**	**.00020255**	**.53846157**	**1**
68	**68**	**.00050381**	**.53846157**	**1**
69	**69**	**.00033602**	**.53846157**	**1**
70	**70**	**.00030612**	**.53846157**	**1**
71	**71**	**.00023783**	**.53846157**	**1**
72	**72**	**.00027848**	**.5**	**1**
73	**73**	**.0001392**	**.5**	**1**
74	**74**	**.00010769**	**.5**	**1**
75	**75**	**.00019867**	**.53846157**	**1**
76	**76**	**.00001879**	**.53846157**	**1**

17.
18. log close
name: **<unnamed>**
log: **/home/elven/Documents/College/metrics_project/synth/synth_output.smcl**
log type: **smcl**
closed on: **17 May 2022, 06:23:56**