```
      name:  <unnamed>
       log:  /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/GMR_replication_log.smcl
  log type:  smcl
 opened on:   3 Nov 2021, 15:24:21

. do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

. ********************************************************************************
. * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
. ********************************************************************************
.
. // NOVEMBER 2, 2021
.
. // THIS FILE REPLICATES FIGURE 1 IN THE MAIN TEXT OF "ELECTORAL
. // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
. // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
.
. global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

. global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

.
. * Install required package
.
. ssc install blindschemes, replace
checking blindschemes consistency and verifying not already installed...
all files already exist and are up to date.

.
. * Open data
.
. use "$data/GMR_weekly_cases.dta", clear

.
. ********************************************************************************
.
. * Figure 1
.
. tsset week

Time variable: week, 1 to 52
        Delta: 1 unit

.
. twoway (tsline sum_aris, xtitle("Week") ytitle("ARIs (1000s)") scheme(plotplain) xline(27) yaxis(1)) ///
>         (tsline excess, ytitle("Excess cases (1000s)", axis(2)) yaxis(2)), ///
>         legend(label(1 "ARIs (1000s)") label(2 "Excess cases (1000s)") cols(2) position(6)) ///
>         text(1100 31 "Election")

.
. graph export "$output/fg1.eps", as(eps) preview(off) replace
file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/fg1.eps saved as EPS format

.
end of do-file

. do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

. ********************************************************************************
. * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
. ********************************************************************************
.
. // NOVEMBER 2, 2021
.
. // THIS FILE REPLICATES TABLES 1 AND 2 IN THE MAIN TEXT OF "ELECTORAL
. // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
. // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
.
. global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

. global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

.
. * Install required packages
.
. ssc install reghdfe, replace
checking reghdfe consistency and verifying not already installed...
all files already exist and are up to date.

. ssc install estout, replace
checking estout consistency and verifying not already installed...
all files already exist and are up to date.

.
. * Open data
.
. use "$data/GMR_data_main.dta", clear

.
. ********************************************************************************
.
. * Table 1
. * H1N1 and electoral performance of the incumbent: difference-in-differences estimates
.
. egen munid=group(estado municipio)

.
. gen year2=year*year // Generate year^2

.
. preserve

.
. keep if year==2006 | year==2009
(256,661 observations deleted)

. gen a=1 if change_ari!=. & PAN_voteshare!=.
(813 missing values generated)

. bysort id: egen sum_a=sum(a)

. keep if sum_a==2
(1,428 observations deleted)

.
. est clear

.
. eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 434 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    127,370
```

```
Absorbing 2 HDFE groups                         F(   1,  16127) =      17.37
Statistics robust to heteroskedasticity         Prob > F        =     0.0000
                                                R-squared       =     0.9593
                                                Adj R-squared   =     0.9125
                                                Within R-sq.    =     0.0010
Number of clusters (clues)   =     16,128       Root MSE        =     4.6570

                                  (Std. err. adjusted for 16,128 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |           0  (omitted)
  change_ari |           0  (omitted)
             |
post#c.change_ari |
          1  |   -.1740035   .0417464    -4.17   0.000    -.2558311    -.092176
             |
       _cons |    30.97957   .0076316  4059.36   0.000     30.96462    30.99453
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685        63685           0     * |
   munid#year |       4438            0        4438       |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

75 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  127370

76 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  63685

77 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  16128

78 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

79 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

80 . estadd local linear " "

added macro:
               e(linear) : " "

81 . estadd local quadratic " "

added macro:
            e(quadratic) : " "

82 . restore

83 .
84 . preserve

85 .
86 . keep if year==2006 | year==2009
  (256,661 observations deleted)

87 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
  (7,085 missing values generated)

88 . bysort id: egen sum_a=sum(a)

89 . keep if sum_a==2
  (7,658 observations deleted)

90 .
91 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
  (dropped 460 singleton observations)
  note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
  note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
  (MWFE estimator converged in 7 iterations)
  note: 1.post omitted because of collinearity
  note: change_ari_z omitted because of collinearity

HDFE Linear regression                          Number of obs   =    121,114
Absorbing 2 HDFE groups                         F(   1,  15339) =       9.80
Statistics robust to heteroskedasticity         Prob > F        =     0.0017
                                                R-squared       =     0.9590
                                                Adj R-squared   =     0.9116
                                                Within R-sq.    =     0.0004
Number of clusters (clues)   =     15,340       Root MSE        =     4.6880

                                  (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |           0  (omitted)
change_ari_z |           0  (omitted)
             |
post#c.change_ari_z |
          1  |   -.0155956   .0049814    -3.13   0.002    -.0253598   -.0058315
             |
       _cons |    30.99943   .0049278  6290.74   0.000     30.98977    31.00909
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60557        60557           0     * |
   munid#year |       4382            0        4382       |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

92 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  121114
```

```
 93 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60557

 94 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15340

 95 . estadd local district "\checkmark"

    added macro:
             e(district) : "\checkmark"

 96 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

 97 . estadd local linear " "

    added macro:
                e(linear) : " "

 98 . estadd local quadratic " "

    added macro:
            e(quadratic) : " "

 99 . restore

100 .
101 . preserve

102 .
103 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (114,080 missing values generated)

104 . bysort id: egen sum_a=sum(a)

105 . keep if sum_a==6
    (233,907 observations deleted)

106 .
107 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 2 HDFE groups                           F(   1,   6502) =      12.72
    Statistics robust to heteroskedasticity           Prob > F        =     0.0004
                                                      R-squared       =     0.9276
                                                      Adj R-squared   =     0.9102
                                                      Within R-sq.    =     0.0007
    Number of clusters (clues)   =      6,503         Root MSE        =     5.0400

                                   (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
       change_ari |          0  (omitted)
                  |
    post#c.change_ari |
                1  |  -.2193988   .0615268    -3.57   0.000    -.3400116    -.098786
                  |
            _cons |   31.04261   .0090244  3439.87   0.000     31.02492     31.0603
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      25295        25295           0     *|
      munid#year |       3984            0        3984      |
    -----------------------------------------------------+

    * = FE nested within cluster; treated as redundant for DoF computation
    (est3 stored)

108 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

109 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

110 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

111 . estadd local district "\checkmark"

    added macro:
             e(district) : "\checkmark"

112 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

113 . estadd local linear " "

    added macro:
                e(linear) : " "

114 . estadd local quadratic " "

    added macro:
            e(quadratic) : " "

115 .
116 . restore

117 .
118 . preserve

119 .
```

```
120 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (128,008 missing values generated)

121 . bysort id: egen sum_a=sum(a)

122 . keep if sum_a==6
    (242,157 observations deleted)

123 .
124 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 2 HDFE groups                           F(   1,   6143) =       1.29
    Statistics robust to heteroskedasticity           Prob > F        =     0.2570
                                                      R-squared       =     0.9272
                                                      Adj R-squared   =     0.9096
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,144         Root MSE        =     5.0664

                                       (Std. err. adjusted for 6,144 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
    change_ari_z |          0  (omitted)
                 |
    post#c.change_ari_z |
               1 |  -.0105882   .0093397    -1.13   0.257    -.0288972    .0077208
                 |
           _cons |   31.02295   .0080788  3840.05   0.000     31.00711    31.03879
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      23916       23916           0     *|
      munid#year |       3918           0        3918      |
    -----------------------------------------------------+

    * = FE nested within cluster; treated as redundant for DoF computation
    (est4 stored)

125 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  143496

126 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  23916

127 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6144

128 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

129 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

130 . estadd local linear " "

    added macro:
                e(linear) : " "

131 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

132 .
133 . restore

134 .
135 . preserve

136 .
137 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (114,080 missing values generated)

138 . bysort id: egen sum_a=sum(a)

139 . keep if sum_a==6
    (233,907 observations deleted)

140 .
141 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 24 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 3 HDFE groups                           F(   1,   6502) =       5.84
    Statistics robust to heteroskedasticity           Prob > F        =     0.0157
                                                      R-squared       =     0.9568
                                                      Adj R-squared   =     0.9326
                                                      Within R-sq.    =     0.0002
    Number of clusters (clues)   =      6,503         Root MSE        =     4.3686

                                       (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
      change_ari |          0  (omitted)
                 |
    post#c.change_ari |
               1 |  -.150011   .0621011    -2.42   0.016    -.2717497   -.0282724
                 |
           _cons |   31.03243   .0091086  3406.94   0.000     31.01457    31.05028
    ------------------------------------------------------------------------------
```

```
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------------------------------
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
-------------+---------------------------------------+
           id |      25295       25295           0    *|
   munid#year |       3984           0        3984     |
    id#c.year |      25295           0       25295    ?|
-----------------------------------------------------------------------------
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

142 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

143 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

144 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

145 . estadd local district "\checkmark"

    added macro:
             e(district) : "\checkmark"

146 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

147 . estadd local linear "\checkmark"

    added macro:
               e(linear) : "\checkmark"

148 . estadd local quadratic " "

    added macro:
            e(quadratic) : " "

149 .
150 . restore

151 .
152 .
153 . preserve

154 .
155 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (128,008 missing values generated)

156 . bysort id: egen sum_a=sum(a)

157 . keep if sum_a==6
    (242,157 observations deleted)

158 .
159 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
    (dropped 240 singleton observations)
    note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 26 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 3 HDFE groups                           F(   1,   6143) =       4.39
    Statistics robust to heteroskedasticity           Prob > F        =     0.0362
                                                      R-squared       =     0.9568
                                                      Adj R-squared   =     0.9324
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,144         Root MSE        =     4.3815

                                    (Std. err. adjusted for 6,144 clusters in clues)
-----------------------------------------------------------------------------
                    |               Robust
      PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------------+---------------------------------------------------------
             1.post |          0  (omitted)
       change_ari_z |          0  (omitted)
                    |
post#c.change_ari_z |
                 1  |  -.0136459   .0065125    -2.10   0.036    -.0264126   -.0008792
                    |
              _cons |    31.0256   .0056333  5507.58   0.000     31.01455    31.03664
-----------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------------------------------
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
-------------+---------------------------------------+
           id |      23916       23916           0    *|
   munid#year |       3918           0        3918     |
    id#c.year |      23916           0       23916    ?|
-----------------------------------------------------------------------------
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

160 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  143496

161 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  23916

162 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6144

163 . estadd local district "\checkmark"

    added macro:
             e(district) : "\checkmark"
```

```
164 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

165 . estadd local linear "\checkmark"

    added macro:
                 e(linear) : "\checkmark"

166 . estadd local quadratic " "

    added macro:
              e(quadratic) : " "

167 .
168 . restore

169 .
170 . preserve

171 .
172 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (114,080 missing values generated)

173 . bysort id: egen sum_a=sum(a)

174 . keep if sum_a==6
    (233,907 observations deleted)

175 .
176 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 21 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 4 HDFE groups                           F(   1,   6502) =       4.63
    Statistics robust to heteroskedasticity           Prob > F        =     0.0315
                                                      R-squared       =     0.9568
                                                      Adj R-squared   =     0.9088
                                                      Within R-sq.    =     0.0002
    Number of clusters (clues)   =      6,503         Root MSE        =     5.0793

                                          (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
      change_ari |          0  (omitted)
                 |
    post#c.change_ari |
               1 |  -.1501178   .0697838    -2.15   0.031    -.2869171   -.0133186
                 |
           _cons |   31.03244   .0102354  3031.86   0.000     31.01238    31.05251
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      25295       25295           0     *|
      munid#year |       3984           0        3984      |
       id#c.year |      25295           0       25295     ?|
      id#c.year2 |      25295           0       25295     ?|
    -----------------------------------------------------+
    ? = number of redundant parameters may be higher
    * = FE nested within cluster; treated as redundant for DoF computation
    (est7 stored)

177 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

178 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

179 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

180 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

181 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

182 . estadd local linear " "

    added macro:
                 e(linear) : " "

183 . estadd local quadratic "\checkmark"

    added macro:
              e(quadratic) : "\checkmark"

184 .
185 . restore

186 .
187 . preserve

188 .
189 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (128,008 missing values generated)

190 . bysort id: egen sum_a=sum(a)

191 . keep if sum_a==6
    (242,157 observations deleted)

192 .
193 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
```

```
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 112 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    143,496
Absorbing 4 HDFE groups                           F(   1,   6143) =       3.48
Statistics robust to heteroskedasticity           Prob > F        =     0.0621
                                                  R-squared       =     0.9568
                                                  Adj R-squared   =     0.9086
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =      6,144         Root MSE        =     5.0958

                                    (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.chang~z |
          1  |  -.013669   .0073244    -1.87   0.062    -.0280274    .0006893
             |
       _cons |   31.02562   .0063356  4897.05   0.000     31.0132    31.03803
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916       23916           0     *
   munid#year |       3918           0        3918
    id#c.year |      23916           0       23916    ?
   id#c.year2 |      23916           0       23916    ?
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est8 stored)

194 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  143496

195 . estadd scalar N2 = e(N)/6

added scalar:
                e(N2) =  23916

196 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  6144

197 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

198 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

199 . estadd local linear " "

added macro:
              e(linear) : " "

200 . estadd local quadratic "\checkmark"

added macro:
           e(quadratic) : "\checkmark"

201 .
202 . restore

203 .
204 .
205 . esttab est*  using "$output/table1.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/table1.tex)

206 .
207 . ********************************************************************************
208 .
209 . * Table 2
210 . * Effect heterogeneity by the timing and the height of the peak
211 .
212 . est clear

213 .
214 . preserve

215 .
216 . keep if year==2006 | year==2009
(256,661 observations deleted)

217 . gen a=1 if change_ari!=. & PAN_voteshare!=.
(813 missing values generated)

218 . bysort id: egen sum_a=sum(a)

219 . keep if sum_a==2
(1,428 observations deleted)

220 .
221 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari##i.timing [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 434 singleton observations)
note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.timing is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.timing#c.change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 2009.year omitted because of collinearity
note: change_ari omitted because of collinearity
note: 2.timing omitted because of collinearity
note: 2.timing#c.change_ari omitted because of collinearity
```

```
HDFE Linear regression                            Number of obs   =    127,370
Absorbing 2 HDFE groups                           F(   3,  16127) =       8.87
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9593
                                                  Adj R-squared   =     0.9126
                                                  Within R-sq.    =     0.0016
Number of clusters (clues)   =     16,128         Root MSE        =     4.6554

                                          (Std. err. adjusted for 16,128 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
       2009  |          0  (omitted)
             |
  change_ari |          0  (omitted)
             |
year#c.change_ari |
       2009  |  -.1361315    .044567    -3.05   0.002    -.2234877   -.0487753
             |
    2.timing |          0  (omitted)
             |
 year#timing |
    2009 2   |   .4181074   .1284935     3.25   0.001     .1662459    .6699689
             |
timing#c.change_ari |
           2 |          0  (omitted)
             |
year#timing#c.change_ari |
    2009 2   |  -.1502357   .1135217    -1.32   0.186    -.3727508    .0722793
             |
       _cons |   30.91891   .0198874  1554.70   0.000     30.87993    30.95789
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685        63685           0  *|
   munid#year |       4438            0        4438   |
-----------------------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

222 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  127370

223 . estadd scalar N2 = e(N)/2

added scalar:
                e(N2) =  63685

224 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  16128

225 . test 2009.year#c.change_ari = 2009.year#2.timing#c.change_ari

 ( 1)  2009.year#c.change_ari - 2009.year#2.timing#c.change_ari = 0

       F(  1, 16127) =    0.01
            Prob > F =    0.9176

226 . estadd scalar f = r(F)

added scalar:
                 e(f) =  .01070903

227 . estadd scalar p = r(p)

added scalar:
                 e(p) =  .91757977

228 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

229 . estadd local stateyear "\checkmark"

added macro:
          e(stateyear) : "\checkmark"

230 .
231 . restore

232 .
233 . preserve

234 .
235 . keep if year==2006 | year==2009
(256,661 observations deleted)

236 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
(7,085 missing values generated)

237 . bysort id: egen sum_a=sum(a)

238 . keep if sum_a==2
(7,658 observations deleted)

239 .
240 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari_z##i.timing [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 460 singleton observations)
note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.timing is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.timing#c.change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 2009.year omitted because of collinearity
note: change_ari_z omitted because of collinearity
note: 2.timing omitted because of collinearity
note: 2.timing#c.change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    121,114
Absorbing 2 HDFE groups                           F(   3,  15339) =       7.31
Statistics robust to heteroskedasticity           Prob > F        =     0.0001
                                                  R-squared       =     0.9590
                                                  Adj R-squared   =     0.9117
                                                  Within R-sq.    =     0.0011
Number of clusters (clues)   =     15,340         Root MSE        =     4.6865

                                          (Std. err. adjusted for 15,340 clusters in clues)
```

PAN_voteshare	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
year						
2009	**0**	(omitted)				
change_ari_z	**0**	(omitted)				
year#c.change_ari_z						
2009	**-.0165142**	**.0050819**	**-3.25**	**0.001**	**-.0264752**	**-.0065531**
2.timing	**0**	(omitted)				
year#timing						
2009 2	**.3781393**	**.1276623**	**2.96**	**0.003**	**.127906**	**.6283725**
timing#c.change_ari_z						
2	**0**	(omitted)				
year#timing#c.change_ari_z						
2009 2	**.0085805**	**.0139324**	**0.62**	**0.538**	**-.0187287**	**.0358897**
_cons	**30.94253**	**.0192866**	**1604.36**	**0.000**	**30.90472**	**30.98033**

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	60557	60557	**0**	*
munid#year	4382	0	**4382**	

* = FE nested within cluster; treated as redundant for DoF computation
(**est2** stored)

```
241 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  121114

242 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60557

243 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15340

244 . test 2009.year#c.change_ari_z = 2009.year#2.timing#c.change_ari_z

     ( 1)  2009.year#c.change_ari_z - 2009.year#2.timing#c.change_ari_z = 0

           F(  1, 15339) =    2.32
                Prob > F =    0.1281

245 . estadd scalar f = r(F)

    added scalar:
                     e(f) =  2.3152871

246 . estadd scalar p = r(p)

    added scalar:
                     e(p) =  .12812826

247 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

248 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

249 .
250 . restore

251 .
252 . preserve

253 .
254 . keep if year==2006 | year==2009
    (256,661 observations deleted)

255 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (813 missing values generated)

256 . bysort id: egen sum_a=sum(a)

257 . keep if sum_a==2
    (1,428 observations deleted)

258 .
259 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari##i.height [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 434 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.height is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.height#c.change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari omitted because of collinearity
    note: 2.height omitted because of collinearity
    note: 2.height#c.change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,370
    Absorbing 2 HDFE groups                           F(   3,  16127) =      18.51
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9594
                                                      Adj R-squared   =     0.9127
                                                      Within R-sq.    =     0.0029
    Number of clusters (clues)   =     16,128         Root MSE        =     4.6526

                                               (Std. err. adjusted for 16,128 clusters in clues)
```

PAN_voteshare	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
year						
2009	**0**	(omitted)				
change_ari	**0**	(omitted)				
year#c.change_ari						

```
                    2009 |    .485619   .2159253     2.25   0.025     .0623814    .9088566
                         |
                2.height |          0  (omitted)
                         |
             year#height |
                2009 2   |   -.6585923   .1197912    -5.50   0.000    -.8933964   -.4237883
                         |
      height#c.change_ari |
                       2 |          0  (omitted)
                         |
year#height#c.change_ari |
                2009 2   |   -.6074542   .2207629    -2.75   0.006    -1.040174   -.1747343
                         |
                   _cons |    31.14261   .0291781  1067.33   0.000     31.08542    31.1998
-------------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685        63685           0  *|
  munid#year |       4438            0        4438   |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est3 stored)

260 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  127370

261 . estadd scalar N2 = e(N)/2

added scalar:
                e(N2) =  63685

262 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  16128

263 . test 2009.year#c.change_ari = 2009.year#2.height#c.change_ari

 ( 1)  2009.year#c.change_ari - 2009.year#2.height#c.change_ari = 0

       F(  1, 16127) =    6.33
            Prob > F =    0.0119

264 . estadd scalar f = r(F)

added scalar:
                 e(f) =  6.3291865

265 . estadd scalar p = r(p)

added scalar:
                 e(p) =  .01188631

266 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

267 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

268 .
269 . restore

270 .
271 . preserve

272 .
273 . keep if year==2006 | year==2009
(256,661 observations deleted)

274 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
(7,085 missing values generated)

275 . bysort id: egen sum_a=sum(a)

276 . keep if sum_a==2
(7,658 observations deleted)

277 .
278 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari_z##i.height [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 460 singleton observations)
note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.height is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.height#c.change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 2009.year omitted because of collinearity
note: change_ari_z omitted because of collinearity
note: 2.height omitted because of collinearity
note: 2.height#c.change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    121,114
Absorbing 2 HDFE groups                           F(   3,  15339) =      16.57
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9591
                                                  Adj R-squared   =     0.9118
                                                  Within R-sq.    =     0.0030
Number of clusters (clues)   =     15,340         Root MSE        =     4.6821

                                              (Std. err. adjusted for 15,340 clusters in clues)
-------------------------------------------------------------------------------------------
                          |               Robust
             PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------------------+----------------------------------------------------------------
                     year |
                     2009 |          0  (omitted)
                          |
              change_ari_z |          0  (omitted)
                          |
       year#c.change_ari_z |
                     2009 |   .0030485   .0123859     0.25   0.806    -.0212293    .0273263
                          |
                2.height |          0  (omitted)
                          |
             year#height |
                2009 2   |   -.777249   .1226873    -6.34   0.000    -1.017731   -.5367674
                          |
      height#c.change_ari_z |
                       2 |          0  (omitted)
                          |
```

```
year#height#c.change_ari_z |
                  2009 2   |  -.0147546   .0136236    -1.08   0.279    -.0414584    .0119493
                           |
                     _cons |   31.19909   .0320036   974.86   0.000     31.13636    31.26182
-----------------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs      |
--------------+--------------------------------------------|
           id |      60557       60557           0     *   |
   munid#year |       4382           0        4382         |
-----------------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est4 stored)

279 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  121114

280 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  60557

281 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15340

282 . test 2009.year#c.change_ari_z = 2009.year#2.height#c.change_ari_z

 ( 1)  2009.year#c.change_ari_z - 2009.year#2.height#c.change_ari_z = 0

       F(  1, 15339) =    0.49
            Prob > F =    0.4835

283 . estadd scalar f = r(F)

added scalar:
                     e(f) =  .49105594

284 . estadd scalar p = r(p)

added scalar:
                     e(p) =  .48346728

285 . estadd local district "\checkmark"

added macro:
              e(district) : "\checkmark"

286 . estadd local stateyear "\checkmark"

added macro:
             e(stateyear) : "\checkmark"

287 .
288 . restore

289 .
290 . preserve

291 .
292 . keep if year==2006 | year==2009
(256,661 observations deleted)

293 . gen a=1 if change_ari!=. & PAN_voteshare!=.
(813 missing values generated)

294 . bysort id: egen sum_a=sum(a)

295 . keep if sum_a==2
(1,428 observations deleted)

296 .
297 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari##i.distance2 [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 434 singleton observations)
note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.distance2 is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2bn.distance2#c.change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 2009.year omitted because of collinearity
note: change_ari omitted because of collinearity
note: 2.distance2 omitted because of collinearity
note: 2.distance2#c.change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    127,370
Absorbing 2 HDFE groups                           F(   3,  16127) =      28.03
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9594
                                                  Adj R-squared   =     0.9127
                                                  Within R-sq.    =     0.0036
Number of clusters (clues)   =     16,128         Root MSE        =     4.6510

                                              (Std. err. adjusted for 16,128 clusters in clues)
-----------------------------------------------------------------------------------------------
                              |               Robust
               PAN_voteshare  | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------------------------+----------------------------------------------------------------
                         year |
                         2009 |          0  (omitted)
                              |
                   change_ari |          0  (omitted)
                              |
            year#c.change_ari |
                         2009 |  -.1241201   .0416172    -2.98   0.003    -.2056944   -.0425458
                              |
                 2.distance2  |          0  (omitted)
                              |
              year#distance2  |
                       2009 2 |   .7678316   .0901703     8.52   0.000     .5910877    .9445755
                              |
       distance2#c.change_ari |
                            2 |          0  (omitted)
                              |
year#distance2#c.change_ari   |
                       2009 2 |  -.1377256   .0628841    -2.19   0.029    -.2609855   -.0144657
                              |
                        _cons |   30.81811   .0193855  1589.75   0.000     30.78012    30.85611
-----------------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs      |
--------------+--------------------------------------------|
```

```
            id |     63685       63685          0    *|
   munid#year |      4438           0       4438     |
-------------+----------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

298 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  127370

299 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  63685

300 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  16128

301 . test 2009.year#c.change_ari = 2009.year#2.distance2#c.change_ari

     ( 1)  2009.year#c.change_ari - 2009.year#2.distance2#c.change_ari = 0

           F(  1, 16127) =    0.03
                Prob > F =    0.8708

302 . estadd scalar f = r(F)

    added scalar:
                     e(f) =  .02644784

303 . estadd scalar p = r(p)

    added scalar:
                     e(p) =  .87081343

304 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

305 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

306 .
307 . restore

308 .
309 . preserve

310 .
311 . keep if year==2006 | year==2009
    (256,661 observations deleted)

312 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (7,085 missing values generated)

313 . bysort id: egen sum_a=sum(a)

314 . keep if sum_a==2
    (7,658 observations deleted)

315 .
316 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari_z##i.distance2 [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 460 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.distance2 is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.distance2#c.change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity
    note: 2.distance2 omitted because of collinearity
    note: 2.distance2#c.change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    121,114
    Absorbing 2 HDFE groups                           F(   3,  15339) =      24.37
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9591
                                                      Adj R-squared   =     0.9118
                                                      Within R-sq.    =     0.0029
    Number of clusters (clues)   =     15,340         Root MSE        =     4.6822

                                                (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------------------------
                                |               Robust
                 PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------------------------+---------------------------------------------------------------
                           year |
                          2009  |          0  (omitted)
                                |
                  change_ari_z |          0  (omitted)
                                |
           year#c.change_ari_z |
                          2009  |  -.0129432   .0080483    -1.61   0.108    -.0287189    .0028325
                                |
                   2.distance2 |          0  (omitted)
                                |
                year#distance2 |
                       2009 2  |   .7328131    .091516     8.01   0.000     .5534308    .9121954
                                |
      distance2#c.change_ari_z |
                             2  |          0  (omitted)
                                |
year#distance2#c.change_ari_z |
                       2009 2  |  -.0048711   .0111211    -0.44   0.661    -.0266697    .0169276
                                |
                         _cons |    30.8443   .0200284  1540.03   0.000     30.80504    30.88356
------------------------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
-------------+---------------------------------------|
           id |     60557       60557          0    *|
   munid#year |      4382           0       4382     |
-----------------------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

317 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  121114
```

```
318 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60557

319 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15340

320 . test 2009.year#c.change_ari_z = 2009.year#2.distance2#c.change_ari_z

     ( 1)  2009.year#c.change_ari_z - 2009.year#2.distance2#c.change_ari_z = 0

           F(  1, 15339) =    0.20
                Prob > F =    0.6560

321 . estadd scalar f = r(F)

    added scalar:
                     e(f) =  .1984258

322 . estadd scalar p = r(p)

    added scalar:
                     e(p) =  .6560008

323 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

324 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

325 .
326 . restore

327 .
328 .
329 . preserve

330 .
331 . keep if year==2006 | year==2009
    (256,661 observations deleted)

332 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (813 missing values generated)

333 . bysort id: egen sum_a=sum(a)

334 . keep if sum_a==2
    (1,428 observations deleted)

335 .
336 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari##i.coverage [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 436 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.coverage is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.coverage#c.change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari omitted because of collinearity
    note: 2.coverage omitted because of collinearity
    note: 2.coverage#c.change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,254
    Absorbing 2 HDFE groups                           F(   3,  16124) =      61.70
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9597
                                                      Adj R-squared   =     0.9133
                                                      Within R-sq.    =     0.0089
    Number of clusters (clues)   =     16,125         Root MSE        =     4.6343

                                              (Std. err. adjusted for 16,125 clusters in clues)
    ------------------------------------------------------------------------------------------
                                |               Robust
                PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    ------------------------------------------------------------------------------------------
                         year |
                         2009 |          0  (omitted)
                              |
                   change_ari |          0  (omitted)
                              |
            year#c.change_ari |
                         2009 |  -.3504242   .0786721    -4.45   0.000    -.5046303   -.1962182
                              |
                  2.coverage |          0  (omitted)
                              |
                year#coverage |
                       2009 2 |  -1.680965   .1290883   -13.02   0.000    -1.933992   -1.427938
                              |
        coverage#c.change_ari |
                            2 |          0  (omitted)
                              |
    year#coverage#c.change_ari |
                       2009 2 |   .2599855   .0842688     3.09   0.002     .0948092    .4251618
                              |
                        _cons |   31.36036   .0305683  1025.91   0.000     31.30045    31.42028
    ------------------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    -------------+---------------------------------------|
               id |     63627       63627           0    *|
       munid#year |      4436           0        4436     |
    -----------------------------------------------------
    * = FE nested within cluster; treated as redundant for DoF computation
    (est7 stored)

337 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  127254

338 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  63627

339 . estadd scalar N3 = e(N_clust)

    added scalar:
```

```
                  e(N3) =  16125

340 . test 2009.year#c.change_ari = 2009.year#2.coverage#c.change_ari

     ( 1)  2009.year#c.change_ari - 2009.year#2.coverage#c.change_ari = 0

           F(  1, 16124) =   15.08
                Prob > F =    0.0001

341 . estadd scalar f = r(F)

    added scalar:
                  e(f) =  15.082723

342 . estadd scalar p = r(p)

    added scalar:
                  e(p) =  .00010331

343 . estadd local district "\checkmark"

    added macro:
             e(district) : "\checkmark"

344 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

345 .
346 . restore

347 .
348 . preserve

349 .
350 . keep if year==2006 | year==2009
    (256,661 observations deleted)

351 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (7,085 missing values generated)

352 . bysort id: egen sum_a=sum(a)

353 . keep if sum_a==2
    (7,658 observations deleted)

354 .
355 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari_z##i.coverage [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 462 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.coverage is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2bn.coverage#c.change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity
    note: 2.coverage omitted because of collinearity
    note: 2.coverage#c.change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    121,004
    Absorbing 2 HDFE groups                           F(   3,  15336) =      53.17
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9594
                                                      Adj R-squared   =     0.9124
                                                      Within R-sq.    =     0.0078
    Number of clusters (clues)   =     15,337         Root MSE        =     4.6665

                                              (Std. err. adjusted for 15,337 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
                 |
            year |
            2009 |          0  (omitted)
                 |
    change_ari_z |          0  (omitted)
                 |
    year#c.change_ari_z |
            2009 |  -.0191337   .0049165    -3.89   0.000    -.0287707   -.0094967
                 |
      2.coverage |          0  (omitted)
                 |
    year#coverage |
          2009 2 |  -1.595445   .1311287   -12.17   0.000    -1.852473   -1.338417
                 |
    coverage#c.change_ari_z |
                 2 |          0  (omitted)
                 |
    year#coverage#c.change_ari_z |
          2009 2 |   .008607   .0105285     0.82   0.414      -.01203    .0292441
                 |
           _cons |   31.35746   .0294688  1064.09   0.000      31.2997    31.41522
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------------
               id |      60502       60502           0     *
      munid#year |       4380           0        4380       |
    -----------------------------------------------------------
    * = FE nested within cluster; treated as redundant for DoF computation
    (est8 stored)

356 . estadd scalar N1 = e(N)

    added scalar:
                  e(N1) =  121004

357 . estadd scalar N2 = e(N)/2

    added scalar:
                  e(N2) =  60502

358 . estadd scalar N3 = e(N_clust)

    added scalar:
                  e(N3) =  15337

359 . test 2009.year#c.change_ari_z = 2009.year#2.coverage#c.change_ari_z

     ( 1)  2009.year#c.change_ari_z - 2009.year#2.coverage#c.change_ari_z = 0

           F(  1, 15336) =    4.58
                Prob > F =    0.0324

360 . estadd scalar f = r(F)
```

```
    added scalar:
                    e(f) =  4.5787954

361 . estadd scalar p = r(p)

    added scalar:
                    e(p) =  .0323857

362 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

363 . estadd local stateyear "\checkmark"

    added macro:
            e(stateyear) : "\checkmark"

364 .
365 . restore

366 .
367 . preserve

368 .
369 . keep if year==2006 | year==2009
    (256,661 observations deleted)

370 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (813 missing values generated)

371 . bysort id: egen sum_a=sum(a)

372 . keep if sum_a==2
    (1,428 observations deleted)

373 .
374 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari##i.pan [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 434 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 1bn.pan is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2009bn.year#1bn.pan is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 1bn.pan#c.change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari omitted because of collinearity
    note: 1.pan omitted because of collinearity
    note: 2009.year#1.pan omitted because of collinearity
    note: 1.pan#c.change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,370
    Absorbing 2 HDFE groups                           F(   2,  16127) =      14.21
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9593
                                                      Adj R-squared   =     0.9126
                                                      Within R-sq.    =     0.0019
    Number of clusters (clues)   =     16,128         Root MSE        =     4.6549

                                          (Std. err. adjusted for 16,128 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
        2009 |          0  (omitted)
             |
  change_ari |          0  (omitted)
             |
year#c.change_ari |
        2009 |  -.0924605   .0417052    -2.22   0.027    -.1742074   -.0107136
             |
       1.pan |          0  (omitted)
             |
    year#pan |
      2009 1 |          0  (omitted)
             |
pan#c.change_ari |
           1 |          0  (omitted)
             |
year#pan#c.change_ari |
      2009 1 |  -.4381693   .1171071    -3.74   0.000    -.6677123   -.2086263
             |
       _cons |   30.9804   .0072786  4256.38   0.000     30.96614    30.99467
------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685       63685           0     *|
  munid#year |       4438           0        4438      |
-----------------------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation
    (est9 stored)

375 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  127370

376 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  63685

377 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  16128

378 . test 2009.year#c.change_ari = 2009.year#1.pan#c.change_ari

     ( 1)  2009.year#c.change_ari - 2009.year#1.pan#c.change_ari = 0

           F(  1, 16127) =    6.31
                Prob > F =    0.0120

379 . estadd scalar f = r(F)

    added scalar:
                    e(f) =  6.3128633

380 . estadd scalar p = r(p)

    added scalar:
                    e(p) =  .01199619
```

```
381 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

382 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

383 .
384 . restore

385 .
386 . preserve

387 .
388 . keep if year==2006 | year==2009
    (256,661 observations deleted)

389 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (7,085 missing values generated)

390 . bysort id: egen sum_a=sum(a)

391 . keep if sum_a==2
    (7,658 observations deleted)

392 .
393 . eststo: reghdfe PAN_voteshare ib2006.year##c.change_ari_z##i.pan [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 460 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 1bn.pan is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2009bn.year#1bn.pan is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 1bn.pan#c.change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2009.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity
    note: 1.pan omitted because of collinearity
    note: 2009.year#1.pan omitted because of collinearity
    note: 1.pan#c.change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    121,114
    Absorbing 2 HDFE groups                           F(   2,  15339) =       7.92
    Statistics robust to heteroskedasticity           Prob > F        =     0.0004
                                                      R-squared       =     0.9590
                                                      Adj R-squared   =     0.9116
                                                      Within R-sq.    =     0.0004
    Number of clusters (clues)   =     15,340         Root MSE        =     4.6881

                                          (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
        2009 |          0  (omitted)
             |
 change_ari_z |          0  (omitted)
             |
year#c.change_ari_z |
        2009 |  -.0156529   .0039698    -3.94   0.000    -.0234343   -.0078716
             |
       1.pan |          0  (omitted)
             |
    year#pan |
      2009 1 |          0  (omitted)
             |
 pan#c.change_ari_z |
           1 |          0  (omitted)
             |
year#pan#c.change_ari_z |
        2009 1 |   .0004493   .0283987     0.02   0.987    -.0552156    .0561142
             |
       _cons |   30.9994   .0060407  5131.73   0.000     30.98756    31.01124
------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60557        60557           0     * |
   munid#year |       4382            0        4382       |
-----------------------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation
    (est10 stored)

394 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  121114

395 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60557

396 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15340

397 . test 2009.year#c.change_ari_z = 2009.year#1.pan#c.change_ari_z

     ( 1)  2009.year#c.change_ari_z - 2009.year#1.pan#c.change_ari_z = 0

           F(  1, 15339) =    0.30
                Prob > F =    0.5816

398 . estadd scalar f = r(F)

    added scalar:
                     e(f) =  .30365548

399 . estadd scalar p = r(p)

    added scalar:
                     e(p) =  .58160781

400 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

401 . estadd local stateyear "\checkmark"
```

```
    added macro:
            e(stateyear) : "\checkmark"

402 .
403 . restore

404 .
405 . esttab est*  using "$output/table2.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
    >         compress lines star(* .1 ** .05 *** .01) label ///
    >         mgroups("Timing of peak" "Height of peak" "Distance from healthcare" "Insurance coverage" "PAN governor", pattern(1 0 1 0 1 0 1 0 1 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
    >         b(%9.3f) se(%9.3f) stats(N1 N2 N3 f p district stateyear, labels("Number of observations" "Number of sections" "Number of clusters" "\textit{F}-statistic" "\textit{p}-value" "Section FE" "Municipality-year FE") ///
    >         fmt(0 0 0 2)) keep(2009.year#c.change_ari 2009.year#c.change_ari_z ///
    >         2009.year#2.timing#c.change_ari 2009.year#2.timing#c.change_ari_z ///
    >         2009.year#2.height#c.change_ari 2009.year#2.height#c.change_ari_z ///
    >         2009.year#2.coverage#c.change_ari 2009.year#2.coverage#c.change_ari_z ///
    >         2009.year#2.distance2#c.change_ari 2009.year#2.distance2#c.change_ari_z ///
    >         2009.year#1.pan#c.change_ari 2009.year#1.pan#c.change_ari_z) ///
    >         coeflabels(2009.year#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s)" ///
    >         2009.year#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score)" ///
    >         2009.year#2.timing#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s) $\times$ Late peak" ///
    >         2009.year#2.timing#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score) $\times$ Late peak" ///
    >         2009.year#2.height#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s) $\times$ High peak" ///
    >         2009.year#2.height#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score) $\times$ High peak" ///
    >         2009.year#2.distance2#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s) $\times$ Far from healthcare" ///
    >         2009.year#2.distance2#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score) $\times$ Far from healthcare" ///
    >         2009.year#2.coverage#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s) $\times$ High insurance coverage" ///
    >         2009.year#2.coverage#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score) $\times$ High insurance coverage" ///
    >         2009.year#1.pan#c.change_ari "1[Year = 2009] $\times$ Excess ARI cases (1000s) $\times$ State controlled by PAN" ///
    >         2009.year#1.pan#c.change_ari_z "1[Year = 2009] $\times$ Excess ARI cases (z-score) $\times$ State controlled by PAN") ///
    >         order(2009.year#c.change_ari 2009.year#c.change_ari_z ///
    >         2009.year#2.timing#c.change_ari 2009.year#2.timing#c.change_ari_z ///
    >         2009.year#2.height#c.change_ari 2009.year#2.height#c.change_ari_z ///
    >         2009.year#2.distance2#c.change_ari 2009.year#2.distance2#c.change_ari_z ///
    >         2009.year#2.coverage#c.change_ari 2009.year#2.coverage#c.change_ari_z ///
    >         2009.year#1.pan#c.change_ari 2009.year#1.pan#c.change_ari_z) ///
    >         nodepvars nomtitle prehead(\begin{tabular}{l*{11}{c}} \toprule) ///
    >         postfoot(\bottomrule \end{tabular})
    (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/table2.tex)

406 .
    end of do-file

407 . do "/var/folders/q3/rmf9jk5n31bfy0jr6bt7d3ch0000gn/T//SD58535.000000"

408 . ********************************************************************************
409 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
410 . ********************************************************************************
411 .
412 . // NOVEMBER 2, 2021
413 .
414 . // THIS FILE REPLICATES FIGURES 2 AND 3 IN THE MAIN TEXT OF "ELECTORAL
415 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
416 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
417 .
418 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

419 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

420 .
421 . * Open data
422 .
423 . use "$data/GMR_data_main.dta", clear

424 .
425 . ********************************************************************************
426 .
427 . * Figure 2
428 . * H1N1 and electoral performance of the incumbent: event-study estimates
429 .
430 . egen munid=group(estado municipio) // generate municipality identifiers

431 .
432 . preserve

433 .
434 . gen a=1 if change_ari!=. & PAN_voteshare!=. // NB. The analyses in the main text use a balanced panel
    (114,080 missing values generated)

435 . bysort id: egen sum_a=sum(a)

436 . drop if sum_a<6
    (233,907 observations deleted)

437 .
438 . est clear

439 .
440 . reghdfe PAN_voteshare ib2006.year##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1997bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2000bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2003bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1997.year omitted because of collinearity
    note: 2000.year omitted because of collinearity
    note: 2003.year omitted because of collinearity
    note: 2009.year omitted because of collinearity
    note: 2012.year omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 2 HDFE groups                           F(   5,   6502) =       3.79
    Statistics robust to heteroskedasticity           Prob > F        =     0.0020
                                                      R-squared       =     0.9276
                                                      Adj R-squared   =     0.9103
                                                      Within R-sq.    =     0.0009
    Number of clusters (clues)   =      6,503         Root MSE        =     5.0395

                                          (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
            year |
            1997 |          0  (omitted)
            2000 |          0  (omitted)
            2003 |          0  (omitted)
            2009 |          0  (omitted)
            2012 |          0  (omitted)
                 |
       change_ari |          0  (omitted)
                 |
    year#c.change_ari |
            1997 |   .0798793   .0633589     1.26   0.207    -.0443251    .2040836
            2000 |   .1342829   .0786852     1.71   0.088    -.0199659    .2885316
```

```
             2003 |   .0179616   .0531902     0.34   0.736    -.0863086    .1222319
             2009 |  -.2489404   .0627456    -3.97   0.000    -.3719424   -.1259385
             2012 |  -.0999497   .0516655    -1.93   0.053    -.2012311    .0013317
                  |
            _cons |    31.0186    .013468  2303.14   0.000      30.9922      31.045
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      25295        25295           0     * |
  munid#year |       3984            0        3984       |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation

441 . local N1 = e(N)

442 . local N2 = `N1'/6

443 . local N3 = e(N_clust)

444 . coefplot, vertical scheme(plotplain) keep(1997.year#c.c* 2000.year#c.c* 2003.year#c.c* 2006.year 2009.year#c.c* 2012.year#c.c*) ///
>         omitted baselevels order(1997.year#c.c* 2000.year#c.c* 2003.year#c.c* 2006.year 2009.year#c.c* 2012.year#c.c*) ///
>         coeflabels(1997.year#c.c* = "1997" 2000.year#c.c* = "2000" 2003.year#c.c* = "2003" 2006.year = "2006" 2009.year#c.c* = "2009" 2012.year#c.c* = "2012") ///
>         ylabel(,format(%9.2f)) ytitle("Effect of excess cases (1000s)") xtitle("Election") note("Number of observations = `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") yline(0) mlabposition(1) mlabel(string(@b,"%9.3f")
>  + cond(@pval<.01, "***", cond(@pval<.05, "**", cond(@pval<.1, "*", "")))) subtitle("Panel A: Excess cases and PAN vote share", position(11))

445 . graph save "$output/PAN_voteshare_excess_seccion_balanced.gph", replace
file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/PAN_voteshare_excess_seccion_balanced.gph saved

446 .
447 . test i1997.year#c.change_ari i2000.year#c.change_ari i2003.year#c.change_ari

 ( 1)  1997.year#c.change_ari = 0
 ( 2)  2000.year#c.change_ari = 0
 ( 3)  2003.year#c.change_ari = 0

       F(  3,  6502) =    1.48
            Prob > F =    0.2184

448 . test i2009.year#c.change_ari i2012.year#c.change_ari

 ( 1)  2009.year#c.change_ari = 0
 ( 2)  2012.year#c.change_ari = 0

       F(  2,  6502) =    7.99
            Prob > F =    0.0003

449 .
450 . restore

451 .
452 . preserve

453 .
454 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
(128,008 missing values generated)

455 . bysort id: egen sum_a=sum(a)

456 . drop if sum_a<6
(242,157 observations deleted)

457 .
458 . reghdfe PAN_voteshare ib2006.year##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 240 singleton observations)
note: 1997bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2000bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2003bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1997.year omitted because of collinearity
note: 2000.year omitted because of collinearity
note: 2003.year omitted because of collinearity
note: 2009.year omitted because of collinearity
note: 2012.year omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    143,496
Absorbing 2 HDFE groups                           F(   5,   6143) =       2.31
Statistics robust to heteroskedasticity           Prob > F        =     0.0416
                                                  R-squared       =     0.9272
                                                  Adj R-squared   =     0.9096
                                                  Within R-sq.    =     0.0002
Number of clusters (clues)   =      6,144         Root MSE        =     5.0663

                                      (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
        1997 |          0  (omitted)
        2000 |          0  (omitted)
        2003 |          0  (omitted)
        2009 |          0  (omitted)
        2012 |          0  (omitted)
             |
  change_ari_z |          0  (omitted)
             |
year#c.change_ari_z |
        1997 |   .0001156   .0094375     0.01   0.990    -.0183852    .0186164
        2000 |  -.0101989   .0151781    -0.67   0.502    -.0399533    .0195554
        2003 |  -.0063254   .0077528    -0.82   0.415    -.0215235    .0088728
        2009 |  -.0196962   .0070153    -2.81   0.005    -.0334486   -.0059438
        2012 |   -.010957    .004725    -2.32   0.020    -.0202197   -.0016943
             |
       _cons |   31.03241   .0118932  2609.26   0.000     31.00909    31.05572
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916        23916           0     * |
  munid#year |       3918            0        3918       |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation

459 . local N1 = e(N)

460 . local N2 = `N1'/6

461 . local N3 = e(N_clust)
```

```
462 . coefplot, vertical scheme(plotplain) keep(1997.year#c.c* 2000.year#c.c* 2003.year#c.c* 2006.year 2009.year#c.c* 2012.year#c.c*) ///
    >         omitted baselevels order(1997.year#c.c* 2000.year#c.c* 2003.year#c.c* 2006.year 2009.year#c.c* 2012.year#c.c*) ///
    >         coeflabels(1997.year#c.c* = "1997" 2000.year#c.c* = "2000" 2003.year#c.c* = "2003" 2006.year = "2006" 2009.year#c.c* = "2009" 2012.year#c.c* = "2012") ///
    >         ylabel(,format(%9.2f)) ytitle("Effect of excess cases (z-score)") xtitle("Election") note("Number of observations = `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") yline(0) mlabposition(1) mlabel(string(@b,"%9.3f
    > ") + cond(@pval<.01, "***", cond(@pval<.05, "**", cond(@pval<.1, "*", "")))) subtitle("Panel B: Excess cases (z-score) and PAN vote share", position(11))

463 . graph save "$output/PAN_voteshare_excess_z_seccion_balanced.gph", replace
    file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/PAN_voteshare_excess_z_seccion_balanced.gph saved

464 .
465 . test i1997.year#c.change_ari_z i2000.year#c.change_ari_z i2003.year#c.change_ari_z

     ( 1)  1997.year#c.change_ari_z = 0
     ( 2)  2000.year#c.change_ari_z = 0
     ( 3)  2003.year#c.change_ari_z = 0

           F(  3,  6143) =    1.02
                Prob > F =    0.3804

466 . test i2009.year#c.change_ari_z i2012.year#c.change_ari_z

     ( 1)  2009.year#c.change_ari_z = 0
     ( 2)  2012.year#c.change_ari_z = 0

           F(  2,  6143) =    4.48
                Prob > F =    0.0114

467 .
468 . restore

469 .
470 . graph combine "$output/PAN_voteshare_excess_seccion_balanced.gph" ///
    >         "$output/PAN_voteshare_excess_z_seccion_balanced.gph", ///
    >         cols(2) scheme(plotplain) xsize(16) ysize(9)

471 . graph export "$output/fg2.eps", as(eps) preview(off) replace
    file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/fg2.eps saved as EPS format

472 .
473 . ********************************************************************************
474 .
475 . * Figure 3
476 . * Effect of the H1N1 epidemic on voter turnout
477 .
478 . preserve

479 .
480 . gen a=1 if change_ari!=. & turnout!=.
    (191,269 missing values generated)

481 . bysort id: egen sum_a=sum(a)

482 . keep if sum_a==3
    (118,052 observations deleted)

483 .
484 . reghdfe turnout ib2006.year##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(id)
    (dropped 654 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 8 iterations)
    note: 2009.year omitted because of collinearity
    note: 2012.year omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    190,322
    Absorbing 2 HDFE groups                           F(   2,  63449) =      47.71
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9487
                                                      Adj R-squared   =     0.9188
                                                      Within R-sq.    =     0.0009
    Number of clusters (id)      =     63,450         Root MSE        =     3.3922

                                        (Std. err. adjusted for 63,450 clusters in id)
    ------------------------------------------------------------------------------
                 |               Robust
         turnout |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
            year |
            2009 |          0  (omitted)
            2012 |          0  (omitted)
                 |
       change_ari |          0  (omitted)
                 |
    year#c.change_ari |
            2009 |  -.1828286   .0190852    -9.58   0.000    -.2202356   -.1454216
            2012 |  -.0600438   .0174057    -3.45   0.001     -.094159   -.0259285
                 |
           _cons |   58.13374   .0042833  1.4e+04   0.000     58.12534    58.14213
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      63450       63450           0     *|
      munid#year |       6653           0        6653      |
    -----------------------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation

485 . local N2 =  e(N_clust)

486 .
487 . reghdfe turnout ib2006.year##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 654 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 8 iterations)
    note: 2009.year omitted because of collinearity
    note: 2012.year omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    190,322
    Absorbing 2 HDFE groups                           F(   2,  16101) =      11.91
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9487
                                                      Adj R-squared   =     0.9188
                                                      Within R-sq.    =     0.0009
    Number of clusters (clues)   =     16,102         Root MSE        =     3.3922

                                      (Std. err. adjusted for 16,102 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
         turnout |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
            year |
```

```
             2009 |          0  (omitted)
             2012 |          0  (omitted)
                  |
       change_ari |          0  (omitted)
                  |
year#c.change_ari |
             2009 |  -.1828286   .0374877    -4.88   0.000    -.2563087   -.1093485
             2012 |  -.0600438   .0220096    -2.73   0.006    -.1031851   -.0169025
                  |
            _cons |   58.13374   .0068365  8503.39   0.000     58.12034    58.14714
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63450       63450           0     *
  munid#year |       6653           0        6653     |
-----------------------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation

488 . local N1 = e(N)

489 . local N3 = e(N_clust)

490 . coefplot, vertical scheme(plotplain) keep(2003.year#* 2006.year 2009.year#* 2012.year#*) ///
>         omitted baselevels order(2003.year#* 2006.year 2009.year#* 2012.year#*) ///
>         coeflabels(2003.year#* = "2003" 2006.year = "2006" 2009.year#* = "2009" 2012.year#* = "2012") ///
>         xtitle("Election") note("Number of observations = `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") ylabel(,format(%9.2f)) ytitle("Effect of excess cases (1000s)") xtitle("Election") note("Number of observations =
> `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") yline(0) mlabposition(1) mlabel(string(@b,"%9.3f") + cond(@pval<.01, "***", cond(@pval<.05, "**", cond(@pval<.1, "*", "")))) subtitle("Panel A: Excess cases and turnout", p
> osition(11))

491 . graph save "$output/turnout_excess_seccion_balanced.gph", replace
    file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/turnout_excess_seccion_balanced.gph saved

492 .
493 . restore

494 .
495 . preserve

496 .
497 . gen a=1 if change_ari_z!=. & turnout!=.
    (200,991 missing values generated)

498 . bysort id: egen sum_a=sum(a)

499 . keep if sum_a==3
    (131,548 observations deleted)

500 .
501 . reghdfe turnout ib2006.year##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(id)
    (dropped 696 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 8 iterations)
    note: 2009.year omitted because of collinearity
    note: 2012.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    180,975
    Absorbing 2 HDFE groups                           F(   2,  60333) =       1.92
    Statistics robust to heteroskedasticity           Prob > F        =     0.1468
                                                      R-squared       =     0.9488
                                                      Adj R-squared   =     0.9188
                                                      Within R-sq.    =     0.0001
    Number of clusters (id)      =     60,334         Root MSE        =     3.3934

                                          (Std. err. adjusted for 60,334 clusters in id)
------------------------------------------------------------------------------
             |               Robust
     turnout | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
        2009 |          0  (omitted)
        2012 |          0  (omitted)
             |
  change_ari_z |          0  (omitted)
             |
year#c.change_ari_z |
        2009 |  -.0057675   .0038252    -1.51   0.132    -.0132648    .0017299
        2012 |   .0011002    .001988     0.55   0.580    -.0027962    .0049966
             |
       _cons |   58.09373    .003403  1.7e+04   0.000     58.08706     58.1004
------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60334       60334           0     *
  munid#year |       6566           0        6566     |
-----------------------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation

502 . local N2 =  e(N_clust)

503 .
504 . reghdfe turnout ib2006.year##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 696 singleton observations)
    note: 2009bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 8 iterations)
    note: 2009.year omitted because of collinearity
    note: 2012.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    180,975
    Absorbing 2 HDFE groups                           F(   2,  15314) =       3.82
    Statistics robust to heteroskedasticity           Prob > F        =     0.0219
                                                      R-squared       =     0.9488
                                                      Adj R-squared   =     0.9188
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =     15,315         Root MSE        =     3.3934

                                        (Std. err. adjusted for 15,315 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
     turnout | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
        year |
        2009 |          0  (omitted)
        2012 |          0  (omitted)
             |
  change_ari_z |          0  (omitted)
             |
```

```
year#c.change_ari_z |
               2009 |  -.0057675   .0033248    -1.73   0.083    -.0122845    .0007496
               2012 |   .0011002   .0023293     0.47   0.637    -.0034655    .0056659

              _cons |   58.09373   .0037018  1.6e+04   0.000     58.08647    58.10099
------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60334        60334           0     *|
   munid#year |       6566            0        6566      |
--------------+--------------------------------------|
* = FE nested within cluster; treated as redundant for DoF computation

505 . local N1 = e(N)

506 . local N3 = e(N_clust)

507 . coefplot, vertical scheme(plotplain) keep(2003.year#* 2006.year 2009.year#* 2012.year#*) ///
>         omitted baselevels order(2003.year#* 2006.year 2009.year#* 2012.year#*) ///
>         coeflabels(2003.year#* = "2003" 2006.year = "2006" 2009.year#* = "2009" 2012.year#* = "2012") ///
>         xtitle("Election") note("Number of observations = `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") ylabel(,format(%9.3f)) ytitle("Effect of excess cases (z-score)") xtitle("Election") note("Number of observations
> = `N1'" "Number of sections = `N2'" "Number of clusters = `N3'") yline(0) mlabposition(1) mlabel(string(@b,"%9.3f") + cond(@pval<.01, "***", cond(@pval<.05, "**", cond(@pval<.1, "*", "")))) subtitle("Panel B: Excess cases (z-score) and
>  turnout", position(11))

508 . graph save "$output/turnout_excess_z_seccion_balanced.gph", replace
file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/turnout_excess_z_seccion_balanced.gph saved

509 .
510 . graph combine "$output/turnout_excess_seccion_balanced.gph" ///
>         "$output/turnout_excess_z_seccion_balanced.gph", ///
>         cols(2) scheme(plotplain) xsize(16) ysize(9)

511 . graph export "$output/fg3.eps", as(eps) preview(off) replace
file /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/fg3.eps saved as EPS format

512 .
513 . restore

514 .
end of do-file

515 . do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

516 . ********************************************************************************
517 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
518 . ********************************************************************************
519 .
520 . // NOVEMBER 2, 2021
521 .
522 . // THIS FILE REPLICATES TABLES A1 AND A2 IN APPENDIX A OF "ELECTORAL
523 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
524 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
525 .
526 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

527 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

528 .
529 . * Open data
530 .
531 . use "$data/GMR_data_main.dta", clear

532 .
533 . ********************************************************************************
534 .
535 . * Table A1
536 .
537 . est clear

538 .
539 . preserve

540 .
541 . gen a=1 if change_ari!=. & PAN_voteshare!=.
(114,080 missing values generated)

542 . bysort id: egen sum_a=sum(a)

543 . drop if sum_a<6
(233,907 observations deleted)

544 .
545 . la var PAN_voteshare "\quad PAN vote share"

546 . la var PRI_voteshare "\quad PRI vote share"

547 . la var others "\quad Other parties' vote share"

548 . la var turnout "\quad Voter turnout"

549 . la var change_ari "\quad Excess cases (1000s)"

550 . la var change_ari_z "\quad Excess cases (z-score)"

551 .
552 . estpost summarize PAN_voteshare PRI_voteshare others turnout change_ari change_ari_z

             |  e(count)   e(sum_w)    e(mean)     e(Var)      e(sd)     e(min)     e(max)      e(sum)
-------------+---------------------------------------------------------------------------------------
PAN_votesh~e |     151986     151986   29.01333   292.1721   17.09304          0   95.89041    4409620
PRI_votesh~e |     151986     151986   37.15045   277.3224     16.653          0        100    5646348
      others |     151986     151986   33.83623   380.2892     19.501  -3.81e-06        100    5142633
     turnout |      75926      75926   55.31615    171.197   13.08423   4.563758        100    4199934
 change_ari  |     151986     151986   .3548801   1.389916   1.178947  -7.230333     17.191   53936.81
change_ari_z |     143736     143736   2.120971   107.4798   10.36725  -69.66967   379.8965   304859.9

553 . esttab using "$output/tableA1.tex", replace booktabs cells("count mean(fmt(%9.2f)) sd(fmt(%9.2f))") noobs nomtitle nonumber label ///
>         collabels("\textit{N}" "Mean" "Std. dev.") refcat(PAN_voteshare "\emph{Electoral outcomes}" change_ari "\emph{H1N1 exposure}", nolabel)
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableA1.tex)

554 .
555 . restore

556 .
557 . * Table A2
558 .
559 . est clear

560 .
561 . preserve

562 .
563 . la var PAN_voteshare "\quad PAN vote share"

564 . la var PRI_voteshare "\quad PRI vote share"
```

```
565 . la var others "\quad Other parties' vote share"

566 . la var turnout "\quad Voter turnout"

567 . la var change_ari "\quad Excess cases (1000s)"

568 . la var change_ari_z "\quad Excess cases (z-score)"

569 .
570 . estpost summarize PAN_voteshare PRI_voteshare others turnout change_ari change_ari_z

                |  e(count)   e(sum_w)    e(mean)     e(Var)      e(sd)     e(min)     e(max)     e(sum)
----------------+------------------------------------------------------------------------------------
PAN_votesh~e    |     385260     385260   28.34451   282.6061   16.81089          0   98.18182   1.09e+07
PRI_votesh~e    |     385260     385260   36.92922    263.765   16.24084          0        100   1.42e+07
        others  |     385260     385260   34.72627   360.2634   18.98061  -3.81e-06        100   1.34e+07
       turnout  |     195507     195507   55.50926   170.7653   13.06772          0        100   1.09e+07
  change_ari    |     272127     272127   .3665368   1.405967   1.185735  -7.230333     17.191   99744.57
change_ari_z    |     258180     258180   2.078675   84.56143   9.195729  -142.1223   379.8965   536672.2

571 . esttab using "$output/tableA2.tex", replace booktabs cells("count mean(fmt(%9.2f)) sd(fmt(%9.2f))") noobs nomtitle nonumber label ///
>         collabels("\textit{N}" "Mean" "Std. dev.") refcat(PAN_voteshare "\emph{Electoral outcomes}" change_ari "\emph{H1N1 exposure}", nolabel)
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableA2.tex)

572 .
573 . restore

574 .
    end of do-file

575 . do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

576 . ********************************************************************************
577 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
578 . ********************************************************************************
579 .
580 . // NOVEMBER 2, 2021
581 .
582 . // THIS FILE REPLICATES TABLES B1, B2, AND B3 IN APPENDIX B OF "ELECTORAL
583 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
584 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
585 .
586 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

587 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

588 .
589 . * Open data
590 .
591 . use "$data/GMR_data_main.dta", clear

592 .
593 . egen munid=group(estado municipio) // Generate an identifier for municipalities

594 . gen year2=year*year

595 .
596 . ********************************************************************************
597 .
598 . * Table B1
599 .
600 . est clear

601 .
602 . eststo: reghdfe PAN_voteshare_president ib2006.year##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 3087 singleton observations)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 2012.year omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,182
    Absorbing 2 HDFE groups                           F(   1,  16115) =      34.66
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9646
                                                      Adj R-squared   =     0.9239
                                                      Within R-sq.    =     0.0027
    Number of clusters (clues)   =     16,116         Root MSE        =     4.3821

                                       (Std. err. adjusted for 16,116 clusters in clues)
    ------------------------------------------------------------------------------
                                 |               Robust
    PAN_voteshare_p~t | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    ------------------+-----------------------------------------------------------
                 year |
                 2012 |          0  (omitted)
                      |
           change_ari |          0  (omitted)
                      |
    year#c.change_ari |
                 2012 |  -.2774019   .0471199    -5.89   0.000    -.3697622   -.1850417
                      |
                _cons |   30.16892   .0103438  2916.63   0.000     30.14864    30.18919
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    ------------------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+---------------------------------------------
               id |      63591       63591           0     *
      munid#year |       4438           0        4438
    ------------------------------------------------------------
    * = FE nested within cluster; treated as redundant for DoF computation
    (est1 stored)

603 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  127182

604 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  63591

605 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  16116

606 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

607 . estadd local stateyear "\checkmark"
```

```
    added macro:
              e(stateyear) : "\checkmark"

608 .
609 . eststo: reghdfe PAN_voteshare_president ib2006.year##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 2751 singleton observations)
    note: 2012bn.year is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 8 iterations)
    note: 2012.year omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    120,950
    Absorbing 2 HDFE groups                           F(   1,  15327) =      12.32
    Statistics robust to heteroskedasticity           Prob > F        =     0.0004
                                                      R-squared       =     0.9646
                                                      Adj R-squared   =     0.9238
                                                      Within R-sq.    =     0.0014
    Number of clusters (clues)   =     15,328         Root MSE        =     4.3874

                                       (Std. err. adjusted for 15,328 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare_pre~t |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    ---------------------+--------------------------------------------------------
                    year |
                    2012 |          0  (omitted)
                         |
           change_ari_z |          0  (omitted)
                         |
    year#c.change_ari_z |
                    2012 |  -.0270176   .0076962    -3.51   0.000    -.0421031   -.0119322
                         |
                   _cons |   30.12142   .0094453  3189.05   0.000     30.10291    30.13993
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      60475       60475           0     *|
      munid#year |       4380           0        4380      |
    -----------------------------------------------------+

    * = FE nested within cluster; treated as redundant for DoF computation
    (est2 stored)

610 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  120950

611 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60475

612 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15328

613 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

614 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

615 .
616 . esttab est*  using "$output/tableB1.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
    >         compress lines star(* .1 ** .05 *** .01) label ///
    >         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE") ///
    >         fmt(0 0 0)) keep(2012.year#c.change_ari 2012.year#c.change_ari_z) ///
    >         coeflabels(2012.year#c.change_ari "1[Year = 2012] $\times$ Excess ARI cases (1000s)" ///
    >         2012.year#c.change_ari_z "1[Year = 2012] $\times$ Excess ARI cases (z-score)") ///
    >         nodepvars nomtitle prehead(\begin{tabular}{l*{3}{c}} \toprule) ///
    >         postfoot(\bottomrule \end{tabular})
    (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableB1.tex)

617 .
618 . est clear

619 .
620 . * Table B2
621 .
622 . preserve

623 .
624 . keep if year==2006 | year==2009
    (256,661 observations deleted)

625 . gen a=1 if change_ari!=. & PRI_voteshare!=.
    (813 missing values generated)

626 . bysort id: egen sum_a=sum(a)

627 . keep if sum_a==2
    (1,428 observations deleted)

628 .
629 . est clear

630 .
631 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
    (dropped 434 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,370
    Absorbing 2 HDFE groups                           F(   1,  16127) =       0.39
    Statistics robust to heteroskedasticity           Prob > F        =     0.5333
                                                      R-squared       =     0.9457
                                                      Adj R-squared   =     0.8832
                                                      Within R-sq.    =     0.0000
    Number of clusters (clues)   =     16,128         Root MSE        =     4.8760

                                       (Std. err. adjusted for 16,128 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
        PRI_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    ---------------------+--------------------------------------------------------
```

```
            1.post |          0  (omitted)
      change_ari |          0  (omitted)

post#c.change_ari |
                1 |  -.0271755   .0436246    -0.62   0.533    -.1126846    .0583336

            _cons |   32.04084    .007975  4017.66   0.000      32.0252    32.05647
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685       63685           0     *|
  munid#year |       4438           0        4438      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

632 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  127370

633 . estadd scalar N2 = e(N)/2

added scalar:
                e(N2) =  63685

634 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  16128

635 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

636 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

637 . estadd local linear " "

added macro:
              e(linear) : " "

638 . estadd local quadratic " "

added macro:
           e(quadratic) : " "

639 . restore

640 .
641 . preserve

642 .
643 . keep if year==2006 | year==2009
(256,661 observations deleted)

644 . gen a=1 if change_ari_z!=. & PRI_voteshare!=.
(7,085 missing values generated)

645 . bysort id: egen sum_a=sum(a)

646 . keep if sum_a==2
(7,658 observations deleted)

647 .
648 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari_z [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 460 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    121,114
Absorbing 2 HDFE groups                           F(   1,  15339) =       0.00
Statistics robust to heteroskedasticity           Prob > F        =     0.9463
                                                  R-squared       =     0.9450
                                                  Adj R-squared   =     0.8813
                                                  Within R-sq.    =     0.0000
Number of clusters (clues)   =     15,340         Root MSE        =     4.9027

                                  (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PRI_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
change_ari_z |          0  (omitted)

post#c.change_ari_z |
                1 |  -.0003236   .0048056    -0.07   0.946    -.0097431    .0090959

            _cons |   32.06316   .0047538  6744.69   0.000     32.05384    32.07248
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60557       60557           0     *|
  munid#year |       4382           0        4382      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

649 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  121114

650 . estadd scalar N2 = e(N)/2

added scalar:
                e(N2) =  60557

651 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  15340

652 . estadd local district "\checkmark"
```

```
    added macro:
               e(district) : "\checkmark"

653 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

654 . estadd local linear " "

    added macro:
                 e(linear) : " "

655 . estadd local quadratic " "

    added macro:
              e(quadratic) : " "

656 . restore

657 .
658 . preserve

659 .
660 . gen a=1 if change_ari!=. & PRI_voteshare!=.
    (114,080 missing values generated)

661 . bysort id: egen sum_a=sum(a)

662 . keep if sum_a==6
    (233,907 observations deleted)

663 .
664 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 2 HDFE groups                           F(   1,   6502) =       5.74
    Statistics robust to heteroskedasticity           Prob > F        =     0.0166
                                                      R-squared       =     0.9020
                                                      Adj R-squared   =     0.8785
                                                      Within R-sq.    =     0.0002
    Number of clusters (clues)   =      6,503         Root MSE        =     5.1677

                                       (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PRI_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
           1.post|          0  (omitted)
       change_ari|          0  (omitted)
                 |
    post#c.change_ari|
               1 |   .1213411   .0506357     2.40   0.017     .0220784    .2206038
                 |
           _cons |   33.58696   .0074269  4522.33   0.000      33.5724    33.60152
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      25295       25295           0     *|
      munid#year |       3984           0        3984      |
    -----------------------------------------------------

    * = FE nested within cluster; treated as redundant for DoF computation
    (est3 stored)

665 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

666 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

667 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

668 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

669 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

670 . estadd local linear " "

    added macro:
                 e(linear) : " "

671 . estadd local quadratic " "

    added macro:
              e(quadratic) : " "

672 .
673 . restore

674 .
675 . preserve

676 .
677 . gen a=1 if change_ari_z!=. & PRI_voteshare!=.
    (128,008 missing values generated)

678 . bysort id: egen sum_a=sum(a)

679 . keep if sum_a==6
    (242,157 observations deleted)

680 .
681 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
```

```
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    143,496
Absorbing 2 HDFE groups                           F(   1,   6143) =       4.33
Statistics robust to heteroskedasticity           Prob > F        =     0.0374
                                                  R-squared       =     0.9014
                                                  Adj R-squared   =     0.8777
                                                  Within R-sq.    =     0.0002
Number of clusters (clues)   =      6,144         Root MSE        =     5.1835

                                    (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PRI_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |   .0123808    .005948     2.08   0.037     .0007206     .024041
             |
       _cons |   33.56164    .005145  6523.13   0.000     33.55155    33.57172
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916        23916           0     *|
   munid#year |       3918            0        3918      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est4 stored)

682 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  143496

683 . estadd scalar N2 = e(N)/6

added scalar:
                e(N2) =  23916

684 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  6144

685 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

686 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

687 . estadd local linear " "

added macro:
              e(linear) : " "

688 . estadd local quadratic " "

added macro:
           e(quadratic) : " "

689 .
690 . restore

691 .
692 . preserve

693 .
694 . gen a=1 if change_ari!=. & PRI_voteshare!=.
(114,080 missing values generated)

695 . bysort id: egen sum_a=sum(a)

696 . keep if sum_a==6
(233,907 observations deleted)

697 .
698 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
(dropped 216 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 24 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    151,770
Absorbing 3 HDFE groups                           F(   1,   6502) =       0.10
Statistics robust to heteroskedasticity           Prob > F        =     0.7554
                                                  R-squared       =     0.9385
                                                  Adj R-squared   =     0.9039
                                                  Within R-sq.    =     0.0000
Number of clusters (clues)   =      6,503         Root MSE        =     4.5958

                                    (Std. err. adjusted for 6,503 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PRI_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.0161634   .0518788    -0.31   0.755    -.1178629    .0855361
             |
       _cons |   33.60713   .0076092  4416.62   0.000     33.59221    33.62205
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      25295        25295           0     *|
   munid#year |       3984            0        3984      |
    id#c.year |      25295            0       25295     ?|
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
```

```
    (est5 stored)

699 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

700 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

701 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

702 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

703 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

704 . estadd local linear "\checkmark"

    added macro:
                e(linear) : "\checkmark"

705 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

706 .
707 . restore

708 .
709 .
710 . preserve

711 .
712 . gen a=1 if change_ari_z!=. & PRI_voteshare!=.
    (128,008 missing values generated)

713 . bysort id: egen sum_a=sum(a)

714 . keep if sum_a==6
    (242,157 observations deleted)

715 .
716 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 26 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 3 HDFE groups                           F(   1,   6143) =       0.21
    Statistics robust to heteroskedasticity           Prob > F        =     0.6506
                                                      R-squared       =     0.9381
                                                      Adj R-squared   =     0.9032
                                                      Within R-sq.    =     0.0000
    Number of clusters (clues)   =      6,144         Root MSE        =     4.6116

                                    (Std. err. adjusted for 6,144 clusters in clues)
    ------------------------------------------------------------------------------
                     |               Robust
         PRI_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -----------------+------------------------------------------------------------
                1.post |          0  (omitted)
          change_ari_z |          0  (omitted)

    post#c.change_ari_z |
                   1 |   -.0020098   .0044369    -0.45   0.651    -.0107076     .006688
                     |
                _cons |    33.57408   .0038379  8748.09   0.000     33.56656    33.58161
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    -------------+---------------------------------------|
               id |     23916       23916           0    *|
       munid#year |      3918           0        3918     |
        id#c.year |     23916           0       23916    ?|
    -----------------------------------------------------+
    ? = number of redundant parameters may be higher
    * = FE nested within cluster; treated as redundant for DoF computation
    (est6 stored)

717 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  143496

718 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  23916

719 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6144

720 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

721 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

722 . estadd local linear "\checkmark"

    added macro:
                e(linear) : "\checkmark"

723 . estadd local quadratic " "
```

```
    added macro:
              e(quadratic) : " "

724 .
725 . restore

726 .
727 . preserve

728 .
729 . gen a=1 if change_ari!=. & PRI_voteshare!=.
    (114,080 missing values generated)

730 . bysort id: egen sum_a=sum(a)

731 . keep if sum_a==6
    (233,907 observations deleted)

732 .
733 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 21 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 4 HDFE groups                           F(   1,   6502) =       0.08
    Statistics robust to heteroskedasticity           Prob > F        =     0.7813
                                                      R-squared       =     0.9385
                                                      Adj R-squared   =     0.8701
                                                      Within R-sq.    =     0.0000
    Number of clusters (clues)   =      6,503         Root MSE        =     5.3436

                                       (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PRI_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
     change_ari  |          0  (omitted)
                 |
    post#c.change_ari |
              1  |   -.016185   .0582894    -0.28   0.781    -.1304514    .0980815
                 |
           _cons |   33.60713   .0085495  3930.88   0.000     33.59037    33.62389
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      25295       25295           0   *|
      munid#year  |       3984           0        3984    |
       id#c.year  |      25295           0       25295   ?|
      id#c.year2  |      25295           0       25295   ?|
    -----------------------------------------------------+
    ? = number of redundant parameters may be higher
    * = FE nested within cluster; treated as redundant for DoF computation
    (est7 stored)

734 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

735 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

736 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

737 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

738 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

739 . estadd local linear " "

    added macro:
                 e(linear) : " "

740 . estadd local quadratic "\checkmark"

    added macro:
              e(quadratic) : "\checkmark"

741 .
742 . restore

743 .
744 . preserve

745 .
746 . gen a=1 if change_ari_z!=. & PRI_voteshare!=.
    (128,008 missing values generated)

747 . bysort id: egen sum_a=sum(a)

748 . keep if sum_a==6
    (242,157 observations deleted)

749 .
750 . eststo: reghdfe PRI_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 112 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 4 HDFE groups                           F(   1,   6143) =       0.17
    Statistics robust to heteroskedasticity           Prob > F        =     0.6829
                                                      R-squared       =     0.9381
                                                      Adj R-squared   =     0.8691
                                                      Within R-sq.    =     0.0000
    Number of clusters (clues)   =      6,144         Root MSE        =     5.3635
```

```
                                                (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PRI_voteshare |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0020378   .0049882    -0.41   0.683    -.0118165    .0077409
             |
       _cons |   33.57411   .0043148  7781.12   0.000     33.56565    33.58257
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916       23916           0     *|
   munid#year |       3918           0        3918      |
    id#c.year |      23916           0       23916     ?|
   id#c.year2 |      23916           0       23916     ?|
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est8 stored)

751 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  143496

752 . estadd scalar N2 = e(N)/6

added scalar:
                e(N2) =  23916

753 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  6144

754 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

755 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

756 . estadd local linear " "

added macro:
              e(linear) : " "

757 . estadd local quadratic "\checkmark"

added macro:
           e(quadratic) : "\checkmark"

758 .
759 . restore

760 .
761 . esttab est*  using "$output/tableB2.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableB2.tex)

762 .
763 . ********************************************************************************
764 .
765 . * Table B3
766 .
767 . preserve

768 .
769 . keep if year==2006 | year==2009
(256,661 observations deleted)

770 . gen a=1 if change_ari!=. & others!=.
(813 missing values generated)

771 . bysort id: egen sum_a=sum(a)

772 . keep if sum_a==2
(1,428 observations deleted)

773 .
774 . est clear

775 .
776 . eststo: reghdfe others 1.post##c.change_ari [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 434 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    127,370
Absorbing 2 HDFE groups                           F(   1,  16127) =      13.58
Statistics robust to heteroskedasticity           Prob > F        =     0.0002
                                                  R-squared       =     0.9655
                                                  Adj R-squared   =     0.9258
                                                  Within R-sq.    =     0.0011
Number of clusters (clues)   =     16,128         Root MSE        =     5.0065

                                (Std. err. adjusted for 16,128 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
      others |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
```

```
                1 |   .2011791   .0546023     3.68   0.000     .0941524    .3082057
            _cons |   36.97959   .0099818  3704.69   0.000     36.96002    36.99915
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685        63685           0   *|
   munid#year |       4438            0        4438    |
-----------------------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

777 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  127370

778 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  63685

779 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  16128

780 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

781 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

782 . estadd local linear " "

added macro:
                e(linear) : " "

783 . estadd local quadratic " "

added macro:
             e(quadratic) : " "

784 . restore

785 .
786 . preserve

787 .
788 . keep if year==2006 | year==2009
(256,661 observations deleted)

789 . gen a=1 if change_ari_z!=. & others!=.
(7,085 missing values generated)

790 . bysort id: egen sum_a=sum(a)

791 . keep if sum_a==2
(7,658 observations deleted)

792 .
793 . eststo: reghdfe others 1.post##c.change_ari_z [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 460 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    121,114
Absorbing 2 HDFE groups                           F(   1,  15339) =       6.56
Statistics robust to heteroskedasticity           Prob > F        =     0.0104
                                                  R-squared       =     0.9652
                                                  Adj R-squared   =     0.9250
                                                  Within R-sq.    =     0.0004
Number of clusters (clues)   =     15,340         Root MSE        =     5.0292

                                  (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
      others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |   .0159193   .0062136     2.56   0.010     .0037399    .0280986
             |
       _cons |   36.93741   .0061467  6009.31   0.000     36.92536    36.94946
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60557        60557           0   *|
   munid#year |       4382            0        4382    |
-----------------------------------------------------+
* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

794 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  121114

795 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  60557

796 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15340

797 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"
```

```
798 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

799 . estadd local linear " "

    added macro:
                 e(linear) : " "

800 . estadd local quadratic " "

    added macro:
              e(quadratic) : " "

801 . restore

802 .
803 . preserve

804 .
805 . gen a=1 if change_ari!=. & others!=.
    (114,080 missing values generated)

806 . bysort id: egen sum_a=sum(a)

807 . keep if sum_a==6
    (233,907 observations deleted)

808 .
809 . eststo: reghdfe others 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 2 HDFE groups                           F(   1,   6502) =       5.20
    Statistics robust to heteroskedasticity           Prob > F        =     0.0226
                                                      R-squared       =     0.9434
                                                      Adj R-squared   =     0.9298
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,503         Root MSE        =     5.1882

                                       (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
          others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
     change_ari |          0  (omitted)
                |
    post#c.change_ari |
              1  |   .0980577    .042999     2.28   0.023     .0137655      .18235
                 |
           _cons |   35.37043   .0063068  5608.28   0.000     35.35807     35.38279
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:

    ------------------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+---------------------------------------------
               id |      25295        25295           0     *
      munid#year |       3984            0        3984       |
    ------------------------------------------------------------
    * = FE nested within cluster; treated as redundant for DoF computation
    (est3 stored)

810 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

811 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

812 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

813 . estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

814 . estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

815 . estadd local linear " "

    added macro:
                 e(linear) : " "

816 . estadd local quadratic " "

    added macro:
              e(quadratic) : " "

817 .
818 . restore

819 .
820 . preserve

821 .
822 . gen a=1 if change_ari_z!=. & others!=.
    (128,008 missing values generated)

823 . bysort id: egen sum_a=sum(a)

824 . keep if sum_a==6
    (242,157 observations deleted)

825 .
826 . eststo: reghdfe others 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 7 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity
```

```
HDFE Linear regression                            Number of obs   =    143,496
Absorbing 2 HDFE groups                           F(   1,   6143) =       0.10
Statistics robust to heteroskedasticity           Prob > F        =     0.7518
                                                  R-squared       =     0.9431
                                                  Adj R-squared   =     0.9294
                                                  Within R-sq.    =     0.0000
Number of clusters (clues)   =      6,144         Root MSE        =     5.2046

                                    (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
      others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.chang |
e_ari_z      |
          1  |  -.0017926   .0056684    -0.32   0.752    -.0129047    .0093196
             |
       _cons |   35.41541   .0049032  7222.93   0.000     35.4058    35.42503
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916        23916           0     *|
   munid#year |       3918            0        3918      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est4 stored)

827 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  143496

828 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  23916

829 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  6144

830 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

831 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

832 . estadd local linear " "

added macro:
               e(linear) : " "

833 . estadd local quadratic " "

added macro:
            e(quadratic) : " "

834 .
835 . restore

836 .
837 . preserve

838 .
839 . gen a=1 if change_ari!=. & others!=.
(114,080 missing values generated)

840 . bysort id: egen sum_a=sum(a)

841 . keep if sum_a==6
(233,907 observations deleted)

842 .
843 . eststo: reghdfe others 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
(dropped 216 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 24 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    151,770
Absorbing 3 HDFE groups                           F(   1,   6502) =       6.79
Statistics robust to heteroskedasticity           Prob > F        =     0.0092
                                                  R-squared       =     0.9622
                                                  Adj R-squared   =     0.9409
                                                  Within R-sq.    =     0.0002
Number of clusters (clues)   =      6,503         Root MSE        =     4.7618

                                    (Std. err. adjusted for 6,503 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
      others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.chang |
e_ari        |
          1  |   .1661744   .0637702     2.61   0.009     .0411638    .2911851
             |
       _cons |   35.36044   .0093534  3780.49   0.000      35.3421    35.37878
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      25295        25295           0     *|
   munid#year |       3984            0        3984      |
    id#c.year |      25295            0       25295     ?|
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

844 . estadd scalar N1 = e(N)
```

```
    added scalar:
                    e(N1) =  151770

845 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

846 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

847 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

848 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

849 . estadd local linear "\checkmark"

    added macro:
                e(linear) : "\checkmark"

850 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

851 .
852 . restore

853 .
854 .
855 . preserve

856 .
857 . gen a=1 if change_ari_z!=. & others!=.
    (128,008 missing values generated)

858 . bysort id: egen sum_a=sum(a)

859 . keep if sum_a==6
    (242,157 observations deleted)

860 .
861 . eststo: reghdfe others 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 26 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 3 HDFE groups                           F(   1,   6143) =       5.33
    Statistics robust to heteroskedasticity           Prob > F        =     0.0209
                                                      R-squared       =     0.9620
                                                      Adj R-squared   =     0.9406
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,144         Root MSE        =     4.7770

                                       (Std. err. adjusted for 6,144 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
          others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
          1.post |          0  (omitted)
    change_ari_z |          0  (omitted)
                 |
    post#c.change_ari_z |
               1 |  .0156557   .0067783     2.31   0.021     .0023679    .0289435
                 |
           _cons |  35.40032   .0058632  6037.72   0.000     35.38883    35.41181
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------------------
      Absorbed FE | Categories  - Redundant  = Num. Coefs   |
    --------------+--------------------------------------------------
               id |      23916       23916           0     *
      munid#year |       3918           0        3918
        id#c.year |      23916           0       23916     ?
    -----------------------------------------------------------------
    ? = number of redundant parameters may be higher
    * = FE nested within cluster; treated as redundant for DoF computation
    (est6 stored)

862 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  143496

863 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  23916

864 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6144

865 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

866 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

867 . estadd local linear "\checkmark"

    added macro:
                e(linear) : "\checkmark"

868 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

869 .
```

```
870 . restore

871 .
872 . preserve

873 .
874 . gen a=1 if change_ari!=. & others!=.
    (114,080 missing values generated)

875 . bysort id: egen sum_a=sum(a)

876 . keep if sum_a==6
    (233,907 observations deleted)

877 .
878 . eststo: reghdfe others 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 21 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 4 HDFE groups                           F(   1,   6502) =       5.38
    Statistics robust to heteroskedasticity           Prob > F        =     0.0204
                                                      R-squared       =     0.9621
                                                      Adj R-squared   =     0.9201
                                                      Within R-sq.    =     0.0002
    Number of clusters (clues)   =      6,503         Root MSE        =     5.5366

                                      (Std. err. adjusted for 6,503 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
          others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
     change_ari |          0  (omitted)
                |
    post#c.change_ari |
              1  |   .1663028   .0717091     2.32   0.020     .0257293    .3068762
                 |
           _cons |   35.36042   .0105178  3361.95   0.000      35.3398    35.38104
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      25295       25295           0     *|
      munid#year |       3984           0        3984      |
       id#c.year |      25295           0       25295     ?|
      id#c.year2 |      25295           0       25295     ?|
    -----------------------------------------------------+
    ? = number of redundant parameters may be higher
    * = FE nested within cluster; treated as redundant for DoF computation
    (est7 stored)

879 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

880 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

881 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

882 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

883 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

884 . estadd local linear " "

    added macro:
                e(linear) : " "

885 . estadd local quadratic "\checkmark"

    added macro:
             e(quadratic) : "\checkmark"

886 .
887 . restore

888 .
889 . preserve

890 .
891 . gen a=1 if change_ari_z!=. & others!=.
    (128,008 missing values generated)

892 . bysort id: egen sum_a=sum(a)

893 . keep if sum_a==6
    (242,157 observations deleted)

894 .
895 . eststo: reghdfe others 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 112 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 4 HDFE groups                           F(   1,   6143) =       4.25
    Statistics robust to heteroskedasticity           Prob > F        =     0.0393
                                                      R-squared       =     0.9620
                                                      Adj R-squared   =     0.9196
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,144         Root MSE        =     5.5559

                                      (Std. err. adjusted for 6,144 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
```

```
             others | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------------+----------------------------------------------------------------
             1.post |          0  (omitted)
       change_ari_z |          0  (omitted)
--------------------+----------------------------------------------------------------
post#c.change_ari_z |
                  1 |   .0157068   .0076209     2.06   0.039     .0007671    .0306465
--------------------+----------------------------------------------------------------
              _cons |   35.40028   .0065921  5370.12   0.000     35.38735     35.4132
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23916       23916           0     *|
   munid#year |       3918           0        3918      |
    id#c.year |      23916           0       23916     ?|
   id#c.year2 |      23916           0       23916     ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est8 stored)

896 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  143496

897 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  23916

898 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  6144

899 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

900 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

901 . estadd local linear " "

added macro:
               e(linear) : " "

902 . estadd local quadratic "\checkmark"

added macro:
            e(quadratic) : "\checkmark"

903 .
904 . restore

905 .
906 . esttab est*  using "$output/tableB3.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableB3.tex)

907 .
    end of do-file

908 . do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

909 . ********************************************************************************
910 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
911 . ********************************************************************************
912 .
913 . // NOVEMBER 2, 2021
914 .
915 . // THIS FILE REPLICATES TABLES C1 AND C4-C8 IN APPENDIX C OF "ELECTORAL
916 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
917 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
918 .
919 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

920 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

921 .
922 . * Open data
923 .
924 . use "$data/GMR_data_main.dta", clear

925 .
926 . egen munid=group(estado municipio) // Generate an identifier for municipalities

927 . gen year2=year*year

928 .
929 . ********************************************************************************
930 .
931 . * Table C1
932 .
933 . est clear

934 .
935 . preserve

936 .
937 . keep if year==2006 | year==2009
    (256,661 observations deleted)

938 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (813 missing values generated)

939 . bysort id: egen sum_a=sum(a)

940 . keep if sum_a==2
    (1,428 observations deleted)

941 .
```

```
942 . est clear

943 .
944 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
    (dropped 434 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 2 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    127,370
    Absorbing 2 HDFE groups                           F(   1,  16127) =      19.46
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9436
                                                      Adj R-squared   =     0.8787
                                                      Within R-sq.    =     0.0007
    Number of clusters (clues)   =     16,128         Root MSE        =     5.5776

                                    (Std. err. adjusted for 16,128 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.1938516   .0439466    -4.41   0.000    -.2799918   -.1077114
             |
       _cons |   29.75932   .0080859  3680.39   0.000     29.74347    29.77517
------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63685        63685           0    *|
   munid#year |       4438            0        4438     |
-----------------------------------------------------+

    * = FE nested within cluster; treated as redundant for DoF computation
    (est1 stored)

945 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  127370

946 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  63685

947 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  16128

948 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

949 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

950 . estadd local linear " "

    added macro:
                e(linear) : " "

951 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

952 . restore

953 .
954 . preserve

955 .
956 . keep if year==2006 | year==2009
    (256,661 observations deleted)

957 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (7,085 missing values generated)

958 . bysort id: egen sum_a=sum(a)

959 . keep if sum_a==2
    (7,658 observations deleted)

960 .
961 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
    (dropped 460 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 2 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    121,114
    Absorbing 2 HDFE groups                           F(   1,  15339) =       9.75
    Statistics robust to heteroskedasticity           Prob > F        =     0.0018
                                                      R-squared       =     0.9433
                                                      Adj R-squared   =     0.8777
                                                      Within R-sq.    =     0.0003
    Number of clusters (clues)   =     15,340         Root MSE        =     5.6124

                                    (Std. err. adjusted for 15,340 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0157722     .00505    -3.12   0.002    -.0256708   -.0058736
             |
       _cons |   29.71387   .0051688  5748.73   0.000     29.70374    29.72401
------------------------------------------------------------------------------

    Absorbed degrees of freedom:
-----------------------------------------------------+
```

```
      Absorbed FE |  Categories  - Redundant  = Num. Coefs |
------------------+---------------------------------------+
               id |       60557        60557           0     *
      munid#year |        4382            0        4382     |
------------------+---------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation
    (est2 stored)

962 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  121114

963 . estadd scalar N2 = e(N)/2

    added scalar:
                    e(N2) =  60557

964 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  15340

965 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

966 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

967 . estadd local linear " "

    added macro:
                e(linear) : " "

968 . estadd local quadratic " "

    added macro:
             e(quadratic) : " "

969 . restore

970 .
971 . preserve

972 .
973 . gen a=1 if change_ari!=. & PAN_voteshare!=.
    (114,080 missing values generated)

974 . bysort id: egen sum_a=sum(a)

975 . keep if sum_a==6
    (233,907 observations deleted)

976 .
977 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari, absorb(id i.munid#i.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 2 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 2 HDFE groups                           F(   1,   6502) =      18.22
    Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                      R-squared       =     0.9025
                                                      Adj R-squared   =     0.8792
                                                      Within R-sq.    =     0.0008
    Number of clusters (clues)   =      6,503         Root MSE        =     5.9409

                                       (Std. err. adjusted for 6,503 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.2989155   .0700287    -4.27   0.000    -.4361949   -.1616362
             |
       _cons |    29.0684   .0082945  3504.54   0.000     29.05214    29.08466
------------------------------------------------------------------------------

    Absorbed degrees of freedom:

      Absorbed FE |  Categories  - Redundant  = Num. Coefs |
------------------+---------------------------------------+
               id |       25295        25295           0     *
      munid#year |        3984            0        3984     |
------------------+---------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation
    (est3 stored)

978 . estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  151770

979 . estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  25295

980 . estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6503

981 . estadd local district "\checkmark"

    added macro:
              e(district) : "\checkmark"

982 . estadd local stateyear "\checkmark"

    added macro:
             e(stateyear) : "\checkmark"

983 . estadd local linear " "

    added macro:
                e(linear) : " "
```

```
. estadd local quadratic " "

    added macro:
              e(quadratic) : " "

.
. restore

.
. preserve

.
. gen a=1 if change_ari_z!=. & PAN_voteshare!=.
    (128,008 missing values generated)

. bysort id: egen sum_a=sum(a)

. keep if sum_a==6
    (242,157 observations deleted)

.
. eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z, absorb(id i.munid#i.year) cluster(clues)
    (dropped 240 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 2 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari_z omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    143,496
    Absorbing 2 HDFE groups                           F(   1,   6143) =       1.73
    Statistics robust to heteroskedasticity           Prob > F        =     0.1879
                                                      R-squared       =     0.9020
                                                      Adj R-squared   =     0.8784
                                                      Within R-sq.    =     0.0001
    Number of clusters (clues)   =      6,144         Root MSE        =     5.9686

                                          (Std. err. adjusted for 6,144 clusters in clues)
    ------------------------------------------------------------------------------
                 |               Robust
    PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
    -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
     change_ari_z |          0  (omitted)
                  |
    post#c.change_ari_z |
                1  |  -.0141469    .010743    -1.32   0.188    -.0352068    .0069131
                  |
            _cons |   28.98573   .0075976  3815.12   0.000     28.97084    29.00062
    ------------------------------------------------------------------------------

    Absorbed degrees of freedom:
    -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
    --------------+--------------------------------------|
               id |      23916       23916           0     *|
      munid#year |       3918           0        3918      |
    -----------------------------------------------------+
    * = FE nested within cluster; treated as redundant for DoF computation
    (est4 stored)

. estadd scalar N1 = e(N)

    added scalar:
                    e(N1) =  143496

. estadd scalar N2 = e(N)/6

    added scalar:
                    e(N2) =  23916

. estadd scalar N3 = e(N_clust)

    added scalar:
                    e(N3) =  6144

. estadd local district "\checkmark"

    added macro:
               e(district) : "\checkmark"

. estadd local stateyear "\checkmark"

    added macro:
              e(stateyear) : "\checkmark"

. estadd local linear " "

    added macro:
                 e(linear) : " "

. estadd local quadratic " "

    added macro:
              e(quadratic) : " "

.
. restore

.
. preserve

.
. gen a=1 if change_ari!=. & PAN_voteshare!=.
    (114,080 missing values generated)

. bysort id: egen sum_a=sum(a)

. keep if sum_a==6
    (233,907 observations deleted)

.
. eststo: reghdfe PAN_voteshare 1.post##c.change_ari, absorb(id i.munid#i.year i.id#c.year) cluster(clues)
    (dropped 216 singleton observations)
    note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
    (MWFE estimator converged in 3 iterations)
    note: 1.post omitted because of collinearity
    note: change_ari omitted because of collinearity

    HDFE Linear regression                            Number of obs   =    151,770
    Absorbing 3 HDFE groups                           F(   1,   6502) =       7.15
    Statistics robust to heteroskedasticity           Prob > F        =     0.0075
                                                      R-squared       =     0.9389
                                                      Adj R-squared   =     0.9045
                                                      Within R-sq.    =     0.0002
    Number of clusters (clues)   =      6,503         Root MSE        =     5.2809
```

```
                                   (Std. err. adjusted for 6,503 clusters in clues)
------------------------------------------------------------------------------
                  |               Robust
    PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------------+-----------------------------------------------------------
           1.post |          0  (omitted)
       change_ari |          0  (omitted)
                  |
post#c.change_ari |
                1 |  -.1961525   .0733475    -2.67   0.008    -.3399378   -.0523672
                  |
            _cons |   29.05623   .0086876  3344.57   0.000      29.0392    29.07326
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |     25295       25295           0    *|
   munid#year |      3984           0        3984     |
    id#c.year |     25295           0       25295    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

1012 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  151770

1013 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  25295

1014 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  6503

1015 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1016 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1017 . estadd local linear "\checkmark"

     added macro:
                e(linear) : "\checkmark"

1018 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1019 .
1020 . restore

1021 .
1022 .
1023 . preserve

1024 .
1025 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)

1026 . bysort id: egen sum_a=sum(a)

1027 . keep if sum_a==6
     (242,157 observations deleted)

1028 .
1029 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z, absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 240 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 3 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    143,496
     Absorbing 3 HDFE groups                           F(   1,   6143) =       4.72
     Statistics robust to heteroskedasticity           Prob > F        =     0.0299
                                                       R-squared       =     0.9389
                                                       Adj R-squared   =     0.9045
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,144         Root MSE        =     5.2903

                                   (Std. err. adjusted for 6,144 clusters in clues)
------------------------------------------------------------------------------
                  |               Robust
      PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------------+-----------------------------------------------------------
             1.post |          0  (omitted)
       change_ari_z |          0  (omitted)
                  |
post#c.change_ari_z |
                1 |   -.014996   .0069028    -2.17   0.030    -.0285279    -.001464
                  |
              _cons |   28.98633   .0048818  5937.64   0.000     28.97676     28.9959
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |     23916       23916           0    *|
   munid#year |      3918           0        3918     |
    id#c.year |     23916           0       23916    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

1030 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  143496

1031 . estadd scalar N2 = e(N)/6

     added scalar:
```

```
                    e(N2) =  23916

1032 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  6144

1033 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1034 . estadd local stateyear "\checkmark"

     added macro:
            e(stateyear) : "\checkmark"

1035 . estadd local linear "\checkmark"

     added macro:
                e(linear) : "\checkmark"

1036 . estadd local quadratic " "

     added macro:
            e(quadratic) : " "

1037 .
1038 . restore

1039 .
1040 . preserve

1041 .
1042 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1043 . bysort id: egen sum_a=sum(a)

1044 . keep if sum_a==6
     (233,907 observations deleted)

1045 .
1046 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari, absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 216 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 3 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    151,770
     Absorbing 4 HDFE groups                           F(   1,   6502) =       5.66
     Statistics robust to heteroskedasticity           Prob > F        =     0.0174
                                                       R-squared       =     0.9389
                                                       Adj R-squared   =     0.8709
                                                       Within R-sq.    =     0.0002
     Number of clusters (clues)   =      6,503         Root MSE        =     6.1401

                                          (Std. err. adjusted for 6,503 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
     PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
       change_ari |          0  (omitted)
                  |
     post#c.change_ari |
                1 |  -.1961391   .0824187    -2.38   0.017    -.3577069   -.0345713
                  |
            _cons |   29.05623    .009762  2976.46   0.000     29.03709    29.07536
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |      25295       25295           0     *|
       munid#year |       3984           0        3984     |
        id#c.year |      25295           0       25295     ?|
       id#c.year2 |      25295           0       25295     ?|
     -----------------------------------------------------
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est7 stored)

1047 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  151770

1048 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  25295

1049 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  6503

1050 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1051 . estadd local stateyear "\checkmark"

     added macro:
            e(stateyear) : "\checkmark"

1052 . estadd local linear " "

     added macro:
                e(linear) : " "

1053 . estadd local quadratic "\checkmark"

     added macro:
            e(quadratic) : "\checkmark"

1054 .
1055 . restore

1056 .
1057 . preserve

1058 .
```

```
1059 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)

1060 . bysort id: egen sum_a=sum(a)

1061 . keep if sum_a==6
     (242,157 observations deleted)

1062 .
1063 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z, absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 240 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 3 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    143,496
     Absorbing 4 HDFE groups                           F(   1,   6143) =       3.74
     Statistics robust to heteroskedasticity           Prob > F        =     0.0530
                                                       R-squared       =     0.9389
                                                       Adj R-squared   =     0.8708
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,144         Root MSE        =     6.1528

                                       (Std. err. adjusted for 6,144 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
           PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     ------------------------------------------------------------------------------
                  1.post |          0  (omitted)
                change_ari_z |          0  (omitted)

     post#c.change_ari_z |
                       1  |  -.0150098   .0077567    -1.94   0.053    -.0302156    .0001961

                    _cons |   28.98634   .0054857  5284.02   0.000     28.97559    28.99709
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |      23916       23916           0     *|
           munid#year |       3918           0        3918      |
            id#c.year |      23916           0       23916     ?|
           id#c.year2 |      23916           0       23916     ?|
     -----------------------------------------------------+
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est8 stored)

1064 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  143496

1065 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  23916

1066 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  6144

1067 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1068 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1069 . estadd local linear " "

     added macro:
                  e(linear) : " "

1070 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1071 .
1072 . restore

1073 .
1074 .
1075 . esttab est*  using "$output/tableC1.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC1.tex)

1076 .
1077 . ********************************************************************************
1078 .
1079 . * Table C4
1080 .
1081 . est clear

1082 .
1083 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 2723 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 10 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    269,090
     Absorbing 2 HDFE groups                           F(   1,  16151) =      22.48
     Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                       R-squared       =     0.9350
                                                       Adj R-squared   =     0.9108
                                                       Within R-sq.    =     0.0006
     Number of clusters (clues)   =     16,152         Root MSE        =     4.7491
```

```
                                                (Std. err. adjusted for 16,152 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |           0  (omitted)
  change_ari |           0  (omitted)
             |
post#c.change_ari |
          1  |  -.1779631   .0375328    -4.74   0.000    -.2515315   -.1043947
             |
       _cons |   29.82235   .0078478  3800.11   0.000     29.80697    29.83774
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      64294        64294           0     *|
   munid#year |       8675            0        8675      |
--------------+--------------------------------------|
* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

1084 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  269090

1085 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  44848.333

1086 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  16152

1087 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1088 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1089 . estadd local linear " "

added macro:
               e(linear) : " "

1090 . estadd local quadratic " "

added macro:
            e(quadratic) : " "

1091 .
1092 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 2468 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 10 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    255,417
Absorbing 2 HDFE groups                           F(   1,  15362) =       3.55
Statistics robust to heteroskedasticity           Prob > F        =     0.0597
                                                  R-squared       =     0.9346
                                                  Adj R-squared   =     0.9100
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =     15,363         Root MSE        =     4.7743

                                                (Std. err. adjusted for 15,363 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |           0  (omitted)
 change_ari_z |           0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0110677   .0058779    -1.88   0.060     -.022589    .0004536
             |
       _cons |   29.82751   .0067885  4393.81   0.000     29.81421    29.84082
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      61126        61126           0     *|
   munid#year |       8555            0        8555      |
--------------+--------------------------------------|
* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

1093 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  255417

1094 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  42569.5

1095 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15363

1096 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1097 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1098 . estadd local linear " "
```

```
      added macro:
                  e(linear) : " "

1099 . estadd local quadratic " "

      added macro:
              e(quadratic) : " "

1100 .
1101 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
      (dropped 2723 singleton observations)
      note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
      note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
      (MWFE estimator converged in 61 iterations)
      note: 1.post omitted because of collinearity
      note: change_ari omitted because of collinearity

      HDFE Linear regression                            Number of obs   =    269,090
      Absorbing 3 HDFE groups                           F(   1,  16151) =       7.05
      Statistics robust to heteroskedasticity           Prob > F        =     0.0079
                                                        R-squared       =     0.9637
                                                        Adj R-squared   =     0.9260
                                                        Within R-sq.    =     0.0002
      Number of clusters (clues)   =     16,152         Root MSE        =     4.3271

                                          (Std. err. adjusted for 16,152 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare |Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.153742   .0578916    -2.66   0.008    -.2672159    -.040268
             |
       _cons |  29.81729   .0121046  2463.30   0.000     29.79356    29.84102
------------------------------------------------------------------------------

      Absorbed degrees of freedom:
-----------------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs      |
--------------+--------------------------------------------|
           id |      64294       64294           0     *   |
   munid#year |       8675           0        8675         |
   id#c.year  |      64294           0       64294     ?   |
--------------+--------------------------------------------|
      ? = number of redundant parameters may be higher
      * = FE nested within cluster; treated as redundant for DoF computation
      (est3 stored)

1102 . estadd scalar N1 = e(N)

      added scalar:
                  e(N1) =  269090

1103 . estadd scalar N2 = e(N)/6

      added scalar:
                  e(N2) =  44848.333

1104 . estadd scalar N3 = e(N_clust)

      added scalar:
                  e(N3) =  16152

1105 . estadd local district "\checkmark"

      added macro:
               e(district) : "\checkmark"

1106 . estadd local stateyear "\checkmark"

      added macro:
              e(stateyear) : "\checkmark"

1107 . estadd local linear "\checkmark"

      added macro:
                e(linear) : "\checkmark"

1108 . estadd local quadratic " "

      added macro:
              e(quadratic) : " "

1109 .
1110 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
      (dropped 2468 singleton observations)
      note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
      note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
      (MWFE estimator converged in 63 iterations)
      note: 1.post omitted because of collinearity
      note: change_ari_z omitted because of collinearity

      HDFE Linear regression                            Number of obs   =    255,417
      Absorbing 3 HDFE groups                           F(   1,  15362) =       4.93
      Statistics robust to heteroskedasticity           Prob > F        =     0.0264
                                                        R-squared       =     0.9636
                                                        Adj R-squared   =     0.9254
                                                        Within R-sq.    =     0.0001
      Number of clusters (clues)   =     15,363         Root MSE        =     4.3482

                                          (Std. err. adjusted for 15,363 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare |Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0136393   .0061441    -2.22   0.026    -.0256825   -.0015961
             |
       _cons |  29.83048    .007096  4203.83   0.000     29.81657    29.84439
------------------------------------------------------------------------------

      Absorbed degrees of freedom:
-----------------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs      |
--------------+--------------------------------------------|
           id |      61126       61126           0     *   |
   munid#year |       8555           0        8555         |
   id#c.year  |      61126           0       61126     ?   |
--------------+--------------------------------------------|
      ? = number of redundant parameters may be higher
      * = FE nested within cluster; treated as redundant for DoF computation
      (est4 stored)
```

```
1111 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  255417

1112 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  42569.5

1113 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  15363

1114 . estadd local district "\checkmark"

     added macro:
               e(district) : "\checkmark"

1115 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1116 . estadd local linear "\checkmark"

     added macro:
                 e(linear) : "\checkmark"

1117 . estadd local quadratic " "

     added macro:
              e(quadratic) : " "

1118 .
1119 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 2723 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 62 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    269,090
     Absorbing 4 HDFE groups                           F(   1,  16151) =       4.74
     Statistics robust to heteroskedasticity           Prob > F        =     0.0295
                                                       R-squared       =     0.9637
                                                       Adj R-squared   =     0.8555
                                                       Within R-sq.    =     0.0002
     Number of clusters (clues)   =     16,152         Root MSE        =     6.0457

                                   (Std. err. adjusted for 16,152 clusters in clues)
     ------------------------------------------------------------------------------
                     |               Robust
        PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------------+----------------------------------------------------------
               1.post |          0  (omitted)
           change_ari |          0  (omitted)
                      |
     post#c.change_ari |
                    1 |  -.1538076   .0706524    -2.18   0.029    -.2922942   -.0153211
                      |
                _cons |    29.8173   .0147728  2018.40   0.000     29.78835    29.84626
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     -------------+---------------------------------------|
                id |     64294       64294           0    *|
        munid#year |      8675           0        8675     |
         id#c.year |     64294           0       64294    ?|
        id#c.year2 |     64294           0       64294    ?|
     -----------------------------------------------------+
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est5 stored)

1120 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  269090

1121 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  44848.333

1122 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  16152

1123 . estadd local district "\checkmark"

     added macro:
               e(district) : "\checkmark"

1124 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1125 . estadd local linear " "

     added macro:
                 e(linear) : " "

1126 . estadd local quadratic "\checkmark"

     added macro:
              e(quadratic) : "\checkmark"

1127 .
1128 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 2468 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 68 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    255,417
     Absorbing 4 HDFE groups                           F(   1,  15362) =       3.31
     Statistics robust to heteroskedasticity           Prob > F        =     0.0690
                                                       R-squared       =     0.9636
```

```
                                                Adj R-squared   =     0.8535
                                                Within R-sq.    =     0.0001
Number of clusters (clues)   =     15,363       Root MSE        =     6.0919

                                   (Std. err. adjusted for 15,363 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.chang~z |
          1  |  -.0136566   .0075099    -1.82   0.069    -.0283769    .0010638
             |
       _cons |   29.8305   .0086735  3439.28   0.000      29.8135     29.8475
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      61126       61126           0     *|
   munid#year |       8555           0        8555     |
    id#c.year |      61126           0       61126    ?|
   id#c.year2 |      61126           0       61126    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

1129 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  255417

1130 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  42569.5

1131 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15363

1132 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1133 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1134 . estadd local linear " "

added macro:
               e(linear) : " "

1135 . estadd local quadratic "\checkmark"

added macro:
            e(quadratic) : "\checkmark"

1136 .
1137 . esttab est*  using "$output/tableC4.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{7}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC4.tex)

1138 .
1139 . ********************************************************************************
1140 .
1141 . * Table C5
1142 .
1143 . xtile pctiles = change_ari, nq(100)

1144 . xtile pctiles2 = change_ari_z, nq(100)

1145 .
1146 . preserve

1147 .
1148 . keep if year==2006 | year==2009
(256,661 observations deleted)

1149 . keep if  pctiles<=95 & pctiles>=5
(12,255 observations deleted)

1150 . gen a=1 if change_ari!=. & PAN_voteshare!=.
(76 missing values generated)

1151 . bysort id: egen sum_a=sum(a)

1152 . keep if sum_a==2
(657 observations deleted)

1153 .
1154 . est clear

1155 .
1156 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 436 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    115,884
Absorbing 2 HDFE groups                           F(   1,  15478) =      30.81
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9582
                                                  Adj R-squared   =     0.9095
                                                  Within R-sq.    =     0.0019
Number of clusters (clues)   =     15,479         Root MSE        =     4.7504

                                   (Std. err. adjusted for 15,479 clusters in clues)
------------------------------------------------------------------------------
             |
```

PAN_voteshare	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
1.post	**0**	(omitted)				
change_ari	**0**	(omitted)				
post#c.change_ari						
1	**-.7222579**	**.1301186**	**-5.55**	**0.000**	**-.9773056**	**-.4672102**
_cons	**30.69862**	**.013772**	**2229.06**	**0.000**	**30.67163**	**30.72562**

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	57942	57942	**0**	*
munid#year	4420	0	**4420**	

* = FE nested within cluster; treated as redundant for DoF computation
(**est1** stored)

```
1157 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  115884

1158 . estadd scalar N2 = e(N)/2

     added scalar:
                     e(N2) =  57942

1159 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  15479

1160 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1161 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1162 . estadd local linear " "

     added macro:
                e(linear) : " "

1163 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1164 . restore

1165 .
1166 . preserve

1167 .
1168 . keep if year==2006 | year==2009
     (256,661 observations deleted)

1169 . keep if  pctiles2<=95 & pctiles2>=5
     (18,021 observations deleted)

1170 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (76 missing values generated)

1171 . bysort id: egen sum_a=sum(a)

1172 . keep if sum_a==2
     (541 observations deleted)

1173 .
1174 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 472 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    110,198
     Absorbing 2 HDFE groups                           F(   1,  14050) =      15.78
     Statistics robust to heteroskedasticity           Prob > F        =     0.0001
                                                       R-squared       =     0.9592
                                                       Adj R-squared   =     0.9115
                                                       Within R-sq.    =     0.0009
     Number of clusters (clues)   =     14,051         Root MSE        =     4.6908

                                       (Std. err. adjusted for 14,051 clusters in clues)
```

PAN_voteshare	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
1.post	**0**	(omitted)				
change_ari_z	**0**	(omitted)				
post#c.change_ari_z						
1	**-.0959552**	**.024155**	**-3.97**	**0.000**	**-.1433022**	**-.0486082**
_cons	**31.17148**	**.0152481**	**2044.29**	**0.000**	**31.14159**	**31.20137**

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	55099	55099	**0**	*
munid#year	4304	0	**4304**	

* = FE nested within cluster; treated as redundant for DoF computation
(**est2** stored)

```
1175 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  110198

1176 . estadd scalar N2 = e(N)/2

     added scalar:
                     e(N2) =  55099
```

```
1177 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  14051

1178 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1179 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1180 . estadd local linear " "

     added macro:
                 e(linear) : " "

1181 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1182 . restore

1183 .
1184 . preserve

1185 .
1186 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1187 . keep if  pctiles<=95 & pctiles>=5
     (138,164 observations deleted)

1188 . bysort id: egen sum_a=sum(a)

1189 . keep if sum_a==6
     (109,309 observations deleted)

1190 .
1191 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 216 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    138,204
     Absorbing 2 HDFE groups                           F(   1,   6213) =      64.76
     Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                       R-squared       =     0.9262
                                                       Adj R-squared   =     0.9083
                                                       Within R-sq.    =     0.0044
     Number of clusters (clues)   =      6,214         Root MSE        =     5.1028

                                          (Std. err. adjusted for 6,214 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -1.604747    .199413    -8.05   0.000    -1.995666   -1.213829
             |
       _cons |   30.69122   .0174322  1760.60   0.000     30.65705    30.72539
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------------------
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------+
           id |      23034       23034           0     *|
   munid#year |       3960           0        3960      |
--------------+--------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est3 stored)

1192 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  138204

1193 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  23034

1194 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  6214

1195 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1196 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1197 . estadd local linear " "

     added macro:
                 e(linear) : " "

1198 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1199 .
1200 . restore

1201 .
1202 . preserve

1203 .
1204 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)
```

```
1205 . keep if  pctiles2<=95 & pctiles2>=5
     (150,956 observations deleted)

1206 . bysort id: egen sum_a=sum(a)

1207 . keep if sum_a==6
     (103,903 observations deleted)

1208 .
1209 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos] if pctiles2<=95, absorb(id i.munid#i.year) cluster(clues)
     (dropped 234 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    130,800
     Absorbing 2 HDFE groups                           F(   1,   5640) =      10.37
     Statistics robust to heteroskedasticity           Prob > F        =     0.0013
                                                       R-squared       =     0.9277
                                                       Adj R-squared   =     0.9101
                                                       Within R-sq.    =     0.0006
     Number of clusters (clues)   =      5,641         Root MSE        =     5.0550

                                       (Std. err. adjusted for 5,641 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.1114122   .0346052    -3.22   0.001    -.1792517   -.0435728
             |
       _cons |   31.25468   .0181655  1720.55   0.000     31.21907    31.29029
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      21800       21800           0     *|
   munid#year |       3894           0        3894      |
--------------+--------------------------------------|
     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1210 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  130800

1211 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  21800

1212 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  5641

1213 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1214 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1215 . estadd local linear " "

     added macro:
                e(linear) : " "

1216 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1217 .
1218 . restore

1219 .
1220 . preserve

1221 .
1222 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1223 . keep if  pctiles<=95 & pctiles>=5
     (138,164 observations deleted)

1224 . bysort id: egen sum_a=sum(a)

1225 . keep if sum_a==6
     (109,309 observations deleted)

1226 .
1227 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 216 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 22 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    138,204
     Absorbing 3 HDFE groups                           F(   1,   6213) =       1.23
     Statistics robust to heteroskedasticity           Prob > F        =     0.2677
                                                       R-squared       =     0.9557
                                                       Adj R-squared   =     0.9306
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,214         Root MSE        =     4.4394

                                       (Std. err. adjusted for 6,214 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
```

```
                1 |  -.2664957    .240407    -1.11   0.268    -.7377766    .2047852
            _cons |   30.57423   .0210158  1454.82   0.000     30.53304    30.61543
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23034       23034           0     *
   munid#year |       3960           0        3960
    id#c.year |      23034           0       23034     ?
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

1228 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  138204

1229 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  23034

1230 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  6214

1231 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1232 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1233 . estadd local linear "\checkmark"

added macro:
              e(linear) : "\checkmark"

1234 . estadd local quadratic " "

added macro:
            e(quadratic) : " "

1235 .
1236 . restore

1237 .
1238 .
1239 . preserve

1240 .
1241 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
(128,008 missing values generated)

1242 . keep if  pctiles2<=95 & pctiles2>=5
(150,956 observations deleted)

1243 . bysort id: egen sum_a=sum(a)

1244 . keep if sum_a==6
(103,903 observations deleted)

1245 .
1246 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
(dropped 234 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 24 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    130,800
Absorbing 3 HDFE groups                           F(   1,   5640) =       0.79
Statistics robust to heteroskedasticity           Prob > F        =     0.3753
                                                  R-squared       =     0.9571
                                                  Adj R-squared   =     0.9326
                                                  Within R-sq.    =     0.0000
Number of clusters (clues)   =      5,641         Root MSE        =     4.3750

                                   (Std. err. adjusted for 5,641 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0398093   .0448995    -0.89   0.375    -.1278296    .0482111
             |
       _cons |   31.21709   .0235694  1324.47   0.000     31.17089     31.2633
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      21800       21800           0     *
   munid#year |       3894           0        3894
    id#c.year |      21800           0       21800     ?
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

1247 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  130800

1248 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  21800

1249 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  5641
```

```
1250 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1251 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1252 . estadd local linear "\checkmark"

     added macro:
                  e(linear) : "\checkmark"

1253 . estadd local quadratic " "

     added macro:
               e(quadratic) : " "

1254 .
1255 . restore

1256 .
1257 . preserve

1258 .
1259 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1260 . keep if  pctiles<=95 & pctiles>=5
     (138,164 observations deleted)

1261 . bysort id: egen sum_a=sum(a)

1262 . keep if sum_a==6
     (109,309 observations deleted)

1263 .
1264 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 216 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 24 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    138,204
     Absorbing 4 HDFE groups                           F(   1,   6213) =       0.96
     Statistics robust to heteroskedasticity           Prob > F        =     0.3260
                                                       R-squared       =     0.9557
                                                       Adj R-squared   =     0.9061
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,214         Root MSE        =     5.1651

                                   (Std. err. adjusted for 6,214 clusters in clues)
     ------------------------------------------------------------------------------
                     |               Robust
        PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -----------------+------------------------------------------------------------
               1.post |          0  (omitted)
           change_ari |          0  (omitted)
                      |
     post#c.change_ari |
                    1 |  -.2653772   .2701722    -0.98   0.326    -.7950082    .2642538
                      |
                _cons |   30.57414   .0236178  1294.54   0.000     30.52784    30.62044
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     -------------+---------------------------------------|
                id |     23034       23034           0     *|
         munid#year |      3960           0        3960     |
          id#c.year |     23034           0       23034    ?|
         id#c.year2 |     23034           0       23034    ?|
     -----------------------------------------------------+
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est7 stored)

1265 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  138204

1266 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  23034

1267 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  6214

1268 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1269 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1270 . estadd local linear " "

     added macro:
                  e(linear) : " "

1271 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1272 .
1273 . restore

1274 .
1275 . preserve

1276 .
1277 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)
```

```
1278 . keep if  pctiles2<=95 & pctiles2>=5
     (150,956 observations deleted)

1279 . bysort id: egen sum_a=sum(a)

1280 . keep if sum_a==6
     (103,903 observations deleted)

1281 .
1282 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 234 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 76 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    130,800
     Absorbing 4 HDFE groups                           F(   1,   5640) =       0.62
     Statistics robust to heteroskedasticity           Prob > F        =     0.4312
                                                       R-squared       =     0.9571
                                                       Adj R-squared   =     0.9087
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =      5,641         Root MSE        =     5.0917

                                          (Std. err. adjusted for 5,641 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
           PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------------+----------------------------------------------------------------
                 1.post |          0  (omitted)
          change_ari_z |          0  (omitted)

     post#c.change_ari_z |
                       1 |  -.0397331   .0504791    -0.79   0.431    -.1386915    .0592252

                   _cons |   31.21705   .0264983  1178.08   0.000      31.1651      31.269
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |      21800       21800           0     *|
           munid#year |       3894           0        3894      |
            id#c.year |      21800           0       21800     ?|
           id#c.year2 |      21800           0       21800     ?|
     -----------------------------------------------------+

     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est8 stored)

1283 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  130800

1284 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  21800

1285 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  5641

1286 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1287 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1288 . estadd local linear " "

     added macro:
                 e(linear) : " "

1289 . estadd local quadratic "\checkmark"

     added macro:
              e(quadratic) : "\checkmark"

1290 .
1291 . restore

1292 .
1293 . esttab est*  using "$output/tableC5.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC5.tex)

1294 .
1295 . ********************************************************************************
1296 .
1297 . * Table C6
1298 .
1299 . preserve

1300 .
1301 . keep if year==2006 | year==2009
     (256,661 observations deleted)

1302 . keep if  pctiles<=99 & pctiles>=1
     (1,969 observations deleted)

1303 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (85 missing values generated)

1304 . bysort id: egen sum_a=sum(a)

1305 . keep if sum_a==2
     (695 observations deleted)

1306 .
1307 . est clear
```

```
1308 .
1309 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 434 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    126,134
     Absorbing 2 HDFE groups                           F(   1,  16092) =      19.01
     Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                       R-squared       =     0.9592
                                                       Adj R-squared   =     0.9123
                                                       Within R-sq.    =     0.0010
     Number of clusters (clues)   =     16,093         Root MSE        =     4.6661

                                   (Std. err. adjusted for 16,093 clusters in clues)
     ------------------------------------------------------------------------------
                     |               Robust
        PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------------+----------------------------------------------------------
               1.post |          0  (omitted)
           change_ari |          0  (omitted)
                      |
     post#c.change_ari |
                    1 |  -.2320595   .0532185    -4.36   0.000    -.3363737   -.1277452
                      |
                _cons |   30.94041   .0079716  3881.34   0.000     30.92478    30.95603
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
     -------------+---------------------------------------|
               id |     63067       63067          0    *|
        munid#year |      4438           0       4438     |
     -----------------------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est1 stored)

1310 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  126134

1311 . estadd scalar N2 = e(N)/2

     added scalar:
                     e(N2) =  63067

1312 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  16093

1313 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1314 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1315 . estadd local linear " "

     added macro:
                  e(linear) : " "

1316 . estadd local quadratic " "

     added macro:
               e(quadratic) : " "

1317 . restore

1318 .
1319 . preserve

1320 .
1321 . keep if year==2006 | year==2009
     (256,661 observations deleted)

1322 . keep if  pctiles2<=99 & pctiles2>=1
     (8,134 observations deleted)

1323 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (86 missing values generated)

1324 . bysort id: egen sum_a=sum(a)

1325 . keep if sum_a==2
     (658 observations deleted)

1326 .
1327 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 456 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    119,984
     Absorbing 2 HDFE groups                           F(   1,  15239) =      14.52
     Statistics robust to heteroskedasticity           Prob > F        =     0.0001
                                                       R-squared       =     0.9590
                                                       Adj R-squared   =     0.9115
                                                       Within R-sq.    =     0.0007
     Number of clusters (clues)   =     15,240         Root MSE        =     4.6902

                                   (Std. err. adjusted for 15,240 clusters in clues)
     ------------------------------------------------------------------------------
                     |               Robust
        PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------------+----------------------------------------------------------
               1.post |          0  (omitted)
          change_ari_z |          0  (omitted)
                      |
     post#c.change_ari_z |
                    1 |  -.0488893   .0128316    -3.81   0.000    -.0740408   -.0237378
                      |
                _cons |   31.01039   .0093293  3323.99   0.000     30.99211    31.02868
     ------------------------------------------------------------------------------
```

```
Absorbed degrees of freedom:
```

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	59992	59992	**0**	*
munid#year	4378	0	**4378**	

```
* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

1328 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  119984

1329 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  59992

1330 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15240

1331 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1332 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1333 . estadd local linear " "

added macro:
               e(linear) : " "

1334 . estadd local quadratic " "

added macro:
            e(quadratic) : " "

1335 . restore

1336 .
1337 . preserve

1338 .
1339 . gen a=1 if change_ari!=. & PAN_voteshare!=.
(114,080 missing values generated)

1340 . keep if  pctiles<=99 & pctiles>=1
(116,430 observations deleted)

1341 . bysort id: egen sum_a=sum(a)

1342 . keep if sum_a==6
(118,983 observations deleted)

1343 .
1344 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 216 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    150,264
Absorbing 2 HDFE groups                           F(   1,   6481) =      14.10
Statistics robust to heteroskedasticity           Prob > F        =     0.0002
                                                  R-squared       =     0.9274
                                                  Adj R-squared   =     0.9100
                                                  Within R-sq.    =     0.0009
Number of clusters (clues)   =      6,482         Root MSE        =     5.0479

                                  (Std. err. adjusted for 6,482 clusters in clues)
```

PAN_voteshare	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
1.post	**0**	(omitted)				
change_ari	**0**	(omitted)				
post#c.change_ari						
1	**-.3388508**	**.0902385**	**-3.76**	**0.000**	**-.515748**	**-.1619535**
_cons	**30.99802**	**.0107071**	**2895.09**	**0.000**	**30.97703**	**31.01901**

```
Absorbed degrees of freedom:
```

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	25044	25044	**0**	*
munid#year	3984	0	**3984**	

```
* = FE nested within cluster; treated as redundant for DoF computation
(est3 stored)

1345 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  150264

1346 . estadd scalar N2 = e(N)/6

added scalar:
                    e(N2) =  25044

1347 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  6482

1348 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1349 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"
```

```
1350 . estadd local linear " "

     added macro:
                 e(linear) : " "

1351 . estadd local quadratic " "

     added macro:
              e(quadratic) : " "

1352 .
1353 . restore

1354 .
1355 . preserve

1356 .
1357 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)

1358 . keep if  pctiles2<=99 & pctiles2>=1
     (130,223 observations deleted)

1359 . bysort id: egen sum_a=sum(a)

1360 . keep if sum_a==6
     (113,308 observations deleted)

1361 .
1362 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos] if pctiles2<=99, absorb(id i.munid#i.year) cluster(clues)
     (dropped 234 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    142,128
     Absorbing 2 HDFE groups                           F(   1,   6104) =       9.34
     Statistics robust to heteroskedasticity           Prob > F        =     0.0023
                                                       R-squared       =     0.9270
                                                       Adj R-squared   =     0.9094
                                                       Within R-sq.    =     0.0006
     Number of clusters (clues)   =      6,105         Root MSE        =     5.0686

                                              (Std. err. adjusted for 6,105 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
           PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------------+----------------------------------------------------------------
                1.post |          0  (omitted)
          change_ari_z |          0  (omitted)
                       |
     post#c.change_ari_z |
                     1 |  -.0646715   .0211663    -3.06   0.002     -.106165   -.0231781
                       |
                 _cons |   31.02486   .0126637  2449.91   0.000     31.00003    31.04968
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |      23688       23688           0     *|
       munid#year |       3918           0        3918      |
     -----------------------------------------------------

     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1363 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  142128

1364 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  23688

1365 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  6105

1366 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1367 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1368 . estadd local linear " "

     added macro:
                 e(linear) : " "

1369 . estadd local quadratic " "

     added macro:
              e(quadratic) : " "

1370 .
1371 . restore

1372 .
1373 . preserve

1374 .
1375 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1376 . keep if  pctiles<=99 & pctiles>=1
     (116,430 observations deleted)

1377 . bysort id: egen sum_a=sum(a)

1378 . keep if sum_a==6
     (118,983 observations deleted)

1379 .
1380 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 216 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 24 iterations)
```

```
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    150,264
Absorbing 3 HDFE groups                           F(   1,   6481) =       3.33
Statistics robust to heteroskedasticity           Prob > F        =     0.0682
                                                  R-squared       =     0.9567
                                                  Adj R-squared   =     0.9324
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =      6,482         Root MSE        =     4.3759

                                  (Std. err. adjusted for 6,482 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.1673236   .0917301    -1.82   0.068    -.347145    .0124977
             |
       _cons |   30.97766   .0108841  2846.15   0.000     30.95633      30.999
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      25044        25044           0     *|
   munid#year |       3984            0        3984    |
    id#c.year |      25044            0       25044    ?|
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

1381 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  150264

1382 . estadd scalar N2 = e(N)/6

added scalar:
                e(N2) =  25044

1383 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  6482

1384 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

1385 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

1386 . estadd local linear "\checkmark"

added macro:
              e(linear) : "\checkmark"

1387 . estadd local quadratic " "

added macro:
           e(quadratic) : " "

1388 .
1389 . restore

1390 .
1391 .
1392 . preserve

1393 .
1394 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
(128,008 missing values generated)

1395 . keep if  pctiles2<=99 & pctiles2>=1
(130,223 observations deleted)

1396 . bysort id: egen sum_a=sum(a)

1397 . keep if sum_a==6
(113,308 observations deleted)

1398 .
1399 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
(dropped 234 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 26 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    142,128
Absorbing 3 HDFE groups                           F(   1,   6104) =       1.17
Statistics robust to heteroskedasticity           Prob > F        =     0.2790
                                                  R-squared       =     0.9566
                                                  Adj R-squared   =     0.9321
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =      6,105         Root MSE        =     4.3866

                                  (Std. err. adjusted for 6,105 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0273024   .0252202    -1.08   0.279    -.0767429     .022138
             |
       _cons |     31.0025   .0150891  2054.63   0.000     30.97292    31.03208
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      23688        23688           0     *|
   munid#year |       3918            0        3918    |
```

```
     id#c.year |     23688           0       23688    ?|
-------------+----------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

1400 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  142128

1401 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  23688

1402 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  6105

1403 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1404 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1405 . estadd local linear "\checkmark"

     added macro:
                e(linear) : "\checkmark"

1406 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1407 .
1408 . restore

1409 .
1410 . preserve

1411 .
1412 . gen a=1 if change_ari!=. & PAN_voteshare!=.
     (114,080 missing values generated)

1413 . keep if  pctiles<=99 & pctiles>=1
     (116,430 observations deleted)

1414 . bysort id: egen sum_a=sum(a)

1415 . keep if sum_a==6
     (118,983 observations deleted)

1416 .
1417 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 216 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 21 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    150,264
     Absorbing 4 HDFE groups                           F(   1,   6481) =       2.64
     Statistics robust to heteroskedasticity           Prob > F        =     0.1045
                                                       R-squared       =     0.9567
                                                       Adj R-squared   =     0.9086
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,482         Root MSE        =     5.0882

                                   (Std. err. adjusted for 6,482 clusters in clues)
------------------------------------------------------------------------------
                   |               Robust
     PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------------+----------------------------------------------------------
           1.post  |          0  (omitted)
       change_ari  |          0  (omitted)
                   |
post#c.change_ari  |
                1  |  -.1673121   .1030561    -1.62   0.105    -.3693361    .0347118
                   |
             _cons |   30.97766   .0122279  2533.35   0.000     30.95369    31.00163
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
-------------+---------------------------------------|
           id |     25044       25044           0    *|
   munid#year |      3984           0        3984     |
    id#c.year |     25044           0       25044    ?|
   id#c.year2 |     25044           0       25044    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est7 stored)

1418 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  150264

1419 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  25044

1420 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  6482

1421 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1422 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"
```

```
1423 . estadd local linear " "

     added macro:
                 e(linear) : " "

1424 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1425 .
1426 . restore

1427 .
1428 . preserve

1429 .
1430 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.
     (128,008 missing values generated)

1431 . keep if  pctiles2<=99 & pctiles2>=1
     (130,223 observations deleted)

1432 . bysort id: egen sum_a=sum(a)

1433 . keep if sum_a==6
     (113,308 observations deleted)

1434 .
1435 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 234 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 108 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    142,128
     Absorbing 4 HDFE groups                           F(   1,   6104) =       0.93
     Statistics robust to heteroskedasticity           Prob > F        =     0.3357
                                                       R-squared       =     0.9566
                                                       Adj R-squared   =     0.9082
                                                       Within R-sq.    =     0.0001
     Number of clusters (clues)   =      6,105         Root MSE        =     5.1021

                                               (Std. err. adjusted for 6,105 clusters in clues)
     ------------------------------------------------------------------------------------------
                    |               Robust
     PAN_voteshare  | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     ---------------+--------------------------------------------------------------------------
           1.post   |          0  (omitted)
     change_ari_z   |          0  (omitted)
                    |
     post#c.change_ari_z |
                1   |  -.0272872   .0283411    -0.96   0.336    -.0828457    .0282713
                    |
            _cons   |   31.00249   .0169563  1828.37   0.000     30.96925    31.03573
     ------------------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |      23688       23688           0     *|
          munid#year |       3918           0        3918     |
           id#c.year |      23688           0       23688    ?|
          id#c.year2 |      23688           0       23688    ?|
     -----------------------------------------------------

     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est8 stored)

1436 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  142128

1437 . estadd scalar N2 = e(N)/6

     added scalar:
                     e(N2) =  23688

1438 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  6105

1439 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1440 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1441 . estadd local linear " "

     added macro:
                 e(linear) : " "

1442 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1443 .
1444 . restore

1445 .
1446 . esttab est*  using "$output/tableC6.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "1997-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC6.tex)

1447 .
1448 . ********************************************************************************
1449 .
1450 . * Table C7
```

```
1451 .
1452 . est clear

1453 .
1454 . preserve

1455 .
1456 . keep if year==2006 | year==2009
     (256,661 observations deleted)

1457 . gen a=1 if excess_deaths!=. & PAN_voteshare!=.
     (86,356 missing values generated)

1458 . bysort id: egen sum_a=sum(a)

1459 . keep if sum_a==2
     (86,408 observations deleted)

1460 .
1461 . eststo: reghdfe PAN_voteshare 1.post##c.excess_deaths [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
     (dropped 876 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: excess_deaths is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 7 iterations)
     note: 1.post omitted because of collinearity
     note: excess_deaths omitted because of collinearity

     HDFE Linear regression                            Number of obs   =     41,940
     Absorbing 2 HDFE groups                           F(   1,  12267) =      33.03
     Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                       R-squared       =     0.9440
                                                       Adj R-squared   =     0.8616
                                                       Within R-sq.    =     0.0033
     Number of clusters (clues)   =     12,268         Root MSE        =     6.2354

                                       (Std. err. adjusted for 12,268 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
     PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
     excess_deaths |          0  (omitted)
                  |
     post#c.excess_deaths |
                1 |  -.0070725   .0012306    -5.75   0.000    -.0094847   -.0046604
                  |
            _cons |   27.58261   .0059395  4643.94   0.000     27.57097    27.59426
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs   |
     --------------+--------------------------------------------
                id |      20970       20970           0     *
       munid#year |       3994           0        3994     |
     -----------------------------------------------------------
     * = FE nested within cluster; treated as redundant for DoF computation
     (est1 stored)

1462 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  41940

1463 . estadd scalar N2 = e(N)/2

     added scalar:
                     e(N2) =  20970

1464 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  12268

1465 . estadd local district "\checkmark"

     added macro:
               e(district) : "\checkmark"

1466 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1467 . estadd local linear " "

     added macro:
                 e(linear) : " "

1468 . estadd local quadratic " "

     added macro:
              e(quadratic) : " "

1469 . restore

1470 .
1471 . preserve

1472 .
1473 . gen a=1 if excess_deaths!=. & PAN_voteshare!=.
     (297,317 missing values generated)

1474 . bysort id: egen sum_a=sum(a)

1475 . keep if sum_a==6
     (338,379 observations deleted)

1476 .
1477 . eststo: reghdfe PAN_voteshare 1.post##c.excess_deaths [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 636 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: excess_deaths is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 8 iterations)
     note: 1.post omitted because of collinearity
     note: excess_deaths omitted because of collinearity

     HDFE Linear regression                            Number of obs   =     46,866
     Absorbing 2 HDFE groups                           F(   1,   4619) =      40.10
     Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                       R-squared       =     0.8956
                                                       Adj R-squared   =     0.8623
                                                       Within R-sq.    =     0.0047
     Number of clusters (clues)   =      4,620         Root MSE        =     6.3895

                                       (Std. err. adjusted for 4,620 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
```

```
       PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
---------------------+----------------------------------------------------------------
             1.post |          0  (omitted)
      excess_deaths |          0  (omitted)
                    |
post#c.excess_deaths |
                  1 |  -.0122381   .0019325    -6.33   0.000    -.0160268   -.0084495
                    |
              _cons |   24.97551   .0071314  3502.20   0.000     24.96153    24.98949
------------------------------------------------------------------------------
```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	7811	7811	0	*
munid#year	3534	0	3534	

* = FE nested within cluster; treated as redundant for DoF computation
(**est2** stored)

```
1478 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  46866

1479 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  7811

1480 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  4620

1481 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1482 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1483 . estadd local linear " "

     added macro:
                e(linear) : " "

1484 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1485 .
1486 . restore

1487 .
1488 . preserve

1489 .
1490 . gen a=1 if excess_deaths!=. & PAN_voteshare!=.
     (297,317 missing values generated)

1491 . bysort id: egen sum_a=sum(a)

1492 . keep if sum_a==6
     (338,379 observations deleted)

1493 .
1494 . eststo: reghdfe PAN_voteshare 1.post##c.excess_deaths [aw = total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 636 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: excess_deaths is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 26 iterations)
     note: 1.post omitted because of collinearity
     note: excess_deaths omitted because of collinearity

     HDFE Linear regression                            Number of obs   =     46,866
     Absorbing 3 HDFE groups                           F(   1,   4619) =      14.93
     Statistics robust to heteroskedasticity           Prob > F        =     0.0001
                                                       R-squared       =     0.9325
                                                       Adj R-squared   =     0.8859
                                                       Within R-sq.    =     0.0003
     Number of clusters (clues)   =      4,620         Root MSE        =     5.8179

                                          (Std. err. adjusted for 4,620 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
       PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
---------------------+----------------------------------------------------------------
             1.post |          0  (omitted)
      excess_deaths |          0  (omitted)
                    |
post#c.excess_deaths |
                  1 |  -.0046976   .0012156    -3.86   0.000    -.0070807   -.0023145
                    |
              _cons |   24.94768   .0044857  5561.65   0.000     24.93889    24.95648
------------------------------------------------------------------------------
```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs	
id	7811	7811	0	*
munid#year	3534	0	3534	
id#c.year	7811	0	7811	?

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(**est3** stored)

```
1495 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  46866

1496 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  7811

1497 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  4620
```

```
1498 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1499 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1500 . estadd local linear "\checkmark"

     added macro:
                  e(linear) : "\checkmark"

1501 . estadd local quadratic " "

     added macro:
               e(quadratic) : " "

1502 .
1503 . restore

1504 .
1505 . preserve

1506 .
1507 . gen a=1 if excess_deaths!=. & PAN_voteshare!=.
     (297,317 missing values generated)

1508 . bysort id: egen sum_a=sum(a)

1509 . keep if sum_a==6
     (338,379 observations deleted)

1510 .
1511 . eststo: reghdfe PAN_voteshare 1.post##c.excess_deaths [aw = total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 636 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: excess_deaths is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 22 iterations)
     note: 1.post omitted because of collinearity
     note: excess_deaths omitted because of collinearity

     HDFE Linear regression                            Number of obs   =     46,866
     Absorbing 4 HDFE groups                           F(   1,   4619) =      11.57
     Statistics robust to heteroskedasticity           Prob > F        =     0.0007
                                                       R-squared       =     0.9325
                                                       Adj R-squared   =     0.8410
                                                       Within R-sq.    =     0.0003
     Number of clusters (clues)   =      4,620         Root MSE        =     6.8655

                                               (Std. err. adjusted for 4,620 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
     PAN_voteshare|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
     excess_deaths|          0  (omitted)
                  |
     post#c.excess_deaths |
                1 |  -.0046896   .0013784    -3.40   0.001    -.007392   -.0019872
                  |
            _cons |   24.94765   .0050867  4904.47   0.000     24.93768    24.95763
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------------
                id |       7811        7811           0     *|
       munid#year |       3534           0        3534      |
        id#c.year |       7811           0        7811     ?|
       id#c.year2 |       7811           0        7811     ?|
     -----------------------------------------------------------
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1512 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  46866

1513 . estadd scalar N2 = e(N)/6

     added scalar:
                    e(N2) =  7811

1514 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  4620

1515 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1516 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1517 . estadd local linear " "

     added macro:
                  e(linear) : " "

1518 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1519 .
1520 . restore

1521 .
1522 .
1523 . esttab est*  using "$output/tableC7.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>          compress lines star(* .1 ** .05 *** .01) label ///
>          mgroups("2006-2009" "1997-2012", pattern(1 1 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>          b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>          fmt(0 0 0)) keep(1.post#c.excess_deaths) ///
>          coeflabels(1.post#c.excess_deaths "1[Year $\geq$ 2009] $\times$ Excess deaths") ///
>          nodepvars nomtitle prehead(\begin{tabular}{l*{6}{c}} \toprule) ///
```

```
> postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC7.tex)

. 
. ********************************************************************************
. 
. * Table C8
. 
. preserve

. 
. keep if year==2006 | year==2009
(256,661 observations deleted)

. gen a=1 if change_ari!=. & turnout!=.
(869 missing values generated)

. bysort id: egen sum_a=sum(a)

. keep if sum_a==2
(1,538 observations deleted)

. 
. est clear

. 
. eststo: reghdfe turnout 1.post##c.change_ari [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 455 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    127,218
Absorbing 2 HDFE groups                           F(  1,  16120) =      24.85
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9536
                                                  Adj R-squared   =     0.9002
                                                  Within R-sq.    =     0.0016
Number of clusters (clues)   =     16,121         Root MSE        =     3.7974

                                 (Std. err. adjusted for 16,121 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
     turnout | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.1862335   .0373556    -4.99   0.000    -.2594546   -.1130124
             |
       _cons |   54.21638    .006833  7934.49   0.000     54.20299    54.22978
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63609        63609           0  *|
   munid#year |       4438            0        4438   |
--------------+--------------------------------------|
* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

. estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  127218

. estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  63609

. estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  16121

. estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

. estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

. restore

. 
. preserve

. 
. keep if year==2006 | year==2009
(256,661 observations deleted)

. gen a=1 if change_ari_z!=. & turnout!=.
(7,139 missing values generated)

. bysort id: egen sum_a=sum(a)

. keep if sum_a==2
(7,764 observations deleted)

. 
. eststo: reghdfe turnout 1.post##c.change_ari_z [aw = total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 481 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    120,966
Absorbing 2 HDFE groups                           F(  1,  15332) =       3.35
Statistics robust to heteroskedasticity           Prob > F        =     0.0670
                                                  R-squared       =     0.9535
                                                  Adj R-squared   =     0.8998
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =     15,333         Root MSE        =     3.8069

                                 (Std. err. adjusted for 15,333 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
```

```
------------------------------------------------------------------------------
     turnout | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.chang~z |
           1 |  -.0064553   .0035245    -1.83   0.067    -.0133637    .0004531
             |
       _cons |   54.17128   .0034875  1.6e+04   0.000     54.16444    54.17811
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60483        60483           0  *|
   munid#year |       4382            0        4382   |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

1554 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  120966

1555 . estadd scalar N2 = e(N)/2

added scalar:
                    e(N2) =  60483

1556 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15333

1557 . estadd local district "\checkmark"

added macro:
              e(district) : "\checkmark"

1558 . estadd local stateyear "\checkmark"

added macro:
             e(stateyear) : "\checkmark"

1559 . restore

1560 .
1561 . preserve

1562 .
1563 . gen a=1 if change_ari!=. & turnout!=.
(191,269 missing values generated)

1564 . bysort id: egen sum_a=sum(a)

1565 . keep if sum_a==3
(118,052 observations deleted)

1566 .
1567 . eststo: reghdfe turnout 1.post##c.change_ari [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
(dropped 654 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 8 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    190,322
Absorbing 2 HDFE groups                           F(   1,  16101) =      19.19
Statistics robust to heteroskedasticity           Prob > F        =     0.0000
                                                  R-squared       =     0.9487
                                                  Adj R-squared   =     0.9188
                                                  Within R-sq.    =     0.0005
Number of clusters (clues)   =     16,102         Root MSE        =     3.3929

                                  (Std. err. adjusted for 16,102 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
     turnout | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.chang~i |
           1 |  -.1110811   .0253596    -4.38   0.000    -.1607888   -.0613735
             |
       _cons |   58.1339   .0068458  8491.96   0.000     58.12048    58.14732
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63450        63450           0  *|
   munid#year |       6653            0        6653   |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est3 stored)

1568 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  190322

1569 . estadd scalar N2 = e(N)/3

added scalar:
                    e(N2) =  63440.667

1570 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  16102

1571 . estadd local district "\checkmark"

added macro:
              e(district) : "\checkmark"

1572 . estadd local stateyear "\checkmark"

added macro:
             e(stateyear) : "\checkmark"

1573 .
1574 . restore
```

```
1575 .
1576 . preserve

1577 .
1578 . gen a=1 if change_ari_z!=. & turnout!=.
     (200,991 missing values generated)

1579 . bysort id: egen sum_a=sum(a)

1580 . keep if sum_a==3
     (131,548 observations deleted)

1581 .
1582 . eststo: reghdfe turnout 1.post##c.change_ari_z [aw = total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 696 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 8 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    180,975
     Absorbing 2 HDFE groups                           F(   1,  15314) =       0.47
     Statistics robust to heteroskedasticity           Prob > F        =     0.4939
                                                       R-squared       =     0.9488
                                                       Adj R-squared   =     0.9188
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     15,315         Root MSE        =     3.3935

                                       (Std. err. adjusted for 15,315 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
          turnout |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
            1.post |          0  (omitted)
     change_ari_z |          0  (omitted)
                  |
     post#c.change_ari_z |
                1 |  -.0016942   .0024766    -0.68   0.494    -.0065486    .0031603
                  |
            _cons |   58.09377   .0036853  1.6e+04   0.000     58.08655    58.10099
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
     -------------+---------------------------------------|
               id |      60334       60334           0     *|
      munid#year |       6566           0        6566      |
     -----------------------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1583 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  180975

1584 . estadd scalar N2 = e(N)/3

     added scalar:
                     e(N2) =  60325

1585 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  15315

1586 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1587 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1588 .
1589 . restore

1590 .
1591 . esttab est*  using "$output/tableC8.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>          compress lines star(* .1 ** .05 *** .01) label ///
>          mgroups("2006-2009" "2006-2012", pattern(1 0 1 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>          b(%9.3f) se(%9.3f) stats(N1 N2 N3 district stateyear, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE") ///
>          fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>          coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>          1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>          order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>          nodepvars nomtitle prehead(\begin{tabular}{l*{5}{c}} \toprule) ///
>          postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC8.tex)

1592 .
     end of do-file

1593 . do "/var/folders/q3/rmf9jk5n31bfy0jr6bt7d3ch0000gn/T//SD58535.000000"

1594 . ********************************************************************************
1595 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
1596 . ********************************************************************************
1597 .
1598 . // THIS FILE REPLICATES TABLES C2 AND C3 IN APPENDIX C OF "ELECTORAL
1599 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
1600 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
1601 .
1602 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

1603 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

1604 .
1605 . * Open data
1606 .
1607 . use "$data/GMR_district_level_data.dta", clear

1608 .
1609 . ********************************************************************************
1610 .
1611 . gen post=0

1612 . replace post=1 if year!=2006
     (600 real changes made)

1613 .
1614 . * Table C2
1615 .
```

```
1616 . preserve

1617 .
1618 . keep if year==2006 | year==2009
     (300 observations deleted)

1619 .
1620 . est clear

1621 .
1622 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw=total_votos] if year==2006 | year==2009, absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 5 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        600
     Absorbing 2 HDFE groups                           F(   1,    299) =       6.06
     Statistics robust to heteroskedasticity           Prob > F        =     0.0144
                                                       R-squared       =     0.9468
                                                       Adj R-squared   =     0.8645
                                                       Within R-sq.    =     0.0293
     Number of clusters (id)      =        300         Root MSE        =     4.6587

                                               (Std. err. adjusted for 300 clusters in id)
     ------------------------------------------------------------------------------
                  |               Robust
     PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
       change_ari |          0  (omitted)
                  |
     post#c.change_ari |
                1 |  -.0097221   .0039484    -2.46   0.014    -.0174923    -.001952
                  |
            _cons |   31.3114   .1538877   203.47   0.000     31.00856    31.61424
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |        300          300           0    *
       estado#year |         64            0          64     |
     -----------------------------------------------------+

     * = FE nested within cluster; treated as redundant for DoF computation
     (est1 stored)

1623 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  600

1624 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  300

1625 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1626 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1627 .
1628 . restore

1629 .
1630 . preserve

1631 .
1632 . keep if year==2006 | year==2009
     (300 observations deleted)

1633 .
1634 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw=total_votos] if year==2006 | year==2009 , absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 5 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        600
     Absorbing 2 HDFE groups                           F(   1,    299) =       0.91
     Statistics robust to heteroskedasticity           Prob > F        =     0.3422
                                                       R-squared       =     0.9454
                                                       Adj R-squared   =     0.8608
                                                       Within R-sq.    =     0.0030
     Number of clusters (id)      =        300         Root MSE        =     4.7216

                                               (Std. err. adjusted for 300 clusters in id)
     ------------------------------------------------------------------------------
                  |               Robust
       PAN_voteshare |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
     change_ari_z |          0  (omitted)
                  |
     post#c.change_ari_z |
                1 |  -.0740887   .0778706    -0.95   0.342    -.2273326    .0791552
                  |
            _cons |   31.07193   .1465667   212.00   0.000     30.78349    31.36036
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------|
                id |        300          300           0    *
       estado#year |         64            0          64     |
     -----------------------------------------------------+

     * = FE nested within cluster; treated as redundant for DoF computation
     (est2 stored)

1635 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  600

1636 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  300
```

```
1637 . estadd local district "\checkmark"

     added macro:
               e(district) : "\checkmark"

1638 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1639 . restore

1640 .
1641 . preserve

1642 .
1643 . gen a=1 if change_ari!=. & PAN_voteshare!=.

1644 .
1645 .
1646 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari [aw=total_votos], absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 5 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        900
     Absorbing 2 HDFE groups                           F(   1,    299) =       7.90
     Statistics robust to heteroskedasticity           Prob > F        =     0.0053
                                                       R-squared       =     0.9333
                                                       Adj R-squared   =     0.8808
                                                       Within R-sq.    =     0.0185
     Number of clusters (id)      =        300         Root MSE        =     4.1949

                                               (Std. err. adjusted for 300 clusters in id)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.0085913   .0030561    -2.81   0.005    -.0146055   -.0025772
             |
       _cons |   29.43098    .177537   165.77   0.000      29.0816    29.78036
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
   Absorbed FE | Categories  - Redundant  = Num. Coefs |
---------------+-------------------------------------|
            id |        300         300           0    *
   estado#year |         96           0          96     |
-----------------------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est3 stored)

1647 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  900

1648 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  300

1649 . estadd local district "\checkmark"

     added macro:
               e(district) : "\checkmark"

1650 . estadd local stateyear "\checkmark"

     added macro:
              e(stateyear) : "\checkmark"

1651 .
1652 . restore

1653 .
1654 . preserve

1655 .
1656 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.

1657 .
1658 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z [aw=total_votos], absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 5 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        900
     Absorbing 2 HDFE groups                           F(   1,    299) =       0.32
     Statistics robust to heteroskedasticity           Prob > F        =     0.5742
                                                       R-squared       =     0.9321
                                                       Adj R-squared   =     0.8786
                                                       Within R-sq.    =     0.0003
     Number of clusters (id)      =        300         Root MSE        =     4.2336

                                               (Std. err. adjusted for 300 clusters in id)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0258249   .0459151    -0.56   0.574    -.1161827    .0645328
             |
       _cons |   29.00441   .1289522   224.92   0.000     28.75064    29.25818
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
   Absorbed FE | Categories  - Redundant  = Num. Coefs |
---------------+-------------------------------------|
            id |        300         300           0    *
   estado#year |         96           0          96     |
-----------------------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)
```

```
1659 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  900

1660 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  300

1661 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1662 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1663 .
1664 . restore

1665 .
1666 . esttab est*  using "$output/tableC2.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
     >         compress lines star(* .1 ** .05 *** .01) label ///
     >         mgroups("2006-2009" "2006-2012", pattern(1 0 1 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
     >         b(%9.3f) se(%9.3f) stats(N1 N3 district stateyear, labels("Number of observations" "Number of clusters" "District FE" "State-year FE") ///
     >         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
     >         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
     >         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
     >         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
     >         nodepvars nomtitle prehead(\begin{tabular}{l*{5}{c}} \toprule) ///
     >         postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC2.tex)

1667 .
1668 . ********************************************************************************
1669 .
1670 . * Table C3
1671 .
1672 . preserve

1673 .
1674 . keep if year==2006 | year==2009
     (300 observations deleted)

1675 .
1676 . est clear

1677 .
1678 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari if year==2006 | year==2009, absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 2 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        600
     Absorbing 2 HDFE groups                           F(   1,    299) =       5.15
     Statistics robust to heteroskedasticity           Prob > F        =     0.0240
                                                       R-squared       =     0.9438
                                                       Adj R-squared   =     0.8568
                                                       Within R-sq.    =     0.0275
     Number of clusters (id)      =        300         Root MSE        =     4.7933

                                          (Std. err. adjusted for 300 clusters in id)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
  change_ari |          0  (omitted)
             |
post#c.change_ari |
          1  |  -.0093875   .0041376    -2.27   0.024      -.01753    -.001245
             |
       _cons |   30.32584   .1772191   171.12   0.000     29.97709     30.6746
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |        300          300           0  *|
  estado#year |         64            0          64   |
-----------------------------------------------------+
     * = FE nested within cluster; treated as redundant for DoF computation
     (est1 stored)

1679 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  600

1680 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  300

1681 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1682 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1683 .
1684 . restore

1685 .
1686 . preserve

1687 .
1688 . keep if year==2006 | year==2009
     (300 observations deleted)

1689 .
1690 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z if year==2006 | year==2009, absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 2 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity
```

```
HDFE Linear regression                            Number of obs   =        600
Absorbing 2 HDFE groups                           F(   1,    299) =       1.07
Statistics robust to heteroskedasticity           Prob > F        =     0.3010
                                                  R-squared       =     0.9424
                                                  Adj R-squared   =     0.8533
                                                  Within R-sq.    =     0.0037
Number of clusters (id)      =        300         Root MSE        =     4.8515

                                              (Std. err. adjusted for 300 clusters in id)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |  -.0851681   .0821989    -1.04   0.301    -.2469298    .0765936
             |
       _cons |   30.10352   .1734895   173.52   0.000     29.7621    30.44494
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |        300          300          0    *|
  estado#year |         64            0         64     |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est2 stored)

1691 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  600

1692 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  300

1693 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

1694 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

1695 . restore

1696 .
1697 . preserve

1698 .
1699 . gen a=1 if change_ari!=. & PAN_voteshare!=.

1700 .
1701 .
1702 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari, absorb(id i.estado#i.year) cluster(id)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 2 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =        900
Absorbing 2 HDFE groups                           F(   1,    299) =       6.62
Statistics robust to heteroskedasticity           Prob > F        =     0.0106
                                                  R-squared       =     0.9293
                                                  Adj R-squared   =     0.8736
                                                  Within R-sq.    =     0.0173
Number of clusters (id)      =        300         Root MSE        =     4.3370

                                              (Std. err. adjusted for 300 clusters in id)
------------------------------------------------------------------------------
             |               Robust
PAN_voteshare| Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari   |          0  (omitted)
             |
post#c.change_ari |
          1  |   -.008494   .0033023    -2.57   0.011    -.0149926   -.0019953
             |
       _cons |   29.00459   .1885893   153.80   0.000     28.63346    29.37572
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |        300          300          0    *|
  estado#year |         96            0         96     |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est3 stored)

1703 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  900

1704 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  300

1705 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

1706 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

1707 .
1708 . restore

1709 .
1710 . preserve
```

```
1711 .
1712 . gen a=1 if change_ari_z!=. & PAN_voteshare!=.

1713 .
1714 . eststo: reghdfe PAN_voteshare 1.post##c.change_ari_z, absorb(id i.estado#i.year) cluster(id)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 2 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =        900
     Absorbing 2 HDFE groups                           F(   1,    299) =       0.53
     Statistics robust to heteroskedasticity           Prob > F        =     0.4687
                                                       R-squared       =     0.9281
                                                       Adj R-squared   =     0.8714
                                                       Within R-sq.    =     0.0006
     Number of clusters (id)      =        300         Root MSE        =     4.3737

                                               (Std. err. adjusted for 300 clusters in id)
     ------------------------------------------------------------------------------
                  |               Robust
           PAN_voteshare | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     ------------------------------------------------------------------------------
                  1.post |          0  (omitted)
                change_ari_z |          0  (omitted)

     post#c.change_ari_z |
                       1 |  -.0380233   .0524101    -0.73   0.469    -.1411627    .0651162

                   _cons |   28.62652   .1474895   194.09   0.000     28.33627    28.91676
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------+
      Absorbed FE | Categories  - Redundant  = Num. Coefs |
     -------------+---------------------------------------|
               id |        300          300          0    *|
      estado#year |         96            0         96     |
     -----------------------------------------------------+

     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1715 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  900

1716 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  300

1717 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1718 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1719 .
1720 . restore

1721 .
1722 . esttab est*  using "$output/tableC3.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006-2009" "2006-2012", pattern(1 0 1 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.3f) se(%9.3f) stats(N1 N3 district stateyear, labels("Number of observations" "Number of clusters" "District FE" "State-year FE") ///
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (1000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{5}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
     (output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableC3.tex)

1723 .
     end of do-file

1724 . do "/var/folders/q3/rmf9jk5n3lbfy0jr6bt7d3ch0000gn/T//SD58535.000000"

1725 . ********************************************************************************
1726 . * ELECTORAL REPERCUSSIONS OF A PANDEMIC:  EVIDENCE FROM THE 2009 H1N1 OUTBREAK *
1727 . ********************************************************************************
1728 .
1729 . // THIS FILE REPLICATES TABLE D1 IN APPENDIX D OF "ELECTORAL
1730 . // REPERCUSSIONS OF A PANDEMIC: EVIDENCE FROM THE 2009 H1N1 OUTBREAK" BY
1731 . // EMILIO GUTIÉRREZ, JAAKKO MERILÄINEN, AND ADRIÁN RUBLI
1732 .
1733 . global data "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/data" // Insert data directory here

1734 . global output "/Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output" // Insert output directory here

1735 .
1736 . * Open data
1737 .
1738 . use "$data/GMR_night_lights.dta", clear

1739 .
1740 . ********************************************************************************
1741 .
1742 . gen year2=year*year // Generate year^2

1743 .
1744 . preserve

1745 .
1746 . keep if year==2006 | year==2009
     (323,589 observations deleted)

1747 . gen a=1 if change_ari!=. & nightlights!=.
     (141 missing values generated)

1748 . bysort id: egen sum_a=sum(a)

1749 . keep if sum_a==2
     (735 observations deleted)

1750 .
1751 . est clear

1752 .
1753 . eststo: reghdfe nightlights 1.post##c.change_ari [aw=total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
     (dropped 573 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
```

```
note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari omitted because of collinearity

HDFE Linear regression                            Number of obs   =    127,250
Absorbing 2 HDFE groups                           F(   1,  16118) =       4.25
Statistics robust to heteroskedasticity           Prob > F        =     0.0392
                                                  R-squared       =     0.9976
                                                  Adj R-squared   =     0.9948
                                                  Within R-sq.    =     0.0002
Number of clusters (clues)   =     16,119         Root MSE        =     1.7712

                                  (Std. err. adjusted for 16,119 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
   change_ari |          0  (omitted)
              |
post#c.change_ari |
            1 |   .0003379   .0001639     2.06   0.039     .0000167    .0006591
              |
        _cons |   42.19473   .0029971  1.4e+04   0.000     42.18885    42.2006
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      63625        63625           0     *|
   munid#year |       4494            0        4494      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
(est1 stored)

1754 . estadd scalar N1 = e(N)

added scalar:
                e(N1) =  127250

1755 . estadd scalar N2 = e(N)/2

added scalar:
                e(N2) =  63625

1756 . estadd scalar N3 = e(N_clust)

added scalar:
                e(N3) =  16119

1757 . estadd local district "\checkmark"

added macro:
            e(district) : "\checkmark"

1758 . estadd local stateyear "\checkmark"

added macro:
           e(stateyear) : "\checkmark"

1759 . estadd local linear " "

added macro:
              e(linear) : " "

1760 . estadd local quadratic " "

added macro:
           e(quadratic) : " "

1761 . restore

1762 .
1763 . preserve

1764 .
1765 . keep if year==2006 | year==2009
(323,589 observations deleted)

1766 . gen a=1 if change_ari_z!=. & nightlights!=.
(6,413 missing values generated)

1767 . bysort id: egen sum_a=sum(a)

1768 . keep if sum_a==2
(6,965 observations deleted)

1769 .
1770 . eststo: reghdfe nightlights 1.post##c.change_ari_z [aw=total_votos] if year==2006 | year==2009, absorb(id i.munid#i.year) cluster(clues)
(dropped 583 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 7 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    121,010
Absorbing 2 HDFE groups                           F(   1,  15333) =       2.83
Statistics robust to heteroskedasticity           Prob > F        =     0.0926
                                                  R-squared       =     0.9976
                                                  Adj R-squared   =     0.9947
                                                  Within R-sq.    =     0.0001
Number of clusters (clues)   =     15,334         Root MSE        =     1.7802

                                  (Std. err. adjusted for 15,334 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
 change_ari_z |          0  (omitted)
              |
post#c.change_ari_z |
            1 |   .0034267   .0020376     1.68   0.093    -.0005673    .0074207
              |
        _cons |   41.95887   .0020158  2.1e+04   0.000     41.95492    41.96282
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60505        60505           0     *|
   munid#year |       4436            0        4436      |
-----------------------------------------------------+

* = FE nested within cluster; treated as redundant for DoF computation
```

```
     (est2 stored)

1771 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  121010

1772 . estadd scalar N2 = e(N)/2

     added scalar:
                     e(N2) =  60505

1773 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  15334

1774 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1775 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1776 . estadd local linear " "

     added macro:
                e(linear) : " "

1777 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1778 . restore

1779 .
1780 . preserve

1781 .
1782 . gen a=1 if change_ari!=. & nightlights!=.
     (494 missing values generated)

1783 . bysort id: egen sum_a=sum(a)

1784 . keep if sum_a==7
     (5,358 observations deleted)

1785 .
1786 . eststo: reghdfe nightlights 1.post##c.change_ari [aw=total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 1934 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 8 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    444,803
     Absorbing 2 HDFE groups                           F(   1,  16113) =       1.10
     Statistics robust to heteroskedasticity           Prob > F        =     0.2936
                                                       R-squared       =     0.9953
                                                       Adj R-squared   =     0.9943
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     16,114         Root MSE        =     1.8069

                                       (Std. err. adjusted for 16,114 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights |      Coef.   Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
   change_ari |          0  (omitted)
              |
post#c.change_ari |
          1  |  -.0001342   .0001278    -1.05   0.294    -.0003847    .0001163
              |
       _cons |   43.23803   .0028406  1.5e+04   0.000     43.23246     43.2436
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------------------------------
  Absorbed FE | Categories  - Redundant  = Num. Coefs   |
--------------+--------------------------------------------------------------
           id |      63553       63553           0     *
  munid#year |      15726           0       15726     |
-----------------------------------------------------------------------------
     * = FE nested within cluster; treated as redundant for DoF computation
     (est3 stored)

1787 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  444803

1788 . estadd scalar N2 = e(N)/7

     added scalar:
                     e(N2) =  63543.286

1789 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  16114

1790 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1791 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1792 . estadd local linear " "

     added macro:
                e(linear) : " "

1793 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1794 .
```

```
1795 . restore

1796 .
1797 . preserve

1798 .
1799 . gen a=1 if change_ari_z!=. & nightlights!=.
     (22,770 missing values generated)

1800 . bysort id: egen sum_a=sum(a)

1801 . keep if sum_a==7
     (27,121 observations deleted)

1802 .
1803 . eststo: reghdfe nightlights 1.post##c.change_ari_z [aw=total_votos], absorb(id i.munid#i.year) cluster(clues)
     (dropped 1976 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 8 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    422,999
     Absorbing 2 HDFE groups                           F(   1,  15327) =       0.36
     Statistics robust to heteroskedasticity           Prob > F        =     0.5471
                                                       R-squared       =     0.9954
                                                       Adj R-squared   =     0.9944
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     15,328         Root MSE        =     1.8082

                                    (Std. err. adjusted for 15,328 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
           1 |   .0008007   .0013296     0.60   0.547    -.0018055    .0034068
             |
       _cons |    43.0082   .0016156  2.7e+04   0.000     43.00503    43.01137
------------------------------------------------------------------------------

     Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60438       60438           0     *|
   munid#year |      15516           0       15516     |
--------------+--------------------------------------|
     * = FE nested within cluster; treated as redundant for DoF computation
     (est4 stored)

1804 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  422999

1805 . estadd scalar N2 = e(N)/7

     added scalar:
                     e(N2) =  60428.429

1806 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  15328

1807 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1808 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1809 . estadd local linear " "

     added macro:
                e(linear) : " "

1810 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1811 .
1812 . restore

1813 .
1814 . preserve

1815 .
1816 . gen a=1 if change_ari!=. & nightlights!=.
     (494 missing values generated)

1817 . bysort id: egen sum_a=sum(a)

1818 . keep if sum_a==7
     (5,358 observations deleted)

1819 .
1820 . eststo: reghdfe nightlights 1.post##c.change_ari [aw=total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 1934 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 15 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    444,803
     Absorbing 3 HDFE groups                           F(   1,  16113) =       1.45
     Statistics robust to heteroskedasticity           Prob > F        =     0.2285
                                                       R-squared       =     0.9972
                                                       Adj R-squared   =     0.9958
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     16,114         Root MSE        =     1.5487

                                    (Std. err. adjusted for 16,114 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
       1.post |          0  (omitted)
```

```
        change_ari |          0  (omitted)
                   |
post#c.change_ari  |
                 1 |   .0002203   .0001829     1.20   0.229    -.0001383    .0005788
                   |
             _cons |   43.23015   .0040651  1.1e+04   0.000     43.22218    43.23812
------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |     63553       63553           0    *|
   munid#year |     15726           0       15726     |
    id#c.year |     63553           0       63553    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est5 stored)

1821 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  444803

1822 . estadd scalar N2 = e(N)/7

     added scalar:
                    e(N2) =  63543.286

1823 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  16114

1824 . estadd local district "\checkmark"

     added macro:
              e(district) : "\checkmark"

1825 . estadd local stateyear "\checkmark"

     added macro:
             e(stateyear) : "\checkmark"

1826 . estadd local linear "\checkmark"

     added macro:
                e(linear) : "\checkmark"

1827 . estadd local quadratic " "

     added macro:
             e(quadratic) : " "

1828 .
1829 . restore

1830 .
1831 .
1832 . preserve

1833 .
1834 . gen a=1 if change_ari_z!=. & nightlights!=.
     (22,770 missing values generated)

1835 . bysort id: egen sum_a=sum(a)

1836 . keep if sum_a==7
     (27,121 observations deleted)

1837 .
1838 . eststo: reghdfe nightlights 1.post##c.change_ari_z [aw=total_votos], absorb(id i.munid#i.year i.id#c.year) cluster(clues)
     (dropped 1976 singleton observations)
     note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 18 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari_z omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    422,999
     Absorbing 3 HDFE groups                           F(   1,  15327) =       1.25
     Statistics robust to heteroskedasticity           Prob > F        =     0.2626
                                                       R-squared       =     0.9972
                                                       Adj R-squared   =     0.9959
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     15,328         Root MSE        =     1.5468

                                    (Std. err. adjusted for 15,328 clusters in clues)
------------------------------------------------------------------------------------
                     |               Robust
          nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------------+---------------------------------------------------------------
              1.post |          0  (omitted)
        change_ari_z |          0  (omitted)
                     |
post#c.change_ari_z |
                  1 |   .0023031    .002056     1.12   0.263    -.0017269    .0063331
                     |
               _cons |   43.00637   .0024982  1.7e+04   0.000     43.00148    43.01127
------------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |     60438       60438           0    *|
   munid#year |     15516           0       15516     |
    id#c.year |     60438           0       60438    ?|
-----------------------------------------------------+
? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est6 stored)

1839 . estadd scalar N1 = e(N)

     added scalar:
                    e(N1) =  422999

1840 . estadd scalar N2 = e(N)/7

     added scalar:
                    e(N2) =  60428.429

1841 . estadd scalar N3 = e(N_clust)

     added scalar:
                    e(N3) =  15328
```

```
1842 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1843 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1844 . estadd local linear "\checkmark"

     added macro:
                  e(linear) : "\checkmark"

1845 . estadd local quadratic " "

     added macro:
               e(quadratic) : " "

1846 .
1847 . restore

1848 .
1849 . preserve

1850 .
1851 . gen a=1 if change_ari!=. & nightlights!=.
     (494 missing values generated)

1852 . bysort id: egen sum_a=sum(a)

1853 . keep if sum_a==7
     (5,358 observations deleted)

1854 .
1855 . eststo: reghdfe nightlights 1.post##c.change_ari [aw=total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
     (dropped 1934 singleton observations)
     note: lbn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     note: change_ari is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
     (MWFE estimator converged in 24 iterations)
     note: 1.post omitted because of collinearity
     note: change_ari omitted because of collinearity

     HDFE Linear regression                            Number of obs   =    444,803
     Absorbing 4 HDFE groups                           F(   1,  16113) =       1.20
     Statistics robust to heteroskedasticity           Prob > F        =     0.2735
                                                       R-squared       =     0.9972
                                                       Adj R-squared   =     0.9947
                                                       Within R-sq.    =     0.0000
     Number of clusters (clues)   =     16,114         Root MSE        =     1.7430

                                          (Std. err. adjusted for 16,114 clusters in clues)
     ------------------------------------------------------------------------------
                  |               Robust
       nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
     -------------+----------------------------------------------------------------
           1.post |          0  (omitted)
       change_ari |          0  (omitted)
                  |
     post#c.change_ari |
                1 |   .0002204   .0002012     1.09   0.274    -.0001741    .0006148
                  |
            _cons |   43.23015   .0044728  9665.19   0.000     43.22138    43.23892
     ------------------------------------------------------------------------------

     Absorbed degrees of freedom:
     -----------------------------------------------------------
       Absorbed FE | Categories  - Redundant  = Num. Coefs |
     --------------+--------------------------------------------
                id |      63553       63553           0     *
       munid#year |      15726           0       15726
        id#c.year |      63553           0       63553     ?
       id#c.year2 |      63553           0       63553     ?
     -----------------------------------------------------------
     ? = number of redundant parameters may be higher
     * = FE nested within cluster; treated as redundant for DoF computation
     (est7 stored)

1856 . estadd scalar N1 = e(N)

     added scalar:
                     e(N1) =  444803

1857 . estadd scalar N2 = e(N)/7

     added scalar:
                     e(N2) =  63543.286

1858 . estadd scalar N3 = e(N_clust)

     added scalar:
                     e(N3) =  16114

1859 . estadd local district "\checkmark"

     added macro:
                e(district) : "\checkmark"

1860 . estadd local stateyear "\checkmark"

     added macro:
               e(stateyear) : "\checkmark"

1861 . estadd local linear " "

     added macro:
                  e(linear) : " "

1862 . estadd local quadratic "\checkmark"

     added macro:
               e(quadratic) : "\checkmark"

1863 .
1864 . restore

1865 .
1866 . preserve

1867 .
1868 . gen a=1 if change_ari_z!=. & nightlights!=.
     (22,770 missing values generated)

1869 . bysort id: egen sum_a=sum(a)

1870 . keep if sum_a==7
```

```
(27,121 observations deleted)

1871 .
1872 . eststo: reghdfe nightlights 1.post##c.change_ari_z [aw=total_votos], absorb(id i.munid#i.year i.id#c.year i.id#c.year2) cluster(clues)
(dropped 1976 singleton observations)
note: 1bn.post is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
note: change_ari_z is probably collinear with the fixed effects (all partialled-out values are close to zero; tol = 1.0e-09)
(MWFE estimator converged in 18 iterations)
note: 1.post omitted because of collinearity
note: change_ari_z omitted because of collinearity

HDFE Linear regression                            Number of obs   =    422,999
Absorbing 4 HDFE groups                           F(   1,  15327) =       1.04
Statistics robust to heteroskedasticity           Prob > F        =     0.3085
                                                  R-squared       =     0.9972
                                                  Adj R-squared   =     0.9948
                                                  Within R-sq.    =     0.0000
Number of clusters (clues)   =     15,328         Root MSE        =     1.7414

                                  (Std. err. adjusted for 15,328 clusters in clues)
------------------------------------------------------------------------------
             |               Robust
  nightlights | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
      1.post |          0  (omitted)
change_ari_z |          0  (omitted)
             |
post#c.change_ari_z |
          1  |   .0023042   .0022627     1.02   0.309     -.002131    .0067394
             |
       _cons |   43.00637   .0027494  1.6e+04   0.000     43.00098    43.01176
------------------------------------------------------------------------------

Absorbed degrees of freedom:
-----------------------------------------------------+
  Absorbed FE | Categories  - Redundant  = Num. Coefs |
--------------+--------------------------------------|
           id |      60438        60438           0     *|
  munid#year |      15516            0       15516      |
   id#c.year |      60438            0       60438     ?|
  id#c.year2 |      60438            0       60438     ?|
-----------------------------------------------------+

? = number of redundant parameters may be higher
* = FE nested within cluster; treated as redundant for DoF computation
(est8 stored)

1873 . estadd scalar N1 = e(N)

added scalar:
                    e(N1) =  422999

1874 . estadd scalar N2 = e(N)/7

added scalar:
                    e(N2) =  60428.429

1875 . estadd scalar N3 = e(N_clust)

added scalar:
                    e(N3) =  15328

1876 . estadd local district "\checkmark"

added macro:
             e(district) : "\checkmark"

1877 . estadd local stateyear "\checkmark"

added macro:
            e(stateyear) : "\checkmark"

1878 . estadd local linear " "

added macro:
              e(linear) : " "

1879 . estadd local quadratic "\checkmark"

added macro:
            e(quadratic) : "\checkmark"

1880 .
1881 . restore

1882 .
1883 . esttab est*  using "$output/tableD1.tex", replace noomitted nobaselevels booktabs  mlabels(none) ///
>         compress lines star(* .1 ** .05 *** .01) label ///
>         mgroups("2006 and 2009" "2006-2012", pattern(1 0 1 0 0 0 0 0) prefix(\multicolumn{@span}{c}{) suffix(}) span erepeat(\cmidrule(lr){@span}))  ///
>         b(%9.5f) se(%9.5f) stats(N1 N2 N3 district stateyear linear quadratic, labels("Number of observations" "Number of sections" "Number of clusters" "Section FE" "Municipality-year FE" "Linear time trend" "Quadratic time trend") //
> /
>         fmt(0 0 0)) keep(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         coeflabels(1.post#c.change_ari "1[Year $\geq$ 2009] $\times$ Excess ARI cases (10,000s)" ///
>         1.post#c.change_ari_z "1[Year $\geq$ 2009] $\times$ Excess ARI cases (z-score)") ///
>         order(1.post#c.change_ari 1.post#c.change_ari_z) ///
>         nodepvars nomtitle prehead(\begin{tabular}{l*{9}{c}} \toprule) ///
>         postfoot(\bottomrule \end{tabular})
(output written to /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/output/tableD1.tex)

1884 .
end of do-file

1885 . log close
      name:  <unnamed>
       log:  /Users/jaakko/Dropbox/Jaakko_Adrian_Emilio/submissions/JoP/final/replication_materials/GMR_replication_log.smcl
  log type:  smcl
 closed on:   3 Nov 2021, 16:51:32
```