Supplemental Materials
Appendix B

How Much Should We Trust Instrumental Variable Estimates in Political Science? Practical Advice based on 67 Replicated Studies

28 October 2023

Contents

Readme

- est_ols stores treatment effect estimates from the naive OLS estimation. 'Analytic' corresponds to analytic asymptotic standard errors (SEs) and confidence intervals (CIs). 'Boot.c' and 'Boot.t' represent inferential methods based on bootstrapped coefficients and bootstrapped t-statistics, respectively.
- est_2sls stores treatment effect estimates from the 2SLS estimation.
- AR stores results from the Anderson-Rubin test. The confidence region (CR) is produced by the inversion method. 'AR.bounded = TRUE' means that the CR is bounded and not empty.
- F.stat stores F statistics based on classic SEs (F.standard), H.W. robust SEs (F.robust), cluster-robust SEs (F.cluster), bootstrapped or cluster-bootstrapped SEs (F.bootstrap) and the effective F (F.effective). In the one-treatment-one-instrument case, F.effective is the same as F.robust (if there is no clustering structure) or F.cluster (if there is one).
- rho stores the partial correlation coefficient between the treatment and the predicted treatment from the first stage regression.
- tf.cF stores the results from the tF-cF procedure. Specifically, cF corresponds to the adjusted critical value based on the first stage (effective) F statistic for the subsequent t-test.
- est_rf stores the results from the reduced form regression. The control variables are partialled out.
- est_fs stores the results from the first stage regression. The control variables are partialled out.
- p_iv stores the number of instruments. N and N_cl stores the the number of observations and the number of clusters (if there is a clustering structure), respectively. df stores the degree of freedom from the 2SLS regression.
- nvalues stores the numbers of unique values in the outcome, treatment, and instrument.

APSR

Baccini and Weymouth (2021)

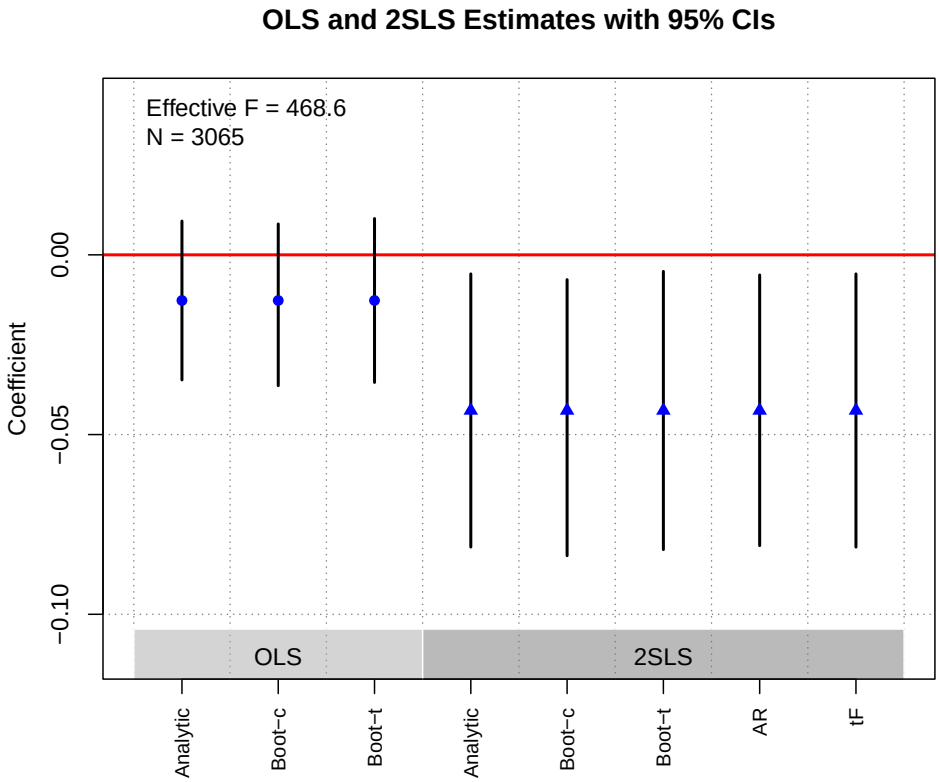
Replication Summary	
Unit of analysis	county
Treatment	Manufacturing Layoffs
Instrument	Bartik instrument
Outcome	Change of Democratic Vote Share
Model	Table2(3)

```
df <- readRDS("./rawdata/apsr_baccini_etal_2021.rds")
D <-"msl_pc4y2"
Y <- "ddem_votes_pct1"
Z <-  "bartik_leo5"
controls <- c("LAU_unemp_rate_4y", "pers_m_total_share_4y", "pers_coll_share_4y",
              "white_counties_4y", "msl_service_pc4y")
cl <- NULL
FE <- "id_state"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0127 0.0113 -1.1240 -0.0348   0.0094   0.261
## Boot.c   -0.0127 0.0116 -1.0904 -0.0364   0.0086   0.262
## Boot.t   -0.0127 0.0113 -1.1240 -0.0355   0.0101   0.279
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0433 0.0194 -2.2308 -0.0813  -0.0053  0.0257
## Boot.c   -0.0433 0.0192 -2.2535 -0.0837  -0.0069  0.0180
## Boot.t   -0.0433 0.0194 -2.2308 -0.0820  -0.0046  0.0230
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    5.0579    1.0000 3063.0000    0.0246
##
## $AR$ci.print
## [1] "[-0.0809, -0.0056]"
##
## $AR$ci
## [1] -0.0809 -0.0056
```

```
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1537.5647    468.6180          NA    492.8107    468.6180
##
## $rho
## [1] 0.5815
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 468.6180   1.9600  -0.0433   0.0194  -2.2308  -0.0813  -0.0053   0.0257
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## bartik_leo5 -4.5381 2.0355  0.0258 2.0041  -8.5967   -0.7369     0.018
##
## $est_fs
##                 Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## bartik_leo5 104.8786 4.8448       0 4.7244  95.7123  113.9969         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 3065
##
## $N_cl
## NULL
##
## $df
## [1] 3010
##
## $nvalues
##      ddem_votes_pct1 msl_pc4y2 bartik_leo5
## [1,]            3062      2913        2771
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Blattman et al. (2014)

Replication Summary	
Unit of analysis	resident
Treatment	mass education campaign for dispute resolution
Instrument	assignment to treatment blocks
Outcome	serious land dispute
Model	Table9(8)

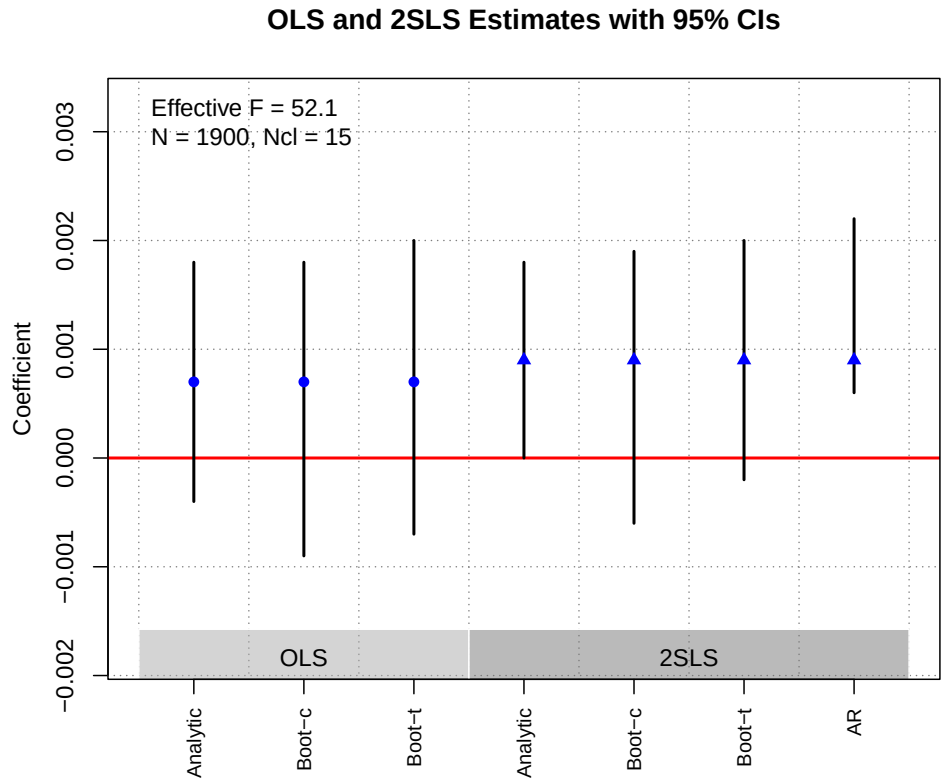
```
df <- readRDS("./rawdata/apsr_Blattman_etal_2014.rds")
df$district <- 0
for (i in 1:15) {df$district[which(df[,paste0("district",i)]==1)] <- i}
D <-"months_treated"
Y <- "fightweap_dummy"
Z <- c("block1", "block2", "block3")
controls <- c("ageover60", "age40_60", "age20_40",
 "yrs_edu", "female", "stranger", "christian",
 "minority", "cashearn_imputedhst", "noland",
 "land_sizehst", "farm_sizehst", "lndtake_dum",
 "housetake_dum", "vsmall", "small",
 "small2", "small3", "quartdummy", "cedulevel_bc",
```

```
 "ctownhh_log_el", "cwealthindex_bc", "cviol_experienced_bc",
 "clndtake_bc", "cviol_scale_bc", "clandconf_scale_bc",
 "cwitchcraft_scale_bc", "cpalaviol_imputed_bc",
 "cprog_ldr_beliefs_bc", "cattitudes_tribe_bc",
 "crelmarry_bc", "trainee")
cl <- "district"
FE <- "district"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef    SE      t CI 2.5% CI 97.5% p.value
## Analytic 7e-04 5e-04 1.2355  -4e-04   0.0018  0.2167
## Boot.c   7e-04 7e-04 0.9923  -9e-04   0.0018  0.3980
## Boot.t   7e-04 5e-04 1.2355  -7e-04   0.0020  0.2840
##
## $est_2sls
##           Coef    SE      t CI 2.5% CI 97.5% p.value
## Analytic 9e-04 5e-04 1.9157   0e+00   0.0018  0.0554
## Boot.c   9e-04 6e-04 1.4484  -6e-04   0.0019  0.2200
## Boot.t   9e-04 5e-04 1.9157  -2e-04   0.0020  0.0950
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    5.0886    3.0000 1896.0000    0.0016
##
## $AR$ci.print
## [1] "[0.0006, 0.0022]"
##
## $AR$ci
## [1] 0.0006 0.0022
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   2756.3845   2472.2847    234.3492     95.2132     52.1000
##
## $rho
## [1] 0.9039
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
```

```
## block1 0.0263 0.0085  0.0020 0.0128  -0.0065    0.0448     0.090
## block2 0.0027 0.0099  0.7812 0.0136  -0.0256    0.0275     0.874
## block3 0.0085 0.0064  0.1816 0.0102  -0.0148    0.0256     0.344
##
## $est_fs
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## block1 20.0361 0.7567       0 1.2573  17.6152   22.5874     0.000
## block2 12.9786 1.7805       0 2.0999   8.9637   16.7281     0.000
## block3  6.7831 1.3081       0 1.8605   2.8911   10.5800     0.002
##
## $p_iv
## [1] 3
##
## $N
## [1] 1900
##
## $N_cl
## [1] 15
##
## $df
## [1] 14
##
## $nvalues
##      fightweap_dummy months_treated block1 block2 block3
## [1,]               2             34      2      2      2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Colantone and Stanig (2018)

Replication Summary	
Unit of analysis	region
Treatment	regional-level import shock from China
Instrument	imports from China to the United States * local industrial structure
Outcome	leave share
Model	Table1(6)

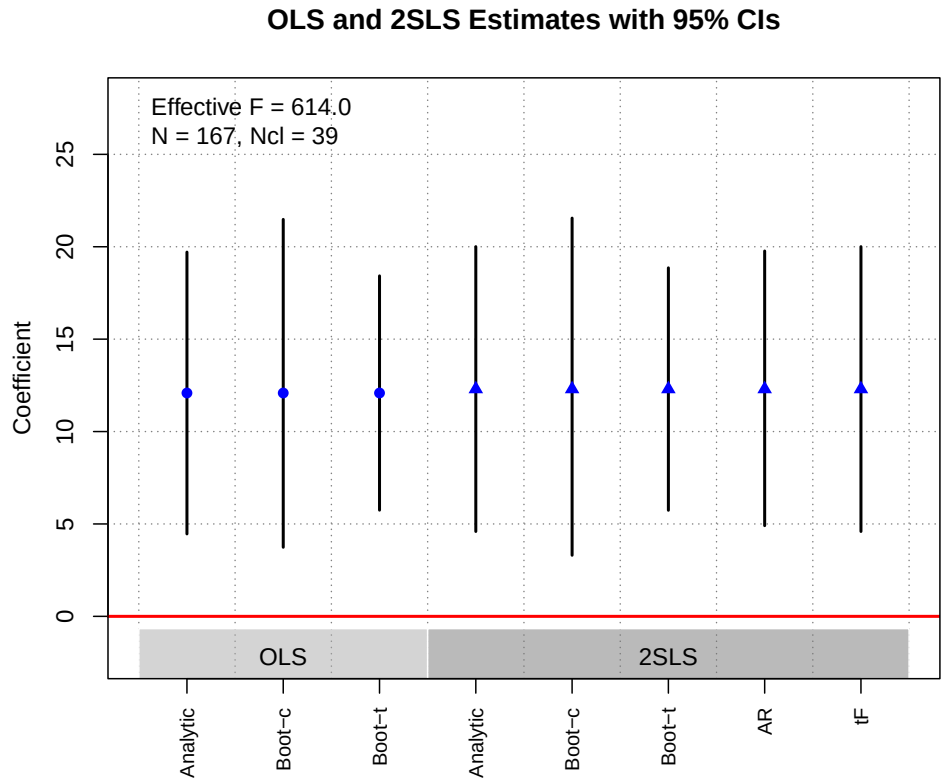
```
df<-readRDS("./rawdata/apsr_Colantone_etal_2018.rds")
D <-'import_shock'
Y <- "leave_share"
Z <- "instrument_for_shock"
controls <- c("immigrant_share", "immigrant_arrivals")
cl <- "fix"
FE <- "nuts1"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 12.0854 3.8903 3.1066  4.4605  19.7104  0.0019
## Boot.c   12.0854 4.4192 2.7348  3.7385  21.4794  0.0020
```

```
## Boot.t   12.0854 3.8903 3.1066  5.7465  18.4243  0.0000
##
## $est_2sls
##             Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 12.2993 3.9320 3.1280  4.5926  20.0060  0.0018
## Boot.c   12.2993 4.6142 2.6655  3.3052  21.5500  0.0000
## Boot.t   12.2993 3.9320 3.1280  5.7402  18.8584  0.0000
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  10.5300   1.0000 165.0000   0.0014
##
## $AR$ci.print
## [1] "[4.9072, 19.7701]"
##
## $AR$ci
## [1]  4.9072 19.7701
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   2158.0662    792.4682    613.9804    581.1155    613.9804
##
## $rho
## [1] 0.9663
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 613.9804   1.9600  12.2993   3.9320   3.1280   4.5926  20.0060   0.0018
##
## $est_rf
##                         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## instrument_for_shock 1.5671 0.5015  0.0018 0.5904   0.4106    2.7361         0
##
## $est_fs
##                         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## instrument_for_shock 0.1274 0.0051       0 0.0053   0.1175    0.1385         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 167
```

```
##
## $N_cl
## [1] 39
##
## $df
## [1] 153
##
## $nvalues
##      leave_share import_shock instrument_for_shock
## [1,]         167          148                   148
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Croke et al. (2016)

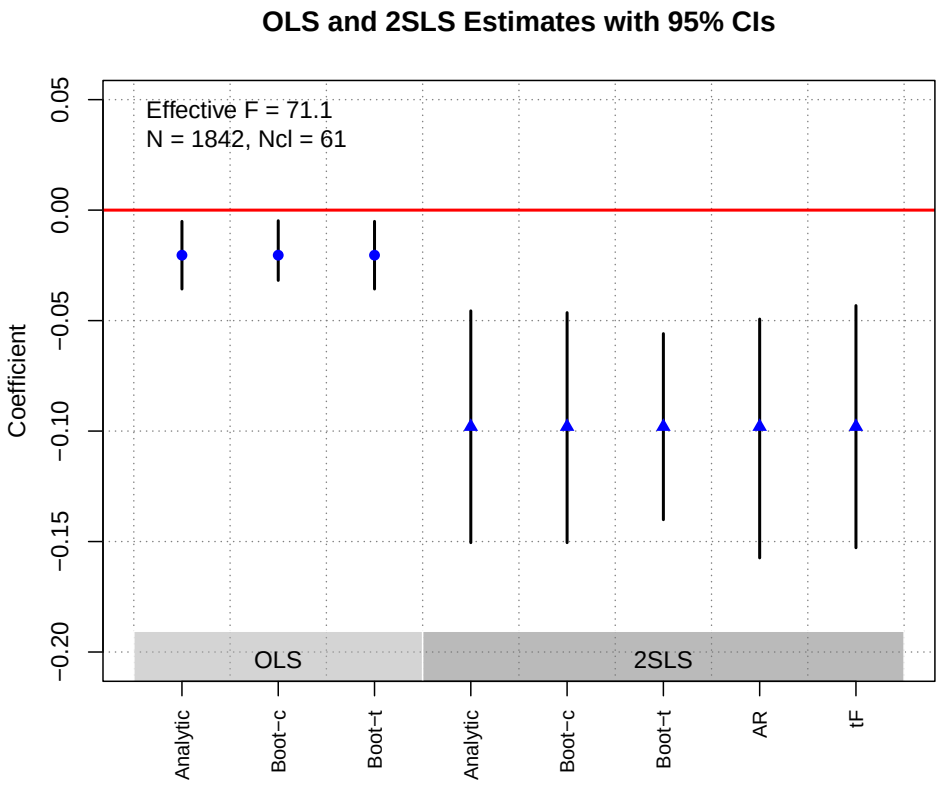
Replication Summary	
Unit of analysis	individual
Treatment	education attainment
Instrument	access to the secondary education
Outcome	political participation
Model	Table2(b1)

```r
df <-readRDS("./rawdata/apsr_Croke_etal_2016.rds")
D <- "edu"
Y <- "part_scale"
Z <- "treatment"
controls <-NULL
cl<- "district"
FE<- "year_survey"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0204 0.0078 -2.6133 -0.0357  -0.0051   0.009
## Boot.c   -0.0204 0.0072 -2.8262 -0.0318  -0.0048   0.014
## Boot.t   -0.0204 0.0078 -2.6133 -0.0357  -0.0051   0.012
##
## $est_2sls
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.098 0.0268 -3.6620 -0.1505  -0.0456   3e-04
## Boot.c   -0.098 0.0275 -3.5603 -0.1505  -0.0464   2e-03
## Boot.t   -0.098 0.0268 -3.6620 -0.1401  -0.0559   1e-03
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   16.1473    1.0000 1840.0000    0.0001
##
## $AR$ci.print
## [1] "[-0.1574, -0.0493]"
##
## $AR$ci
## [1] -0.1574 -0.0493
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     79.7552     78.2588     71.1356     69.0549     71.1356
##
## $rho
## [1] 0.2041
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
```

```
## 71.1356  2.0466 -0.0980  0.0268 -3.6620 -0.1528 -0.0432  0.0005
##
## $est_rf
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment -0.0657 0.0164   1e-04 0.0165  -0.0969   -0.0323     0.002
##
## $est_fs
##             Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment 0.6708 0.0795       0 0.0807   0.5216    0.8418         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 1842
##
## $N_cl
## [1] 61
##
## $df
## [1] 1835
##
## $nvalues
##      part_scale edu treatment
## [1,]          7   7         5
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Dower et al. (2018) (a)

Replication Summary	
Unit of analysis	district*year
Treatment	frequency of unrest
Instrument	religious polarization
Outcome	peasant representation
Model	Table3(1)

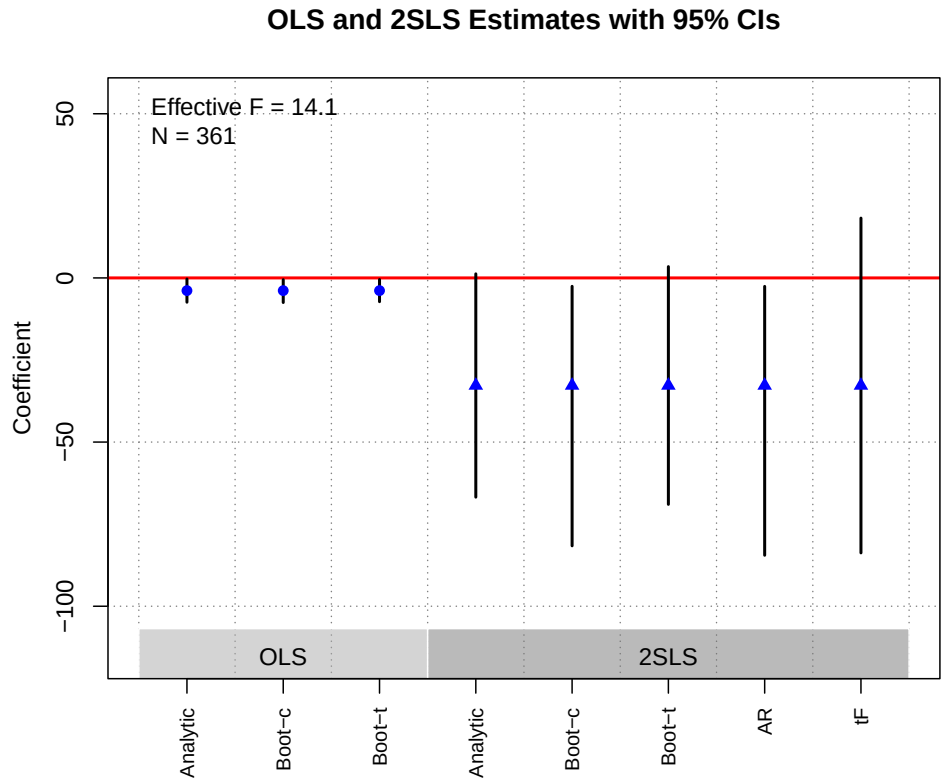
```
df <- readRDS("./rawdata/apsr_Dower_etal_2018.rds")
D <-"afreq"
Y <-"peasantrepresentation_1864"
Z <-"religpolarf4_1870"
controls <- c("distance_moscow", "goodsoil", "lnurban", "lnpopn", "province_capital")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -3.8696 1.8013 -2.1483 -7.4001  -0.3391  0.0317
## Boot.c   -3.8696 1.8025 -2.1468 -7.4905  -0.5380  0.0240
```

```
## Boot.t   -3.8696 1.8013 -2.1483 -7.2448  -0.4944  0.0280
##
## $est_2sls
##              Coef      SE       t  CI 2.5% CI 97.5% p.value
## Analytic -32.7701 17.3518 -1.8886 -66.7796   1.2393  0.0589
## Boot.c   -32.7701 19.3450 -1.6940 -81.6023  -2.5639  0.0240
## Boot.t   -32.7701 17.3518 -1.8886 -68.9771   3.4369  0.0620
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   4.4669   1.0000 359.0000   0.0352
##
## $AR$ci.print
## [1] "[-84.4784, -2.5780]"
##
## $AR$ci
## [1] -84.4784  -2.5780
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     12.0237     14.0828          NA     14.8085     14.0828
##
## $rho
## [1] 0.1812
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
##  14.0828   2.9384 -32.7701  17.3518  -1.8886 -83.7561  18.2159   0.2078
##
## $est_rf
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## religpolarf4_1870 -3.9279 1.8715  0.0358 1.8161   -7.569   -0.3608     0.024
##
## $est_fs
##                      Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## religpolarf4_1870 0.1199 0.0319   2e-04 0.0311   0.0611    0.1864         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 361
```

```
##
## $N_cl
## NULL
##
## $df
## [1] 354
##
## $nvalues
##      peasantrepresentation_1864 afreq religpolarf4_1870
## [1,]                        128    12                361
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Dower et al. (2018) (b)

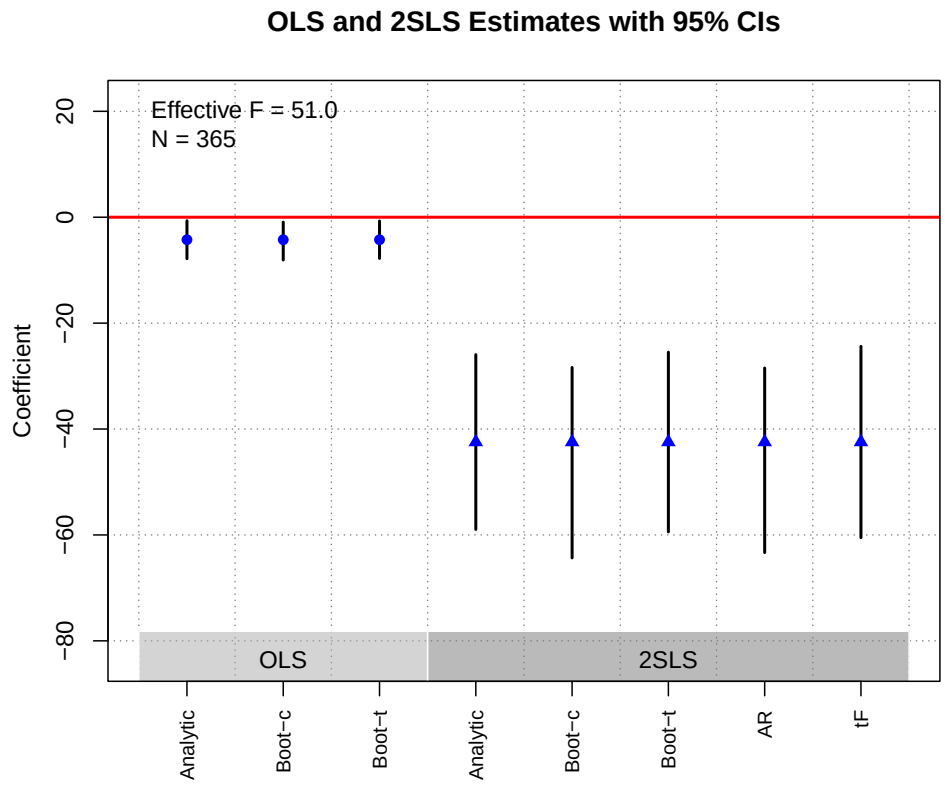
Replication Summary	
Unit of analysis	district*year
Treatment	frequency of unrest
Instrument	religious polarization
Outcome	peasant representation
Model	Table1(2)

```r
df <- readRDS("./rawdata/apsr_Dower_etal_2018.rds")
D <-"afreq"
Y <-"peasantrepresentation_1864"
Z <-"serfperc1"
controls <- c("distance_moscow", "goodsoil", "lnurban", "lnpopn", "province_capital")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -4.2492 1.8297 -2.3224 -7.8353  -0.6631  0.0202
## Boot.c   -4.2492 1.8449 -2.3032 -8.0781  -0.9235  0.0200
## Boot.t   -4.2492 1.8297 -2.3224 -7.7849  -0.7135  0.0220
##
## $est_2sls
##              Coef     SE       t  CI 2.5% CI 97.5% p.value
## Analytic -42.4545 8.4195 -5.0424 -58.9567 -25.9522       0
## Boot.c   -42.4545 9.2641 -4.5827 -64.3361 -28.3632       0
## Boot.t   -42.4545 8.4195 -5.0424 -59.4214 -25.4875       0
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  52.2466   1.0000 363.0000   0.0000
##
## $AR$ci.print
## [1] "[-63.3348, -28.4781]"
##
## $AR$ci
## [1] -63.3348 -28.4781
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     47.6256     51.0176          NA     50.2046     51.0176
##
## $rho
## [1] 0.3427
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
```

```
##  51.0176   2.1457 -42.4545   8.4195  -5.0424 -60.5204 -24.3885   0.0000
##
## $est_rf
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## serfperc1 -11.7823 1.6414       0 1.7047 -15.0359   -8.2923         0
##
## $est_fs
##             Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## serfperc1 0.2775 0.0389       0 0.0392   0.2037    0.3499         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 365
##
## $N_cl
## NULL
##
## $df
## [1] 358
##
## $nvalues
##      peasantrepresentation_1864 afreq serfperc1
## [1,]                        128    12       361
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Gerber et al. (2010)

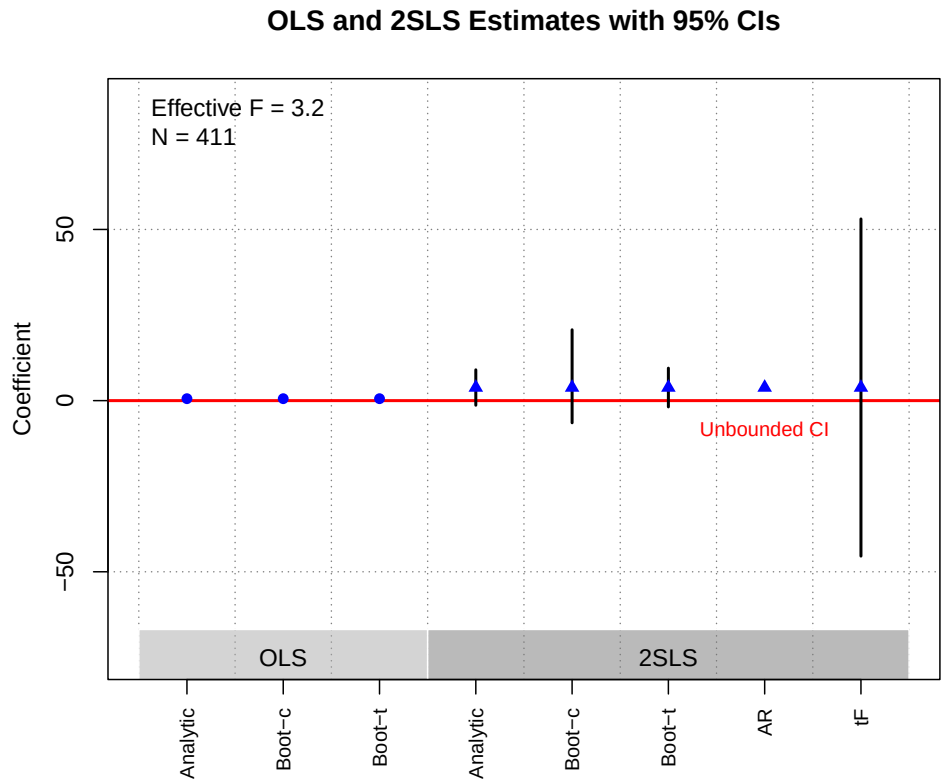
Replication Summary	
Unit of analysis	individual
Treatment	aligning party identification with latent partisanship
Instrument	being sent mail
Outcome	voting and party alignment scale
Model	Table4(1)

```
df <- readRDS("./rawdata/apsr_Gerber_etal_2010.rds")
D <-"pt_id_with_lean"
Y <- "pt_voteevalalignindex"
Z <- "treat"
controls <- c("pre_lean_dem", "age", "age2" ,"regyear" ,
              "regyearmissing", "twonames", "combined_female",
              "voted2006", "voted2004", "voted2002", "voted2000",
              "voted1998", "voted1996", "interest", "pre_aligned_vh",
              "pre_direct_unemp", "pre_direct_econ","pre_direct_bushap",
              "pre_direct_congapp")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.5658 0.1709 3.3105  0.2308   0.9008   9e-04
## Boot.c   0.5658 0.1673 3.3821  0.2495   0.9045   0e+00
## Boot.t   0.5658 0.1709 3.3105  0.2353   0.8963   0e+00
##
## $est_2sls
##            Coef      SE      t CI 2.5% CI 97.5% p.value
## Analytic 3.8231  2.6392 1.4486 -1.3497   8.9960  0.1475
## Boot.c   3.8231 16.4557 0.2323 -6.4832  20.6934  0.1200
## Boot.t   3.8231  2.6392 1.4486 -1.8404   9.4867  0.1330
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.8593   1.0000 409.0000   0.0501
##
## $AR$ci.print
## [1] "[0.0227, Inf)"
##
## $AR$ci
## [1] 0.0227    Inf
##
## $AR$bounded
## [1] FALSE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      2.9926      3.1563          NA      3.2845      3.1563
##
## $rho
## [1] 0.0873
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
##   3.1563  18.6600   3.8231   2.6392   1.4486 -45.4249  53.0712   0.8791
##
## $est_rf
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treat 0.2742 0.1429  0.0551 0.1411  -0.0031    0.5497     0.056
##
## $est_fs
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treat 0.0717 0.0404  0.0756 0.0396  -0.0033    0.1515      0.07
##
## $p_iv
```

```
## [1] 1
##
## $N
## [1] 411
##
## $N_cl
## NULL
##
## $df
## [1] 390
##
## $nvalues
##      pt_voteevalalignindex pt_id_with_lean treat
## [1,]                    10               2     2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Hager et al. (2019)

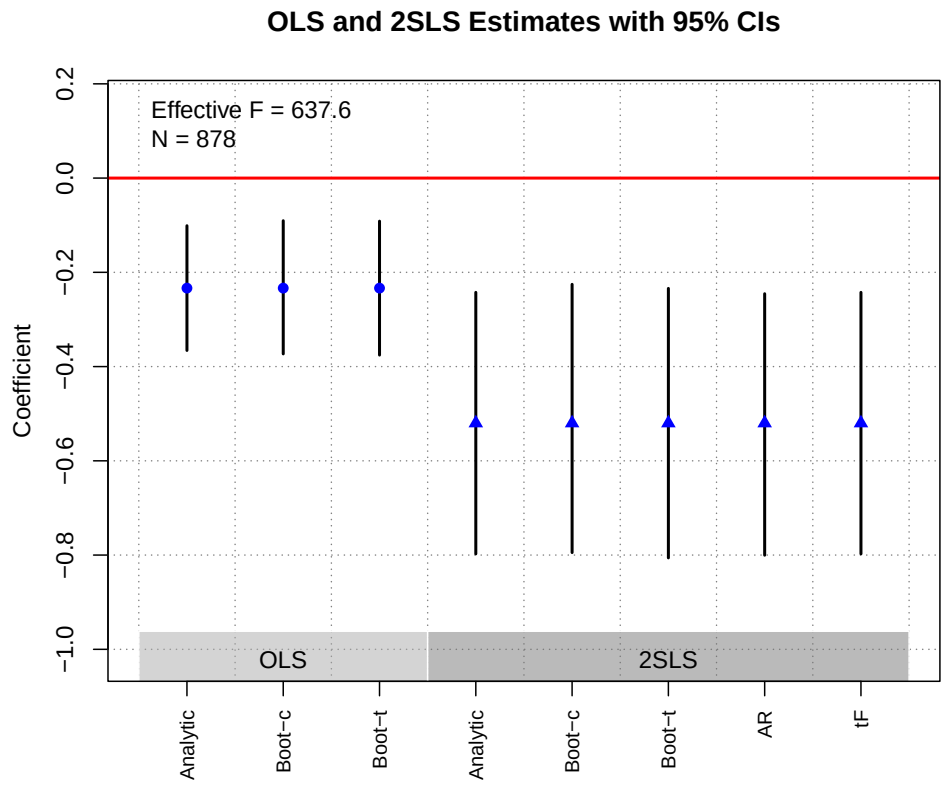
Replication Summary	
Unit of analysis	individual
Treatment	ethnic riots (destruction)
Instrument	distance to the nearest location where armored military vehicles were stolen
Outcome	prosocial behavior
Model	Figure6

```
df <- readRDS("./rawdata/apsr_Hager_etal_2019.rds")
D <-"affected"
Y <- "pd_in_scale"
Z <-  "apc_min_distance"
controls <- NULL
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.2335 0.0675 -3.4582 -0.3658  -0.1011   5e-04
## Boot.c   -0.2335 0.0707 -3.3012 -0.3731  -0.0905   4e-03
## Boot.t   -0.2335 0.0675 -3.4582 -0.3756  -0.0914   4e-03
##
## $est_2sls
##           Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.52 0.1416 -3.6733 -0.7975  -0.2425   2e-04
## Boot.c   -0.52 0.1468 -3.5419 -0.7947  -0.2255   0e+00
## Boot.t   -0.52 0.1416 -3.6733 -0.8060  -0.2341   0e+00
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  13.7909   1.0000 876.0000   0.0002
##
## $AR$ci.print
## [1] "[-0.8003, -0.2454]"
##
## $AR$ci
## [1] -0.8003 -0.2454
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
```

```
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    271.8565    637.5699          NA    644.1748    637.5699
##
## $rho
## [1] 0.4867
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 637.5699   1.9600  -0.5200   0.1416  -3.6733  -0.7975  -0.2425   0.0002
##
## $est_rf
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## apc_min_distance 0.1011 0.0272   2e-04 0.0283   0.0445    0.1533         0
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## apc_min_distance -0.1943 0.0077       0 0.0077  -0.2095   -0.1801         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 878
##
## $N_cl
## NULL
##
## $df
## [1] 876
##
## $nvalues
##      pd_in_scale affected apc_min_distance
## [1,]           2        2              193
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Hager and Krakowski (2022)

Replication Summary	
Unit of analysis	individual
Treatment	number of secret police officers
Instrument	number of corrupted Catholic priests
Outcome	resistance
Model	Table3(2)

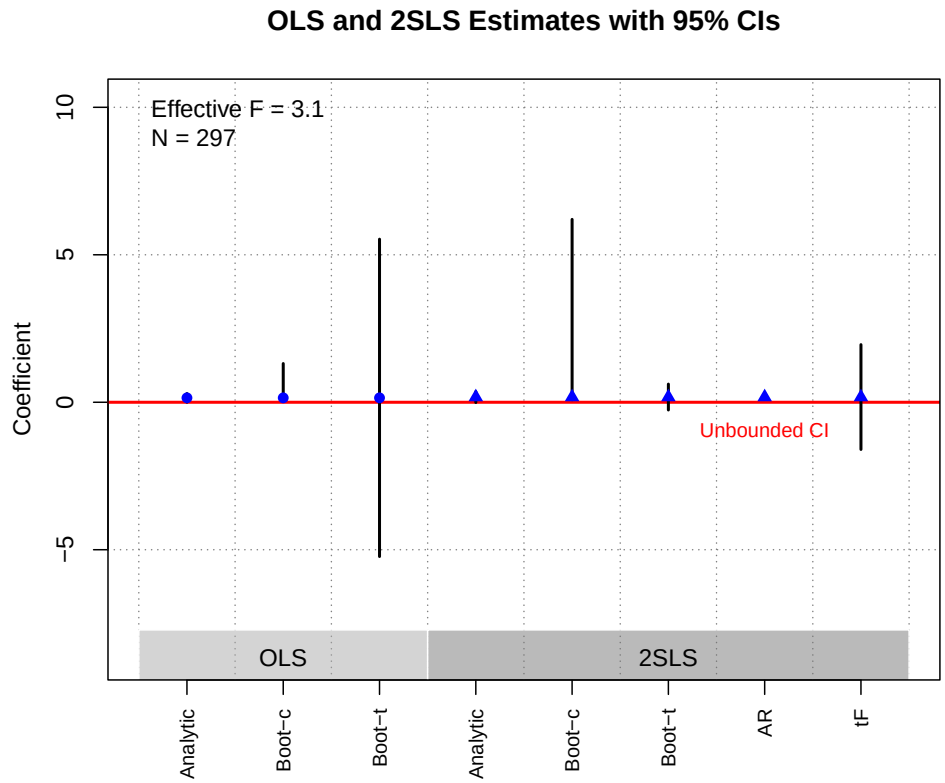
```
df <- readRDS("./rawdata/apsr_Hager_Krakowski_2022.rds")

D <-"commanders"
Y <- "y"
Z <-  "priests_continuous"
controls <- NULL
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1494 0.0751 1.9891   0.0022    0.2965  0.0467
```

```
## Boot.c   0.1494 0.2844 0.5252  0.0594   1.3126  0.0000
## Boot.t   0.1494 0.0751 1.9891 -5.2312   5.5299  0.5040
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1765 0.0952 1.8537 -0.0101   0.3632  0.0638
## Boot.c   0.1765 5.1233 0.0345  0.0837   6.2001  0.0060
## Boot.t   0.1765 0.0952 1.8537 -0.2629   0.6160  0.3570
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   8.7245   1.0000 295.0000   0.0034
##
## $AR$ci.print
## [1] "[0.0642, Inf)"
##
## $AR$ci
## [1] 0.0642    Inf
##
## $AR$bounded
## [1] FALSE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    109.0543      3.1403          NA      3.5112      3.1403
##
## $rho
## [1] 0.5195
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
##  3.1403 18.6600  0.1765  0.0952  1.8537 -1.6005  1.9535  0.8456
##
## $est_rf
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## priests_continuous 0.4736 0.1603  0.0031 0.1733   0.1791    0.8722         0
##
## $est_fs
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## priests_continuous 2.6827 1.5139  0.0764 1.4317   0.0273    5.1169     0.006
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 297
##
## $N_cl
## NULL
##
## $df
## [1] 295
##
## $nvalues
##       y commanders priests_continuous
## [1,] 14         12                  7
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Kapoor and Magesan (2018)

Replication Summary	
Unit of analysis	constituency*election
Treatment	number of independent candidates
Instrument	changes in entry costs
Outcome	voter turnout

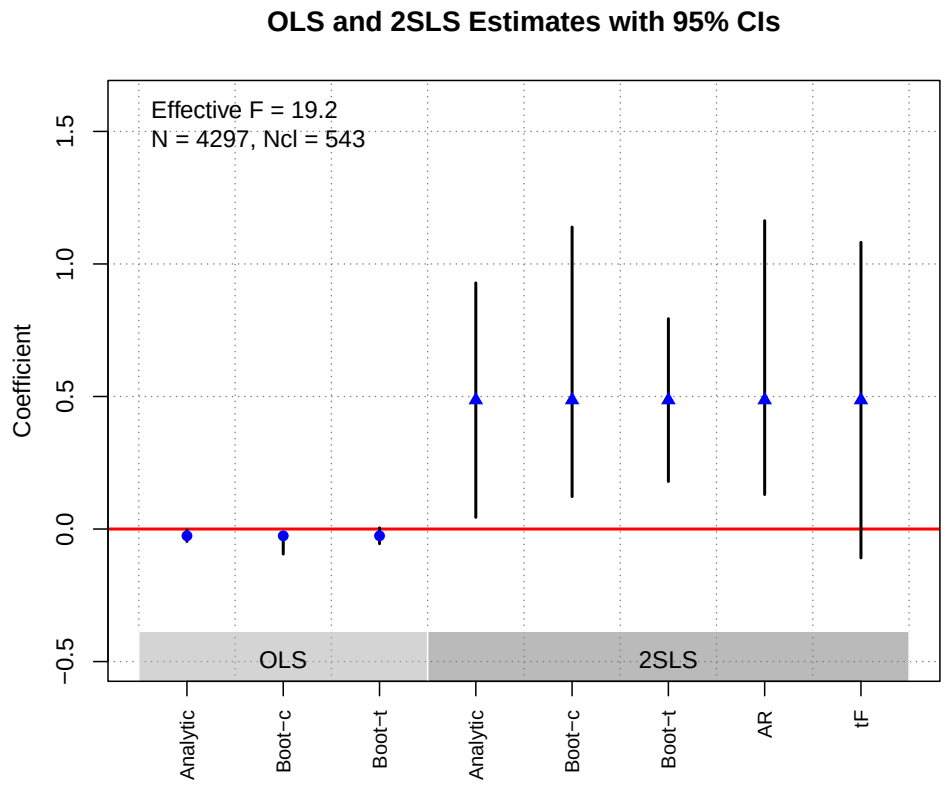
Replication Summary	
Model	Table4(b5)

```
df<-readRDS("./rawdata/apsr_Kapoor_etal_2018.rds")
D <-'CitCand'
Y <- "Turnout"
Z <- "UnScheduledDepChange"
controls <- c("CitCandBaseTrend", "CitCandBaseTrendSq", "CitCandBaseTrendCu",
              "CitCandBaseTrendQu",  "TurnoutBaseTrend", "TurnoutBaseTrendSq",
              "TurnoutBaseTrendCu", "TurnoutBaseTrendQu", "LnElectors",
              "LagWinDist", "LagWinDistSq", "LagWinDistCu",
              "LagWinDistQu", "LagTightElection")
cl<- "constituency"
FE <- c("year","constituency")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0256 0.0110 -2.3216 -0.0472  -0.0040  0.0203
## Boot.c   -0.0256 0.0215 -1.1899 -0.0945  -0.0125  0.0000
## Boot.t   -0.0256 0.0110 -2.3216 -0.0554   0.0042  0.0750
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.4864 0.2256 2.1562  0.0443   0.9285  0.0311
## Boot.c   0.4864 0.2648 1.8367  0.1224   1.1392  0.0020
## Boot.t   0.4864 0.2256 2.1562  0.1794   0.7934  0.0080
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    7.7339    1.0000 4295.0000    0.0054
##
## $AR$ci.print
## [1] "[0.1300, 1.1631]"
##
## $AR$ci
## [1] 0.1300 1.1631
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
```

```
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     11.2301     23.7168     19.1635     19.7933     19.1635
##
## $rho
## [1] 0.0548
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 19.1635  2.6390  0.4864  0.2256  2.1562 -0.1089  1.0817  0.1093
##
## $est_rf
##                         Coef   SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## UnScheduledDepChange -1.277 0.46  0.0055 0.4642  -2.1992   -0.3499     0.002
##
## $est_fs
##                           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## UnScheduledDepChange -2.6256 0.5998       0 0.5902  -3.9271   -1.5206         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 4297
##
## $N_cl
## [1] 543
##
## $df
## [1] 542
##
## $nvalues
##      Turnout CitCand UnScheduledDepChange
## [1,]    4293      68                    2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Kuipers and Sahn (2022)

Replication Summary	
Unit of analysis	municipality* year
Treatment	civil service reform
Instrument	statewide assignment mandate
Outcome	descriptive representation on an unrestricted sample
Model	Table1(2)

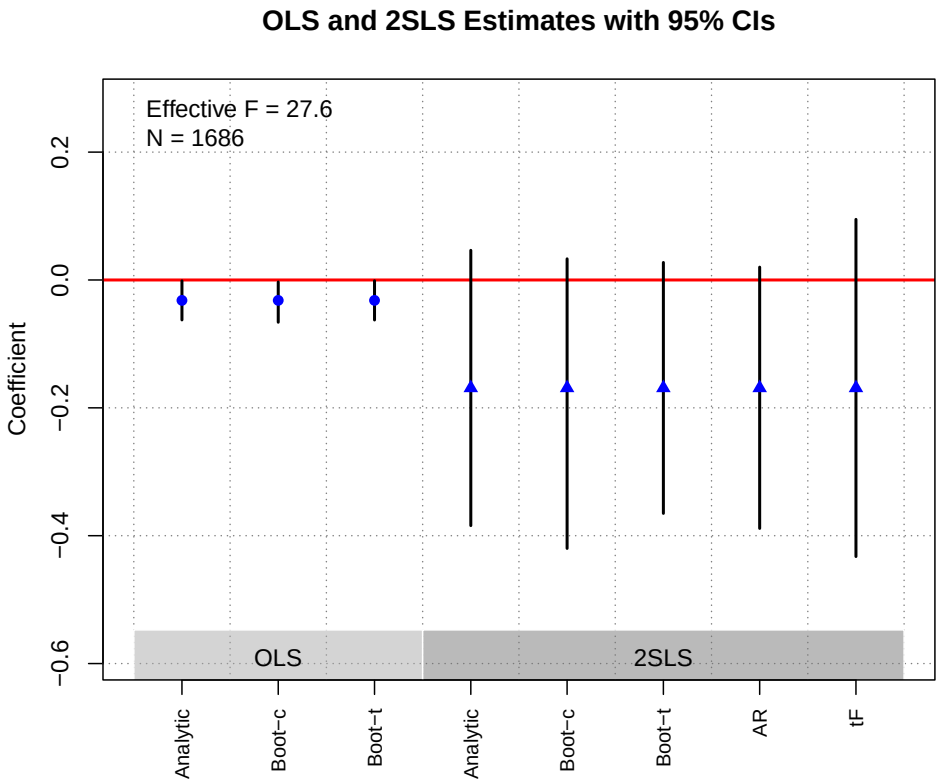
```
df <- readRDS("./rawdata/apsr_kuipers_2022.rds")
df<-df%>%filter(occ=='blue_collar' & name=='white_x_native_born')
D <-"treat_actual"
Y <- "govt"
Z <-  "treat_assign"
controls <-"pop"
cl <- NULL
FE <- c("YEAR","city")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0319 0.0156 -2.0467 -0.0625  -0.0014  0.0407
```

```
## Boot.c   -0.0319 0.0167 -1.9163 -0.0661  -0.0032  0.0280
## Boot.t   -0.0319 0.0156 -2.0467 -0.0626  -0.0012  0.0390
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.1689 0.1099 -1.5373 -0.3842   0.0464  0.1242
## Boot.c   -0.1689 0.1179 -1.4327 -0.4199   0.0331  0.0840
## Boot.t   -0.1689 0.1099 -1.5373 -0.3651   0.0274  0.0870
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    3.0769    1.0000 1684.0000    0.0796
##
## $AR$ci.print
## [1] "[-0.3886, 0.0201]"
##
## $AR$ci
## [1] -0.3886  0.0201
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     32.4157     27.5670          NA     23.9060     27.5670
##
## $rho
## [1] 0.153
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 27.5670  2.3999 -0.1689  0.1099 -1.5373 -0.4326  0.0948  0.2093
##
## $est_rf
##                 Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## treat_assign -0.0254 0.0162   0.116 0.017  -0.0611    0.0052     0.084
##
## $est_fs
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treat_assign 0.1504 0.0286       0 0.0308   0.0969    0.2157         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 1686
##
## $N_cl
## NULL
##
## $df
## [1] 1352
##
## $nvalues
##      govt treat_actual treat_assign
## [1,]  658            2            2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Laitin and Ramachandran (2016)

Replication Summary	
Unit of analysis	country
Treatment	language choice
Instrument	geographic distance from the origins of writing
Outcome	human development index

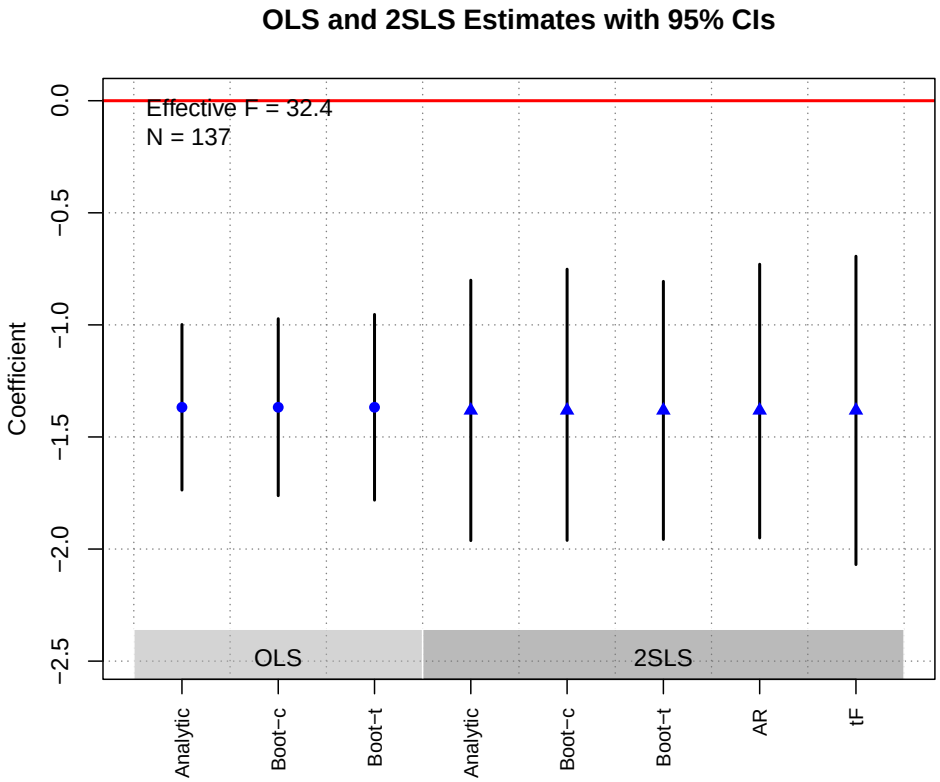
Replication Summary	
Model	Table10(10)

```
df <-readRDS("./rawdata/apsr_Laitin_2016.rds")
D <-"avgdistance_delta50"
Y <- "zhdi_2010"
Z <- "DIST_BGNC"
controls <- c("cdf2003","ln_GDP_Indp", "edes1975",
              "America","xconst")
cl<- NULL
FE<- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.3676 0.1884 -7.2594 -1.7369  -0.9984       0
## Boot.c   -1.3676 0.1957 -6.9878 -1.7619  -0.9725       0
## Boot.t   -1.3676 0.1884 -7.2594 -1.7818  -0.9535       0
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.3815 0.2963 -4.6618 -1.9623  -0.8007       0
## Boot.c   -1.3815 0.3029 -4.5608 -1.9614  -0.7515       0
## Boot.t   -1.3815 0.2963 -4.6618 -1.9571  -0.8059       0
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  11.4476   1.0000 135.0000   0.0009
##
## $AR$ci.print
## [1] "[-1.9505, -0.7295]"
##
## $AR$ci
## [1] -1.9505 -0.7295
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     55.1871     32.4040          NA     33.5596     32.4040
##
```

```
## $rho
## [1] 0.5459
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 32.4040  2.3208 -1.3815  0.2963 -4.6618 -2.0692 -0.6938  0.0001
##
## $est_rf
##             Coef SE p.value SE.b CI.b2.5% CI.b97.5% p.value.b
## DIST_BGNC -1e-04  0   9e-04    0   -2e-04         0         0
##
## $est_fs
##            Coef SE p.value SE.b CI.b2.5% CI.b97.5% p.value.b
## DIST_BGNC 1e-04  0       0    0    1e-04     1e-04         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 137
##
## $N_cl
## NULL
##
## $df
## [1] 130
##
## $nvalues
##      zhdi_2010 avgdistance_delta50 DIST_BGNC
## [1,]       121                  93       134
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Meredith (2013)

Replication Summary	
Unit of analysis	down-ballot race
Treatment	Democratic governor
Instrument	governor's home county
Outcome	down-ballot Democratic candidates' vote share
Model	Table3(5)

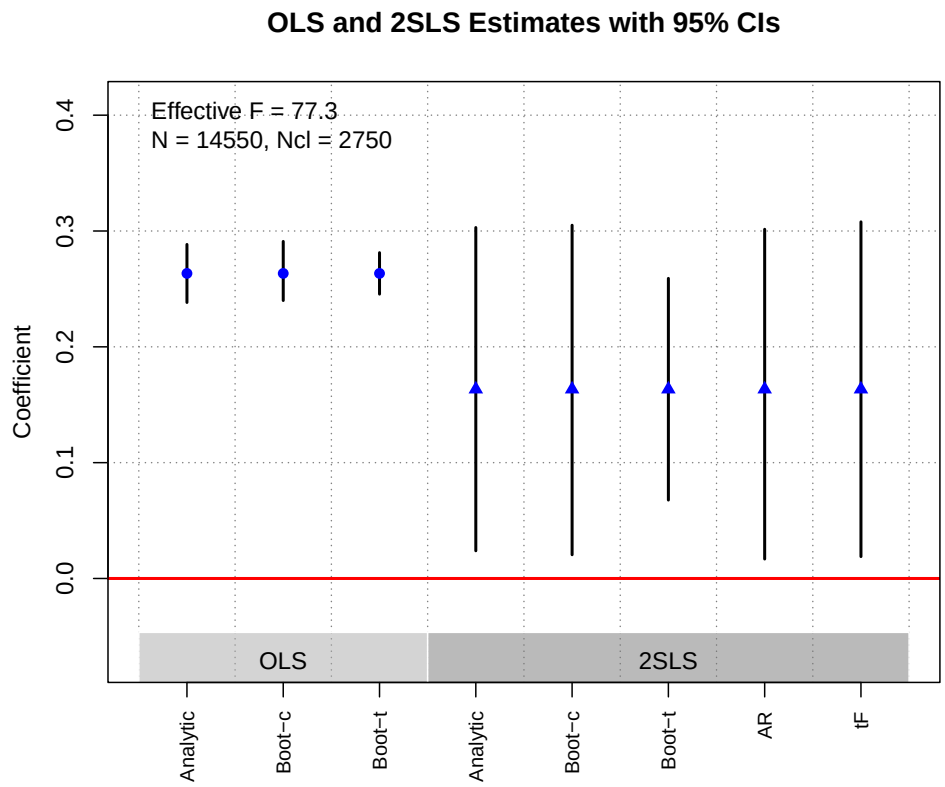
```
df <-readRDS("./rawdata/apsr_Meredith_2013.rds")
Y <- "DemShareDB_res"
D<-"DemShareGOV_res"
Z <- "HomeGOV_res"
controls <- "HomeDB_res"
cl <- "fips"
FE<- NULL
weights<-NULL
(g <- ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic 0.2634 0.0128 20.5976  0.2383   0.2884       0
## Boot.c   0.2634 0.0127 20.7067  0.2400   0.2910       0
```

```
## Boot.t   0.2634 0.0128 20.5976  0.2455   0.2813       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1634 0.0712 2.2959  0.0239   0.3030  0.0217
## Boot.c   0.1634 0.0749 2.1832  0.0205   0.3050  0.0300
## Boot.t   0.1634 0.0712 2.2959  0.0677   0.2591  0.0010
##
## $AR
## $AR$Fstat
##          F        df1        df2          p
##     4.6123     1.0000 14548.0000     0.0318
##
## $AR$ci.print
## [1] "[0.0168, 0.3015]"
##
## $AR$ci
## [1] 0.0168 0.3015
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    284.9652    141.9189     77.2953     76.8134     77.2953
##
## $rho
## [1] 0.1386
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 77.2953  2.0300  0.1634  0.0712  2.2959  0.0189  0.3079  0.0266
##
## $est_rf
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## HomeGOV_res 0.0062 0.0029  0.0317 0.0029    7e-04    0.0115      0.03
##
## $est_fs
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## HomeGOV_res 0.0379 0.0043       0 0.0043   0.0298    0.0467         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 14550
```

```
##
## $N_cl
## [1] 2750
##
## $df
## [1] 14547
##
## $nvalues
##      DemShareDB_res DemShareGOV_res HomeGOV_res
## [1,]          14550           14550        1466
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Nellis and Siddiqui (2018)

Replication Summary	
Unit of analysis	district*election
Treatment	the proportion of MNA seats in a district won by secularist candidates
Instrument	narrow victory by secular parties in a district
Outcome	religious violence

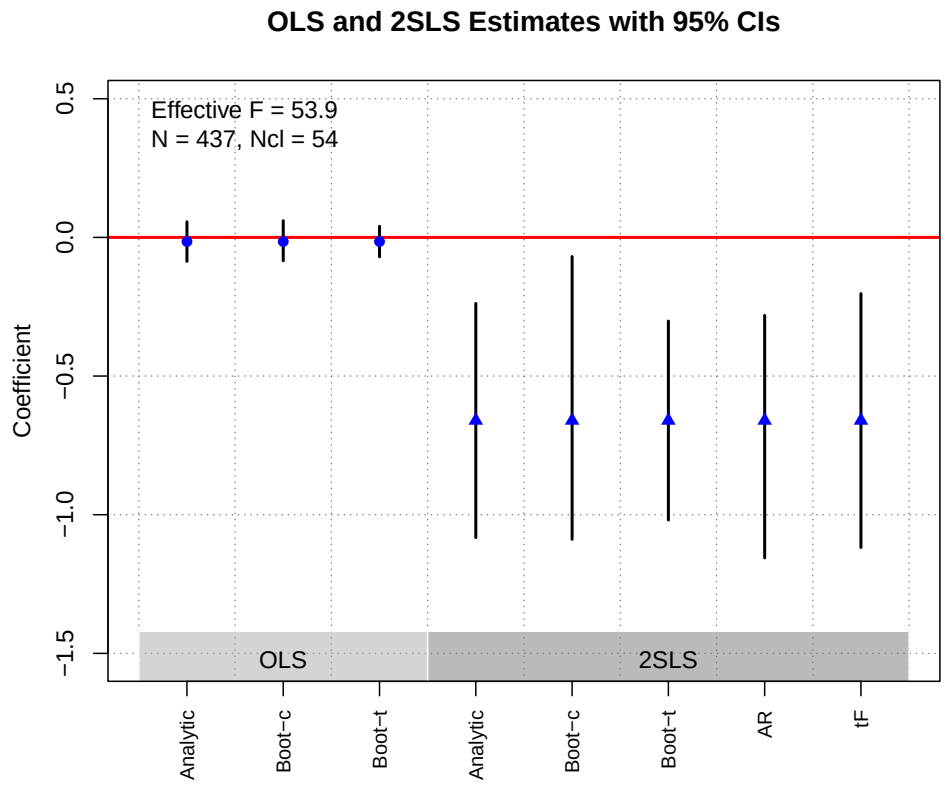
Replication Summary	
Model	Table2(1)

```
df<-readRDS("./rawdata/apsr_Nellis_etal_2018.rds")
D <-'secular_win'
Y <- "any_violence"
Z <- "secular_close_win"
controls <-"secular_close_race"
cl <- "cluster_var"
FE <- "pro"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.015 0.0364 -0.4107 -0.0863   0.0564  0.6813
## Boot.c   -0.015 0.0369 -0.4055 -0.0844   0.0601  0.6660
## Boot.t   -0.015 0.0364 -0.4107 -0.0700   0.0401  0.6070
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.6603 0.2154 -3.0658 -1.0825  -0.2382  0.0022
## Boot.c   -0.6603 0.2556 -2.5832 -1.0888  -0.0691  0.0260
## Boot.t   -0.6603 0.2154 -3.0658 -1.0190  -0.3016  0.0100
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  12.2950   1.0000 435.0000   0.0005
##
## $AR$ci.print
## [1] "[-1.1557, -0.2813]"
##
## $AR$ci
## [1] -1.1557 -0.2813
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     22.0208     60.0400     53.9103     41.7317     53.9103
##
```

```
## $rho
## [1] 0.2207
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 53.9103  2.1258 -0.6603  0.2154 -3.0658 -1.1182 -0.2025  0.0047
##
## $est_rf
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## secular_close_win -0.5965 0.1711   5e-04 0.1998  -0.8619   -0.0804     0.026
##
## $est_fs
##                      Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## secular_close_win 0.9034 0.123       0 0.1398   0.6222    1.1849         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 437
##
## $N_cl
## [1] 54
##
## $df
## [1] 430
##
## $nvalues
##      any_violence secular_win secular_close_win
## [1,]            2          26                17
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Ritter and Conrad (2016)

Replication Summary	
Unit of analysis	province in 54 African countries*day
Treatment	mobilized dissent
Instrument	rainfall
Outcome	repression
Model	Table1(3b)

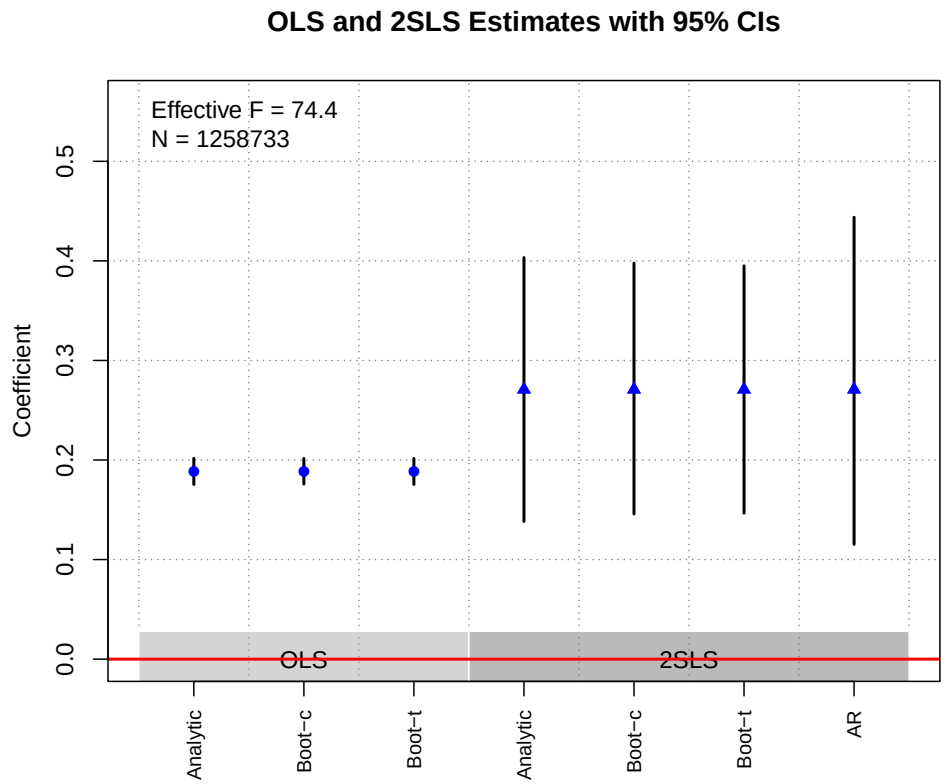
```
df <- readRDS("./rawdata/apsr_Ritter_etal_2016.rds")
D <- "dissentcount"
Y <- "represscount"
Z <- c("lograin", "rainannualpct")
controls <-"urban_mean"
cl<- NULL
FE<- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic 0.1885 0.0067 28.0525  0.1754   0.2017       0
## Boot.c   0.1885 0.0068 27.7793  0.1758   0.2016       0
```

```
## Boot.t   0.1885 0.0067 28.0525  0.1755   0.2016       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2708 0.0676 4.0058  0.1383   0.4033   1e-04
## Boot.c   0.2708 0.0673 4.0257  0.1458   0.3978   0e+00
## Boot.t   0.2708 0.0676 4.0058  0.1466   0.3950   0e+00
##
## $AR
## $AR$Fstat
##           F         df1         df2           p
## 8.36210e+00 2.00000e+00 1.25873e+06 2.00000e-04
##
## $AR$ci.print
## [1] "[0.1153, 0.4438]"
##
## $AR$ci
## [1] 0.1153 0.4438
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     58.3505     73.6819          NA     72.6998     74.3587
##
## $rho
## [1] 0.0096
##
## $est_rf
##                   Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lograin         0.0001 0.0000  0.0000 0.0000   0.0001    0.0002     0.000
## rainannualpct -0.0092 0.0059  0.1199 0.0061  -0.0201    0.0028     0.122
##
## $est_fs
##                   Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lograin         0.0005 0.0000   0e+00 0.0000   0.0004    0.0006         0
## rainannualpct -0.0250 0.0065   1e-04 0.0069  -0.0382   -0.0116         0
##
## $p_iv
## [1] 2
##
## $N
## [1] 1258733
##
## $N_cl
```

```
## NULL
##
## $df
## [1] 1258730
##
## $nvalues
##      represscount dissentcount lograin rainannualpct
## [1,]            3            5  390194        593785
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



AJPS

Barth et al. (2015)

Replication Summary	
Unit of analysis	country*year
Treatment	wage inequality
Instrument	adjusted bargaining coverage; effective number of union confederations

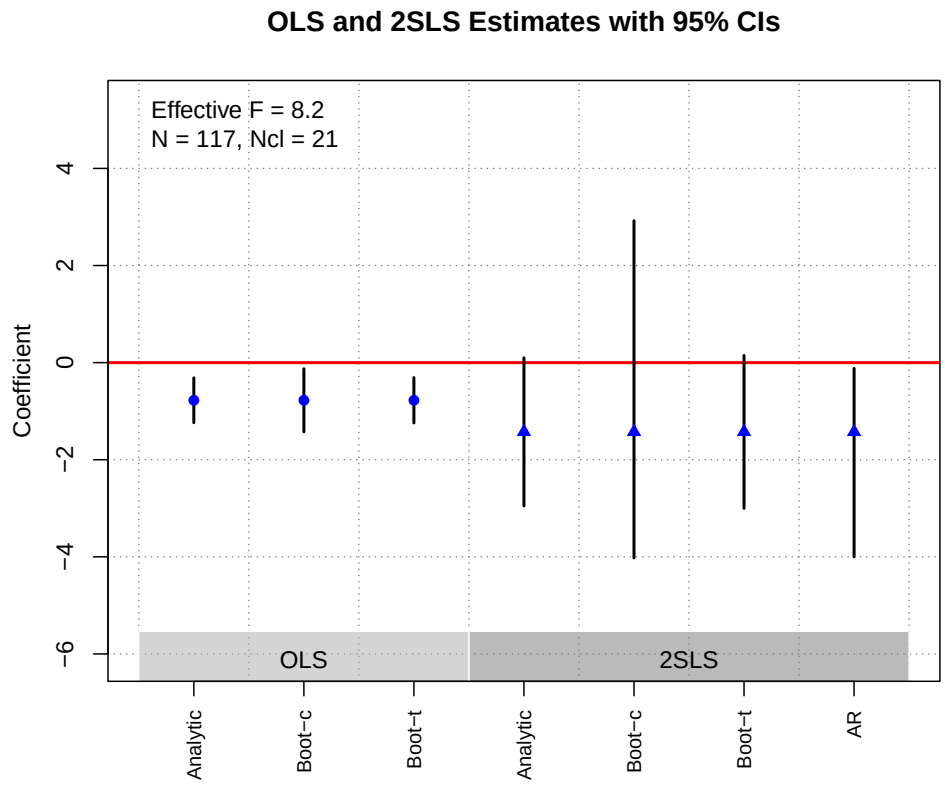
Replication Summary	
Outcome	welfare support
Model	Table4(1)

```
df<- readRDS("./rawdata/ajps_Barth_2015.rds")
D <-"ld9d1"
Y <- "welfareleft"
Z <- c("l2ip_adjcov5", "l2ip_enucfs")
controls <- c("lgdpgr", "lelderly", "llntexp", "lud", "ludsq",
              "lechp", "lnet", "lannual", "ltrend", "ltrendsq")
cl <- FE <- "countrynumber"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.7755 0.2358 -3.2886 -1.2376  -0.3133   0.001
## Boot.c   -0.7755 0.3286 -2.3598 -1.4249  -0.1264   0.022
## Boot.t   -0.7755 0.2358 -3.2886 -1.2427  -0.3082   0.003
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.4265 0.7779 -1.8339 -2.9511   0.0981  0.0667
## Boot.c   -1.4265 2.0723 -0.6884 -4.0218   2.9224  0.3200
## Boot.t   -1.4265 0.7779 -1.8339 -3.0006   0.1477  0.0740
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.6053   2.0000 114.0000   0.0303
##
## $AR$ci.print
## [1] "[-4.0005, -0.1197]"
##
## $AR$ci
## [1] -4.0005 -0.1197
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      9.7741     15.0268     11.5754      3.0487      8.1611
##
```

```
## $rho
## [1] 0.4345
##
## $est_rf
##                 Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l2ip_adjcov5 0.0184 0.0124  0.1377 0.0193  -0.0262    0.0507     0.380
## l2ip_enucfs  0.1687 0.2420  0.4858 0.3867  -0.8098    0.7905     0.768
##
## $est_fs
##                  Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l2ip_adjcov5 -0.0096 0.0046  0.0383 0.0070  -0.0267   -0.0002     0.044
## l2ip_enucfs  -0.1542 0.0777  0.0473 0.1028  -0.2885    0.1103     0.190
##
## $p_iv
## [1] 2
##
## $N
## [1] 117
##
## $N_cl
## [1] 21
##
## $df
## [1] 20
##
## $nvalues
##      welfareleft ld9d1 l2ip_adjcov5 l2ip_enucfs
## [1,]         117   117          106         112
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Blair et al. (2022)

Replication Summary	
Unit of analysis	UN peacekeeping operations event level
Treatment	fragmentation of any given PKO mandate
Instrument	average fragmentation of all ongoing PKO mandates
Outcome	process performance
Model	TableD7(3)

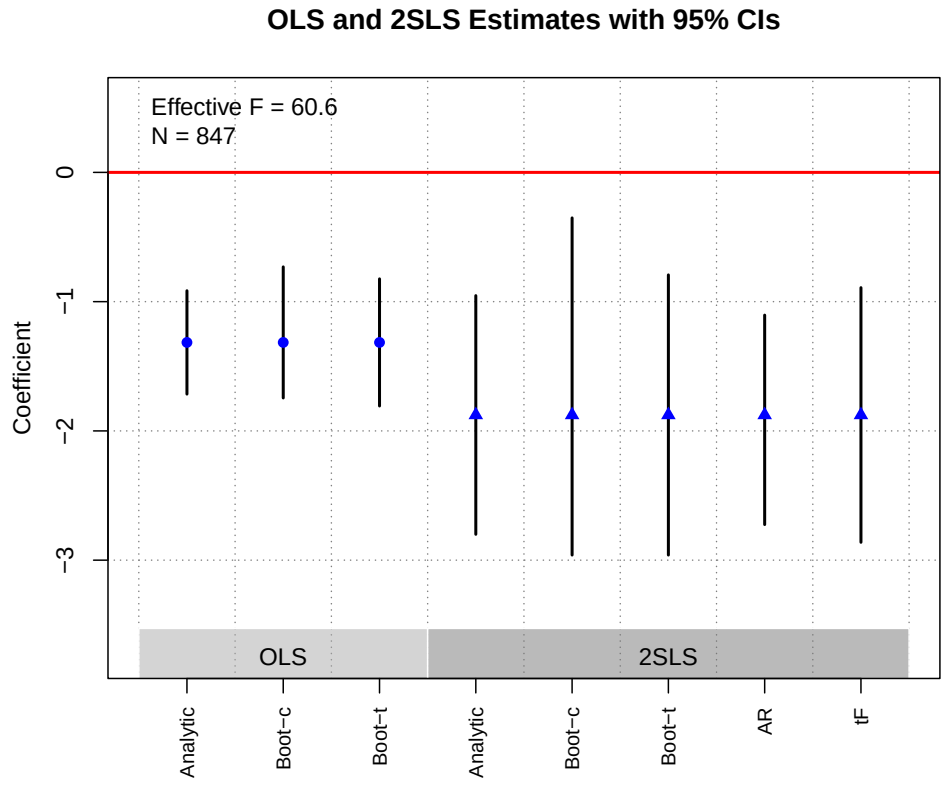
```
df <-readRDS("./rawdata/ajps_Blair_2022.rds")
df<-as.data.frame(df)
D<-"L_avg"
Y <- "sh_perfassist_pb"
Z <- "L_fract_assistv3"
  controls <- c("L_experman_assist_pbv3","L_numtask_assist_pbv3","L_lntot",
                "L_deployment","L_lnpop","L_lngdp","L_ucdpconflictspell","L_polity")
cl <- NULL
FE <- c("date3","iso3n")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
```

```
## Analytic -1.3155 0.2040 -6.4481 -1.7153  -0.9156       0
## Boot.c   -1.3155 0.2527 -5.2056 -1.7451  -0.7310       0
## Boot.t   -1.3155 0.2040 -6.4481 -1.8073  -0.8237       0
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.8768 0.4711 -3.9841 -2.8001  -0.9535  0.0001
## Boot.c   -1.8768 0.6586 -2.8498 -2.9605  -0.3521  0.0140
## Boot.t   -1.8768 0.4711 -3.9841 -2.9606  -0.7930  0.0010
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  20.4937   1.0000 845.0000   0.0000
##
## $AR$ci.print
## [1] "[-2.7247, -1.1042]"
##
## $AR$ci
## [1] -2.7247 -1.1042
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    186.0679     60.6442          NA     24.4332     60.6442
##
## $rho
## [1] 0.4793
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 60.6442  2.0913 -1.8768  0.4711 -3.9841 -2.8619 -0.8917  0.0002
##
## $est_rf
##                   Coef    SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## L_fract_assistv3 1.805 0.464   1e-04 0.751   0.3215    3.4116     0.014
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## L_fract_assistv3 -0.9617 0.1235       0 0.1946  -1.5068     -0.71         0
##
## $p_iv
## [1] 1
##
```

```
## $N
## [1] 847
##
## $N_cl
## NULL
##
## $df
## [1] 624
##
## $nvalues
##      sh_perfassist_pb L_avg L_fract_assistv3
## [1,]               56    55              222
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Carnegie and Marinov (2017)

Replication Summary	
Unit of analysis	country*year
Treatment	foreign aid
Instrument	being a former colony of one of the Council members

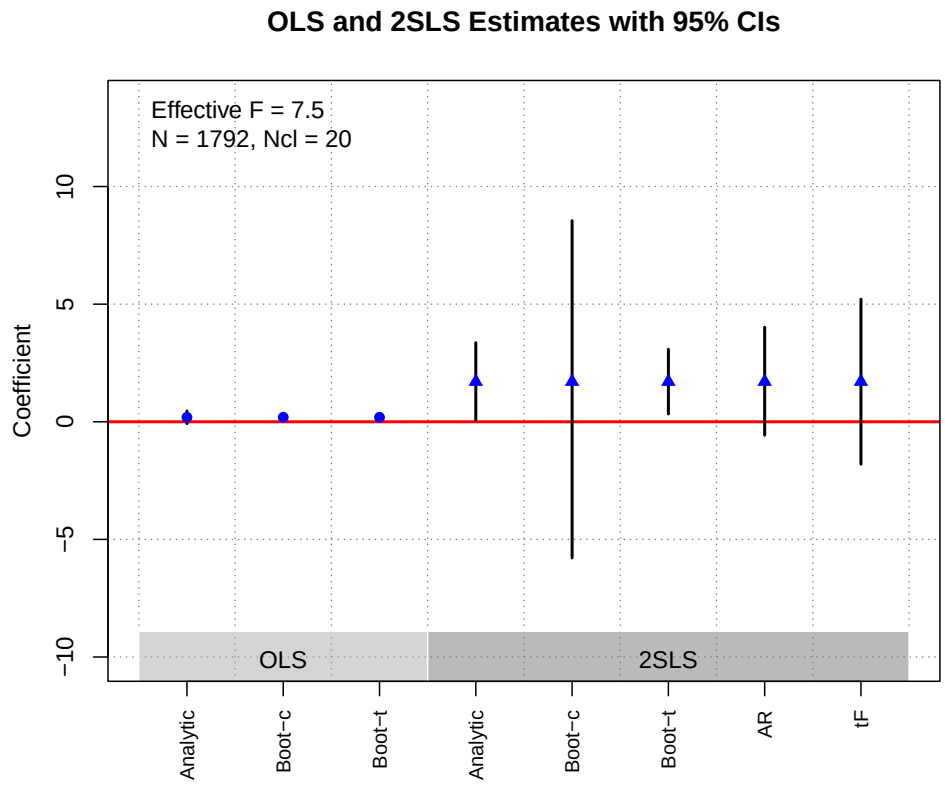
Replication Summary	
Outcome	CIRI Human Empowerment index
Model	Table1(2)

```
df<-readRDS("./rawdata/ajps_Carnegie_etal_2017.rds")
D <-"EV"
Y <- "new_empinxavg"
Z <- "l2CPcol2"
controls <- c( "covloggdp", "covloggdpCF", "covloggdpC",
               "covdemregionF", "covdemregion", "coviNY_GDP_PETR_RT_ZSF",
               "coviNY_GDP_PETR_RT_ZS", "covwvs_relF", "covwvs_rel",
               "covwdi_imp", "covwdi_fdiF", "covwdi_fdi",
               "covwdi_expF", "covwdi_exp", "covihme_ayemF", "covihme_ayem")
cl<-c("year","ccode")
FE <- c("year","ccode")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1903 0.1376 1.3831 -0.0794   0.4601  0.1666
## Boot.c   0.1903 0.0761 2.5001  0.0457   0.3463  0.0040
## Boot.t   0.1903 0.1376 1.3831  0.0449   0.3358  0.0190
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 1.7054 0.8436 2.0217  0.0520   3.3589  0.0432
## Boot.c   1.7054 9.7806 0.1744 -5.7868   8.5463  0.1880
## Boot.t   1.7054 0.8436 2.0217  0.3318   3.0791  0.0240
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    2.7312    1.0000 1790.0000    0.0986
##
## $AR$ci.print
## [1] "[-0.5722, 4.0169]"
##
## $AR$ci
## [1] -0.5722  4.0169
##
## $AR$bounded
## [1] TRUE
##
##
```

```
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      4.5101      4.5766      7.5007      3.8839      7.5007
##
## $rho
## [1] 0.0523
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
##  7.5007  4.1570  1.7054  0.8436  2.0217 -1.8014  5.2123  0.3405
##
## $est_rf
##            Coef   SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l2CPcol2 0.2632 0.16  0.0998 0.1934  -0.0659    0.6537      0.14
##
## $est_fs
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l2CPcol2 0.1543 0.0564  0.0062 0.0783  -0.0163    0.2959     0.076
##
## $p_iv
## [1] 1
##
## $N
## [1] 1792
##
## $N_cl
## [1] 20
##
## $df
## [1] 19
##
## $nvalues
##      new_empinxavg   EV l2CPcol2
## [1,]            57 1601        2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Chong et al. (2019)

Replication Summary	
Unit of analysis	household
Treatment	actual proportion of households treated in the locality
Instrument	treatment assignment in get-out-to-vote campaigns
Outcome	voted in 2013 presidential election
Model	Table4(1)

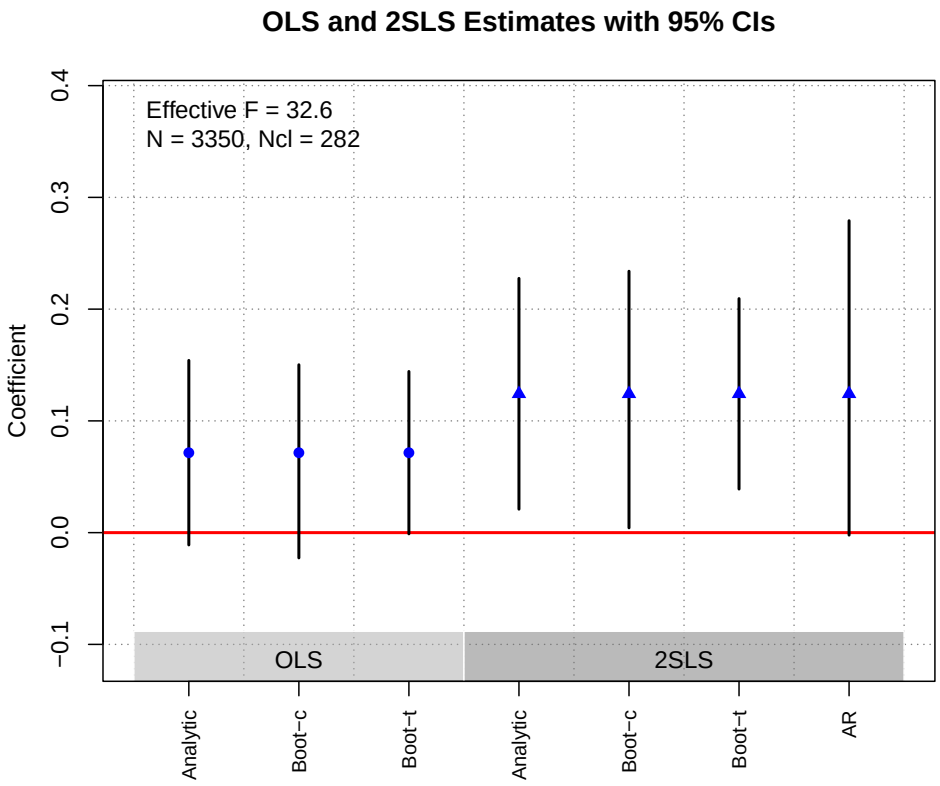
```
df <-readRDS("./rawdata/ajps_Chong_etal_2019.rds")
D <-"ratio_treat"
Y <- "elecc_presid2013"
Z <- c("D2D30", "D2D40", "D2D50")
controls <-c("age", "married", "children", "num_children",
             "employed", "languag", "yrseduc", "bornloc",
             "hh_asset_index", "log_pop", "mujeres_perc",
             "pob_0_14_perc", "pob_15_64_perc", "pob_65mas_perc",
             "analfabetos_perc", "asiste_escuela_perc",
             "TASA_women", "TASA_men", "electricidad_perc",
             "agua_perc", "desague_perc", "basura_perc",
             "fono_fijo_perc", "fono_cel_perc", "ocupantes",
             "Rural",  "distancia2_final", "db_age",
             "db_married", "db_children", "db_num_children",
             "db_employed", "db_languag", "db_yrseduc",
```

```
              "db_bornloc", "db_hh_asset_index", "db_log_pop",
              "db_mujeres_perc", "db_pob_0_14_perc",
              "db_pob_15_64_perc", "db_pob_65mas_perc",
              "db_analfabetos_perc", "db_asiste_escuela_perc",
              "db_TASA_women", "db_TASA_men", "db_electricidad_perc",
              "db_agua_perc", "db_desague_perc", "db_basura_perc",
              "db_fono_fijo_perc", "db_fono_cel_perc",
              "db_ocupantes", "db_Rural", "db_distancia2_final",
              "dpto1", "elecc_presid2008", "db_elecc_presid2008")
cl <- "loc"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0715 0.0421 1.6984 -0.0110   0.1541  0.0894
## Boot.c   0.0715 0.0452 1.5826 -0.0226   0.1502  0.1220
## Boot.t   0.0715 0.0421 1.6984 -0.0011   0.1442  0.0520
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1242 0.0527 2.3584  0.0210   0.2275  0.0184
## Boot.c   0.1242 0.0573 2.1680  0.0043   0.2339  0.0420
## Boot.t   0.1242 0.0527 2.3584  0.0390   0.2094  0.0040
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    2.5349    3.0000 3346.0000    0.0551
##
## $AR$ci.print
## [1] "[-0.0022, 0.2791]"
##
## $AR$ci
## [1] -0.0022  0.2791
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1163.8658    270.5690     37.7653     31.5181     32.5611
##
## $rho
```

```
## [1] 0.7163
##
## $est_rf
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## D2D30 0.0194 0.0333  0.5611 0.0358  -0.0568    0.0813     0.610
## D2D40 0.0651 0.0243  0.0075 0.0276   0.0054    0.1184     0.036
## D2D50 0.0190 0.0277  0.4940 0.0297  -0.0410    0.0732     0.458
##
## $est_fs
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## D2D30 0.2996 0.0434       0 0.0463   0.2212    0.4048         0
## D2D40 0.3946 0.0754       0 0.0773   0.2554    0.5498         0
## D2D50 0.2663 0.0438       0 0.0485   0.1845    0.3858         0
##
## $p_iv
## [1] 3
##
## $N
## [1] 3350
##
## $N_cl
## [1] 282
##
## $df
## [1] 3316
##
## $nvalues
##      elecc_presid2013 ratio_treat D2D30 D2D40 D2D50
## [1,]                2          56     2     2     2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Colantone and Stanig (2018)

Replication Summary	
Unit of analysis	region*year
Treatment	regional import shock from China
Instrument	Chinese imports to the United States
Outcome	Economic nationalism
Model	Table1(1)

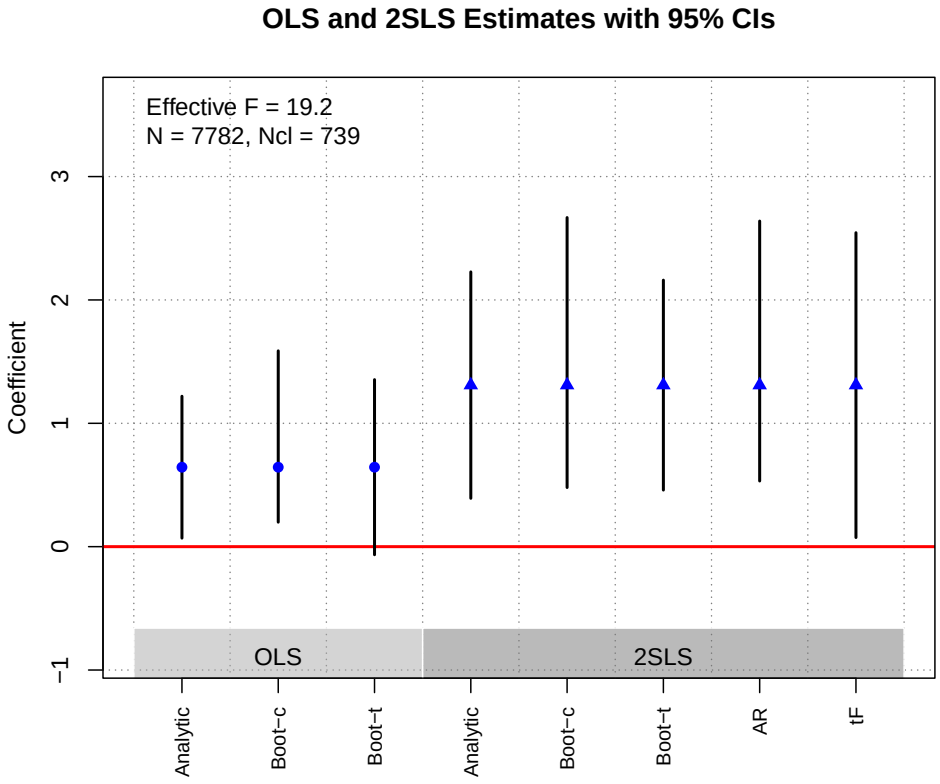
```
df <-readRDS("./rawdata/ajps_Colantone_etal_2018.rds")
D <-"import_shock"
Y <- "median_nationalism"
Z <- "instrument_for_shock"
controls <- NULL
cl <- "nuts2_year"
FE <- "fix_effect"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.6442 0.2934 2.1955  0.0691   1.2193  0.0281
## Boot.c   0.6442 0.3691 1.7452  0.1986   1.5873  0.0000
```

```
## Boot.t   0.6442 0.2934 2.1955 -0.0655   1.3539  0.0670
##
## $est_2sls
##            Coef     SE     t CI 2.5% CI 97.5% p.value
## Analytic 1.3096 0.4682 2.797  0.3919   2.2273  0.0052
## Boot.c   1.3096 0.5482 2.389  0.4795   2.6676  0.0020
## Boot.t   1.3096 0.4682 2.797  0.4588   2.1604  0.0090
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   10.9563    1.0000 7780.0000    0.0009
##
## $AR$ci.print
## [1] "[0.5323, 2.6393]"
##
## $AR$ci
## [1] 0.5323 2.6393
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1810.3678     42.8350     19.1709     11.0506     19.1709
##
## $rho
## [1] 0.4358
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 19.1709  2.6386  1.3096  0.4682  2.7970  0.0741  2.5450  0.0377
##
## $est_rf
##                         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## instrument_for_shock 0.0514 0.0156   0.001 0.0192   0.0222    0.0945     0.002
##
## $est_fs
##                         Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## instrument_for_shock 0.0392 0.009       0 0.0118   0.0258    0.0705         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 7782
```

```
##
## $N_cl
## [1] 739
##
## $df
## [1] 7724
##
## $nvalues
##      median_nationalism import_shock instrument_for_shock
## [1,]                167          739                   739
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Coppock and Green (2016)

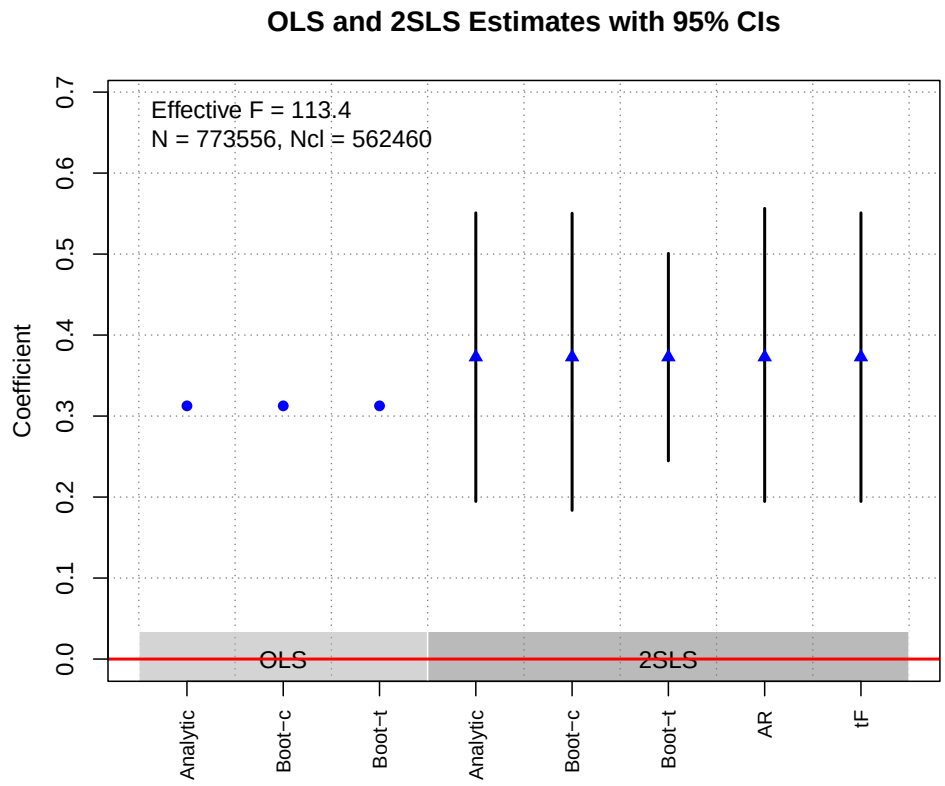
Replication Summary	
Unit of analysis	individual
Treatment	voting in November 2007 municipal elections
Instrument	mailing showing 2005 Vote
Outcome	voting in the 2008 presidential primary
Model	Table2(2)

```r
df<-readRDS("./rawdata/ajps_Coppock_etal_2016.rds")
D <-"og2007"
Y <- "JAN2008"
Z <- "treat2"
controls <- NULL
cl <- "hh"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE        t CI 2.5% CI 97.5% p.value
## Analytic 0.3126 0.0014 229.6550  0.3099   0.3152       0
## Boot.c   0.3126 0.0014 223.0352  0.3097   0.3153       0
## Boot.t   0.3126 0.0014 229.6550  0.3106   0.3145       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.3728 0.0909 4.1013  0.1946   0.5509   0.000
## Boot.c   0.3728 0.0939 3.9688  0.1836   0.5504   0.002
## Boot.t   0.3728 0.0909 4.1013  0.2447   0.5008   0.000
##
## $AR
## $AR$Fstat
##           F         df1         df2           p
##     15.4540      1.0000 773554.0000      0.0001
##
## $AR$ci.print
## [1] "[0.1946, 0.5564]"
##
## $AR$ci
## [1] 0.1946 0.5564
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    165.8659    151.8337    113.3680    102.8618    113.3680
##
## $rho
## [1] 0.0146
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
```

```
## 113.3680   1.9600   0.3728   0.0909   4.1013   0.1946   0.5509   0.0000
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treat2 0.0187 0.0048   1e-04 0.0049    0.009    0.0283     0.002
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treat2 0.0502 0.0047       0 0.0049   0.0398    0.0595         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 773556
##
## $N_cl
## [1] 562460
##
## $df
## [1] 773554
##
## $nvalues
##      JAN2008 og2007 treat2
## [1,]       2      2      2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



De La O (2013)

Replication Summary	
Unit of analysis	village
Treatment	early coverage of Conditional Cash Transfer
Instrument	random assignment to early coverage
Outcome	incumbent party's vote share
Model	Table3(b1)

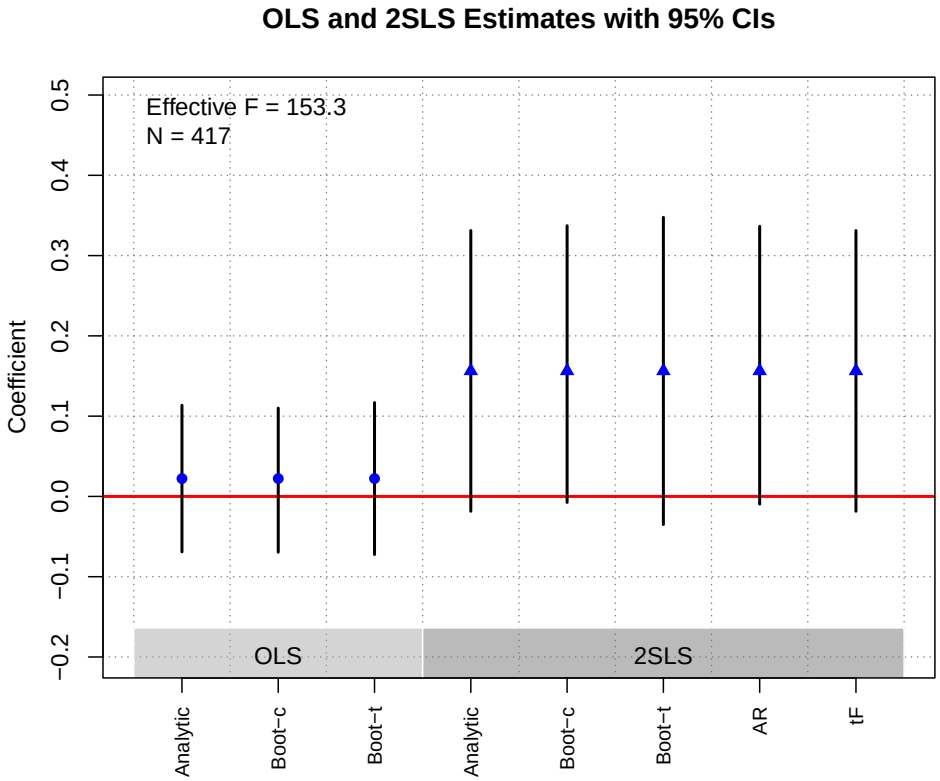
```
df <- readRDS("./rawdata/ajps_De_La_O_2013.rds")
D <-"early_progresa_p"
Y <- "t2000"
Z <- "treatment"
controls <- c("avgpoverty","pobtot1994", "votos_totales1994",
              "pri1994", "pan1994", "prd1994")
cl <- NULL
FE <- "villages"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0222 0.0466 0.4771 -0.0691   0.1136  0.6333
```

```
## Boot.c   0.0222 0.0460 0.4832 -0.0695   0.1101  0.7140
## Boot.t   0.0222 0.0466 0.4771 -0.0724   0.1169  0.6560
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1563 0.0892 1.7521 -0.0185   0.3312  0.0798
## Boot.c   0.1563 0.0912 1.7132 -0.0075   0.3372  0.0740
## Boot.t   0.1563 0.0892 1.7521 -0.0350   0.3476  0.1020
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.3846   1.0000 415.0000   0.0665
##
## $AR$ci.print
## [1] "[-0.0096, 0.3365]"
##
## $AR$ci
## [1] -0.0096  0.3365
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    177.1916    153.2854          NA    144.9531    153.2854
##
## $rho
## [1] 0.556
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 153.2854   1.9600   0.1563   0.0892   1.7521  -0.0185   0.3312   0.0798
##
## $est_rf
##             Coef     SE p.value SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment 0.0532 0.0296  0.0723 0.03  -0.0027    0.1096     0.074
##
## $est_fs
##             Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment 0.3401 0.0275       0 0.0282   0.2871    0.3957         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 417
##
## $N_cl
## NULL
##
## $df
## [1] 396
##
## $nvalues
##      t2000 early_progresa_p treatment
## [1,]   407              251         2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Goldstein and You (2017)

Replication Summary	
Unit of analysis	city
Treatment	lobbying spending
Instrument	direct flight to Washington, DC
Outcome	total earmarks or grants awarded

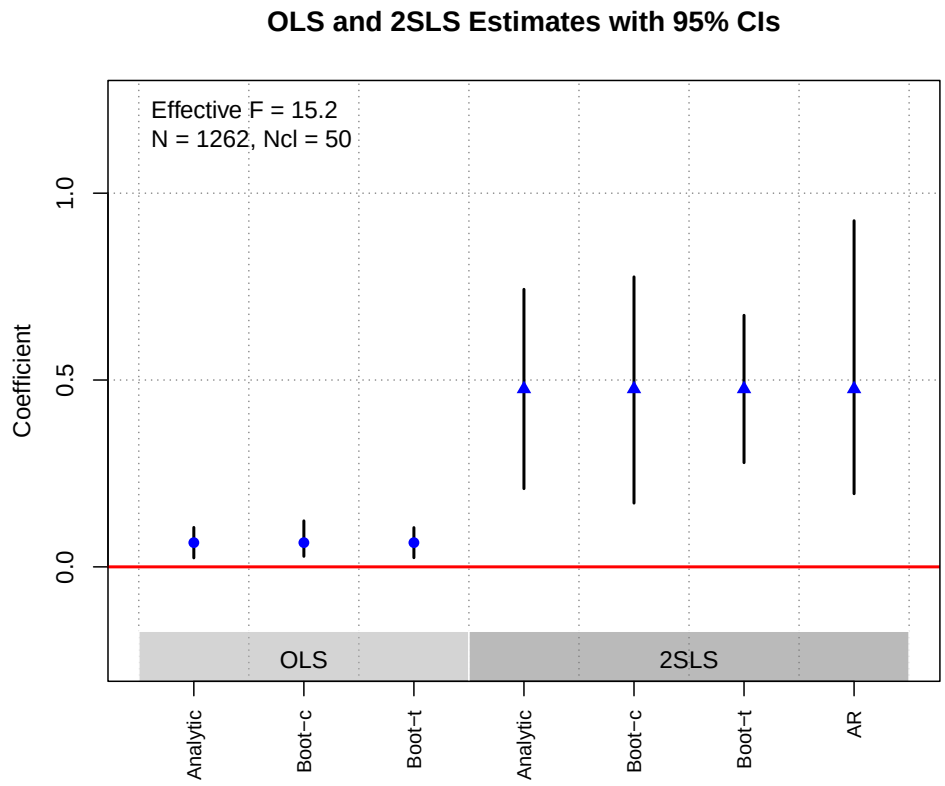
Replication Summary	
Model	Table4(4)

```
df <- readRDS("./rawdata/ajps_Goldstein_etal_2017.rds")
df <- as.data.frame(df)
Y <-"ln_recovery"
D <-"ln_citylob"
Z <- c("direct_flight_dc", "diverge2_r")
controls <- c("pop_r", "land_r", "water_r", "senior_r", "student_r", "ethnic_r",
              "mincome_r", "unemp_r", "poverty_r", "gini_r", "city_propertytaxshare_r",
              "city_intgovrevenueshare_r", "city_airexp_r", "houdem_r", "ln_countylob")
cl <- "state2"
FE <- "state2"
weights <- NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl, weights=weights, cores = cores, parallel = TRUE))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0648 0.0208 3.1171  0.0240   0.1055  0.0018
## Boot.c   0.0648 0.0245 2.6485  0.0282   0.1231  0.0020
## Boot.t   0.0648 0.0208 3.1171  0.0245   0.1050  0.0010
##
## $est_2sls
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.476 0.1361 3.4987  0.2094   0.7427  0.0005
## Boot.c   0.476 0.1580 3.0121  0.1707   0.7760  0.0120
## Boot.t   0.476 0.1361 3.4987  0.2789   0.6732  0.0000
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    8.2957    2.0000 1259.0000    0.0003
##
## $AR$ci.print
## [1] "[0.1958, 0.9263]"
##
## $AR$ci
## [1] 0.1958 0.9263
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
```

```
##     16.6195     13.7688     15.7426     14.5282     15.1587
##
## $rho
## [1] 0.1645
##
## $est_rf
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## direct_flight_dc 1.2403 0.5428  0.0223 0.6128  -0.3190    2.1915     0.098
## diverge2_r       0.3010 0.1688  0.0745 0.1764  -0.0423    0.6681     0.070
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## direct_flight_dc 2.6658 0.7247   2e-04 0.7570   1.0869    4.0204      0.00
## diverge2_r       0.6070 0.2164   5e-03 0.2278   0.1954    1.0927      0.01
##
## $p_iv
## [1] 2
##
## $N
## [1] 1262
##
## $N_cl
## [1] 50
##
## $df
## [1] 49
##
## $nvalues
##      ln_recovery ln_citylob direct_flight_dc diverge2_r
## [1,]        1196        135                2       1262
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Hager and Hilbig (2019) a

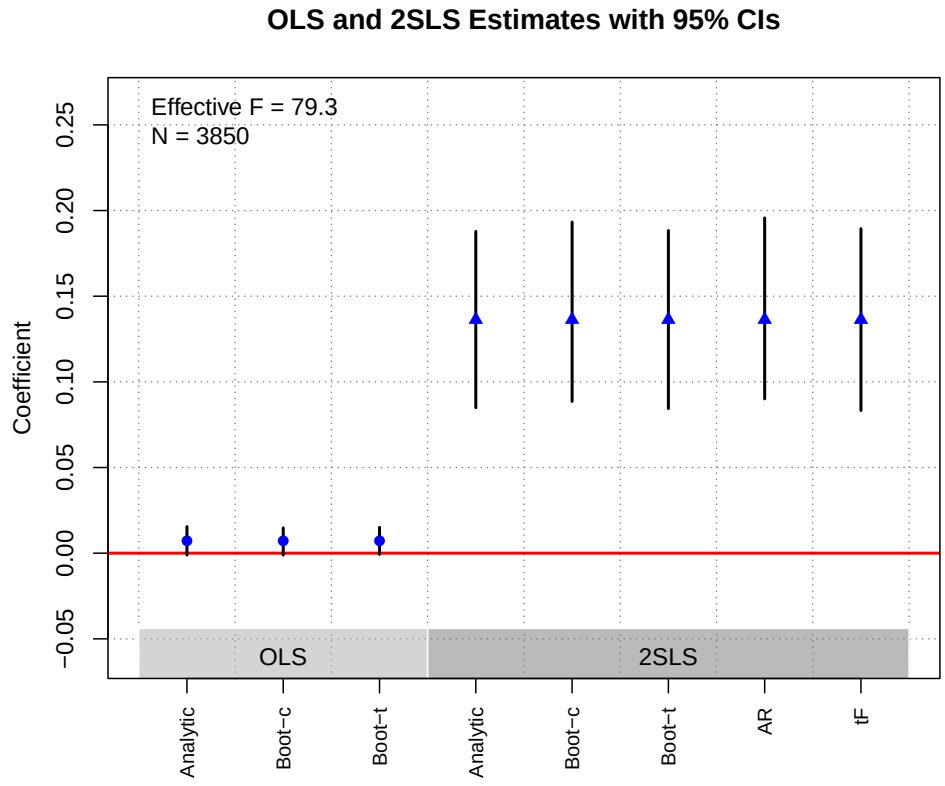
Replication Summary	
Unit of analysis	city
Treatment	equiTable inheritance customs
Instrument	mean elevation
Outcome	female representation
Model	Table3(1)

```
df<-readRDS("./rawdata/ajps_Hager_etal_2019.rds")
D <-"fair_dic"
Y <- "gem_women_share"
Z <- "elev_mean"
controls <- c("lon", "lat", "childlabor_mean_1898",
              "support_expenses_total_capita","gem_council",
              "gem_pop_density","pop_tot")
cl<- NULL
FE<- c("state2","law_cat2")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))

## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
```

```
## Analytic 0.0072 0.0042 1.7010 -0.0011   0.0155  0.0889
## Boot.c   0.0072 0.0042 1.7136 -0.0011   0.0148  0.0900
## Boot.t   0.0072 0.0042 1.7010 -0.0007   0.0151  0.0810
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1363 0.0262 5.1939  0.0849   0.1878       0
## Boot.c   0.1363 0.0273 5.0006  0.0886   0.1933       0
## Boot.t   0.1363 0.0262 5.1939  0.0844   0.1883       0
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   38.9099    1.0000 3848.0000    0.0000
##
## $AR$ci.print
## [1] "[0.0901, 0.1957]"
##
## $AR$ci
## [1] 0.0901 0.1957
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    122.1930     79.2985          NA     76.7872     79.2985
##
## $rho
## [1] 0.1758
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 79.2985  2.0200  0.1363  0.0262  5.1939  0.0833  0.1894  0.0000
##
## $est_rf
##             Coef SE p.value SE.b CI.b2.5% CI.b97.5% p.value.b
## elev_mean -1e-04  0       0    0   -2e-04    -1e-04         0
##
## $est_fs
##             Coef    SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## elev_mean -9e-04 1e-04       0 1e-04  -0.0011    -7e-04         0
##
## $p_iv
## [1] 1
##
```

```
## $N
## [1] 3850
##
## $N_cl
## NULL
##
## $df
## [1] 3831
##
## $nvalues
##      gem_women_share fair_dic elev_mean
## [1,]             230        2      3850
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Hager and Hilbig (2019) b

Replication Summary	
Unit of analysis	city
Treatment	equiTable inheritance customs
Instrument	distance to rivers

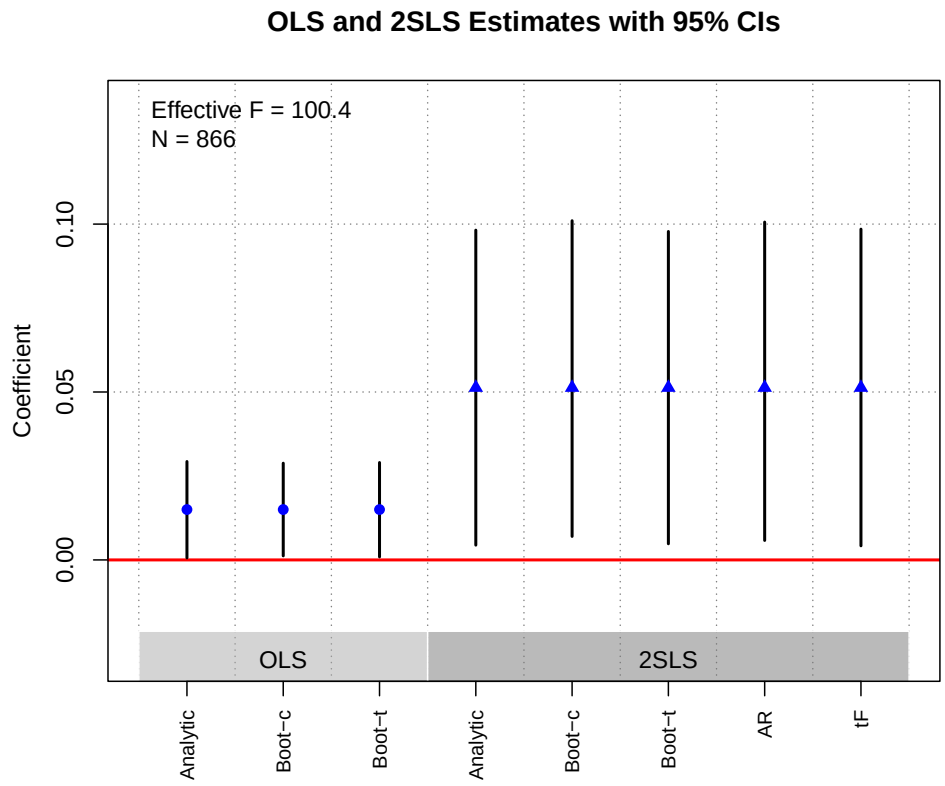
Replication Summary	
Outcome	female representation
Model	Table3(2)

```
df<-readRDS("./rawdata/ajps_Hager_etal_2019.rds")
D <-"fair_dic"
Y <- "gem_women_share"
Z <-"river_dist_min"
controls <- c("lon", "lat", "childlabor_mean_1898",
              "support_expenses_total_capita","gem_council",
              "gem_pop_density","pop_tot")
cl<- NULL
FE<- c("law_cat2")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.015 0.0073 2.0379  0.0006   0.0293  0.0416
## Boot.c   0.015 0.0072 2.0791  0.0012   0.0288  0.0360
## Boot.t   0.015 0.0073 2.0379  0.0009   0.0290  0.0360
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0513 0.0239 2.1441  0.0044   0.0982   0.032
## Boot.c   0.0513 0.0244 2.1071  0.0070   0.1010   0.030
## Boot.t   0.0513 0.0239 2.1441  0.0048   0.0978   0.034
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   4.8070   1.0000 864.0000   0.0286
##
## $AR$ci.print
## [1] "[0.0058, 0.1006]"
##
## $AR$ci
## [1] 0.0058 0.1006
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
```

```
##     99.1676    100.3609          NA     95.5934    100.3609
##
## $rho
## [1] 0.3222
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 100.3609   1.9700   0.0513   0.0239   2.1441   0.0042   0.0985   0.0329
##
## $est_rf
##                   Coef    SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## river_dist_min -5e-04 2e-04  0.0291 2e-04   -0.001    -1e-04      0.03
##
## $est_fs
##                    Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## river_dist_min -0.0105 0.001       0 0.0011  -0.0125   -0.0083         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 866
##
## $N_cl
## NULL
##
## $df
## [1] 856
##
## $nvalues
##      gem_women_share fair_dic river_dist_min
## [1,]             110        2            866
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Hong et al. (2022)

Replication Summary	
Unit of analysis	township
Treatment	NVM subsidy per voter
Instrument	Terrain elevation slope
Outcome	Park's vote share in 2012
Model	Table3(3)

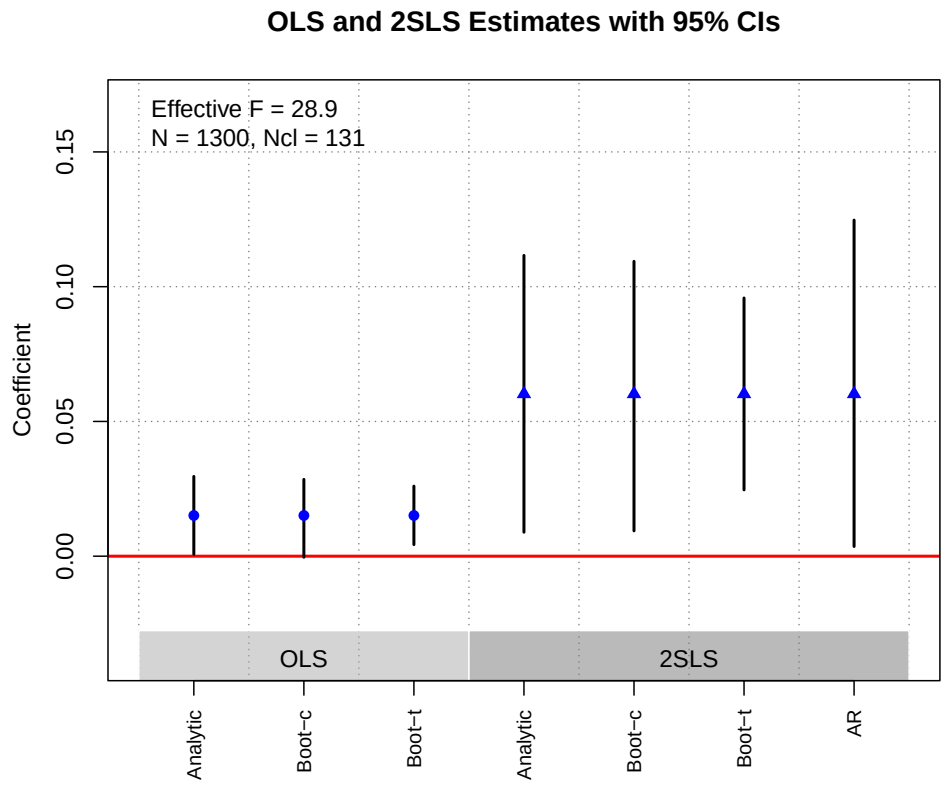
```
df <-readRDS("./rawdata/ajps_Hong_etal_2022.rds")
df<-as.data.frame(df)
D<-"total_Lamount_1974_1978_perelect"
Y <- "E18ConsSh"
Z <- c("te_median1", "ts_median1")
controls <- c("area_1970","demo_female_share_1966","demo_age_15plus_1966",
              "demo_illiterate_1966","demo_pop_ch_1970_1966","E17ConsSh","eup")
cl <- "CTY_cd"
FE <- "CTY_cd"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
```

```
## Analytic 0.0151 0.0074 2.0600  0.0007   0.0296  0.0394
## Boot.c   0.0151 0.0073 2.0641 -0.0004   0.0285  0.0560
## Boot.t   0.0151 0.0074 2.0600  0.0043   0.0260  0.0090
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0602 0.0262 2.2980  0.0089   0.1116  0.0216
## Boot.c   0.0602 0.0257 2.3425  0.0094   0.1094  0.0220
## Boot.t   0.0602 0.0262 2.2980  0.0246   0.0958  0.0070
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    3.2888    2.0000 1297.0000    0.0376
##
## $AR$ci.print
## [1] "[0.0036, 0.1247]"
##
## $AR$ci
## [1] 0.0036 0.1247
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     34.7064     29.0832     28.2296     28.1134     28.8604
##
## $rho
## [1] 0.2376
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## te_median1 -0.0036 0.0233  0.8774 0.0235  -0.0518    0.0412     0.840
## ts_median1  0.0020 0.0010  0.0509 0.0010   0.0002    0.0039     0.028
##
## $est_fs
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## te_median1 0.3276 0.1352  0.0154 0.1444   0.0443    0.6181     0.016
## ts_median1 0.0171 0.0061  0.0050 0.0062   0.0055    0.0296     0.002
##
## $p_iv
## [1] 2
##
## $N
## [1] 1300
```

```
##
## $N_cl
## [1] 131
##
## $df
## [1] 130
##
## $nvalues
##      E18ConsSh total_Lamount_1974_1978_perelect te_median1 ts_median1
## [1,]      1292                               1285       1300       1232
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Kim (2019)

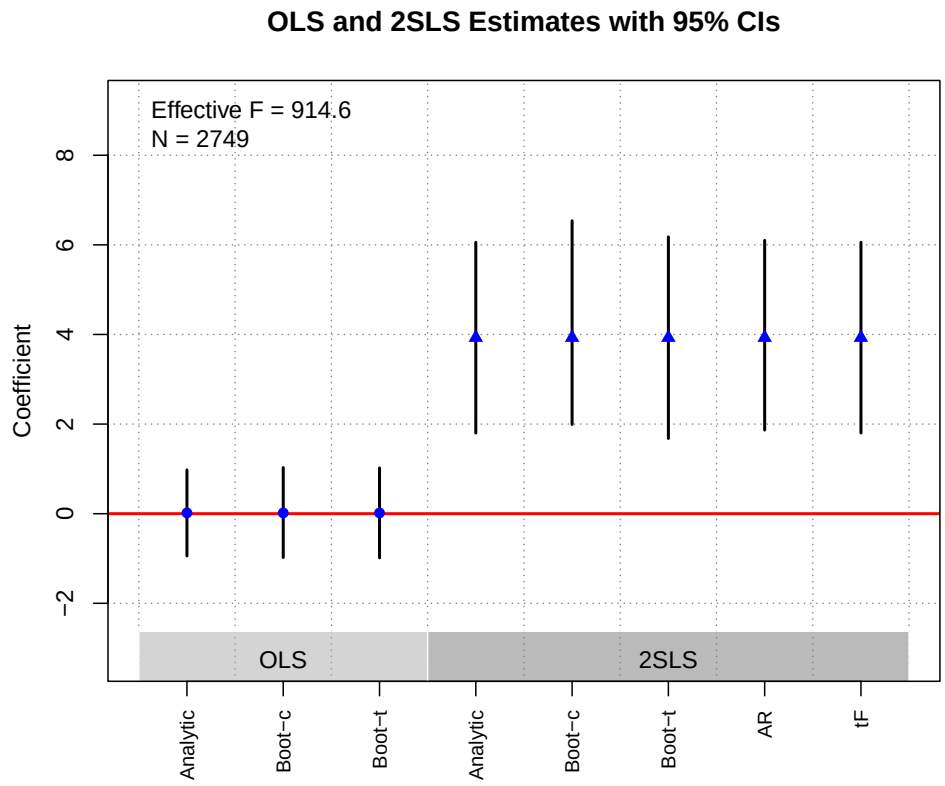
Replication Summary	
Unit of analysis	municipality*year
Treatment	Democratic institutions
Instrument	population threshold
Outcome	women political engagement
Model	Table2(1)

```r
df<- readRDS("./rawdata/ajps_Kim_2019.rds")
D <-"direct"
Y <- "wm_turnout"
Z <-  "new"
controls <- c("left", "wm_voters", "enep")
cl <- NULL
FE <- "year"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.017 0.4897 0.0346 -0.9429   0.9768  0.9724
## Boot.c   0.017 0.5039 0.0337 -0.9780   1.0297  0.8540
## Boot.t   0.017 0.4897 0.0346 -0.9866   1.0205  0.9630
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 3.9287 1.0855 3.6192  1.8011   6.0563   3e-04
## Boot.c   3.9287 1.1465 3.4267  1.9919   6.5383   0e+00
## Boot.t   3.9287 1.0855 3.6192  1.6799   6.1774   0e+00
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   14.3152    1.0000 2747.0000    0.0002
##
## $AR$ci.print
## [1] "[1.8662, 6.0997]"
##
## $AR$ci
## [1] 1.8662 6.0997
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1007.3382    914.6461          NA    955.6475    914.6461
##
## $rho
## [1] 0.5186
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
```

```
## 914.6461   1.9600   3.9287   1.0855   3.6192   1.8011   6.0563   0.0003
##
## $est_rf
##      Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## new 1.949 0.516   2e-04 0.5387   0.9879    3.0959         0
##
## $est_fs
##       Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## new 0.4961 0.0164       0 0.016   0.4585     0.522         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 2749
##
## $N_cl
## NULL
##
## $df
## [1] 2738
##
## $nvalues
##      wm_turnout direct new
## [1,]       2606      2   2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Kocher et al. (2011)

Replication Summary	
Unit of analysis	hamlet (smallest population unit)
Treatment	aerial bombing
Instrument	past insurgent control
Outcome	changes in local control
Model	Table5(5B)

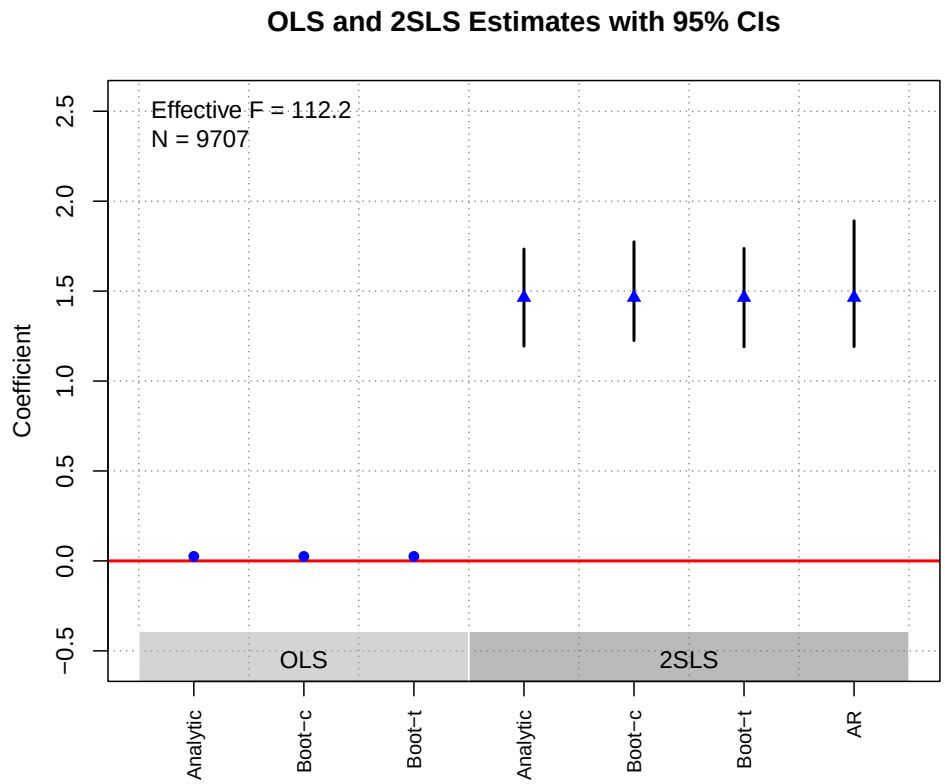
```
df<-readRDS("./rawdata/ajps_Kocher_etal_2011.rds")
D <-"bombed_969"
Y<- "mod2a_1adec"
Z <- c("mod2a_1ajul", "mod2a_1aaug")
controls <- c("mod2a_1asep", "score", "ln_dist", "std", "lnhpop")
cl<- NULL
FE <-NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0249 0.0042 5.8926   0.0166    0.0332       0
## Boot.c   0.0249 0.0043 5.7687   0.0178    0.0349       0
```

```
## Boot.t   0.0249 0.0042 5.8926  0.0163   0.0335       0
##
## $est_2sls
##           Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic 1.464 0.1377 10.6345  1.1942   1.7339       0
## Boot.c   1.464 0.1382 10.5902  1.2253   1.7743       0
## Boot.t   1.464 0.1377 10.6345  1.1906   1.7374       0
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##  681.5407    2.0000 9704.0000    0.0000
##
## $AR$ci.print
## [1] "[1.1914, 1.8908]"
##
## $AR$ci
## [1] 1.1914 1.8908
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     44.1703     59.8861          NA     60.8767    112.1923
##
## $rho
## [1] 0.095
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## mod2a_1ajul 0.2562 0.0123       0 0.0118   0.2330    0.2779         0
## mod2a_1aaug 0.1830 0.0134       0 0.0131   0.1577    0.2089         0
##
## $est_fs
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## mod2a_1ajul 0.1681 0.0284       0 0.0283   0.1126    0.2243         0
## mod2a_1aaug 0.1328 0.0311       0 0.0313   0.0752    0.1965         0
##
## $p_iv
## [1] 2
##
## $N
## [1] 9707
##
## $N_cl
```

```
## NULL
##
## $df
## [1] 9700
##
## $nvalues
##      mod2a_1adec bombed_969 mod2a_1ajul mod2a_1aaug
## [1,]           5         35           5           5
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Lelkes et al. (2017)

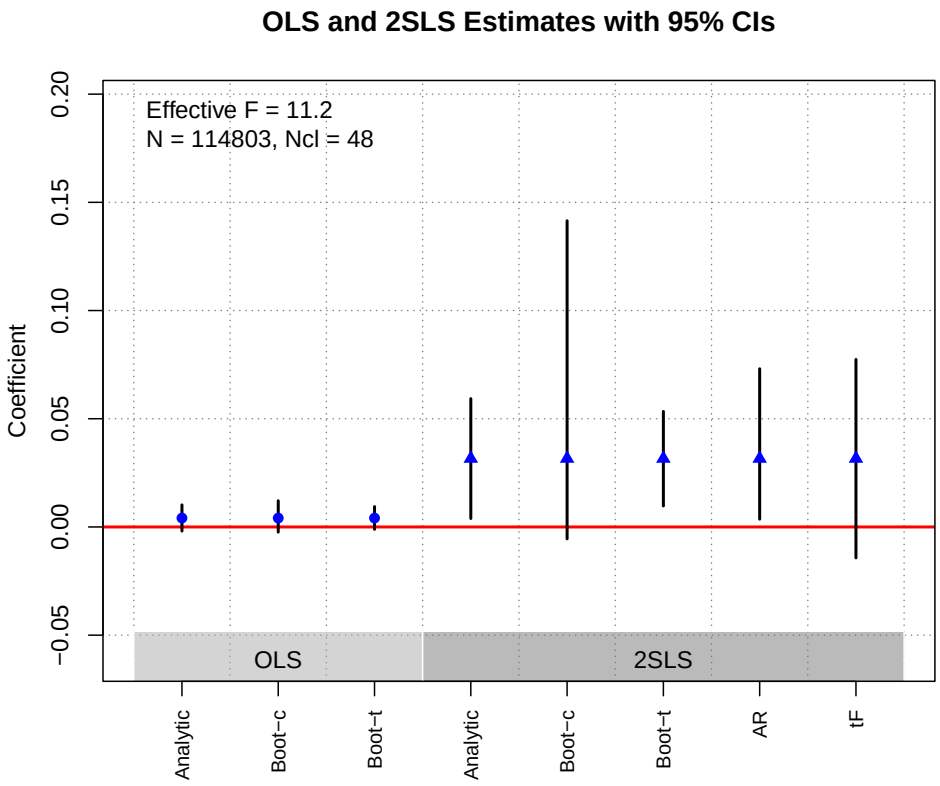
Replication Summary	
Unit of analysis	state*year
Treatment	number of broadband Internet providers
Instrument	state-level ROW index
Outcome	affective polarization
Model	Table1(3)

```r
df<-readRDS("./rawdata/ajps_Lelkes_2017.rds")
D <-"D"
Y <- "outcome"
Z <- "Total_log"
controls <- c("region", "percent_black", "percent_white",
              "percent_male", "lowed", "unemploymentrate",
              "density", "HHINC_log")
cl<- "state"
FE <- "year"
weights=NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0041 0.0031 1.3481 -0.0019   0.0102  0.1776
## Boot.c   0.0041 0.0037 1.1060 -0.0024   0.0121  0.2160
## Boot.t   0.0041 0.0031 1.3481 -0.0011   0.0094  0.1250
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0316 0.0141 2.2364  0.0039   0.0593  0.0253
## Boot.c   0.0316 0.1224 0.2580 -0.0055   0.1415  0.0700
## Boot.t   0.0316 0.0141 2.2364  0.0097   0.0534  0.0060
##
## $AR
## $AR$Fstat
##           F         df1         df2           p
##      4.6542      1.0000 114801.0000      0.0310
##
## $AR$ci.print
## [1] "[0.0036, 0.0731]"
##
## $AR$ci
## [1] 0.0036 0.0731
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   9525.8467   8161.7346     11.1632      7.4361     11.1632
##
## $rho
## [1] 0.2768
##
```

```
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 11.1632  3.2489  0.0316  0.0141  2.2364 -0.0143  0.0774  0.1773
##
## $est_rf
##             Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## Total_log 0.0033 0.0015   0.031 0.002   -1e-04    0.0077     0.056
##
## $est_fs
##             Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Total_log 0.1042 0.0312   8e-04 0.0382    0.012    0.1641     0.014
##
## $p_iv
## [1] 1
##
## $N
## [1] 114803
##
## $N_cl
## [1] 48
##
## $df
## [1] 114790
##
## $nvalues
##      outcome    D Total_log
## [1,]    2423 1438        43
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



López-Moctezuma et al. (2020)

Replication Summary	
Unit of analysis	individual
Treatment	town-hall meetings
Instrument	assignment to treatment
Outcome	voting behavior
Model	figure3(2)

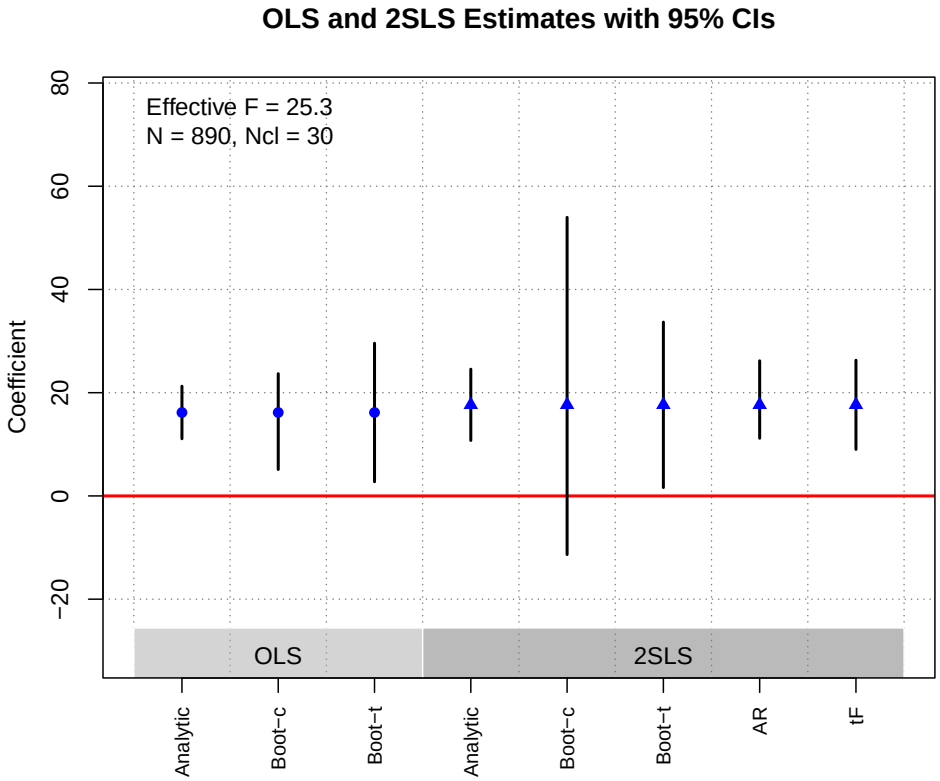
```
df <-readRDS("./rawdata/ajps_Moctezuma_etal_2020.rds")
df<-as.data.frame(df)
D<-"treatment"
Y <- "vote"
Z <- "assignment"
  controls <- NULL
cl <- "barangay"
FE <- "city"
weights<-"weight.att"
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 16.1643 2.5956 6.2275 11.0769  21.2517  0.0000
```

```
## Boot.c   16.1643 4.8128 3.3586  5.1162  23.6906  0.0040
## Boot.t   16.1643 2.5956 6.2275  2.7462  29.5823  0.0391
##
## $est_2sls
##             Coef      SE      t  CI 2.5% CI 97.5% p.value
## Analytic 17.6531  3.5231 5.0106  10.7478  24.5584  0.0000
## Boot.c   17.6531 85.4309 0.2066 -11.3544  53.9644  0.0701
## Boot.t   17.6531  3.5231 5.0106   1.6254  33.6807  0.0451
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  18.6344   1.0000 888.0000   0.0000
##
## $AR$ci.print
## [1] "[11.1705, 26.1790]"
##
## $AR$ci
## [1] 11.1705 26.1790
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1663.9064    521.4034     25.2694      5.6018     25.2694
##
## $rho
## [1] 0.8089
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 25.2694  2.4519 17.6531  3.5231  5.0106  9.0146 26.2915  0.0001
##
## $est_rf
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## assignment 13.2179 3.0776       0 5.9251   0.8983   24.6291    0.0321
##
## $est_fs
##              Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## assignment 0.7488 0.149       0 0.3164   -0.021         1    0.0621
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 890
##
## $N_cl
## [1] 30
##
## $df
## [1] 879
##
## $nvalues
##      vote treatment assignment
## [1,]    2         2          2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



McClendon (2014)

Replication Summary	
Unit of analysis	individual
Treatment	reading social esteem promising email
Instrument	assignment to treatment
Outcome	participation in LGBTQ events

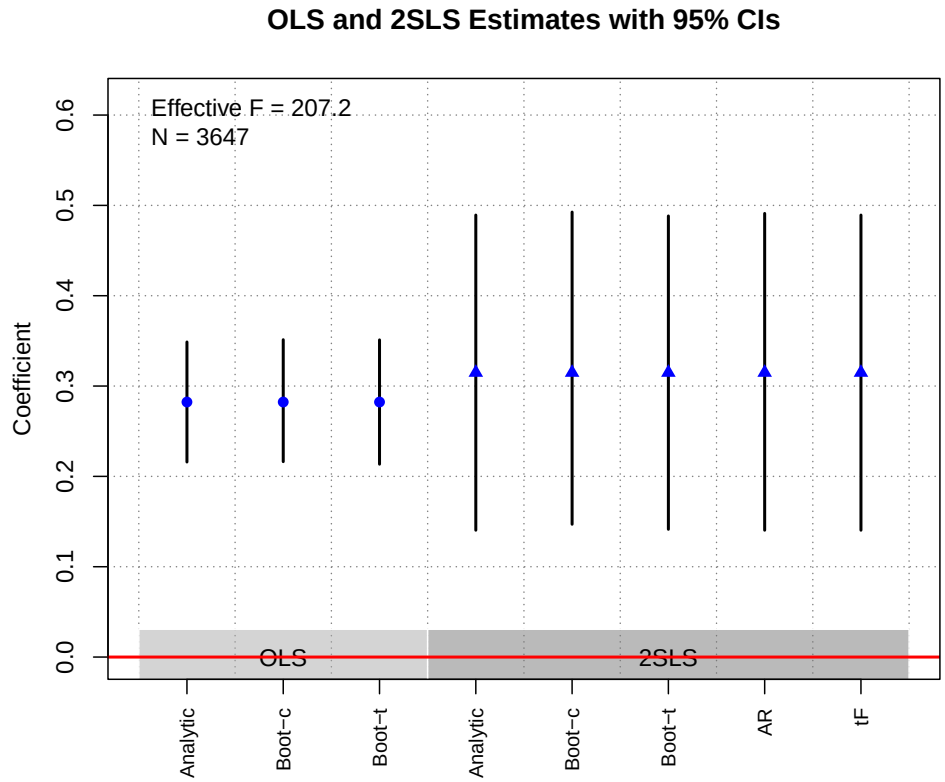
Replication Summary	
Model	Table2(1)

```
df <- readRDS("./rawdata/ajps_McClendon_2014.rds")
D<-"openedesteem"
Y<- "intended"
Z <- "esteem"
controls <- NULL
cl<- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2823 0.0339 8.3291  0.2159   0.3488       0
## Boot.c   0.2823 0.0347 8.1447  0.2163   0.3513       0
## Boot.t   0.2823 0.0339 8.3291  0.2135   0.3511       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.3149 0.0890 3.5376  0.1404   0.4893   4e-04
## Boot.c   0.3149 0.0896 3.5126  0.1470   0.4926   0e+00
## Boot.t   0.3149 0.0890 3.5376  0.1414   0.4883   4e-03
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   11.9462    1.0000 3645.0000    0.0006
##
## $AR$ci.print
## [1] "[0.1404, 0.4911]"
##
## $AR$ci
## [1] 0.1404 0.4911
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    103.7604    207.1798          NA    204.8498    207.1798
##
## $rho
```

```
## [1] 0.1664
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 207.1798   1.9600   0.3149   0.0890   3.5376   0.1404   0.4893   0.0004
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## esteem 0.0247 0.0072   5e-04 0.0071   0.0105    0.0388         0
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## esteem 0.0786 0.0055       0 0.0055   0.0683    0.0894         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 3647
##
## $N_cl
## NULL
##
## $df
## [1] 3645
##
## $nvalues
##      intended openedesteem esteem
## [1,]        2            2      2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Rueda (2017)

Replication Summary	
Unit of analysis	city
Treatment	actual polling place size.
Instrument	the size of the polling station
Outcome	citizens' reports of electoral manipulation
Model	Table5(1)

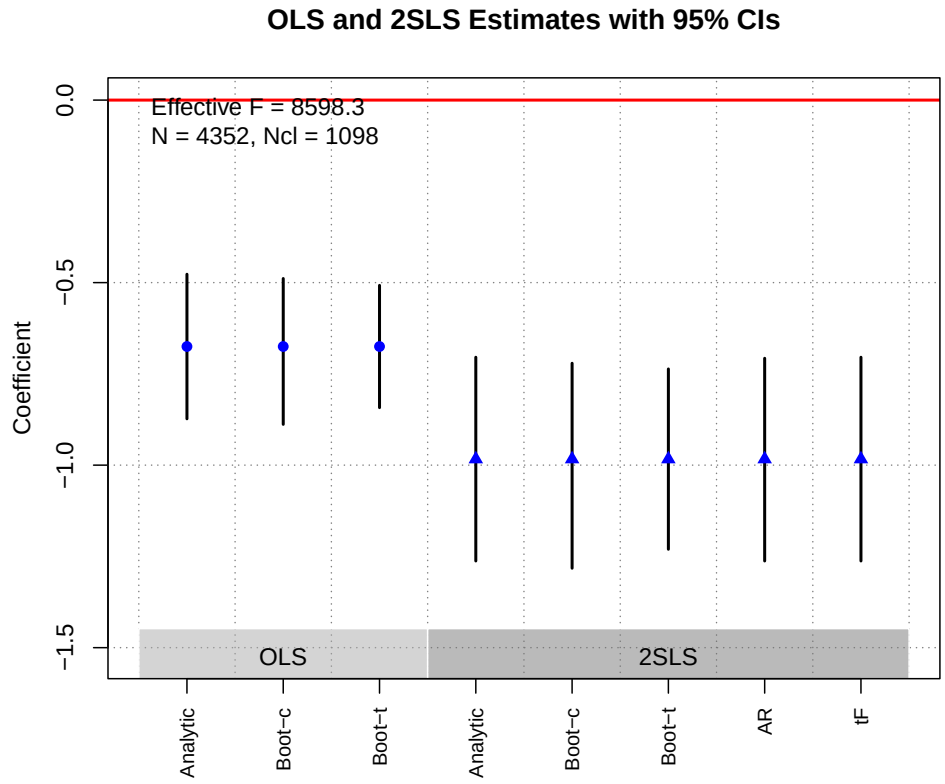
```
df <- readRDS("./rawdata/ajps_Rueda_2017.rds")
D <-"lm_pob_mesa"
Y <- "e_vote_buying"
Z <- "lz_pob_mesa_f"
controls <- c("lpopulation", "lpotencial")
cl <- "muni_code"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.675 0.1011 -6.6803 -0.8731  -0.4770       0
## Boot.c   -0.675 0.1026 -6.5778 -0.8883  -0.4888       0
```

```
## Boot.t   -0.675 0.1011 -6.6803 -0.8425  -0.5075       0
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.9835 0.1424 -6.9071 -1.2626  -0.7044       0
## Boot.c   -0.9835 0.1481 -6.6425 -1.2824  -0.7209       0
## Boot.t   -0.9835 0.1424 -6.9071 -1.2305  -0.7365       0
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   48.4768    1.0000 4350.0000    0.0000
##
## $AR$ci.print
## [1] "[-1.2626, -0.7073]"
##
## $AR$ci
## [1] -1.2626 -0.7073
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    3106.387    3108.591    8598.326    8520.475    8598.326
##
## $rho
## [1] 0.6455
##
## $tF
##         F        cF      Coef        SE         t    CI2.5%   CI97.5%   p-value
## 8598.3264    1.9600   -0.9835    0.1424   -6.9071   -1.2626   -0.7044    0.0000
##
## $est_rf
##                   Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lz_pob_mesa_f -0.7826 0.1124       0 0.1168   -1.024   -0.5756         0
##
## $est_fs
##                  Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lz_pob_mesa_f 0.7957 0.0086       0 0.0086   0.7779    0.8107         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 4352
```

```
##
## $N_cl
## [1] 1098
##
## $df
## [1] 4348
##
## $nvalues
##      e_vote_buying lm_pob_mesa lz_pob_mesa_f
## [1,]            16        4118          3860
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Sexton et al. (2019)

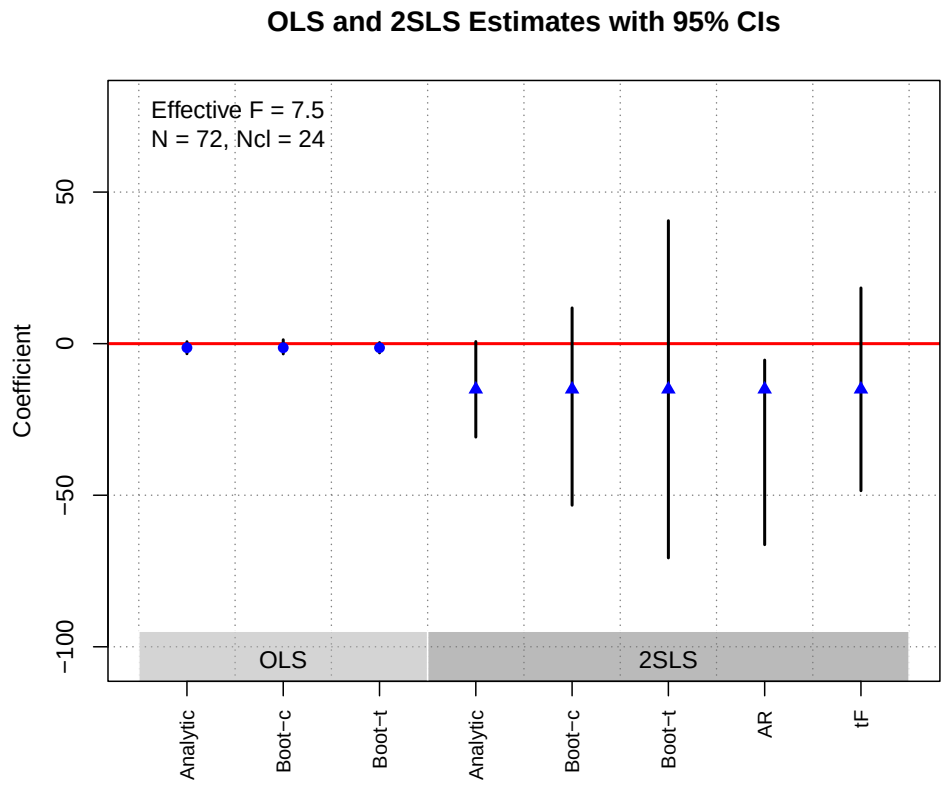
Replication Summary	
Unit of analysis	department*year
Treatment	health budget
Instrument	soldier fatalities
Outcome	health social service
Model	Table3(1)

```r
df <-readRDS("./rawdata/ajps_Sexton_etal_2019.rds")
D<-"socialservice_b"
Y <- "Finfant_mortality"
Z <- "Lgk_budget"
controls <- c("Lgk_prebudget", "ln_pbi_pc", "execution_nohealth")
cl <- "deptcode"
FE <- c("year","deptcode")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.3472 1.0152 -1.3270 -3.3371   0.6426  0.1845
## Boot.c   -1.3472 1.1374 -1.1845 -3.3914   1.2813  0.2589
## Boot.t   -1.3472 1.0152 -1.3270 -3.0501   0.3556  0.0948
##
## $est_2sls
##              Coef      SE       t  CI 2.5% CI 97.5% p.value
## Analytic -15.0645  8.0376 -1.8743 -30.8181   0.6892  0.0609
## Boot.c   -15.0645 28.0180 -0.5377 -53.3001  11.7851  0.2263
## Boot.t   -15.0645  8.0376 -1.8743 -70.6769  40.5480  0.1855
##
## $AR
## $AR$Fstat
##       F     df1     df2       p
## 18.0386  1.0000 70.0000  0.0001
##
## $AR$ci.print
## [1] "[-66.3101, -5.4194]"
##
## $AR$ci
## [1] -66.3101  -5.4194
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      1.0172      2.5692      7.4923      2.7847      7.4923
##
## $rho
## [1] 0.1538
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
```

```
##   7.4923   4.1607 -15.0645   8.0376  -1.8743 -48.5065  18.3775   0.3773
##
## $est_rf
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Lgk_budget 4.3552 1.0481       0 2.1668  -1.5721    6.0768    0.1998
##
## $est_fs
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Lgk_budget -0.2891 0.1056  0.0062 0.1732   -0.698   -0.0156    0.0469
##
## $p_iv
## [1] 1
##
## $N
## [1] 72
##
## $N_cl
## [1] 24
##
## $df
## [1] 23
##
## $nvalues
##      Finfant_mortality socialservice_b Lgk_budget
## [1,]                39              72          6
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Spenkuch and Tillmann (2018)

Replication Summary	
Unit of analysis	electoral district
Treatment	religion of voters living in the same areas more than three and a half centuries later
Instrument	individual princes' decisions concerning whether to adopt Protestantism
Outcome	Nazi vote share
Model	Table2(B1)

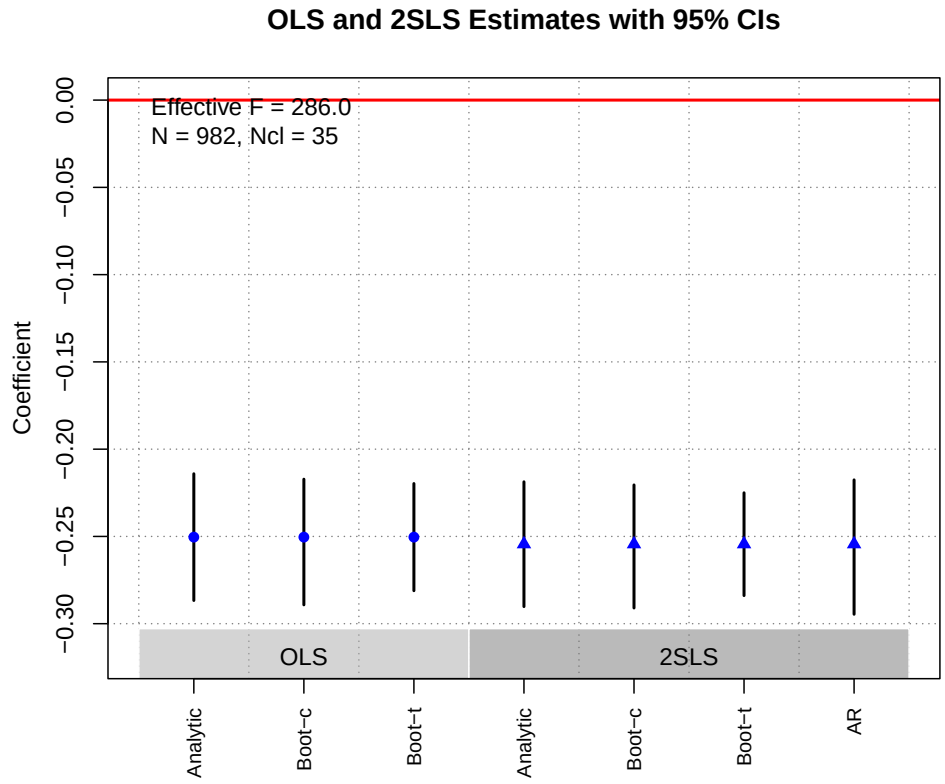
```
df <-readRDS("./rawdata/ajps_Spenkuch_etal_2018.rds")
D <-"r_1925C_kath"
Y <- "r_NSDAP_NOV1932_p"
Z <- c("r_kath1624", "r_gem1624")
controls <- c("r_1925C_juden", "r_1925C_others",
              "r_M1925C_juden","r_M1925C_others")
cl <- 'WKNR'
FE <- NULL
weights="r_wahlberechtigte_NOV1932"
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE        t CI 2.5% CI 97.5% p.value
```

```
## Analytic -0.2504 0.0185 -13.5112 -0.2867  -0.2141       0
## Boot.c   -0.2504 0.0188 -13.2921 -0.2892  -0.2172       0
## Boot.t   -0.2504 0.0185 -13.5112 -0.2811  -0.2197       0
##
## $est_2sls
##             Coef     SE        t CI 2.5% CI 97.5% p.value
## Analytic -0.2544 0.0182 -13.9439 -0.2902  -0.2187       0
## Boot.c   -0.2544 0.0181 -14.0506 -0.2910  -0.2205       0
## Boot.t   -0.2544 0.0182 -13.9439 -0.2839  -0.2250       0
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  89.3425   2.0000 979.0000   0.0000
##
## $AR$ci.print
## [1] "[-0.2946, -0.2176]"
##
## $AR$ci
## [1] -0.2946 -0.2176
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1215.3547    726.7058    212.7390    221.4961    286.0263
##
## $rho
## [1] 0.8446
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## r_kath1624 -17.2028 1.2929       0 1.3039 -19.7471  -14.7375         0
## r_gem1624   -9.1477 1.5382       0 1.6096 -12.9046   -6.4089         0
##
## $est_fs
##               Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## r_kath1624 66.6657 3.232       0 3.1676  59.8434   72.5125         0
## r_gem1624  39.2697 4.320       0 4.5811  31.0940   50.0754         0
##
## $p_iv
## [1] 2
##
## $N
## [1] 982
```

```
##
## $N_cl
## [1] 35
##
## $df
## [1] 978
##
## $nvalues
##      r_NSDAP_NOV1932_p r_1925C_kath r_kath1624 r_gem1624
## [1,]               982          977          2         2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Stokes (2016)

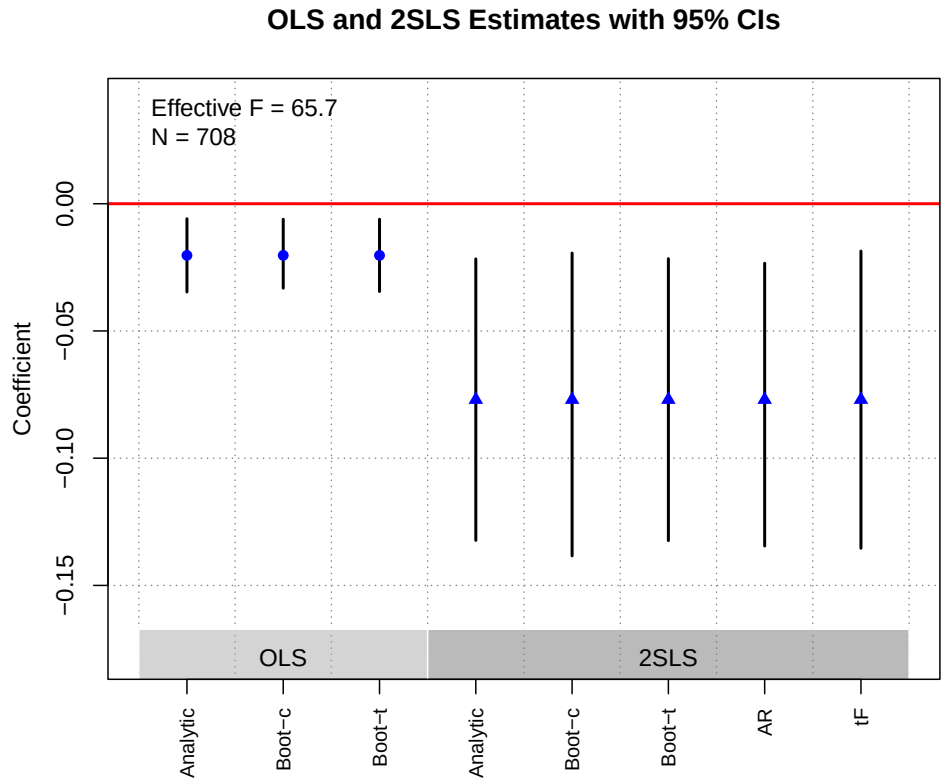
Replication Summary	
Unit of analysis	precinct
Treatment	turbine location
Instrument	wind speed
Outcome	vote turnout
Model	Table2(2)

```r
df<-readRDS("./rawdata/ajps_Stokes_2016.rds")
D <-"prop_3km"
Y <- "chng_lib"
Z <- "avg_pwr_log"
controls <- c("mindistlake", "mindistlake_sq", "longitude",
              "long_sq", "latitude", "lat_sq", "long_lat")
cl <- NULL
FE <- "ed_id"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0203 0.0073 -2.7638 -0.0347  -0.0059  0.0057
## Boot.c   -0.0203 0.0073 -2.7678 -0.0332  -0.0061  0.0100
## Boot.t   -0.0203 0.0073 -2.7638 -0.0345  -0.0061  0.0070
##
## $est_2sls
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.077 0.0282 -2.7289 -0.1323  -0.0217  0.0064
## Boot.c   -0.077 0.0305 -2.5217 -0.1384  -0.0194  0.0080
## Boot.t   -0.077 0.0282 -2.7289 -0.1324  -0.0216  0.0050
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   7.6582   1.0000 706.0000   0.0058
##
## $AR$ci.print
## [1] "[-0.1345, -0.0234]"
##
## $AR$ci
## [1] -0.1345 -0.0234
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     67.9032     65.7306          NA     61.7780     65.7306
##
## $rho
## [1] 0.3025
##
## $tF
```

```
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 65.7306  2.0693 -0.0770  0.0282 -2.7289 -0.1354 -0.0186  0.0097
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## avg_pwr_log -0.0585 0.0216  0.0069 0.0217  -0.1006   -0.0146     0.008
##
## $est_fs
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## avg_pwr_log 0.7602 0.0938       0 0.0967   0.5532    0.9273         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 708
##
## $N_cl
## NULL
##
## $df
## [1] 674
##
## $nvalues
##      chng_lib prop_3km avg_pwr_log
## [1,]      708        2         708
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Tajima (2013)

Replication Summary	
Unit of analysis	village and urban neighborhood
Treatment	distance to police posts (as a proxy for exposure to military intervention)
Instrument	distance to health station
Outcome	incidence of communal violence
Model	Table1(4)

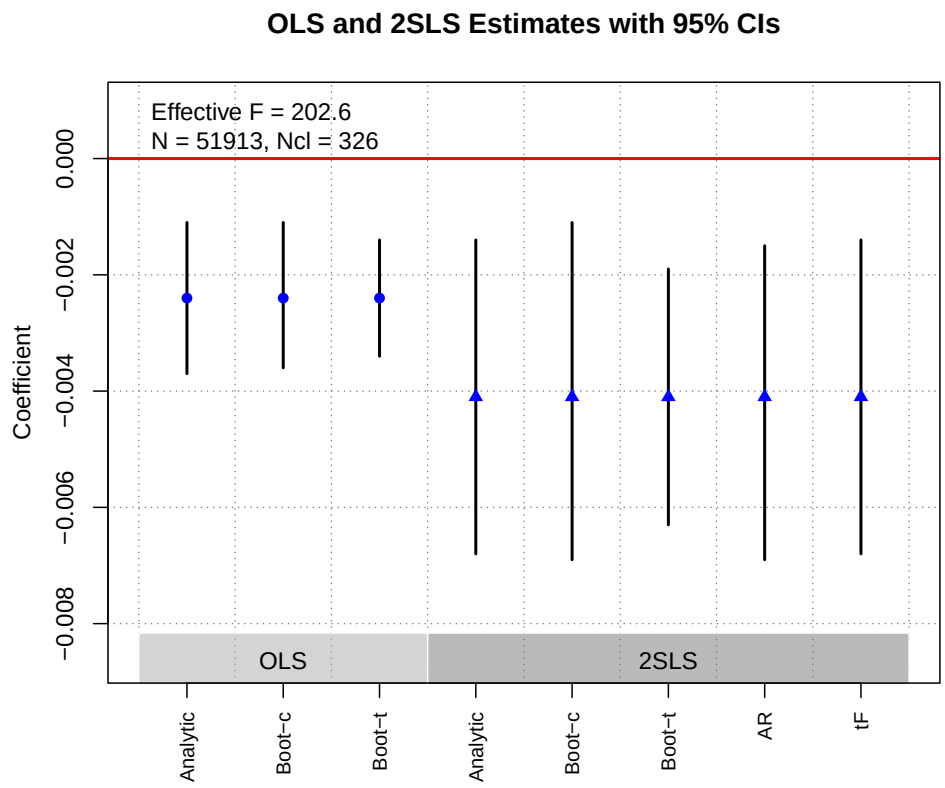
```
df<-readRDS("./rawdata/ajps_Tajima_2013.rds")
D <-"z2_distpospol"
Y <- "horiz2"
Z <- "z2_dispuskes"
controls <- c("flat", "z2_altitude","urban", "natres", "z2_logvillpop", "z2_logdensvil",
              "z2_povrateksvil", "z2_fgtksvild", "z2_covyredvil", "z2_npwperhh",
              "z2_ethfractvil","z2_ethfractsd", "z2_ethfractd", "z2_relfractvil",
              "z2_relfractsd", "z2_relfractd", "z2_ethclustsd", "z2_ethclustvd",
              "z2_relclustsd", "z2_relclustvd", "z2_wgcovegvil", "z2_wgcovegsd",
              "z2_wgcovegd", "z2_wgcovrgvil", "z2_wgcovrgsd", "z2_wgcovrgd",
              "natdis","javanese_off_java", "islam", "split_kab03", "split_vil03")
cl <- 'kabid03'
FE <- 'prop'
weights<-"probit_touse_wts03"
```

```
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef    SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0024 6e-04 -3.7223 -0.0037  -0.0011   2e-04
## Boot.c   -0.0024 7e-04 -3.6349 -0.0036  -0.0011   0e+00
## Boot.t   -0.0024 6e-04 -3.7223 -0.0034  -0.0014   0e+00
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0041 0.0014 -3.0103 -0.0068  -0.0014  0.0026
## Boot.c   -0.0041 0.0015 -2.7409 -0.0069  -0.0011  0.0140
## Boot.t   -0.0041 0.0014 -3.0103 -0.0063  -0.0019  0.0000
##
## $AR
## $AR$Fstat
##          F        df1        df2          p
##     9.0632     1.0000 51911.0000     0.0026
##
## $AR$ci.print
## [1] "[-0.0069, -0.0015]"
##
## $AR$ci
## [1] -0.0069 -0.0015
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##  13363.7649   1529.0807    202.6374    197.8245    202.6374
##
## $rho
## [1] 0.4527
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 202.6374   1.9600  -0.0041   0.0014  -3.0103  -0.0068  -0.0014   0.0026
##
## $est_rf
##                 Coef    SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## z2_dispuskes -0.0019 6e-04  0.0026 7e-04   -0.003    -5e-04     0.014
##
## $est_fs
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
```

```
## z2_dispuskes 0.447 0.0314       0 0.0318   0.3832    0.5074         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 51913
##
## $N_cl
## [1] 326
##
## $df
## [1] 51853
##
## $nvalues
##      horiz2 z2_distpospol z2_dispuskes
## [1,]      2           101          101
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Trounstine (2016)

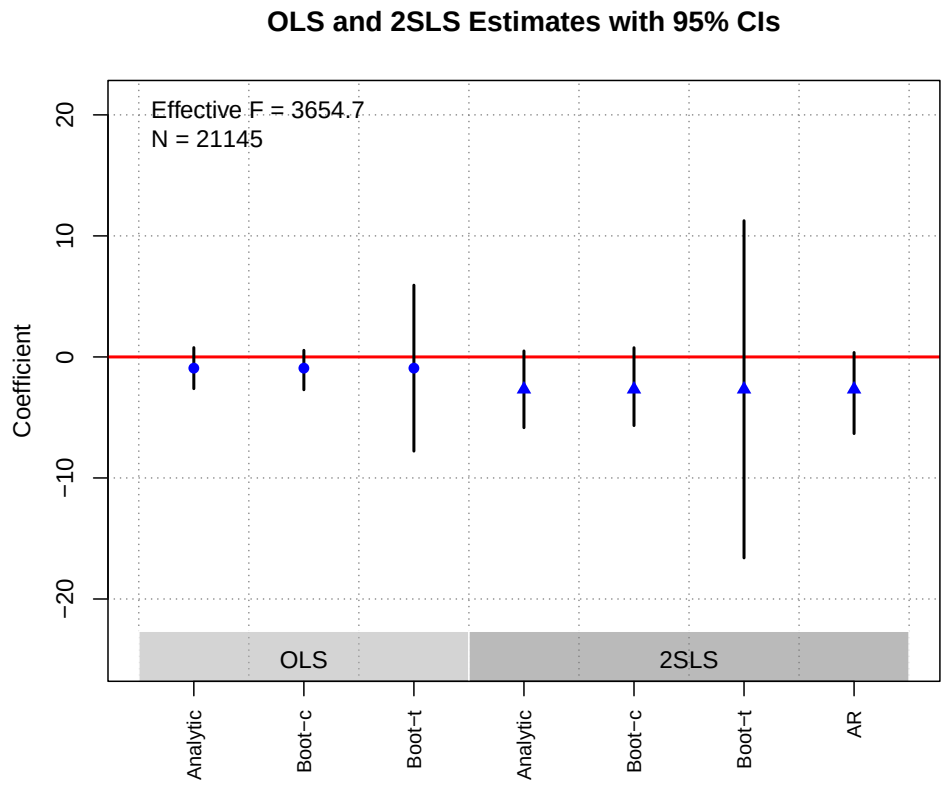
Replication Summary	
Unit of analysis	city*year
Treatment	racial segregation
Instrument	the number of waterways in a city; logged population
Outcome	direct general expenditures
Model	Table5(1)

```
df<-readRDS("./rawdata/ajps_Trounstine_2016.rds")
D <-"H_citytract_NHW_i"
Y <- "dgepercap_cpi"
Z <- c("total_rivs_all", "logpop")
controls <- c("dgepercap_cpilag","diversityinterp","pctblkpopinterp",
              "pctasianpopinterp","pctlatinopopinterp","medincinterp",
              "pctlocalgovworker_100","pctrentersinterp","pctover65",
              "pctcollegegradinterp","northeast","south","midwest",
              "y5", "y6", "y7", "y8", "y9")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.9265 0.8648 -1.0713 -2.6214   0.7685   0.284
## Boot.c   -0.9265 0.8922 -1.0384 -2.7124   0.5450   0.466
## Boot.t   -0.9265 0.8648 -1.0713 -7.7805   5.9276   0.492
##
## $est_2sls
##             Coef     SE       t  CI 2.5% CI 97.5% p.value
## Analytic -2.6757 1.6174 -1.6543  -5.8458   0.4944  0.0981
## Boot.c   -2.6757 1.7177 -1.5577  -5.6716   0.7612  0.2120
## Boot.t   -2.6757 1.6174 -1.6543 -16.6046  11.2532  0.3000
##
## $AR
## $AR$Fstat
##          F        df1        df2          p
##     2.3548     2.0000 21142.0000     0.0949
##
## $AR$ci.print
## [1] "[-6.3310, 0.3650]"
##
## $AR$ci
## [1] -6.331  0.365
##
## $AR$bounded
```

```
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    3883.651    2506.495          NA    2513.902    3654.705
##
## $rho
## [1] 0.5185
##
## $est_rf
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## total_rivs_all -0.0081 0.0229  0.7217 0.0241  -0.0602    0.0269     0.824
## logpop         -0.0855 0.0407  0.0355 0.0432  -0.1631    0.0098     0.108
##
## $est_fs
##                   Coef    SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## total_rivs_all 0.0054 3e-04       0 3e-04   0.0048    0.0060         0
## logpop         0.0291 5e-04       0 5e-04   0.0281    0.0302         0
##
## $p_iv
## [1] 2
##
## $N
## [1] 21145
##
## $N_cl
## NULL
##
## $df
## [1] 21125
##
## $nvalues
##      dgepercap_cpi H_citytract_NHW_i total_rivs_all logpop
## [1,]         21129             15395             22  16223
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Vernby (2013)

Replication Summary	
Unit of analysis	municipality*term
Treatment	share of noncitizens in the electorate
Instrument	immigration Inflow 1940–1950; Immigration Inflow 1960–1967
Outcome	municipal education and social spending
Model	Table3(2)

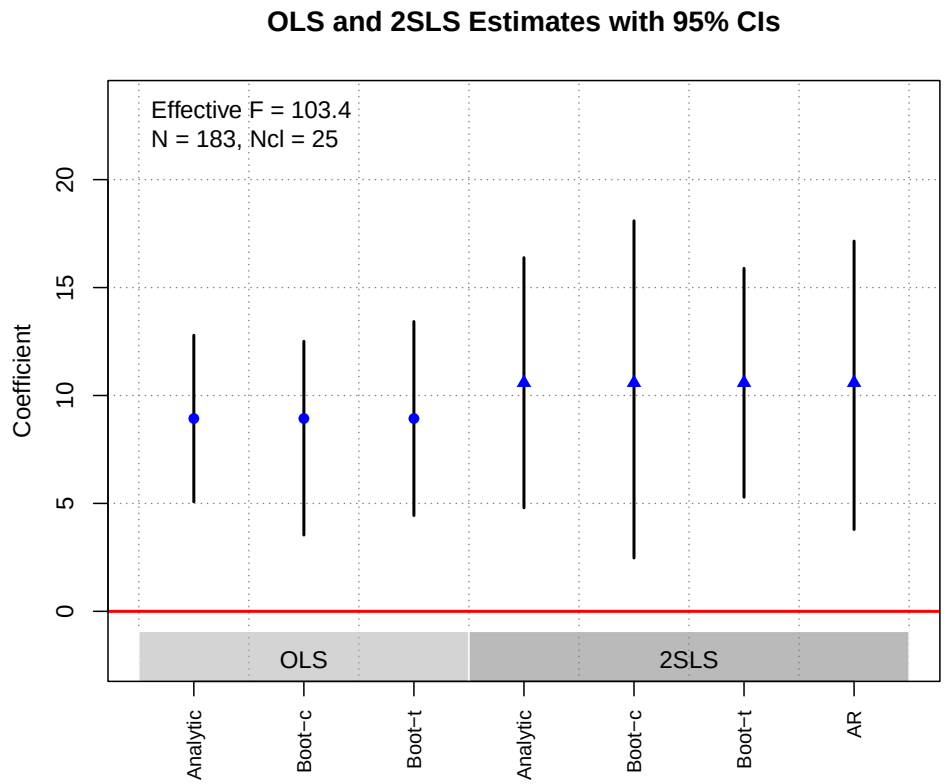
```
df<-readRDS("./rawdata/ajps_Vernby_2013.rds")
D <-"noncitvotsh"
Y <- "Y"
Z <- c("inv1950", "inv1967")
controls <- c("Taxbase2", "L_Taxbase2", "manu", "L_manu", "pop", "L_pop")
cl <- "lan"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 8.9328 1.9684 4.5382  5.0748  12.7908   0.000
## Boot.c   8.9328 2.3503 3.8006  3.5352  12.5119   0.000
```

```
## Boot.t   8.9328 1.9684 4.5382  4.4406  13.4251   0.002
##
## $est_2sls
##             Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 10.5903 2.9560 3.5827  4.7965  16.3840  0.0003
## Boot.c   10.5903 4.1088 2.5775  2.4722  18.0923  0.0240
## Boot.t   10.5903 2.9560 3.5827  5.2882  15.8924  0.0010
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   5.7276   2.0000 180.0000   0.0039
##
## $AR$ci.print
## [1] "[3.7915, 17.1525]"
##
## $AR$ci
## [1]  3.7915 17.1525
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     66.2203     49.5670     79.6400     25.5803    103.3586
##
## $rho
## [1] 0.6574
##
## $est_rf
##            Coef     SE p.value    SE.b CI.b2.5% CI.b97.5% p.value.b
## inv1950  2.5029 9.0396  0.7819 12.4069 -22.7997   25.8299     0.850
## inv1967 10.0729 7.2288  0.1635  9.5940  -9.2488   26.8433     0.244
##
## $est_fs
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## inv1950 0.7234 0.3444  0.0357 0.4241  -0.1254    1.5323     0.088
## inv1967 0.4665 0.2984  0.1180 0.3394  -0.3213    0.9734     0.204
##
## $p_iv
## [1] 2
##
## $N
## [1] 183
##
## $N_cl
```

```
## [1] 25
##
## $df
## [1] 175
##
## $nvalues
##        Y noncitvotsh inv1950 inv1967
## [1,] 183         183      25      25
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Wood and Grose (2022)

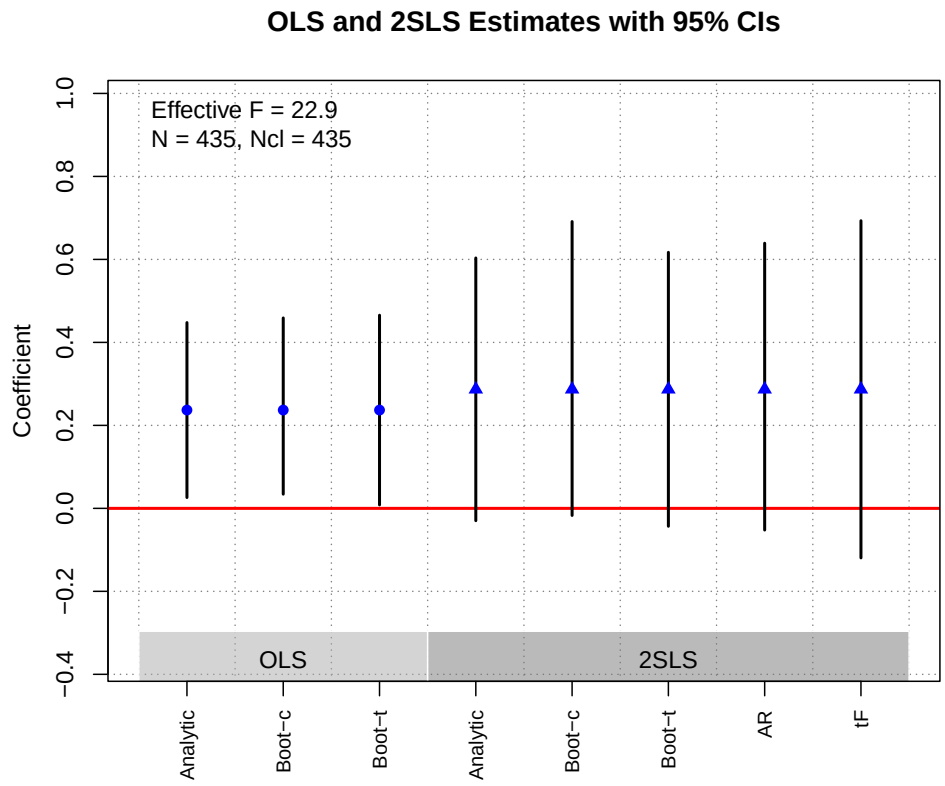
Replication Summary	
Unit of analysis	House member/district
Treatment	incumbent found to have campaign finance violations
Instrument	audit
Outcome	legislator Retired
Model	Table2(1)

```r
df <-readRDS("./rawdata/ajps_Wood_grose_2022.rds")
## preprocess to generate xwhat and xhat in Stata
D<-"findings"
Y <- "retire__or_resign"
Z <- "audited"
controls <-c("xwhat","south")
cl <- "stcd"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2369 0.1076 2.2022  0.0261   0.4477  0.0276
## Boot.c   0.2369 0.1094 2.1657  0.0342   0.4589  0.0120
## Boot.t   0.2369 0.1076 2.2022  0.0083   0.4655  0.0490
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2869 0.1615 1.7764 -0.0297   0.6035  0.0757
## Boot.c   0.2869 0.1749 1.6407 -0.0171   0.6912  0.0660
## Boot.t   0.2869 0.1615 1.7764 -0.0432   0.6170  0.0700
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   2.8595   1.0000 433.0000   0.0916
##
## $AR$ci.print
## [1] "[-0.0523, 0.6390]"
##
## $AR$ci
## [1] -0.0523  0.6390
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    220.6007     22.8647     22.8647     21.1080     22.8647
##
## $rho
## [1] 0.5819
##
## $tF
```

```
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 22.8647  2.5155  0.2869  0.1615  1.7764 -0.1194  0.6932  0.1663
##
## $est_rf
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## audited 0.1377 0.0816  0.0916 0.0817  -0.0066     0.307     0.066
##
## $est_fs
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## audited 0.48 0.1004       0 0.1045     0.28    0.6818         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 435
##
## $N_cl
## [1] 435
##
## $df
## [1] 431
##
## $nvalues
##      retire__or_resign findings audited
## [1,]                 2        2       2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Zhu (2017)

Replication Summary	
Unit of analysis	province*period
Treatment	MNC activity
Instrument	weighted geographic closeness
Outcome	corruption
Model	Table1(1)

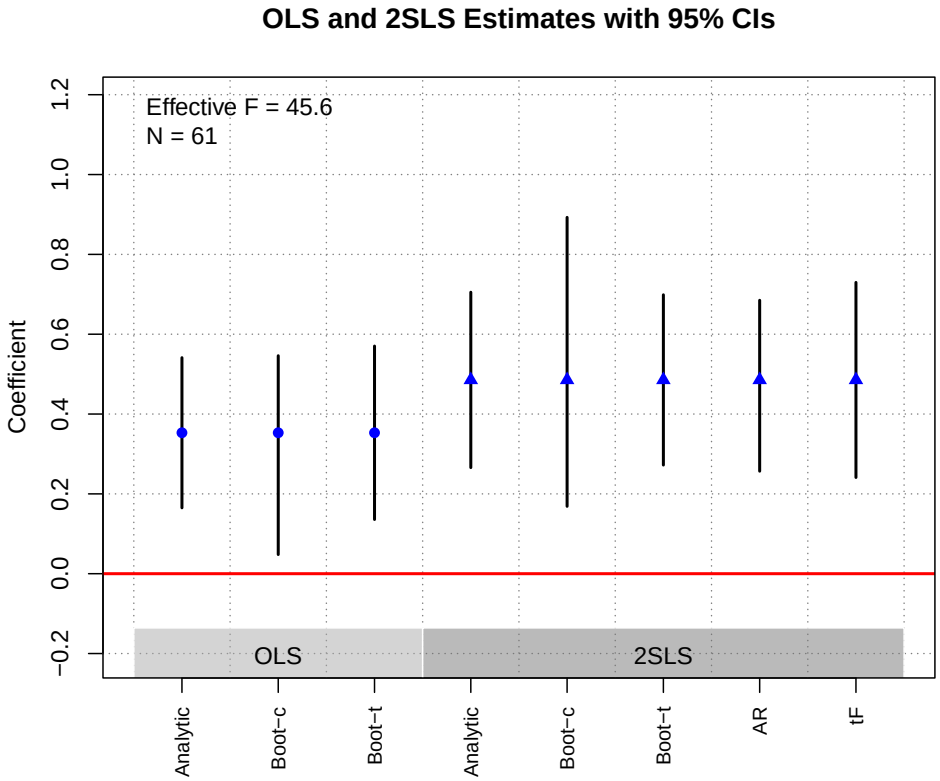
```
df <- readRDS("./rawdata/ajps_Zhu_2017.rds")
D <-"MNC"
Y <- "corruption1"
Z <- "lwdist"
controls <- c("lgdpcap6978", "gdp6978", "population", "lgovtexp9302",
              "pubempratio", "leduc", "pwratio", "female", "time")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.3531 0.0960 3.6788  0.1650   0.5412   2e-04
```

```
## Boot.c   0.3531 0.1237 2.8535  0.0480   0.5461   2e-02
## Boot.t   0.3531 0.0960 3.6788  0.1358   0.5703   4e-03
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.4855 0.1121 4.3317  0.2658   0.7052   0.000
## Boot.c   0.4855 0.2067 2.3482  0.1688   0.8927   0.006
## Boot.t   0.4855 0.1121 4.3317  0.2722   0.6987   0.001
##
## $AR
## $AR$Fstat
##       F     df1     df2       p
## 12.7838  1.0000 59.0000  0.0007
##
## $AR$ci.print
## [1] "[0.2568, 0.6850]"
##
## $AR$ci
## [1] 0.2568 0.6850
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     45.9155     45.5515          NA     23.8884     45.5515
##
## $rho
## [1] 0.6919
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 45.5515  2.1802  0.4855  0.1121  4.3317  0.2411  0.7298  0.0001
##
## $est_rf
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lwdist 0.559 0.1698   0.001 0.2622   0.1651    1.2252     0.006
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lwdist 1.1514 0.1706       0 0.2356   0.8039    1.7455         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 61
##
## $N_cl
## NULL
##
## $df
## [1] 50
##
## $nvalues
##      corruption1 MNC lwdist
## [1,]          61  61     61
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



JOP

Acharya et al. (2016)

Replication Summary	
Unit of analysis	county

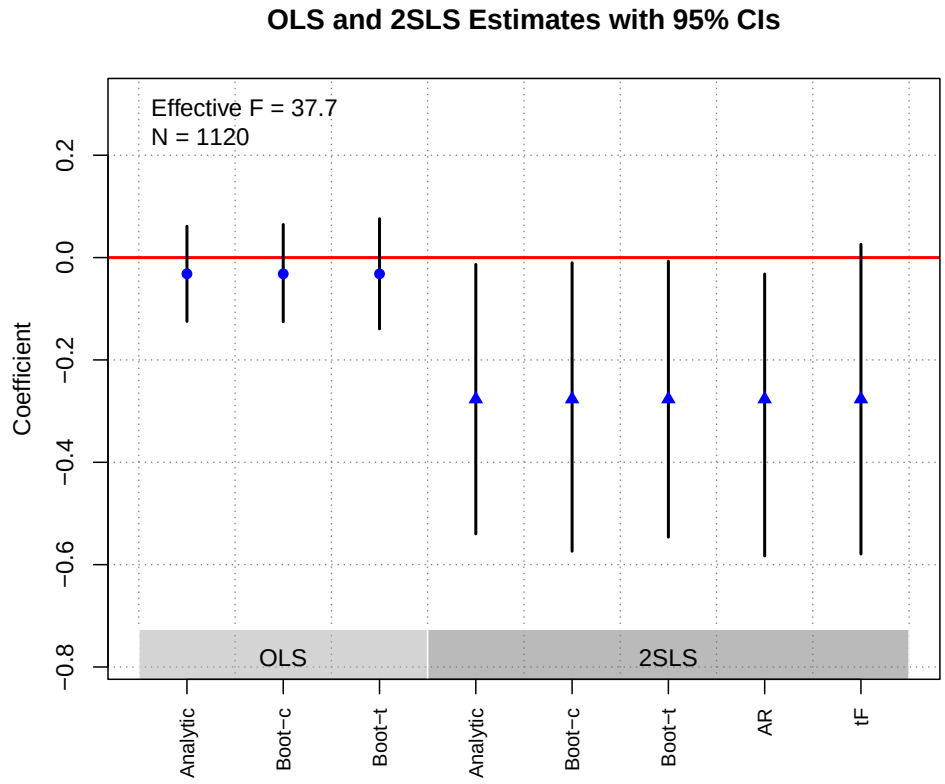
Replication Summary	
Treatment	slave proportion in 1860
Instrument	measures of the environmental suitability for growing cotton
Outcome	proportion Democrat
Model	Table2(2)

```
df<-readRDS("./rawdata/jop_Acharya_etal_2016.rds")
Y <- "dem"
D <-"pslave1860"
Z <- "cottonsuit"
controls <- c("x2", "rugged", "latitude", "x2", "longitude", "x3","x4", "water1860")
cl <- NULL
FE <- 'code'
weights<-"sample.size"
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0318 0.0474 -0.6701 -0.1247   0.0612  0.5028
## Boot.c   -0.0318 0.0486 -0.6534 -0.1254   0.0646  0.5120
## Boot.t   -0.0318 0.0474 -0.6701 -0.1394   0.0759  0.5540
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.2766 0.1343 -2.0596 -0.5399  -0.0134  0.0394
## Boot.c   -0.2766 0.1411 -1.9603 -0.5737  -0.0100  0.0420
## Boot.t   -0.2766 0.1343 -2.0596 -0.5462  -0.0070  0.0470
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    4.8310    1.0000 1118.0000    0.0282
##
## $AR$ci.print
## [1] "[-0.5829, -0.0322]"
##
## $AR$ci
## [1] -0.5829 -0.0322
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
```

```
##    106.4957     37.6527          NA     34.6649     37.6527
##
## $rho
## [1] 0.2973
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 37.6527  2.2528 -0.2766  0.1343 -2.0596 -0.5792  0.0259  0.0731
##
## $est_rf
##               Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## cottonsuit -0.1128 0.0518  0.0294 0.0534  -0.2161   -0.0048     0.042
##
## $est_fs
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## cottonsuit 0.4079 0.0665       0 0.0693   0.2761     0.546         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 1120
##
## $N_cl
## NULL
##
## $df
## [1] 1098
##
## $nvalues
##      dem pslave1860 cottonsuit
## [1,] 911       1077       1120
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Alt et al. (2016)

Replication Summary	
Unit of analysis	individual
Treatment	unemployment expectations
Instrument	assignment to receiving an aggregate unemployment forecast
Outcome	vote intention
Model	Table2(1)

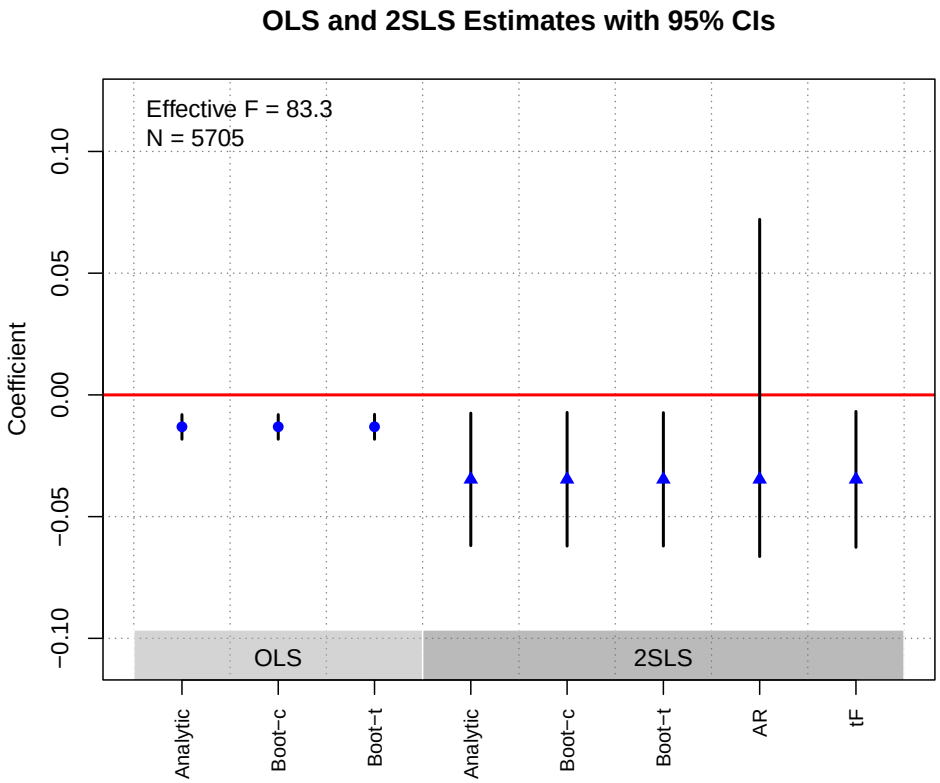
```
df<- readRDS("./rawdata/jop_Alt_etal_2015.rds")
D <- "urate_fut"
Y <- "gov"
Z <- "treatment"
controls <- "urate_now"
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##              Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0131 0.0026 -5.0845 -0.0182  -0.0081       0
```

```
## Boot.c   -0.0131 0.0026 -5.0392 -0.0182  -0.0081       0
## Boot.t   -0.0131 0.0026 -5.0845 -0.0182  -0.0080       0
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0347 0.0139 -2.5022 -0.0619  -0.0075  0.0123
## Boot.c   -0.0347 0.0141 -2.4697 -0.0621  -0.0072  0.0040
## Boot.t   -0.0347 0.0139 -2.5022 -0.0621  -0.0073  0.0090
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    0.0017    1.0000 5703.0000    0.9671
##
## $AR$ci.print
## [1] "[-0.0664, 0.0721]"
##
## $AR$ci
## [1] -0.0664  0.0721
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     60.1863     68.9098          NA     67.1063     83.3152
##
## $rho
## [1] 0.0801
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 83.3152  2.0100 -0.0347  0.0139 -2.5022 -0.0626 -0.0068  0.0147
##
## $est_rf
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment 0.027 0.0243  0.2661 0.0238  -0.0197    0.0743      0.22
##
## $est_fs
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treatment -0.9354 0.1169       0 0.1142  -1.1621   -0.7159         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 5705
##
## $N_cl
## NULL
##
## $df
## [1] 5702
##
## $nvalues
##      gov urate_fut treatment
## [1,]   2        88         8
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Arias and Stasavage (2019)

Replication Summary	
Unit of analysis	country*year
Treatment	government expenditures
Instrument	trade shock × UK bond yield
Outcome	regular leader turnover

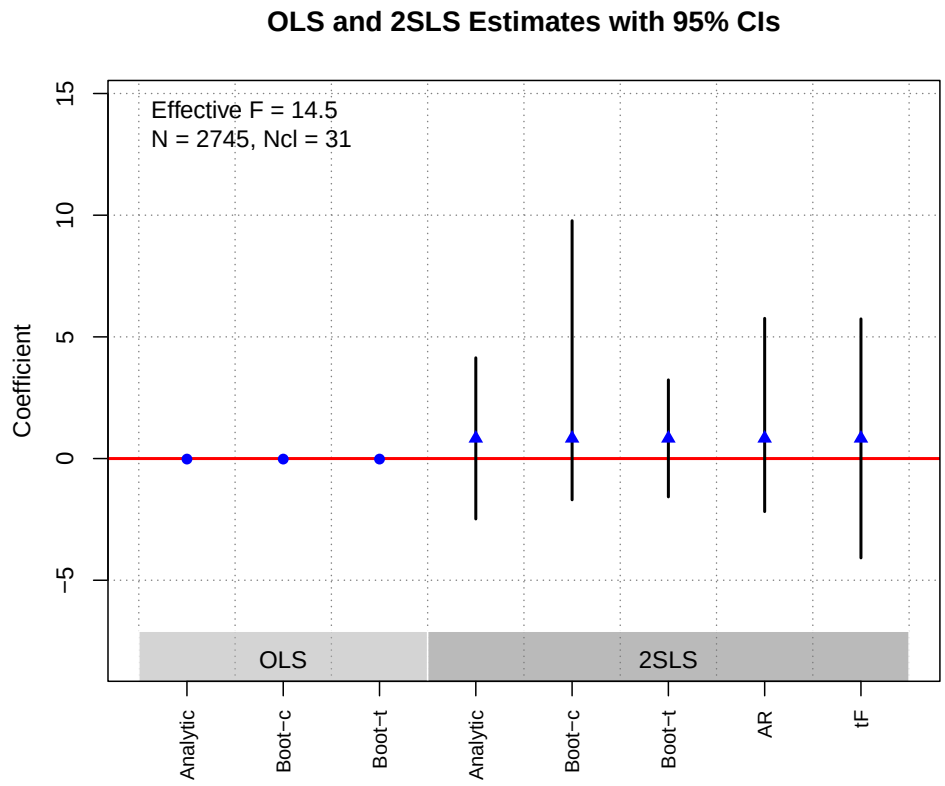
Replication Summary	
Model	Table3(2)

```
# Variables are already residualized against controls, fixed effects, and unit-specific trends
df<-readRDS("./rawdata/jop_Arias_etal_2019.rds")
Y <- "regular_res"
D <- "dexpenditures_res"
Z <- "interact_res"
controls <- NULL
cl<-c("ccode","year")
FE<-NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0215 0.0359 -0.5975 -0.0919   0.0490  0.5502
## Boot.c   -0.0215 0.0391 -0.5499 -0.0910   0.0612  0.6053
## Boot.t   -0.0215 0.0359 -0.5975 -0.0744   0.0315  0.4656
##
## $est_2sls
##            Coef      SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.8282  1.6891 0.4903 -2.4824   4.1389  0.6239
## Boot.c   0.8282 20.8111 0.0398 -1.6956   9.7722  0.5101
## Boot.t   0.8282  1.6891 0.4903 -1.5755   3.2320  0.4370
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    0.2643    1.0000 2743.0000    0.6073
##
## $AR$ci.print
## [1] "[-2.1784, 5.7604]"
##
## $AR$ci
## [1] -2.1784  5.7604
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      3.0429      3.4739     14.4763      7.5067     14.4763
##
```

```
## $rho
## [1] 0.0333
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 14.4763  2.9071  0.8282  1.6891  0.4903 -4.0822  5.7387  0.7410
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## interact_res 0.276 0.5369  0.6072 0.4693  -0.4889    1.3784    0.4762
##
## $est_fs
##                 Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## interact_res 0.3332 0.0876   1e-04 0.1216   0.0477    0.5343    0.0339
##
## $p_iv
## [1] 1
##
## $N
## [1] 2745
##
## $N_cl
## [1] 31
##
## $df
## [1] 2743
##
## $nvalues
##      regular_res dexpenditures_res interact_res
## [1,]        2745              2745         2745
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Bhavnani and Lee (2018)

Replication Summary	
Unit of analysis	district*period
Treatment	bureaucrats' embeddedness
Instrument	early-career job assignment
Outcome	proportion of villages with high schools
Model	Table1(4)

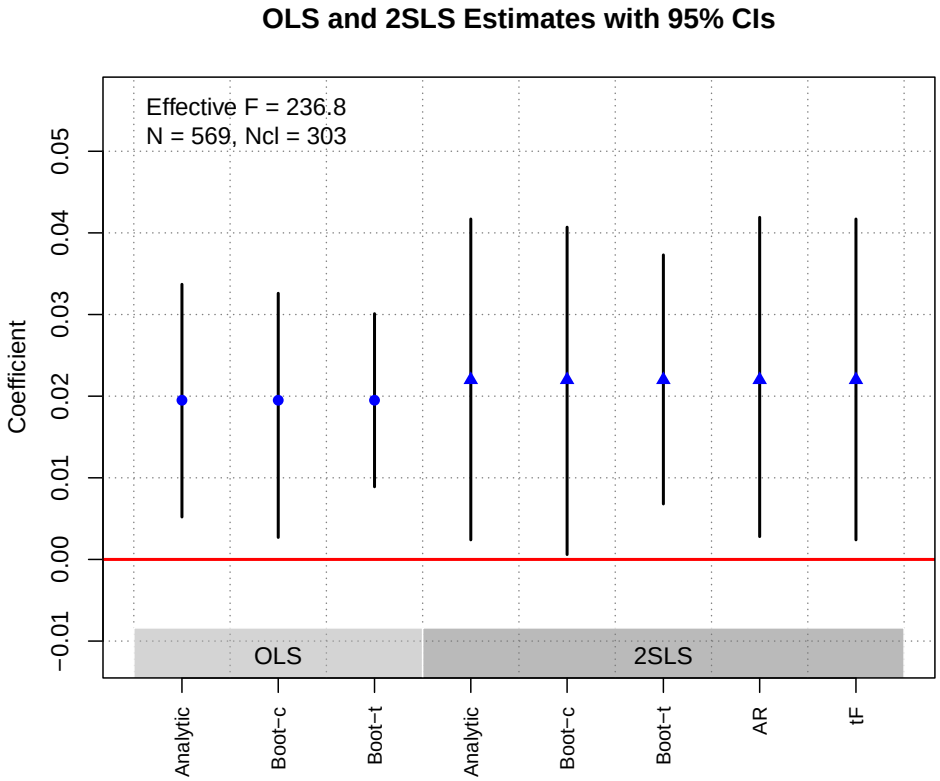
```
df <-readRDS("./rawdata/jop_Bhavnani_etal_2018.rds")
D <- "ALLlocal"
Y <- "Phigh"
Z <- "EXALLlocal"
controls <- c("ALLbachdivi", "lnnewpop", "lnnvill", "p_rural", "p_work",
              "p_aglab", "p_sc", "p_st", "lnmurderpc", "stategov", "natgov")
cl <- "distcode71"
FE<- c('distcode71',"year")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0195 0.0073 2.6753  0.0052   0.0337  0.0075
```

```
## Boot.c   0.0195 0.0077 2.5363  0.0027   0.0326  0.0200
## Boot.t   0.0195 0.0073 2.6753  0.0089   0.0301  0.0000
##
## $est_2sls
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.022 0.0100 2.1986  0.0024   0.0417  0.0279
## Boot.c   0.022 0.0103 2.1365  0.0006   0.0407  0.0340
## Boot.t   0.022 0.0100 2.1986  0.0068   0.0373  0.0030
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   5.0041   1.0000 567.0000   0.0257
##
## $AR$ci.print
## [1] "[0.0028, 0.0419]"
##
## $AR$ci
## [1] 0.0028 0.0419
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    243.2947    215.8574    236.8206    240.8167    236.8206
##
## $rho
## [1] 0.7002
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 236.8206   1.9600   0.0220   0.0100   2.1986   0.0024   0.0417   0.0279
##
## $est_rf
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## EXALLlocal 0.0121 0.0055  0.0267 0.0057    3e-04    0.0224     0.034
##
## $est_fs
##              Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## EXALLlocal 0.5504 0.0358       0 0.0355   0.4842     0.616         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 569
##
## $N_cl
## [1] 303
##
## $df
## [1] 253
##
## $nvalues
##      Phigh ALLlocal EXALLlocal
## [1,]   567      493        318
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Charron and Lapuente (2013)

Replication Summary	
Unit of analysis	region
Treatment	clientelism
Instrument	consolidation of clientelistic networks in regions where rulers have historically less constraints to their decisions

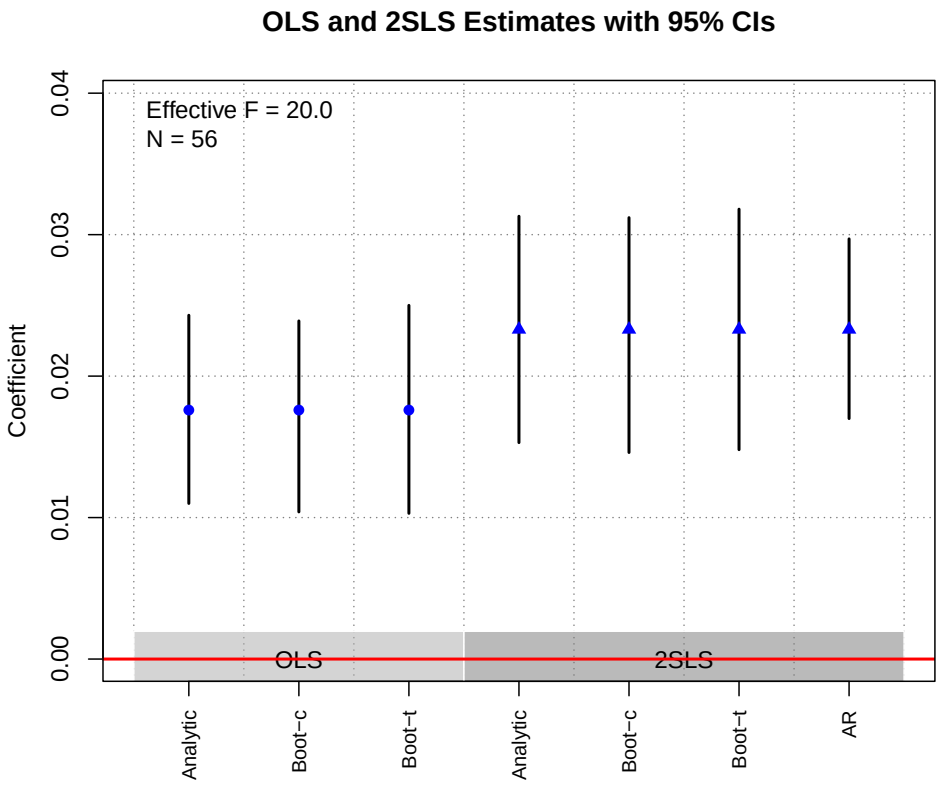
Replication Summary	
Outcome	quality of governments
Model	Table3(2a)

```
df<-readRDS("./rawdata/jop_Charron_etal_2013.rds")
D <- "pc_all4_tol"
Y <- "eqi"
Z <- c("pc_institutions","literacy1880")
controls <- c("logpop", "capitalregion", "ger", "it", "uk","urb_1860_1850_30")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE     t CI 2.5% CI 97.5% p.value
## Analytic 0.0176 0.0034 5.186  0.0110   0.0243       0
## Boot.c   0.0176 0.0034 5.130  0.0104   0.0239       0
## Boot.t   0.0176 0.0034 5.186  0.0103   0.0250       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0233 0.0041 5.7196  0.0153   0.0313       0
## Boot.c   0.0233 0.0042 5.5429  0.0146   0.0312       0
## Boot.t   0.0233 0.0041 5.7196  0.0148   0.0318       0
##
## $AR
## $AR$Fstat
##       F     df1     df2       p
## 18.2062  2.0000 53.0000  0.0000
##
## $AR$ci.print
## [1] "[0.0170, 0.0297]"
##
## $AR$ci
## [1] 0.0170 0.0297
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     37.2005     31.2712          NA     30.0615     19.9514
##
```

```
## $rho
## [1] 0.7828
##
## $est_rf
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## pc_institutions 0.1941 0.0765  0.0111 0.0791   0.0408     0.354     0.010
## literacy1880    0.0204 0.0043  0.0000 0.0050   0.0092     0.029     0.002
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## pc_institutions 12.1093 2.3469   0e+00 2.4409   7.4604   16.8320     0.000
## literacy1880     0.5348 0.1319   1e-04 0.1499   0.1920    0.7925     0.006
##
## $p_iv
## [1] 2
##
## $N
## [1] 56
##
## $N_cl
## NULL
##
## $df
## [1] 48
##
## $nvalues
##      eqi pc_all4_tol pc_institutions literacy1880
## [1,]  56          44              14           38
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Charron et al. (2017)

Replication Summary	
Unit of analysis	region
Treatment	more developed bureaucracy
Instrument	proportion of Protestant residents in a region; aggregate literacy in 1880
Outcome	percent of single bidders in procurement contracts
Model	Table5(4)

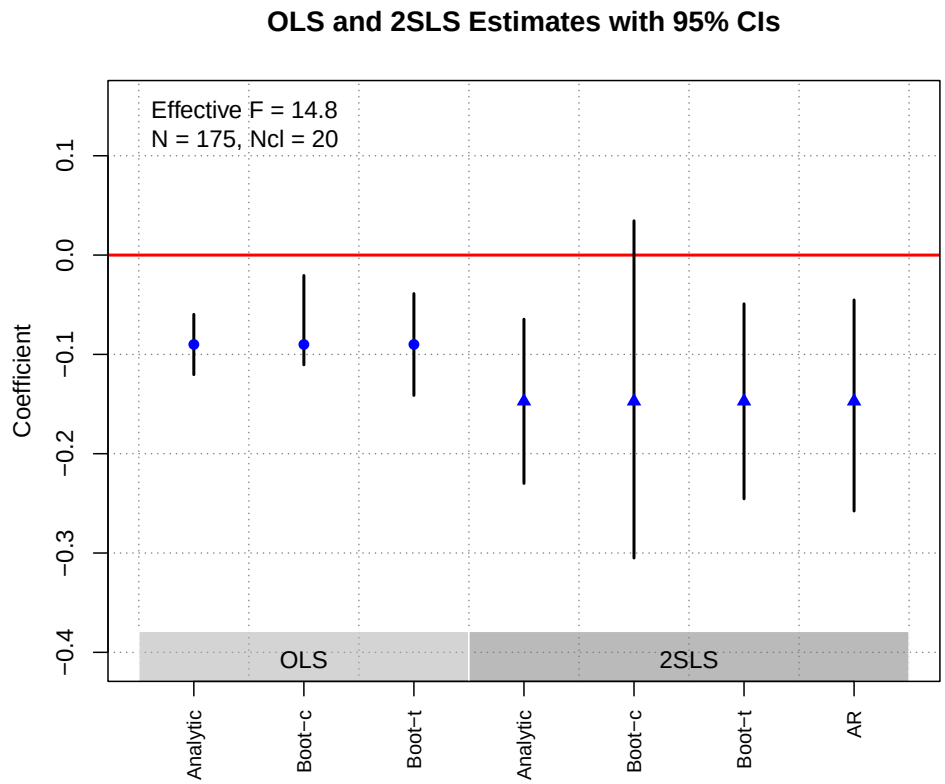
```
df <- readRDS("./rawdata/jop_Charron_etal_2017.rds")
D <- "pubmerit"
Y <- "lcri_euc1_r"
Z <- c("litrate_1880", 'pctprot')
controls <- c("logpopdens", "logppp11", "trust", "pctwomenparl")
cl <- "country"
FE <- NULL
weights<-"eu_popweights"
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.09 0.0155 -5.8068 -0.1204  -0.0597   0.000
## Boot.c   -0.09 0.0233 -3.8649 -0.1105  -0.0206   0.004
```

```
## Boot.t   -0.09 0.0155 -5.8068 -0.1413  -0.0388   0.003
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.1472 0.0422 -3.4919 -0.2299  -0.0646  0.0005
## Boot.c   -0.1472 0.1001 -1.4712 -0.3050   0.0345  0.0900
## Boot.t   -0.1472 0.0422 -3.4919 -0.2454  -0.0491  0.0120
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   5.5325   2.0000 172.0000   0.0047
##
## $AR$ci.print
## [1] "[-0.2577, -0.0452]"
##
## $AR$ci
## [1] -0.2577 -0.0452
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     27.8775     23.2292     36.2651      6.2999     14.8219
##
## $rho
## [1] 0.4992
##
## $est_rf
##                  Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## litrate_1880 -0.0009 0.0005  0.0767 0.0006  -0.0019    0.0004     0.184
## pctprot      -0.1769 0.1131  0.1177 0.1417  -0.4289    0.1099     0.288
##
## $est_fs
##                 Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## litrate_1880 0.0060 0.0025  0.0184 0.0030   0.0000    0.0115     0.050
## pctprot      1.1959 0.3235  0.0002 0.4935   0.0099    1.9314     0.048
##
## $p_iv
## [1] 2
##
## $N
## [1] 175
##
## $N_cl
```

```
## [1] 20
##
## $df
## [1] 169
##
## $nvalues
##      lcri_euc1_r pubmerit litrate_1880 pctprot
## [1,]         173      173           78     131
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Cirone and Van Coppenolle (2018)

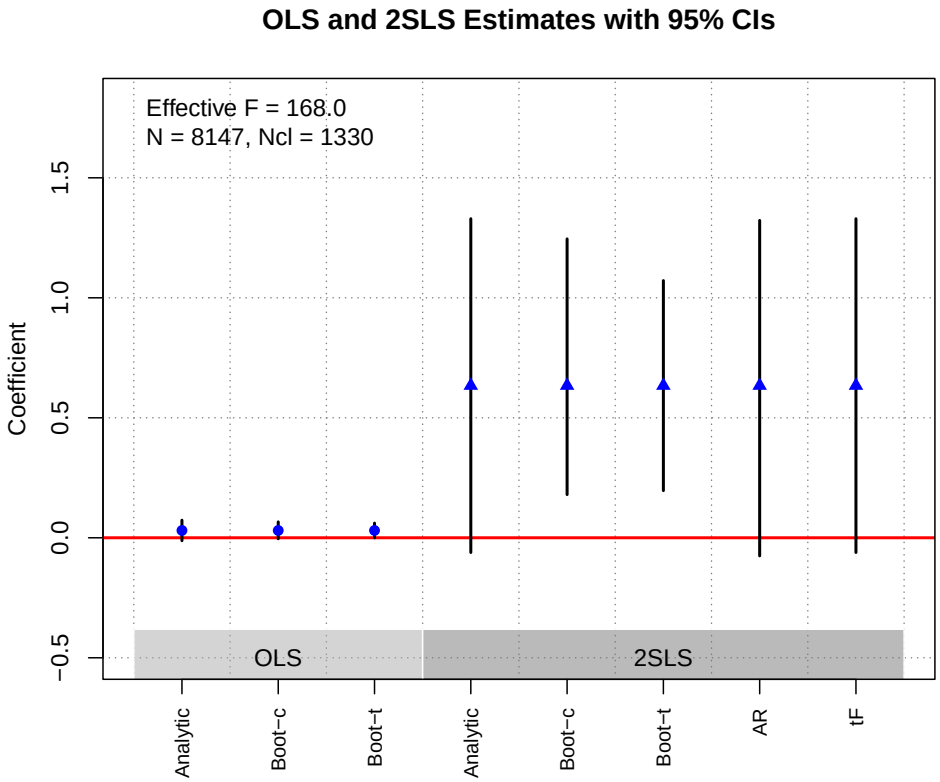
Replication Summary	
Unit of analysis	deputy*year
Treatment	budget committee service
Instrument	random assignment of budget incumbents to bureaux
Outcome	legislator sponsorship on a budget bill
Model	Table2(2)

```r
df<- readRDS("./rawdata/jop_Cirone_etal_2018.rds")
D <- "budget"
Y <- "F1to5billbudgetdummy"
Z <- "bureauotherbudgetincumbent"
controls <- c("budgetincumbent", "cummyears", "cummyears2",
              "age", "age2", "permargin", "permargin2",
              "inscrits", "inscrits2", "proprietaire",
              "lib_all", "civil", "paris")
cl <- c("id","year")
FE <- "year"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0305 0.0218 1.3957 -0.0123   0.0733  0.1628
## Boot.c   0.0305 0.0181 1.6792 -0.0042   0.0662  0.0940
## Boot.t   0.0305 0.0218 1.3957 -0.0003   0.0612  0.0530
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.6341 0.3548 1.7872 -0.0613   1.3295  0.0739
## Boot.c   0.6341 0.2660 2.3840  0.1800   1.2455  0.0100
## Boot.t   0.6341 0.3548 1.7872  0.1965   1.0717  0.0120
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    3.0669    1.0000 8145.0000    0.0799
##
## $AR$ci.print
## [1] "[-0.0755, 1.3224]"
##
## $AR$ci
## [1] -0.0755  1.3224
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     32.1302     34.2557    168.0023     33.4141    168.0023
##
## $rho
## [1] 0.0628
```

```
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 168.0023   1.9600   0.6341   0.3548   1.7872  -0.0613   1.3295   0.0739
##
## $est_rf
##                               Coef    SE p.value   SE.b CI.b2.5% CI.b97.5%
## bureauotherbudgetincumbent -0.0052 0.003  0.0801 0.0018  -0.0088   -0.0016
##                            p.value.b
## bureauotherbudgetincumbent      0.01
##
## $est_fs
##                               Coef    SE p.value   SE.b CI.b2.5% CI.b97.5%
## bureauotherbudgetincumbent -0.0083 6e-04       0 0.0014  -0.0113   -0.0054
##                            p.value.b
## bureauotherbudgetincumbent         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 8147
##
## $N_cl
## [1] 1330
##
## $df
## [1] 13
##
## $nvalues
##      F1to5billbudgetdummy budget bureauotherbudgetincumbent
## [1,]                    2      2                          9
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Dietrich and Wright (2015)

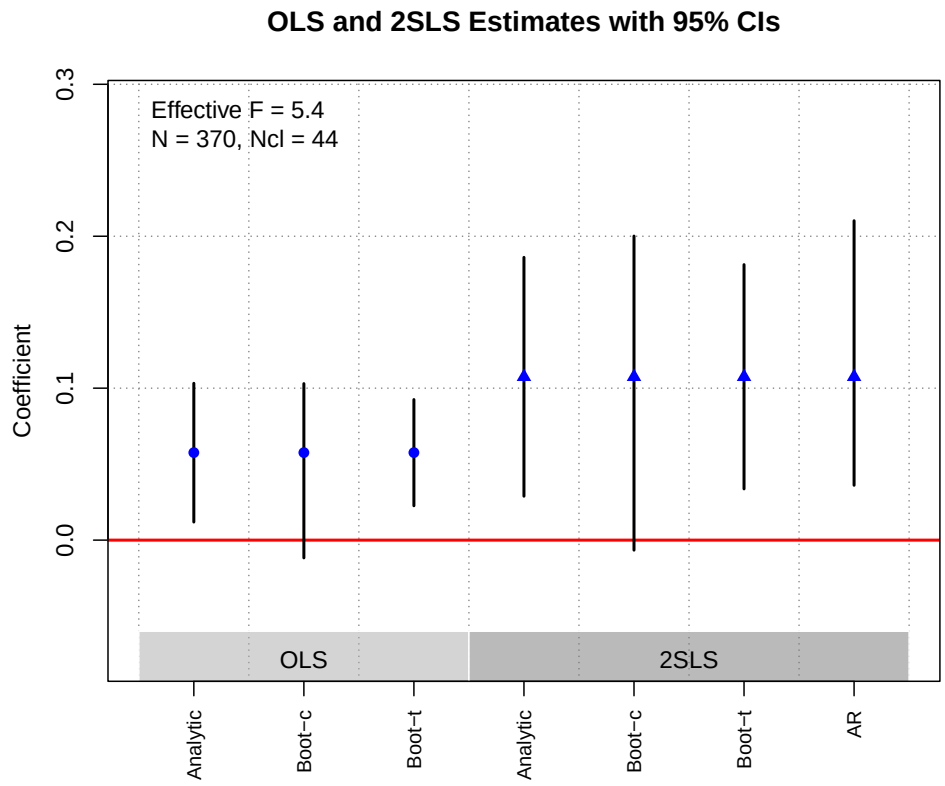
Replication Summary	
Unit of analysis	transition
Treatment	economic aid
Instrument	constructed Z
Outcome	transitions to multipartyism
Model	Table1(2)

```
df <- readRDS("./rawdata/jop_Dietrich_2015.rds")
D <- "econaid"
Y <- "mp"
Z <- c("Iinfl3","econaid_lgdp_g", "econaid_lpop_g",
       "econaid_cwar_g", "econaid_dnmp_g",
       "econaid_dnmp2_g", "econaid_dnmp3_g")
controls <- c('lgdp', 'lpop', 'cwar', 'dmp',
              'dmp2', 'dmp3', "dnmp", "dnmp2", "dnmp3")
cl<- "cowcode"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))

## $est_ols
```

```
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0576 0.0233 2.4734  0.0119   0.1032  0.0134
## Boot.c   0.0576 0.0288 1.9971 -0.0117   0.1030  0.1020
## Boot.t   0.0576 0.0233 2.4734  0.0226   0.0925  0.0020
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1075 0.0401 2.6795  0.0289   0.1861  0.0074
## Boot.c   0.1075 0.0505 2.1292 -0.0066   0.2001  0.0700
## Boot.t   0.1075 0.0401 2.6795  0.0337   0.1813  0.0030
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.5039   7.0000 362.0000   0.0012
##
## $AR$ci.print
## [1] "[0.0361, 0.2102]"
##
## $AR$ci
## [1] 0.0361 0.2102
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     28.9900     47.6878     22.5931      1.8693      5.4068
##
## $rho
## [1] 0.6026
##
## $est_rf
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Iinfl3           0.0382 0.0180  0.0341 0.0229  -0.0138    0.0774     0.160
## econaid_lgdp_g   0.0459 0.0246  0.0624 0.0504   0.0047    0.2038     0.034
## econaid_lpop_g   0.0049 0.0218  0.8229 0.0356  -0.0450    0.0987     0.746
## econaid_cwar_g  -0.0084 0.0635  0.8946 0.1004  -0.2305    0.1684     0.930
## econaid_dnmp_g  -0.0227 0.0268  0.3965 0.0328  -0.0763    0.0481     0.592
## econaid_dnmp2_g  0.0010 0.0011  0.3704 0.0015  -0.0023    0.0034     0.652
## econaid_dnmp3_g  0.0000 0.0000  0.4243 0.0000   0.0000    0.0000     0.772
##
## $est_fs
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Iinfl3           0.1561 0.0506  0.0020 0.0620   0.0044    0.2379     0.044
## econaid_lgdp_g   0.1664 0.1524  0.2749 0.2697  -0.5115    0.6424     0.596
```

```
## econaid_lpop_g   0.1839 0.0976  0.0596 0.1664  -0.3098    0.3684     0.388
## econaid_cwar_g  -0.2848 0.3413  0.4041 0.5017  -1.6604    0.3719     0.462
## econaid_dnmp_g  -0.0235 0.0899  0.7933 0.1039  -0.2589    0.1326     0.734
## econaid_dnmp2_g -0.0009 0.0045  0.8455 0.0054  -0.0087    0.0119     0.998
## econaid_dnmp3_g  0.0000 0.0001  0.5707 0.0001  -0.0001    0.0001     0.852
##
## $p_iv
## [1] 7
##
## $N
## [1] 370
##
## $N_cl
## [1] 44
##
## $df
## [1] 362
##
## $nvalues
##      mp econaid Iinfl3 econaid_lgdp_g econaid_lpop_g econaid_cwar_g
## [1,]  2     370    370             370             370             370
##      econaid_dnmp_g econaid_dnmp2_g econaid_dnmp3_g
## [1,]            370             370             370
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



DiGiuseppe and Shea (2022)

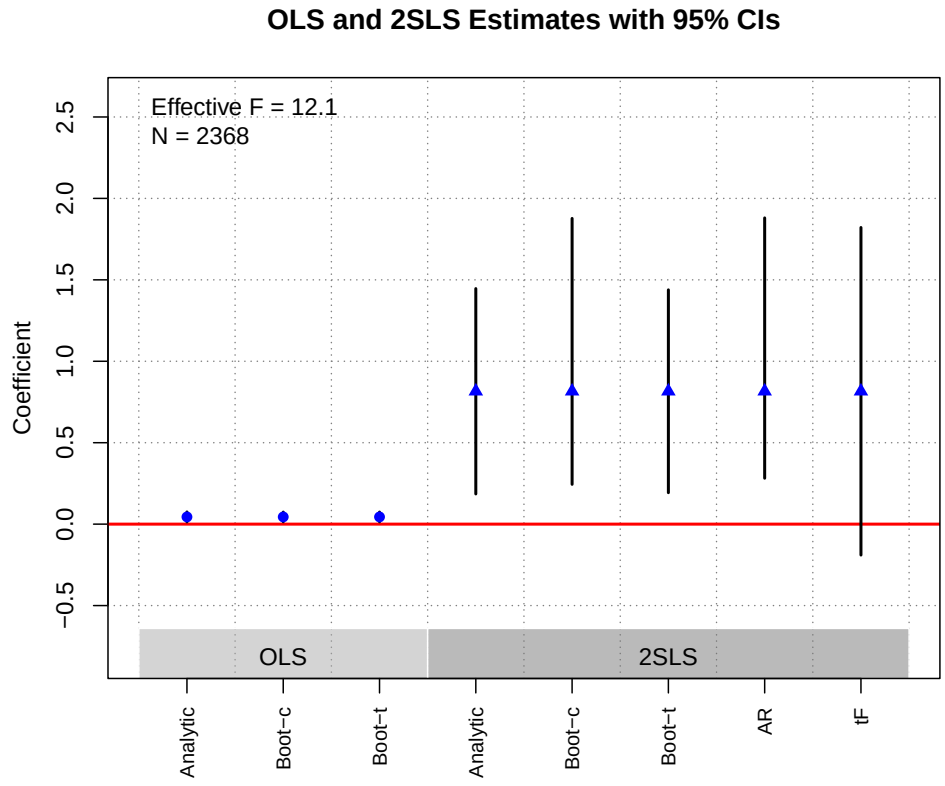
Replication Summary	
Unit of analysis	country*year
Treatment	US support
Instrument	echelon corridor
Outcome	property rights
Model	Table1(5)

```
df <-readRDS("./rawdata/jop_digiuseppe_2022.rds")
D <- "wi_usa_median"
Y<-"Fwi_v2stfisccap2"
Z <- "Echelon2"
controls <-c("wi_v2xcl_prpty","wi_compete", "wi_lnpop_wdi",
             "wi_lngdppc", "wi_polity2", "wi_polity2_2",  "wi_ny_gdp_totl_rt_zs",
             "wi_cwyrs", "wi_c2", "wi_c3", "coldwar")
cl<- NULL
FE<- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))

## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
```

```
## Analytic 0.0443 0.0156 2.8331  0.0136   0.0749  0.0046
## Boot.c   0.0443 0.0156 2.8338  0.0145   0.0741  0.0060
## Boot.t   0.0443 0.0156 2.8331  0.0142   0.0743  0.0050
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.8158 0.3217 2.5360  0.1853   1.4463  0.0112
## Boot.c   0.8158 0.7680 1.0623  0.2443   1.8771  0.0060
## Boot.t   0.8158 0.3217 2.5360  0.1931   1.4385  0.0070
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    8.5251    1.0000 2366.0000    0.0035
##
## $AR$ci.print
## [1] "[0.2818, 1.8803]"
##
## $AR$ci
## [1] 0.2818 1.8803
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     18.8218     12.1084          NA     12.0737     12.1084
##
## $rho
## [1] 0.089
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 12.1084  3.1262  0.8158  0.3217  2.5360 -0.1899  1.8215  0.1118
##
## $est_rf
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Echelon2 0.1792 0.0615  0.0036 0.0601   0.0548    0.2929     0.004
##
## $est_fs
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## Echelon2 0.2196 0.0631   5e-04 0.0632   0.0864    0.3415     0.004
##
## $p_iv
## [1] 1
##
```

```
## $N
## [1] 2368
##
## $N_cl
## NULL
##
## $df
## [1] 2355
##
## $nvalues
##      Fwi_v2stfisccap2 wi_usa_median Echelon2
## [1,]              314          2368        2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Dube and Naidu (2015)

Replication Summary	
Unit of analysis	municipality*year
Treatment	changes in US funding to Colombia
Instrument	US funding in countries outside of Latin America

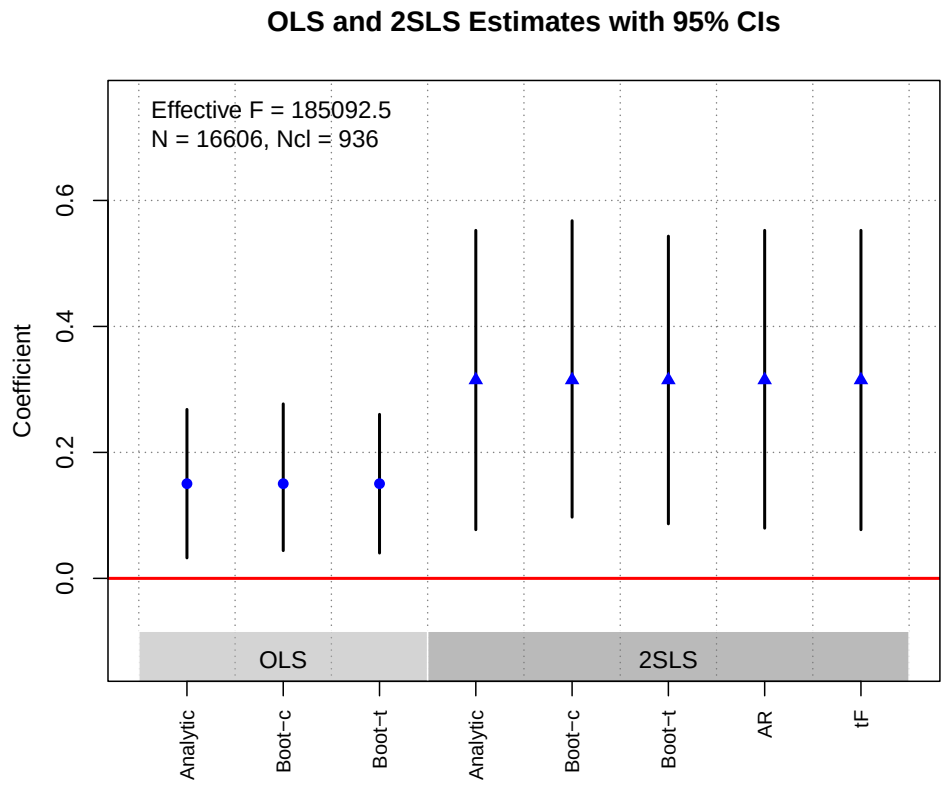
Replication Summary	
Outcome	the number of paramilitary attacks
Model	Table1(1)

```
df<-readRDS("./rawdata/jop_Dube_etal_2015.rds")
D <- "bases6xlrmilnar_col"
Y <- "paratt"
Z <- "bases6xlrmilwnl"
controls <-"lnnewpop"
cl <- "municipality"
FE <- c("year","municipality")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1503 0.0601 2.5001  0.0325   0.2682  0.0124
## Boot.c   0.1503 0.0610 2.4632  0.0441   0.2770  0.0080
## Boot.t   0.1503 0.0601 2.5001  0.0402   0.2604  0.0160
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.3149 0.1212 2.5977  0.0773   0.5525  0.0094
## Boot.c   0.3149 0.1231 2.5580  0.0972   0.5678  0.0020
## Boot.t   0.3149 0.1212 2.5977  0.0866   0.5433  0.0190
##
## $AR
## $AR$Fstat
##          F        df1        df2          p
##     6.7529     1.0000 16604.0000     0.0094
##
## $AR$ci.print
## [1] "[0.0797, 0.5525]"
##
## $AR$ci
## [1] 0.0797 0.5525
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   7003.8727    810.8395 185092.5288 176287.6694 185092.5288
##
```

```
## $rho
## [1] 0.556
##
## $tF
##           F          cF        Coef          SE           t      CI2.5%
## 185092.5288      1.9600      0.3149      0.1212      2.5977      0.0773
##     CI97.5%     p-value
##      0.5525      0.0094
##
## $est_rf
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## bases6xlrmilwnl 1.1155 0.4293  0.0094 0.4362   0.3434    2.0122     0.002
##
## $est_fs
##                    Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## bases6xlrmilwnl 3.5422 0.0082       0 0.0084   3.5227    3.5562         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 16606
##
## $N_cl
## [1] 936
##
## $df
## [1] 935
##
## $nvalues
##      paratt bases6xlrmilnar_col bases6xlrmilwnl
## [1,]     13                  19              18
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Feigenbaum and Hall (2015)

Replication Summary	
Unit of analysis	congressional district*decade
Treatment	localized trade shocks in congressional districts
Instrument	Chinese exports to other economies*local exposure
Outcome	trade score based on congressional voting
Model	Table1(3)

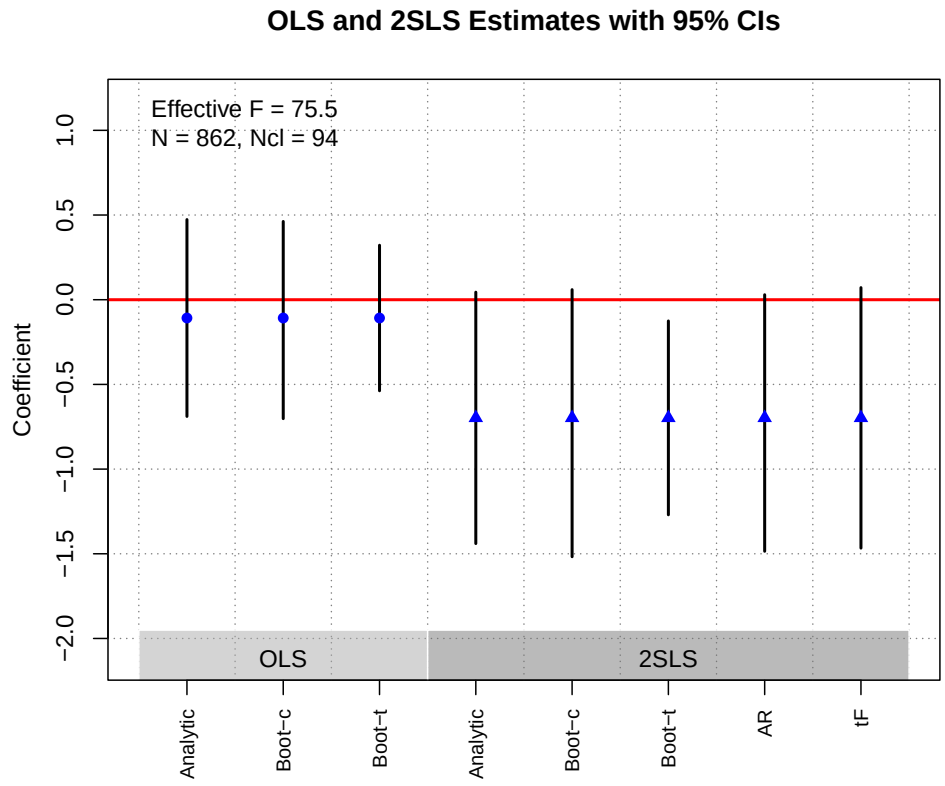
```
df<-readRDS("./rawdata/jop_Feigenbaum_etal_2015.rds")
D <-"x"
Y <- "tradescore"
Z <- "z"
controls <- c("dem_share")
cl <- "state_cluster"
FE <- "decade"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.108 0.2965 -0.3643 -0.6891    0.4731  0.7157
## Boot.c   -0.108 0.3052 -0.3539 -0.7021    0.4620  0.7160
```

```
## Boot.t   -0.108 0.2965 -0.3643 -0.5377   0.3217  0.5980
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.6976 0.3786 -1.8424 -1.4397   0.0445  0.0654
## Boot.c   -0.6976 0.4032 -1.7301 -1.5175   0.0594  0.0680
## Boot.t   -0.6976 0.3786 -1.8424 -1.2698  -0.1254  0.0150
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.4825   1.0000 860.0000   0.0624
##
## $AR$ci.print
## [1] "[-1.4852, 0.0294]"
##
## $AR$ci
## [1] -1.4852  0.0294
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1189.3393    204.4798     75.5233     66.0848     75.5233
##
## $rho
## [1] 0.7622
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 75.5233  2.0310 -0.6976  0.3786 -1.8424 -1.4666  0.0714  0.0754
##
## $est_rf
##      Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## z -0.5863 0.3145  0.0623 0.3485  -1.3311    0.0505     0.068
##
## $est_fs
##     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## z 0.8405 0.0967       0 0.1034    0.684    1.0772         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 862
```

```
##
## $N_cl
## [1] 94
##
## $df
## [1] 858
##
## $nvalues
##      tradescore   x   z
## [1,]        709 698 697
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Flores-Macias and Kreps (2013)

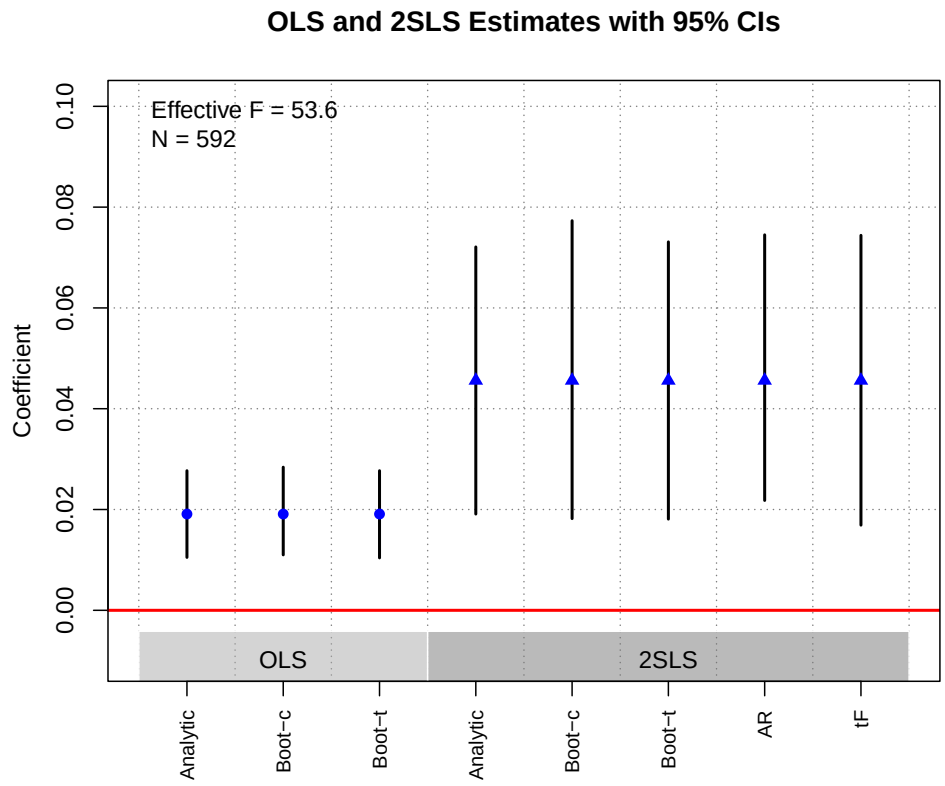
Replication Summary	
Unit of analysis	country*year
Treatment	trade volume
Instrument	lagged energy production
Outcome	foreign policy convergence
Model	Table2(1)

```r
df<- readRDS("./rawdata/jop_Flores_etal_2013.rds")
D <- "log_tot_trade"
Y <- "log_HRVOTE"
Z <- "lag_log_energ_prod"
controls <- c("log_cinc", "us_aid100", "log_tot_ustrade",
              "Joint_Dem_Dum", "pts_score", "dummy2004")
cl <- NULL
FE <- 'statea'
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0191 0.0044 4.3531  0.0105   0.0277       0
## Boot.c   0.0191 0.0045 4.2568  0.0110   0.0284       0
## Boot.t   0.0191 0.0044 4.3531  0.0104   0.0277       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0456 0.0135 3.3747  0.0191   0.0721   7e-04
## Boot.c   0.0456 0.0150 3.0438  0.0182   0.0773   4e-03
## Boot.t   0.0456 0.0135 3.3747  0.0181   0.0731   3e-03
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  14.1713   1.0000 590.0000   0.0002
##
## $AR$ci.print
## [1] "[0.0218, 0.0745]"
##
## $AR$ci
## [1] 0.0218 0.0745
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     66.1143     53.6345          NA     50.8247     53.6345
##
## $rho
## [1] 0.3295
##
## $tF
```

```
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 53.6345  2.1276  0.0456  0.0135  3.3747  0.0169  0.0744  0.0019
##
## $est_rf
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lag_log_energ_prod 0.1086 0.0301   3e-04 0.0324   0.0426    0.1696     0.004
##
## $est_fs
##                       Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lag_log_energ_prod 2.3803 0.325       0 0.3339   1.7522    3.0469         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 592
##
## $N_cl
## NULL
##
## $df
## [1] 543
##
## $nvalues
##      log_HRVOTE log_tot_trade lag_log_energ_prod
## [1,]         32           590                581
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Gehlbach and Keefer (2012)

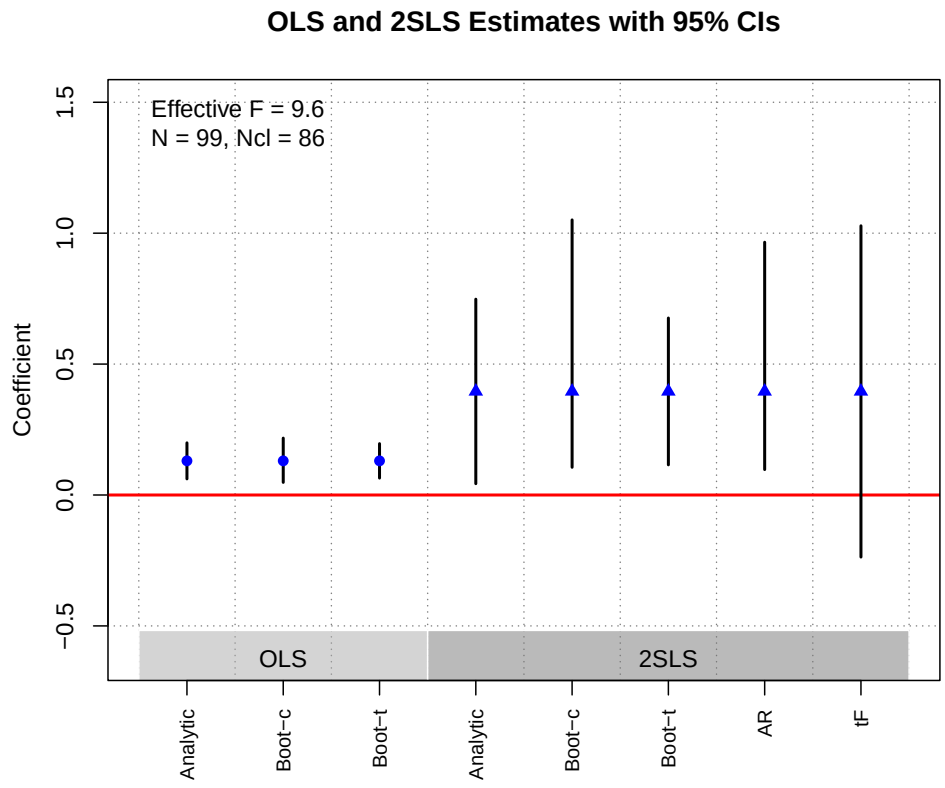
Replication Summary	
Unit of analysis	nondemocratic episode
Treatment	age of ruling party less leader years in office
Instrument	whether the first ruler in a nondemocratic episode is a military leader
Outcome	private invest
Model	Table1(4)

```
df<- readRDS("./rawdata/jop_Gelbach_etal_2012.rds")
D <- "gov1_yrs"
Y <- "gfcf_priv_gdp"
Z <- "military_first_alt"
controls <- c("tenure", "stabs", "fuelex_gdp", "oresex_gdp",
              "frac_ethn", "frac_relig", "frac_ling", "pop_yng_pct",
              "pop_tot", "pop_ru_pct", "land_km", "gdppc_ppp_2005_us")
cl <- "ifs_code"
FE <-NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))

## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
```

```
## Analytic 0.1304 0.0351 3.7118  0.0615   0.1992   2e-04
## Boot.c   0.1304 0.0424 3.0757  0.0482   0.2173   4e-03
## Boot.t   0.1304 0.0351 3.7118  0.0646   0.1961   0e+00
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.3956 0.1798 2.2001  0.0432   0.7479  0.0278
## Boot.c   0.3956 1.0389 0.3807  0.1058   1.0507  0.0140
## Boot.t   0.3956 0.1798 2.2001  0.1151   0.6760  0.0120
##
## $AR
## $AR$Fstat
##       F     df1     df2       p
##  6.3658  1.0000 97.0000  0.0133
##
## $AR$ci.print
## [1] "[0.0971, 0.9654]"
##
## $AR$ci
## [1] 0.0971 0.9654
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##      6.3713      9.2042      9.5714      9.4400      9.5714
##
## $rho
## [1] 0.2641
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
##  9.5714  3.5187  0.3956  0.1798  2.2001 -0.2371  1.0282  0.2204
##
## $est_rf
##                        Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## military_first_alt -3.3385 1.4135  0.0182 1.3984  -6.1212   -0.8649      0.01
##
## $est_fs
##                        Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## military_first_alt -8.4401 2.7281   0.002 2.747 -14.1454    -3.028     0.004
##
## $p_iv
## [1] 1
##
```

```
## $N
## [1] 99
##
## $N_cl
## [1] 86
##
## $df
## [1] 85
##
## $nvalues
##      gfcf_priv_gdp gov1_yrs military_first_alt
## [1,]            99       63                  2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Grossman et al. (2017)

Replication Summary	
Unit of analysis	region * year
Treatment	government fragmentation
Instrument	the number of distinct landmasses;

Replication Summary	
	length of medium and small streams; over-time variation in the number of regional governments
Outcome	public goods provision
Model	Table1(8)

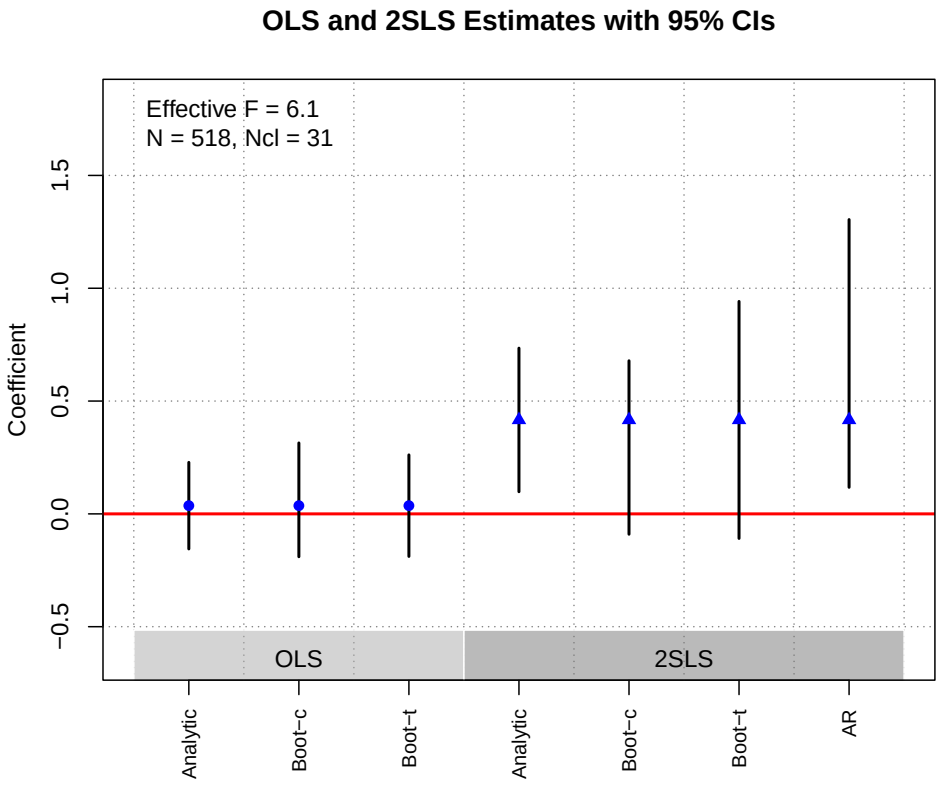
```
df<-readRDS("./rawdata/jop_Grossman_2017.rds")
Y <- "ServicesCA"
D <- "ladminpc_l5"
Z <- c("lmeanMINUSi_adminpc_l6", "lmeanMINUSi_adminpc2_l6",
       "herf", "herf2", "llength", "llength2")
controls <- c("lpop_l", "wdi_urban_l", "lgdppc_l", "conflict_l",
              "dpi_state_l", "p_polity2_l",
              "loilpc_l", "aid_pc_l","al_ethnic")
cl <- "ccodecow"
FE <- "year"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0364 0.0978 0.3721 -0.1554   0.2282  0.7098
## Boot.c   0.0364 0.1257 0.2896 -0.1900   0.3144  0.7385
## Boot.t   0.0364 0.0978 0.3721 -0.1886   0.2614  0.7165
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.4164 0.1623 2.5650  0.0982   0.7345  0.0103
## Boot.c   0.4164 0.2050 2.0315 -0.0902   0.6785  0.1402
## Boot.t   0.4164 0.1623 2.5650 -0.1088   0.9415  0.0962
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   3.8390   6.0000 511.0000   0.0009
##
## $AR$ci.print
## [1] "[0.1177, 1.3043]"
##
## $AR$ci
## [1] 0.1177 1.3043
##
## $AR$bounded
## [1] TRUE
##
```

```
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     39.9978     40.9874     11.9593      0.9983      6.1390
##
## $rho
## [1] 0.581
##
## $est_rf
##                             Coef     SE p.value     SE.b  CI.b2.5% CI.b97.5%
## lmeanMINUSi_adminpc_l6   6.0801 7.3987  0.4112  12.6549  -17.7145   30.7282
## lmeanMINUSi_adminpc2_l6 -3.9097 2.3810  0.1006   3.4728  -11.0236    2.7265
## herf                    -0.0170 2.4059  0.9943 490.3141  -59.6529 1860.2308
## herf2                   -0.0545 1.7185  0.9747 252.8414 -960.7775   27.9109
## llength                  0.0669 0.0507  0.1867   1.0051   -0.9837    2.8628
## llength2                -0.0029 0.0037  0.4309   0.0374   -0.1092    0.0363
##                         p.value.b
## lmeanMINUSi_adminpc_l6     0.5356
## lmeanMINUSi_adminpc2_l6    0.2155
## herf                       0.7071
## herf2                      0.6590
## llength                    0.4665
## llength2                   0.5460
##
## $est_fs
##                              Coef      SE p.value     SE.b   CI.b2.5% CI.b97.5%
## lmeanMINUSi_adminpc_l6   27.1296 12.2417  0.0267  22.9074   -11.2217   74.1688
## lmeanMINUSi_adminpc2_l6 -13.3452  4.9245  0.0067   7.6336   -33.1521   -2.7406
## herf                      3.5973  4.6318  0.4374 344.9919 -1245.2399   62.8496
## herf2                    -2.4844  3.1500  0.4303 178.3931   -49.9218  637.7320
## llength                   0.0536  0.0526  0.3084   0.9889    -0.8785    2.9375
## llength2                  0.0002  0.0039  0.9671   0.0367    -0.1072    0.0327
##                          p.value.b
## lmeanMINUSi_adminpc_l6     0.1632
## lmeanMINUSi_adminpc2_l6    0.0209
## herf                       0.9770
## herf2                      0.9456
## llength                    0.4791
## llength2                   0.7887
##
## $p_iv
## [1] 6
##
## $N
## [1] 518
##
## $N_cl
```

```
## [1] 31
##
## $df
## [1] 476
##
## $nvalues
##      ServicesCA ladminpc_l5 lmeanMINUSi_adminpc_l6 lmeanMINUSi_adminpc2_l6 herf
## [1,]        518         518                     518                      518   15
##      herf2 llength llength2
## [1,]    15      29       29
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Healy and Malhotra (2013)

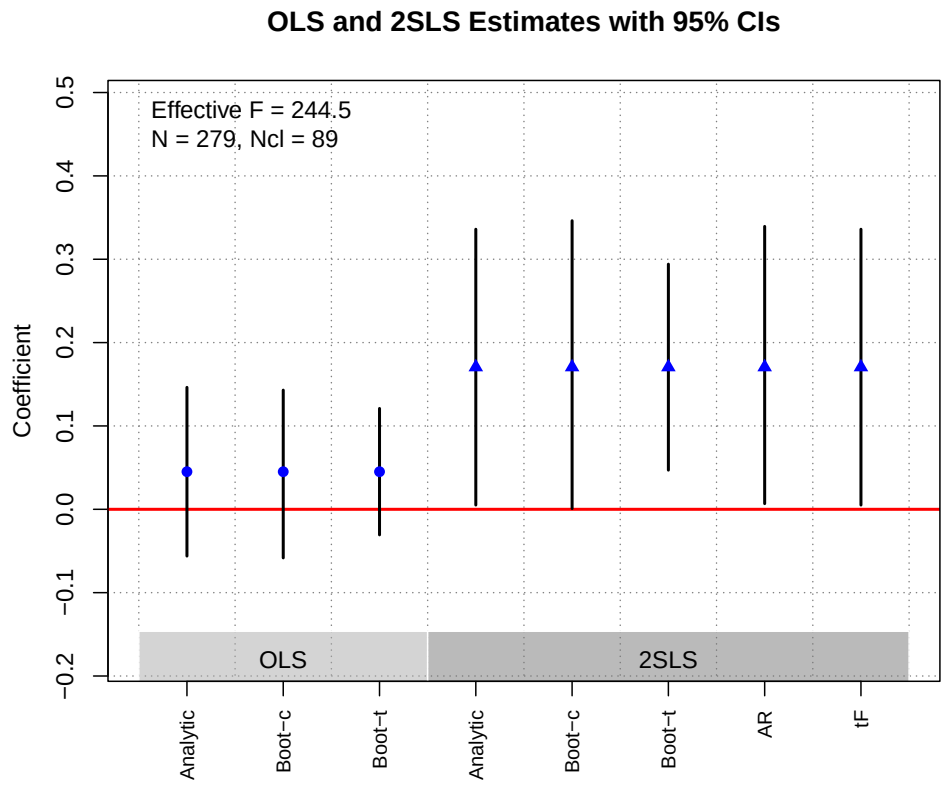
Replication Summary	
Unit of analysis	individual
Treatment	the share of a respondent's siblings who are female
Instrument	whether the younger sibling is a sister
Outcome	gender-role attitude in 1973
Model	Table1(1)

```r
df <- readRDS("./rawdata/jop_Healy_etal_2013.rds")
D <-"share_sis"
Y <- "womens_rights73"
Z <- "closest"
controls <- "num_sib"
cl <- "PSU"
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0451 0.0516 0.8743 -0.0561   0.1463  0.3819
## Boot.c   0.0451 0.0513 0.8800 -0.0583   0.1430  0.3800
## Boot.t   0.0451 0.0516 0.8743 -0.0307   0.1210  0.2230
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.1706 0.0844 2.0203  0.0051   0.3360  0.0434
## Boot.c   0.1706 0.0866 1.9701  0.0009   0.3462  0.0500
## Boot.t   0.1706 0.0844 2.0203  0.0470   0.2941  0.0070
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   4.1446   1.0000 277.0000   0.0427
##
## $AR$ci.print
## [1] "[0.0068, 0.3394]"
##
## $AR$ci
## [1] 0.0068 0.3394
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    255.3329    252.1198    244.4704    238.6458    244.4704
##
## $rho
## [1] 0.6932
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
```

```
## 244.4704   1.9600   0.1706   0.0844   2.0203   0.0051   0.3360   0.0434
##
## $est_rf
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## closest 0.0832 0.0409  0.0421 0.0414    4e-04    0.1588      0.05
##
## $est_fs
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## closest 0.4876 0.0312       0 0.0316   0.4274    0.5508         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 279
##
## $N_cl
## [1] 89
##
## $df
## [1] 276
##
## $nvalues
##      womens_rights73 share_sis closest
## [1,]               7        17       2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Henderson and Brooks (2016) (a)

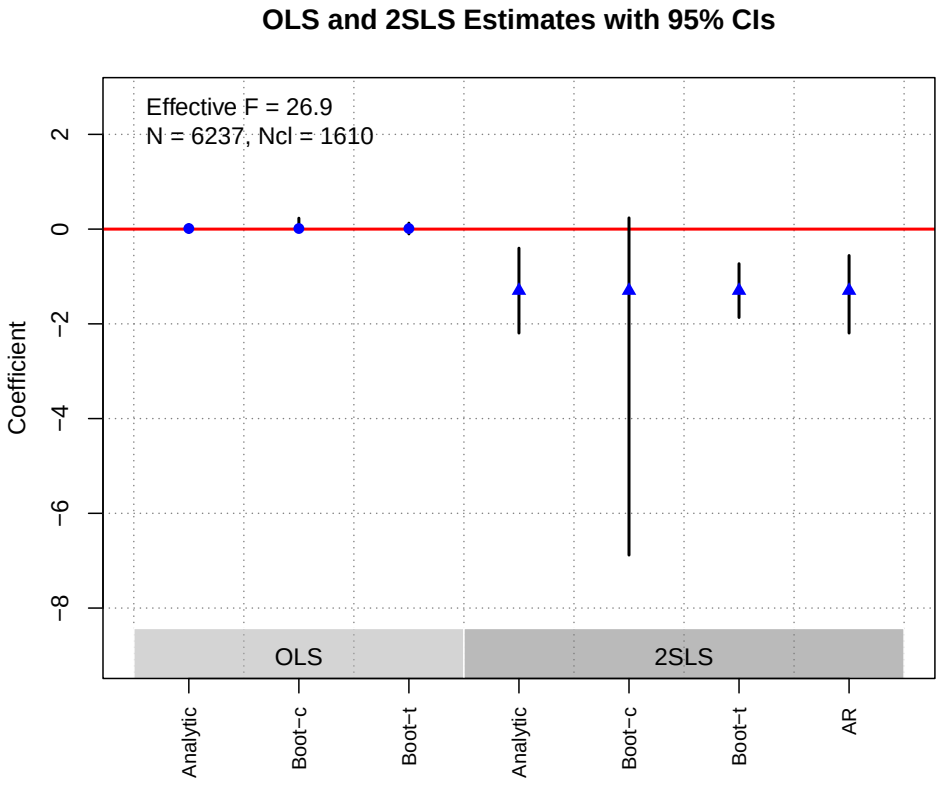
Replication Summary	
Unit of analysis	district*year
Treatment	Democratic vote margins
Instrument	rain around election day
Outcome	incumbent roll call positioning
Model	Table3(1)

```
df<- readRDS("./rawdata/jop_Henderson_etal_2016.rds")
df$fe_id_num<-df$`as.factor(fe_id_num)`
D <- "dose"
Y <- "vote"
Z <- c("rain_day", "rain_day_prev")
controls <- c("d_inc", "dist_prev", "midterm", "pres_party", "black",
              "construction", "educ", "minc", "farmer", "forborn",
              "gvtwkr", "manuf", "pop", "unempld", "urban", "retail",
              "sos", "gov", "comp_cq", "redistricted", "dose_prv", "vote_prv")
cl <- "fe_id_num" # incumbent
FE <- "fe_id_num"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0124 0.0415 0.2996 -0.0689   0.0937  0.7645
## Boot.c   0.0124 0.0540 0.2302  0.0132   0.2308  0.0240
## Boot.t   0.0124 0.0415 0.2996 -0.1017   0.1266  0.9640
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.2984 0.4571 -2.8403 -2.1943  -0.4024  0.0045
## Boot.c   -1.2984 1.9367 -0.6704 -6.8812   0.2365  0.0960
## Boot.t   -1.2984 0.4571 -2.8403 -1.8661  -0.7306  0.0000
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    6.2335    2.0000 6234.0000    0.0020
##
## $AR$ci.print
## [1] "[-2.1943, -0.5578]"
##
## $AR$ci
## [1] -2.1943 -0.5578
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     26.4294     21.5068     22.8295     10.6450     26.9117
##
## $rho
## [1] 0.1066
##
## $est_rf
##                  Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## rain_day      0.0326 0.0100  0.0011 0.0106   0.0187    0.0595     0.000
## rain_day_prev 0.0153 0.0081  0.0585 0.0119  -0.0241    0.0224     0.996
##
## $est_fs
##                   Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## rain_day      -0.0144 0.0031       0 0.0043  -0.0192   -0.0026     0.010
## rain_day_prev -0.0187 0.0031       0 0.0045  -0.0190   -0.0015     0.016
##
## $p_iv
## [1] 2
##
```

```
## $N
## [1] 6237
##
## $N_cl
## [1] 1610
##
## $df
## [1] 1609
##
## $nvalues
##      vote dose rain_day rain_day_prev
## [1,] 6230 5138     5321          5326
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Henderson and Brooks (2016) (b)

Replication Summary	
Unit of analysis	district*year
Treatment	Democratic vote margins
Instrument	rain around election weekend

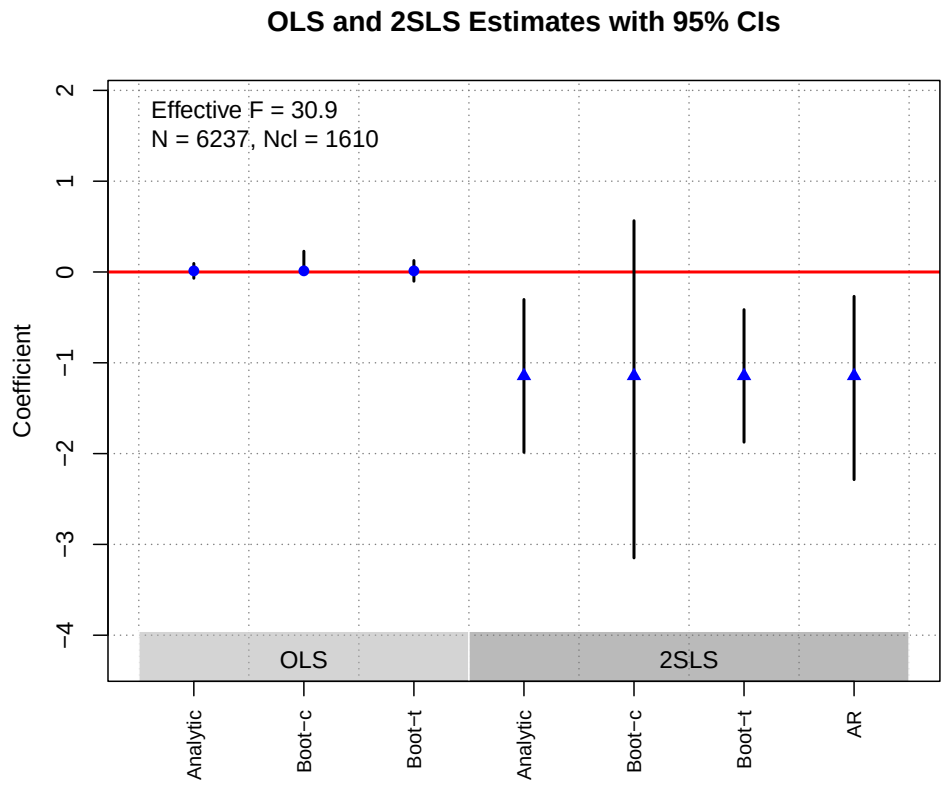
Replication Summary	
Outcome	incumbent roll call positioning
Model	Table3(2)

```
df<- readRDS("./rawdata/jop_Henderson_etal_2016.rds")
df$fe_id_num<-df$`as.factor(fe_id_num)`
D <- "dose"
Y <- "vote"
Z <- c("rain_weekend", "rain_weekend_prev")
controls <- c("d_inc", "dist_prev", "midterm", "pres_party", "black",
              "construction", "educ", "minc", "farmer", "forborn",
              "gvtwkr", "manuf", "pop", "unempld", "urban", "retail",
              "sos", "gov", "comp_cq", "redistricted", "dose_prv", "vote_prv")
cl <- "fe_id_num" # incumbent
FE <- "fe_id_num"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0124 0.0415 0.2996 -0.0689   0.0937  0.7645
## Boot.c   0.0124 0.0520 0.2388  0.0283   0.2285  0.0160
## Boot.t   0.0124 0.0415 0.2996 -0.1012   0.1260  0.9740
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -1.1444 0.4293 -2.6654 -1.9859  -0.3029  0.0077
## Boot.c   -1.1444 0.9276 -1.2337 -3.1487   0.5645  0.1980
## Boot.t   -1.1444 0.4293 -2.6654 -1.8740  -0.4148  0.0040
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    4.7151    2.0000 6234.0000    0.0090
##
## $AR$ci.print
## [1] "[-2.2864, -0.2685]"
##
## $AR$ci
## [1] -2.2864 -0.2685
##
## $AR$bounded
## [1] TRUE
##
##
```

```
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     30.3614     24.5741     26.3171     14.1875     30.9359
##
## $rho
## [1] 0.1141
##
## $est_rf
##                      Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## rain_weekend      0.0306 0.0109  0.0050 0.0116   0.0069    0.0519     0.012
## rain_weekend_prev 0.0175 0.0095  0.0665 0.0148  -0.0294    0.0268     0.954
##
## $est_fs
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## rain_weekend      -0.0192 0.0034       0 0.0048  -0.0251   -0.0063         0
## rain_weekend_prev -0.0213 0.0035       0 0.0047  -0.0231   -0.0050         0
##
## $p_iv
## [1] 2
##
## $N
## [1] 6237
##
## $N_cl
## [1] 1610
##
## $df
## [1] 1609
##
## $nvalues
##      vote dose rain_weekend rain_weekend_prev
## [1,] 6230 5138         5401              5407
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Johns and Pelc (2016)

Replication Summary	
Unit of analysis	WTO dispute
Treatment	the number third parties
Instrument	trade stake of the rest of the world
Outcome	becoming a third party
Model	Table2(2)

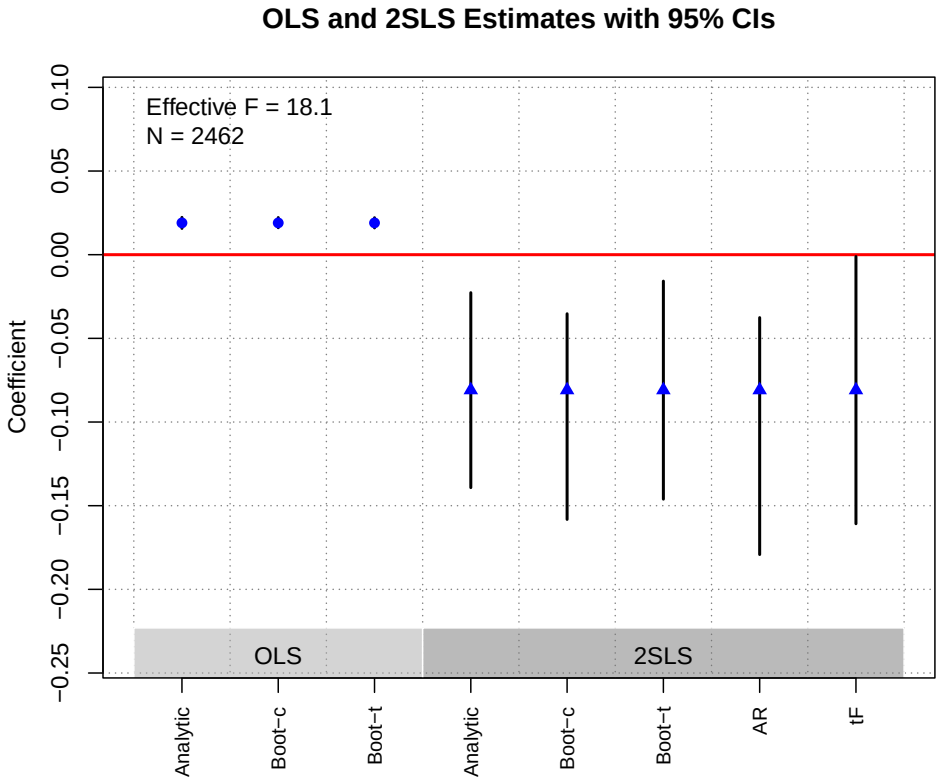
```
df<-readRDS("./rawdata/jop_Johns_etal_2016.rds")
D='third_num_excl'
Y='thirdparty'
Z='ln_ROW_before_disp'
controls=c("ln_gdpk_partner", "ln_history_third", "ln_history_C",
    "Multilateral", "trade_before_dispute",  "ARTICLEXXII")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic 0.019 0.0017 11.3469  0.0157   0.0223       0
```

```
## Boot.c   0.019 0.0016 11.8915  0.0161   0.0222       0
## Boot.t   0.019 0.0017 11.3469  0.0160   0.0221       0
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0809 0.0297 -2.7247 -0.1392  -0.0227  0.0064
## Boot.c   -0.0809 0.0335 -2.4134 -0.1582  -0.0353  0.0000
## Boot.t   -0.0809 0.0297 -2.7247 -0.1461  -0.0158  0.0250
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   19.7186    1.0000 2460.0000    0.0000
##
## $AR$ci.print
## [1] "[-0.1792, -0.0376]"
##
## $AR$ci
## [1] -0.1792 -0.0376
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     16.9224     18.1200          NA     18.9071     18.1200
##
## $rho
## [1] 0.0828
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 18.1200  2.6873 -0.0809  0.0297 -2.7247 -0.1608 -0.0011  0.0469
##
## $est_rf
##                        Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## ln_ROW_before_disp -0.0137 0.0031       0 0.0031  -0.0195   -0.0076         0
##
## $est_fs
##                       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## ln_ROW_before_disp 0.1692 0.0397       0 0.0389   0.1015    0.2536         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 2462
##
## $N_cl
## NULL
##
## $df
## [1] 2454
##
## $nvalues
##      thirdparty third_num_excl ln_ROW_before_disp
## [1,]          2             17                2281
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Kriner and Schickler (2014)

Replication Summary	
Unit of analysis	month
Treatment	committee investigations
Instrument	number of days that Congress was in session in a given month
Outcome	presidential approval

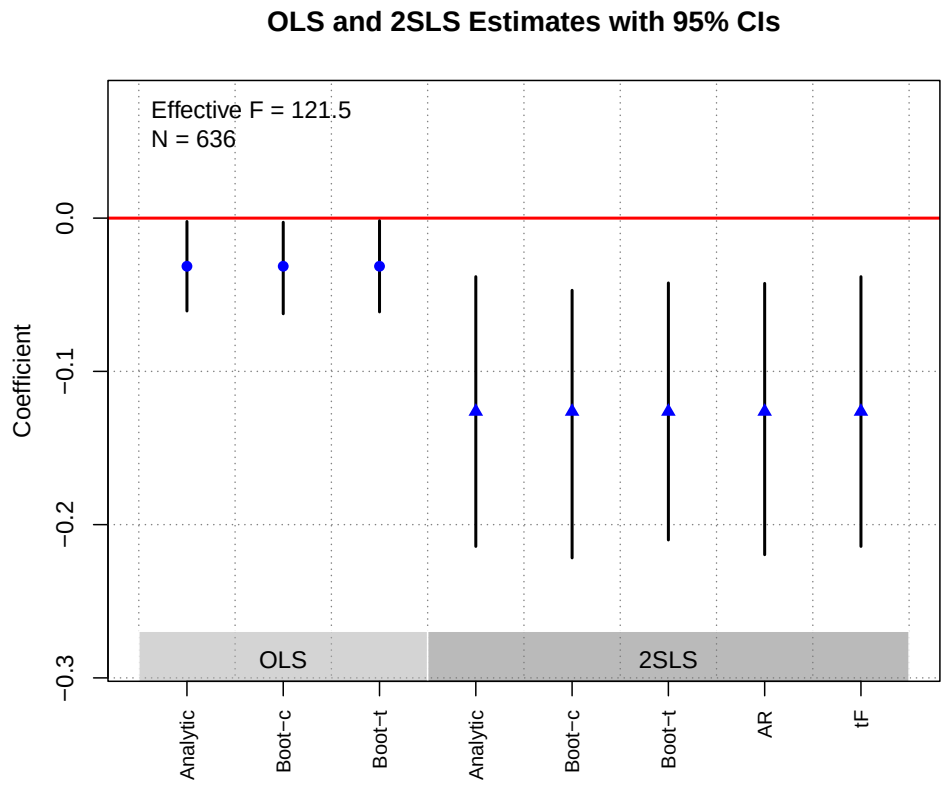
Replication Summary	
Model	Table1(1)

```
df<-readRDS("./rawdata/jop_Kriner_etal_2014.rds")
D <- "misconductdays"
Y <- "approval"
Z <- "alldaysinsession"
controls <- c("icst1", "positive", "negative", "vcaslast6mos",
              "iraqcaslast6mos", "honeymoon", "approvalt1", "ike","jfk",
              "lbj","rmn","ford","carter","reagan","bush","clinton","wbush")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.0314 0.0149 -2.1103 -0.0606  -0.0022  0.0348
## Boot.c   -0.0314 0.0150 -2.0957 -0.0624  -0.0027  0.0240
## Boot.t   -0.0314 0.0149 -2.1103 -0.0612  -0.0017  0.0350
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -0.1262 0.0449 -2.8096 -0.2142  -0.0382   0.005
## Boot.c   -0.1262 0.0455 -2.7699 -0.2217  -0.0471   0.002
## Boot.t   -0.1262 0.0449 -2.8096 -0.2100  -0.0423   0.001
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   8.9171   1.0000 634.0000   0.0029
##
## $AR$ci.print
## [1] "[-0.2196, -0.0426]"
##
## $AR$ci
## [1] -0.2196 -0.0426
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    105.5872    121.5394          NA    124.0945    121.5394
```

```
##
## $rho
## [1] 0.382
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 121.5394   1.9600  -0.1262   0.0449  -2.8096  -0.2142  -0.0382   0.0050
##
## $est_rf
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## alldaysinsession -0.035 0.0119  0.0032 0.0117  -0.0584   -0.0137     0.002
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## alldaysinsession 0.2777 0.0252       0 0.0249    0.226    0.3269         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 636
##
## $N_cl
## NULL
##
## $df
## [1] 618
##
## $nvalues
##      approval misconductdays alldaysinsession
## [1,]      185             52               49
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Lei and Zhou (2022)

Replication Summary	
Unit of analysis	city*year
Treatment	subway approval
Instrument	whether the city has more than 3 million residents* population size
Outcome	mayor promotion
Model	Table3(A)

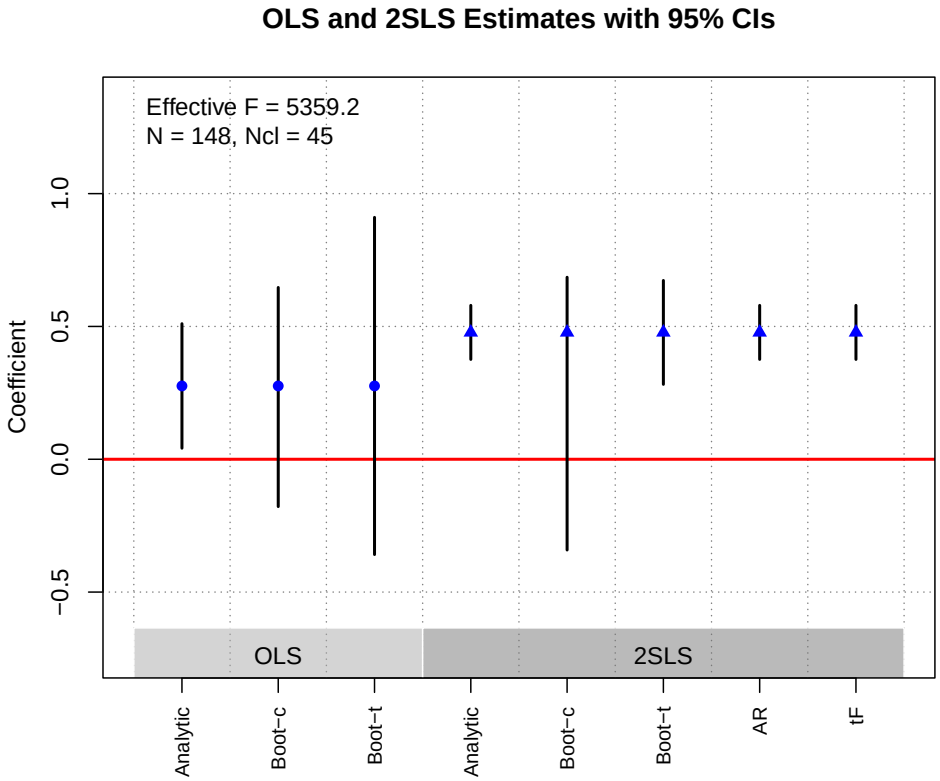
```
df<-readRDS("./rawdata/jop_Lei_2022.rds")
Y <-'Mayor_promotion3y'
D <-'Mayor_plan'
Z <-'iv1'
controls<-c( 'Per_pop_2', 'iv1_int')
cl<-"City_Code"
FE<-c("provinceyear","City_Code")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.276 0.1196 2.3077  0.0416   0.5104  0.0210
```

```
## Boot.c   0.276 0.2244 1.2299 -0.1781   0.6467  0.1372
## Boot.t   0.276 0.1196 2.3077 -0.3587   0.9106  0.2955
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.4776 0.0519 9.2026  0.3759   0.5793  0.0000
## Boot.c   0.4776 0.2701 1.7681 -0.3416   0.6852  0.1478
## Boot.t   0.4776 0.0519 9.2026  0.2820   0.6731  0.0026
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  83.1817   1.0000 146.0000   0.0000
##
## $AR$ci.print
## [1] "[0.3759, 0.5793]"
##
## $AR$ci
## [1] 0.3759 0.5793
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     53.4747   2276.8055   5359.1714    181.9936   5359.1714
##
## $rho
## [1] 0.7604
##
## $tF
##         F        cF      Coef        SE         t    CI2.5%   CI97.5%   p-value
## 5359.1714    1.9600    0.4776    0.0519    9.2026    0.3759    0.5793    0.0000
##
## $est_rf
##       Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## iv1 0.4833 0.0534       0 0.2797   -0.357    0.6955    0.1478
##
## $est_fs
##       Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## iv1 1.0119 0.0138       0 0.075   0.9858    1.2165         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 148
##
## $N_cl
## [1] 45
##
## $df
## [1] 39
##
## $nvalues
##      Mayor_promotion3y Mayor_plan iv1
## [1,]                 2          2   2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Lerman et al. (2017)

Replication Summary	
Unit of analysis	individual
Treatment	public versus only private health insurance
Instrument	born 1946 or 1947
Outcome	support ACA

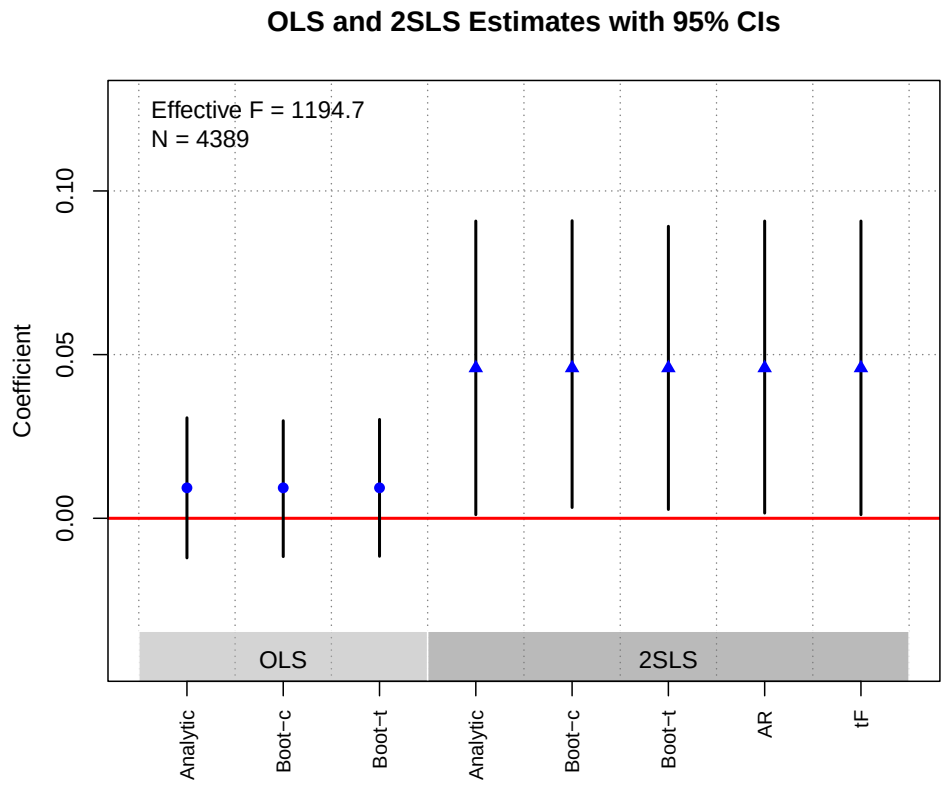
Replication Summary	
Model	Table1(1)

```
df<-readRDS("./rawdata/jop_Lerman_2017.rds")
Y <-'suppafford'
D <-'privpubins3r'
Z <-'byr4647'
controls<-c( 'rep', 'ind', 'con', 'mod',
              'ideostrength', 'hcsocial', 'fininsur',
             'healthcaresupport', 'child18', 'male',
             'married', 'labor', 'mobility', 'homeowner',
             'religimp','employed', 'votereg', 'vote08',
             'black', 'hispanic2', 'military', 'educ',
              'fincome', 'newsint', 'publicemp', 'bornagain')
cl<-NULL
FE<-NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0093 0.0109 0.8542 -0.0121   0.0307   0.393
## Boot.c   0.0093 0.0109 0.8578 -0.0117   0.0298   0.414
## Boot.t   0.0093 0.0109 0.8542 -0.0116   0.0302   0.402
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0459 0.0229 2.0095  0.0011   0.0908  0.0445
## Boot.c   0.0459 0.0230 1.9971  0.0033   0.0909  0.0320
## Boot.t   0.0459 0.0229 2.0095  0.0027   0.0892  0.0360
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    4.0770    1.0000 4387.0000    0.0435
##
## $AR$ci.print
## [1] "[0.0016, 0.0908]"
##
## $AR$ci
## [1] 0.0016 0.0908
##
## $AR$bounded
## [1] TRUE
##
```

```
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    1272.162    1194.659          NA    1143.951    1194.659
##
## $rho
## [1] 0.4752
##
## $tF
##         F         cF      Coef         SE          t    CI2.5%   CI97.5%   p-value
## 1194.6594    1.9600    0.0459    0.0229    2.0095    0.0011    0.0908    0.0445
##
## $est_rf
##           Coef   SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## byr4647 0.0202 0.01  0.0441 0.0101   0.0015    0.0396     0.032
##
## $est_fs
##           Coef     SE p.value  SE.b CI.b2.5% CI.b97.5% p.value.b
## byr4647 0.4401 0.0127       0 0.013   0.4124    0.4645         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 4389
##
## $N_cl
## NULL
##
## $df
## [1] 4361
##
## $nvalues
##      suppafford privpubins3r byr4647
## [1,]          2            2       2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Lorentzen et al. (2014)

Replication Summary	
Unit of analysis	city
Treatment	large firm dominance in 2007
Instrument	same variable measured in 1999
Outcome	pollution information transparency index
Model	Table1(2)

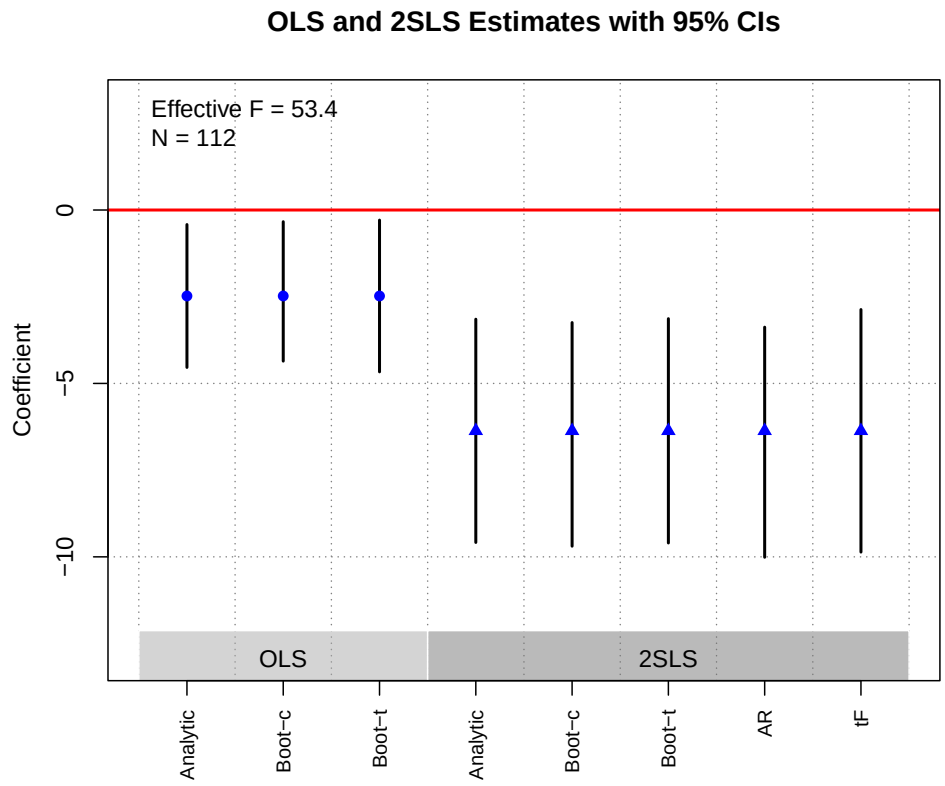
```
df<-readRDS("./rawdata/jop_Lorentzen_2014.rds")
D <- "lfd2007"
Y <- "pitiave3"
Z <- "lfd99"
controls <- c("lbudgetrev", "lexpratio", "tertratio", "sat_air_pca")
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -2.4789 1.0508 -2.3590 -4.5385  -0.4193  0.0183
## Boot.c   -2.4789 1.0523 -2.3557 -4.3565  -0.3374  0.0140
```

```
## Boot.t   -2.4789 1.0508 -2.3590 -4.6666  -0.2911  0.0280
##
## $est_2sls
##             Coef     SE       t CI 2.5% CI 97.5% p.value
## Analytic -6.3664 1.6421 -3.8769 -9.5850  -3.1478   1e-04
## Boot.c   -6.3664 1.6629 -3.8285 -9.6929  -3.2453   2e-03
## Boot.t   -6.3664 1.6421 -3.8769 -9.6001  -3.1328   1e-03
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##  17.3155   1.0000 110.0000   0.0001
##
## $AR$ci.print
## [1] "[-10.0120, -3.3777]"
##
## $AR$ci
## [1] -10.0120  -3.3777
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     53.6182     53.4100          NA     57.4805     53.4100
##
## $rho
## [1] 0.5796
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 53.4100  2.1292 -6.3664  1.6421 -3.8769 -9.8628 -2.8700  0.0004
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lfd99 -3.4227 0.8379       0 0.8463  -4.9716   -1.7773     0.002
##
## $est_fs
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## lfd99 0.5376 0.0736       0 0.0709   0.4093    0.6829         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 112
```

```
##
## $N_cl
## NULL
##
## $df
## [1] 106
##
## $nvalues
##      pitiave3 lfd2007 lfd99
## [1,]      108     112   112
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Pianzola et al. (2019)

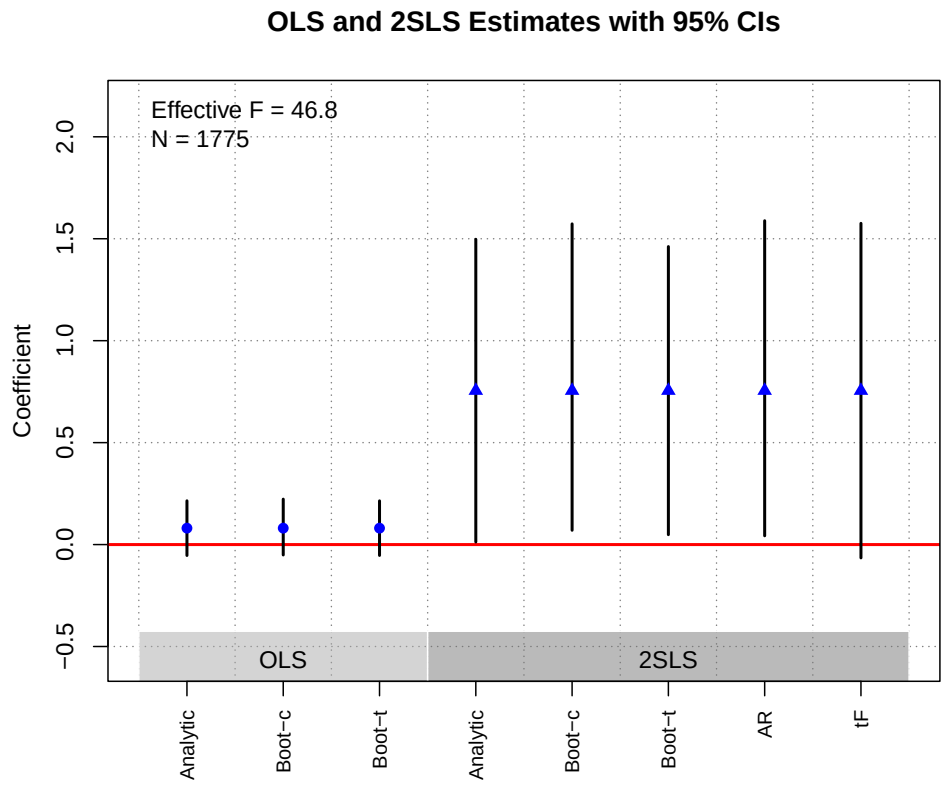
Replication Summary	
Unit of analysis	individual
Treatment	smartvote use
Instrument	random assignment of the e-mail treatment
Outcome	vote intentions
Model	Table4(3)

```r
df <- readRDS("./rawdata/jop_Pianzola_etal_2019.rds")
D <- "smartvote"
Y <- "diff_top_ptv"
Z <- "email"
controls <- NULL
cl <- NULL
FE <- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0805 0.0684 1.1767 -0.0536   0.2146  0.2393
## Boot.c   0.0805 0.0676 1.1913 -0.0510   0.2228  0.2340
## Boot.t   0.0805 0.0684 1.1767 -0.0534   0.2144  0.2180
##
## $est_2sls
##           Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.755 0.3788 1.9934  0.0126   1.4974  0.0462
## Boot.c   0.755 0.3811 1.9810  0.0701   1.5729  0.0320
## Boot.t   0.755 0.3788 1.9934  0.0486   1.4615  0.0380
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    4.2767    1.0000 1773.0000    0.0388
##
## $AR$ci.print
## [1] "[0.0429, 1.5883]"
##
## $AR$ci
## [1] 0.0429 1.5883
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     46.7293     46.7612          NA     48.7842     46.7612
##
## $rho
## [1] 0.1602
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
```

```
## 46.7612  2.1662  0.7550  0.3788  1.9934 -0.0654  1.5755  0.0713
##
## $est_rf
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## email 0.1032 0.0499  0.0386 0.0484   0.0091    0.1989     0.032
##
## $est_fs
##         Coef   SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## email 0.1367 0.02       0 0.0196   0.0992    0.1762         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 1775
##
## $N_cl
## NULL
##
## $df
## [1] 1773
##
## $nvalues
##      diff_top_ptv smartvote email
## [1,]           18         2     2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Schleiter and Tavits (2016)

Replication Summary	
Unit of analysis	election
Treatment	opportunistic election calling
Instrument	prime Minister dissolution power
Outcome	vote share of Prime Minister's party
Model	Table3(b4)

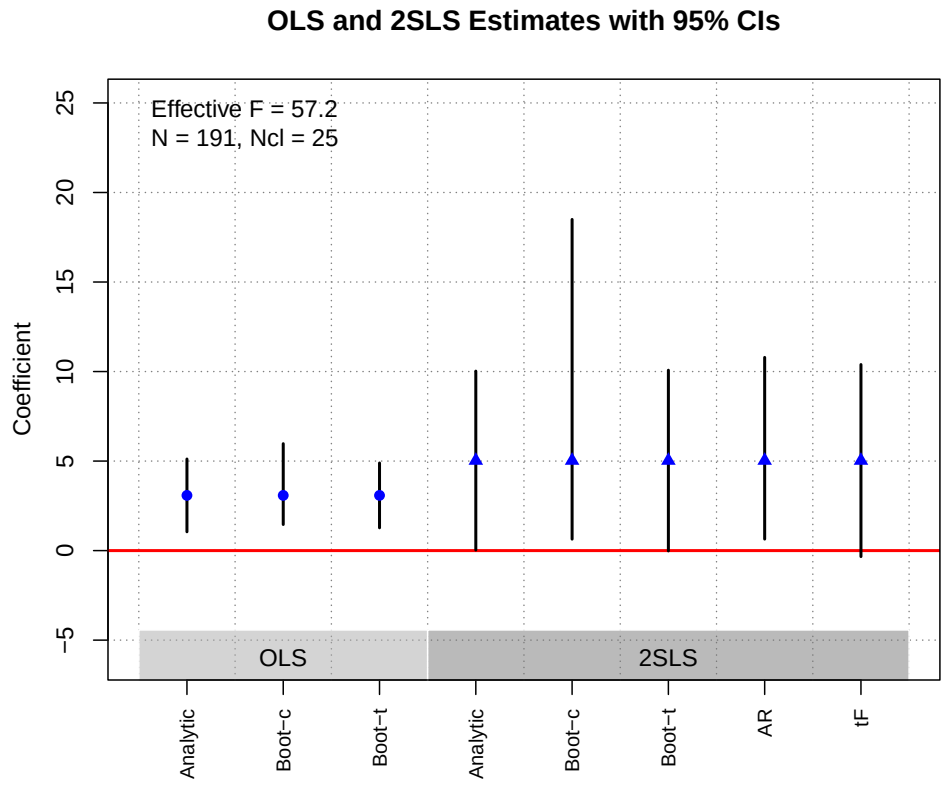
```
df<- readRDS("./rawdata/jop_Schleiter_etal_2016.rds")
D <- "term2"
Y <- "pm_voteshare_next"
Z <- "disspm"
controls <- c("pm_voteshare", "gdp_chg1yr", "cpi1yr",  "dumcpi1yr")
cl <- "countryn"
FE <- "decade"
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 3.0828 1.0369 2.9730  1.0504   5.1152  0.0029
## Boot.c   3.0828 1.1561 2.6665  1.4578   5.9719  0.0000
```

```
## Boot.t   3.0828 1.0369 2.9730  1.2722   4.8933  0.0060
##
## $est_2sls
##            Coef      SE      t CI 2.5% CI 97.5% p.value
## Analytic 5.0282  2.5494 1.9723  0.0314  10.0250  0.0486
## Boot.c   5.0282 67.7447 0.0742  0.6404  18.4948  0.0340
## Boot.t   5.0282  2.5494 1.9723 -0.0190  10.0754  0.0510
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   5.1692   1.0000 189.0000   0.0241
##
## $AR$ci.print
## [1] "[0.6433, 10.7899]"
##
## $AR$ci
## [1]  0.6433 10.7899
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    107.0322     75.6881     57.1949     23.5901     57.1949
##
## $rho
## [1] 0.6117
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 57.1949  2.1037  5.0282  2.5494  1.9723 -0.3350 10.3914  0.0661
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## disspm 0.3124 0.1412  0.0269 0.1749   0.0746    0.7642     0.012
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## disspm 0.0621 0.0082       0 0.0128   0.0209    0.0746     0.022
##
## $p_iv
## [1] 1
##
## $N
## [1] 191
```

```
##
## $N_cl
## [1] 25
##
## $df
## [1] 179
##
## $nvalues
##      pm_voteshare_next term2 disspm
## [1,]               157     2      6
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Schubiger (2021)

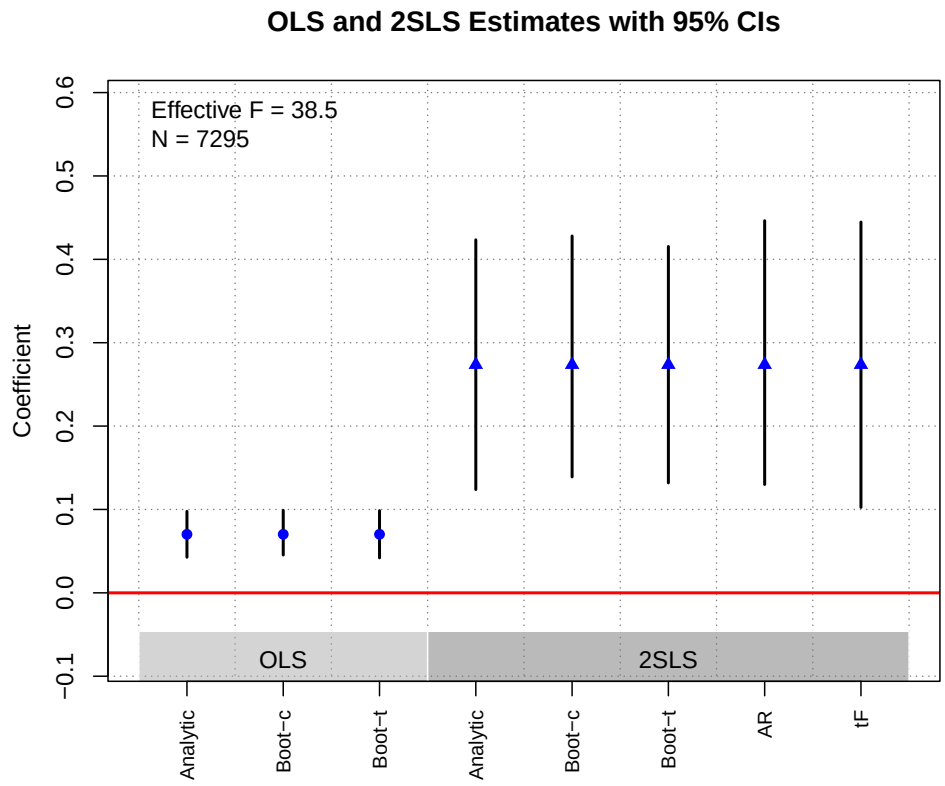
Replication Summary	
Unit of analysis	community
Treatment	exposure to state violence
Instrument	location of a community inside or outside the emergency zone
Outcome	counterinsurgent mobilization

```r
df <-readRDS("./rawdata/jop_Schubiger_2021.rds")
D <- "violence_est_period2"
Y<-"autodefensa"
Z <- "emzone"
controls <-"distance"
cl<- NULL
FE<- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef    SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0702 0.014 5.0069  0.0427   0.0977       0
## Boot.c   0.0702 0.014 5.0115  0.0454   0.0989       0
## Boot.t   0.0702 0.014 5.0069  0.0419   0.0986       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2736 0.0764 3.5814  0.1239   0.4234   3e-04
## Boot.c   0.2736 0.0755 3.6254  0.1390   0.4280   0e+00
## Boot.t   0.2736 0.0764 3.5814  0.1319   0.4154   1e-03
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##   12.7351    1.0000 7293.0000    0.0004
##
## $AR$ci.print
## [1] "[0.1300, 0.4463]"
##
## $AR$ci
## [1] 0.1300 0.4463
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     39.9899     38.5348          NA     40.7010     38.5348
##
## $rho
## [1] 0.0739
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
```

```
## 38.5348  2.2392  0.2736  0.0764  3.5814  0.1025  0.4447  0.0017
##
## $est_rf
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## emzone 0.0172 0.0048   4e-04 0.0047   0.0084     0.027         0
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## emzone 0.0629 0.0101       0 0.0099    0.044    0.0834         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 7295
##
## $N_cl
## NULL
##
## $df
## [1] 7292
##
## $nvalues
##      autodefensa violence_est_period2 emzone
## [1,]           2                    2      2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Stewart and Liou (2017)

Replication Summary	
Unit of analysis	insurgency*year
Treatment	foreign territory
Instrument	log total border length and the total number of that state's neighbors
Outcome	civilian casualties
Model	Table3(1)

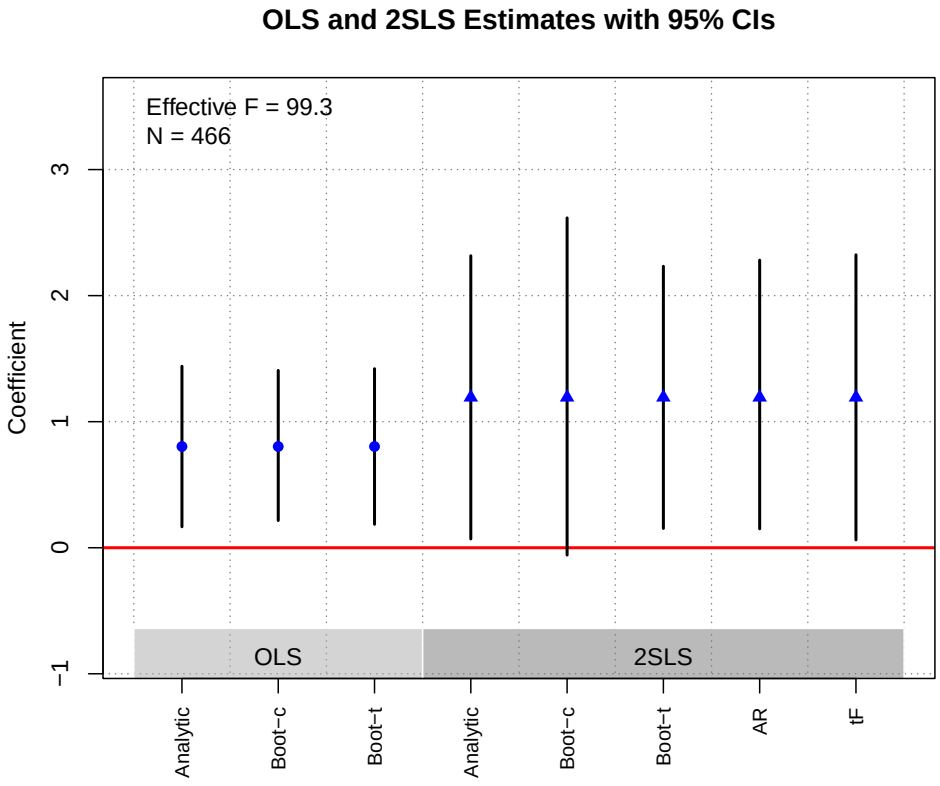
```
df <- readRDS("./rawdata/jop_Stewart_2017.rds")
D <- "exterrdum_low"
Y <- "oneside_best_log"
Z <- "total_border_ln"
controls <- c("bd_log", "terrdum", "strengthcent_ord", "rebstrength_ord",
              'nonmilsupport', 'rebestsize', 'l1popdensity',
              'l1gdppc_log','l1gdppc_change')
cl <- NULL
FE <- c("year","countrynum")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##           Coef     SE      t CI 2.5% CI 97.5% p.value
```

```
## Analytic 0.803 0.3249 2.4716  0.1662   1.4398  0.0135
## Boot.c   0.803 0.3153 2.5465  0.2160   1.4065  0.0140
## Boot.t   0.803 0.3249 2.4716  0.1859   1.4201  0.0120
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 1.1929 0.5730 2.0817  0.0698   2.3161  0.0374
## Boot.c   1.1929 1.4502 0.8226 -0.0582   2.6166  0.0640
## Boot.t   1.1929 0.5730 2.0817  0.1530   2.2328  0.0270
##
## $AR
## $AR$Fstat
##        F      df1      df2        p
##   5.0089   1.0000 464.0000   0.0257
##
## $AR$ci.print
## [1] "[0.1500, 2.2817]"
##
## $AR$ci
## [1] 0.1500 2.2817
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     33.9859     99.3150          NA     55.3927     99.3150
##
## $rho
## [1] 0.2786
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 99.3150  1.9734  1.1929  0.5730  2.0817  0.0621  2.3238  0.0387
##
## $est_rf
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## total_border_ln -7.0905 3.3952  0.0368 6.1515 -15.0568    0.3445     0.064
##
## $est_fs
##                     Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## total_border_ln -5.9438 0.5964       0 0.7986  -7.2768   -4.5464         0
##
## $p_iv
## [1] 1
##
```

```
## $N
## [1] 466
##
## $N_cl
## NULL
##
## $df
## [1] 404
##
## $nvalues
##      oneside_best_log exterrdum_low total_border_ln
## [1,]              113             2               45
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Urpelainen and Zhang (2022)

Replication Summary	
Unit of analysis	district*year
Treatment	wind turbine capacity

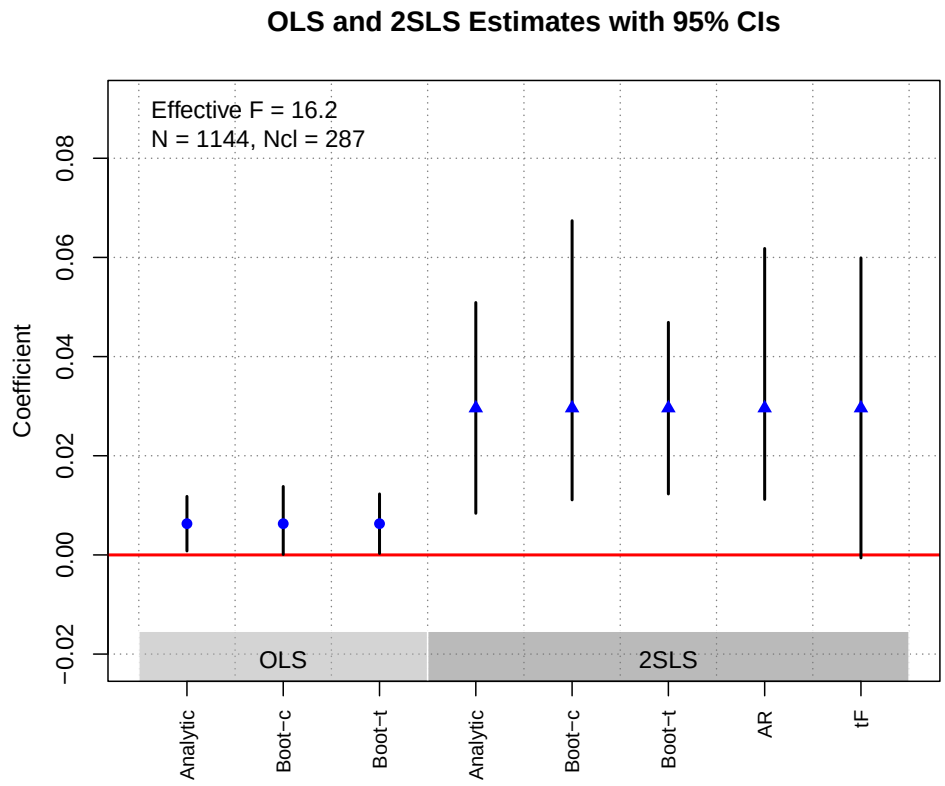
Replication Summary	
Instrument	time trend multiplied by the wind resource of the electoral district
Outcome	Democratic vote
Model	Table3(B1)

```
df <-readRDS("./rawdata/jop_urpelainen_2022.rds")
D <- "cum_capacity_turbine"
Y<-"demvotesmajorpercent"
Z <- "inter"
controls <-NULL
cl<- "district_fixed"
FE<- c("stateyear_fixed","district_fixed")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0063 0.0028 2.2395   8e-04   0.0118  0.0251
## Boot.c   0.0063 0.0035 1.8262   1e-04   0.0138  0.0460
## Boot.t   0.0063 0.0028 2.2395   3e-04   0.0123  0.0380
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0296 0.0109 2.7312  0.0084   0.0509  0.0063
## Boot.c   0.0296 0.0151 1.9612  0.0111   0.0674  0.0020
## Boot.t   0.0296 0.0109 2.7312  0.0123   0.0469  0.0030
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    9.5546    1.0000 1142.0000    0.0020
##
## $AR$ci.print
## [1] "[0.0112, 0.0618]"
##
## $AR$ci
## [1] 0.0112 0.0618
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
```

```
##     93.4366     27.8543     16.1654     15.2135     16.1654
##
## $rho
## [1] 0.3269
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 16.1654  2.7897  0.0296  0.0109  2.7312 -0.0006  0.0599  0.0550
##
## $est_rf
##         Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## inter 0.9095 0.2942   0.002 0.3123   0.2783    1.4911     0.002
##
## $est_fs
##          Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## inter 30.6883 7.6327   1e-04 7.8679  13.5585   43.7354         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 1144
##
## $N_cl
## [1] 287
##
## $df
## [1] 286
##
## $nvalues
##      demvotesmajorpercent cum_capacity_turbine inter
## [1,]                  965                  141   777
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Webster et al. (2022)

Replication Summary	
Unit of analysis	individual
Treatment	percentage of angry words that a respondent wrote in his or her emotional recall prompt
Instrument	treatment assignment indicator
Outcome	social polarization: do favors
Model	Table2(1)

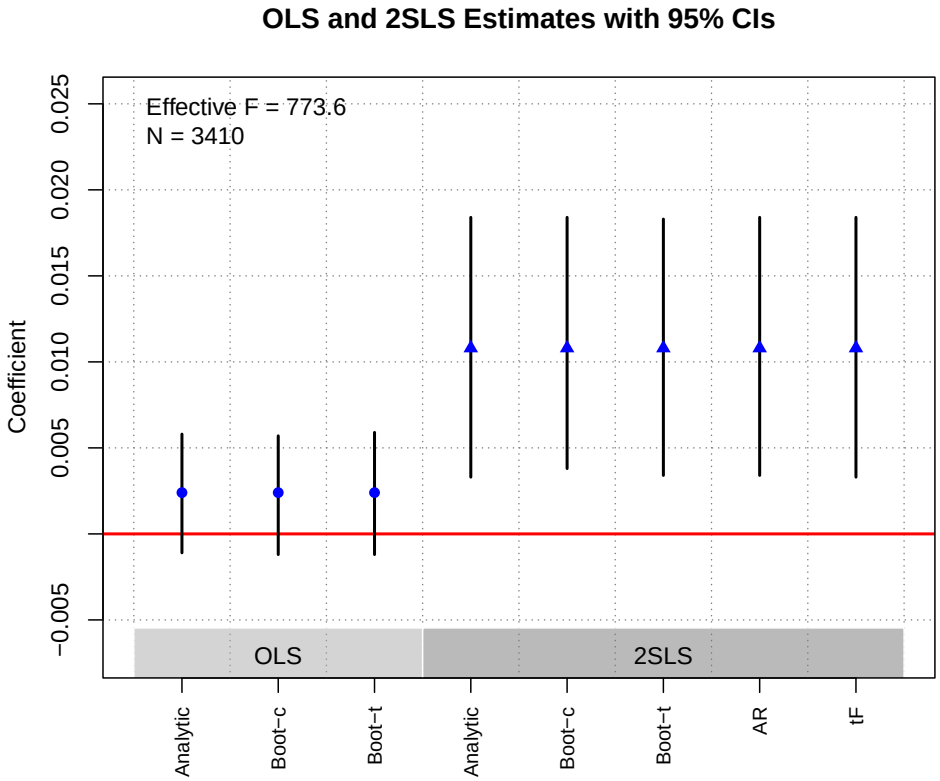
```
df <-readRDS("./rawdata/jop_Webster_2022.rds")
D <- "anger"
Y<-"fourpack_1_01"
Z <- "treated"
controls <-"democrat"
cl<- NULL
FE<- NULL
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0024 0.0018 1.3413 -0.0011   0.0058  0.1798
```

```
## Boot.c   0.0024 0.0018 1.3282 -0.0012   0.0057  0.2100
## Boot.t   0.0024 0.0018 1.3413 -0.0012   0.0059  0.1920
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0108 0.0039 2.8123  0.0033   0.0184  0.0049
## Boot.c   0.0108 0.0038 2.8797  0.0038   0.0184  0.0000
## Boot.t   0.0108 0.0039 2.8123  0.0034   0.0183  0.0000
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    7.9872    1.0000 3408.0000    0.0047
##
## $AR$ci.print
## [1] "[0.0034, 0.0184]"
##
## $AR$ci
## [1] 0.0034 0.0184
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##    801.9232    773.5894          NA    804.5041    773.5894
##
## $rho
## [1] 0.4365
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 773.5894   1.9600   0.0108   0.0039   2.8123   0.0033   0.0184   0.0049
##
## $est_rf
##          Coef    SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treated 0.031 0.011  0.0047 0.0107   0.0107    0.0529         0
##
## $est_fs
##           Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## treated 2.8585 0.1028       0 0.1008    2.677    3.0659         0
##
## $p_iv
## [1] 1
##
## $N
```

```
## [1] 3410
##
## $N_cl
## NULL
##
## $df
## [1] 3407
##
## $nvalues
##      fourpack_1_01 anger treated
## [1,]             5   252       2
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



West (2017)

Replication Summary	
Unit of analysis	individual
Treatment	Obama win
Instrument	IEM (prediction market) price
Outcome	political efficacy

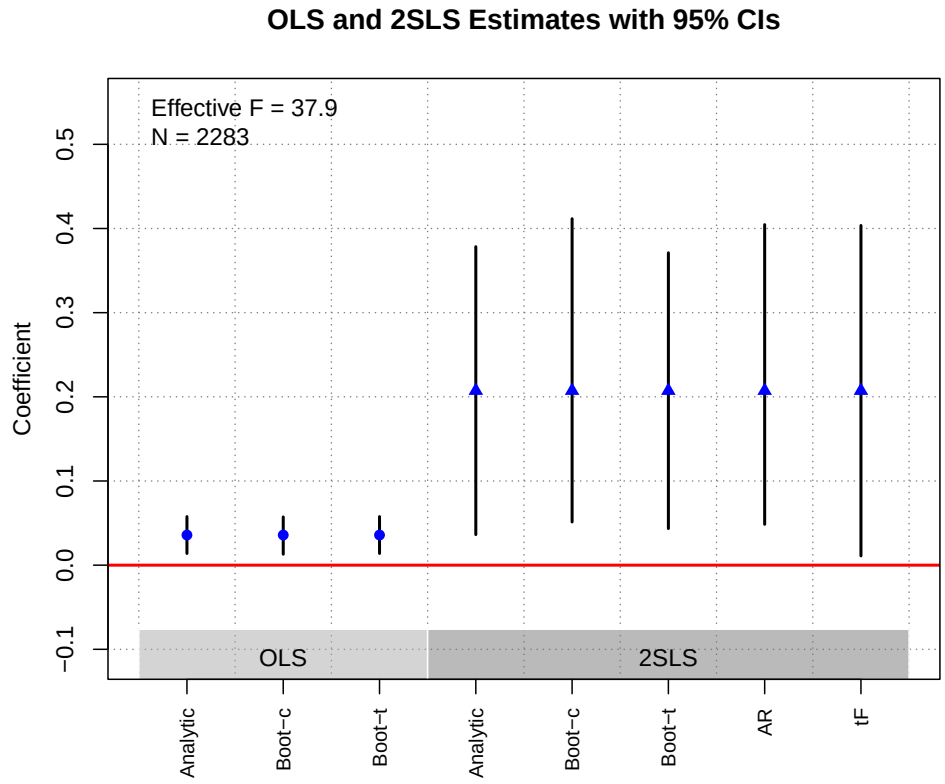
Replication Summary	
Model	Table1(4)

```
df<- readRDS("./rawdata/jop_West_2017.rds")
D <- "obama"
Y <- "newindex"
Z <- "avgprice"
controls <- c("partyd1", "partyd2", "partyd3",
              "partyd4", "partyd5", "wa01_a", "wa02_a",
              "wa03_a", "wa04_a", "wa05_a",   "wfc02_a",
              "ra01_b",  "rd01", "wd02_b", "rkey",
              "wave_1", "dt_w12", "dt_w12_2")
cl <- NULL
FE <- c("state","religion")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.0358 0.0112 3.2084  0.0139   0.0577  0.0013
## Boot.c   0.0358 0.0117 3.0700  0.0130   0.0573  0.0040
## Boot.t   0.0358 0.0112 3.2084  0.0139   0.0577  0.0040
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.2073 0.0873 2.3758  0.0363   0.3784  0.0175
## Boot.c   0.2073 0.0924 2.2446  0.0513   0.4116  0.0140
## Boot.t   0.2073 0.0873 2.3758  0.0435   0.3711  0.0110
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    6.5244    1.0000 2281.0000    0.0107
##
## $AR$ci.print
## [1] "[0.0485, 0.4046]"
##
## $AR$ci
## [1] 0.0485 0.4046
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
```

```
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##     41.7917     37.8652          NA     39.2950     37.8652
##
## $rho
## [1] 0.1362
##
## $tF
##       F      cF    Coef      SE       t  CI2.5% CI97.5% p-value
## 37.8652  2.2493  0.2073  0.0873  2.3758  0.0110  0.4036  0.0384
##
## $est_rf
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## avgprice 0.1407 0.0559  0.0119 0.0559   0.0337    0.2397     0.014
##
## $est_fs
##            Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## avgprice 0.6784 0.1103       0 0.1082   0.4551    0.8873         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 2283
##
## $N_cl
## NULL
##
## $df
## [1] 2211
##
## $nvalues
##      newindex obama avgprice
## [1,]      122     2      141
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



Ziaja (2020)

Replication Summary	
Unit of analysis	country*year
Treatment	number of democracy donors
Instrument	constructed instrument
Outcome	democracy scores
Model	Table1(B2)

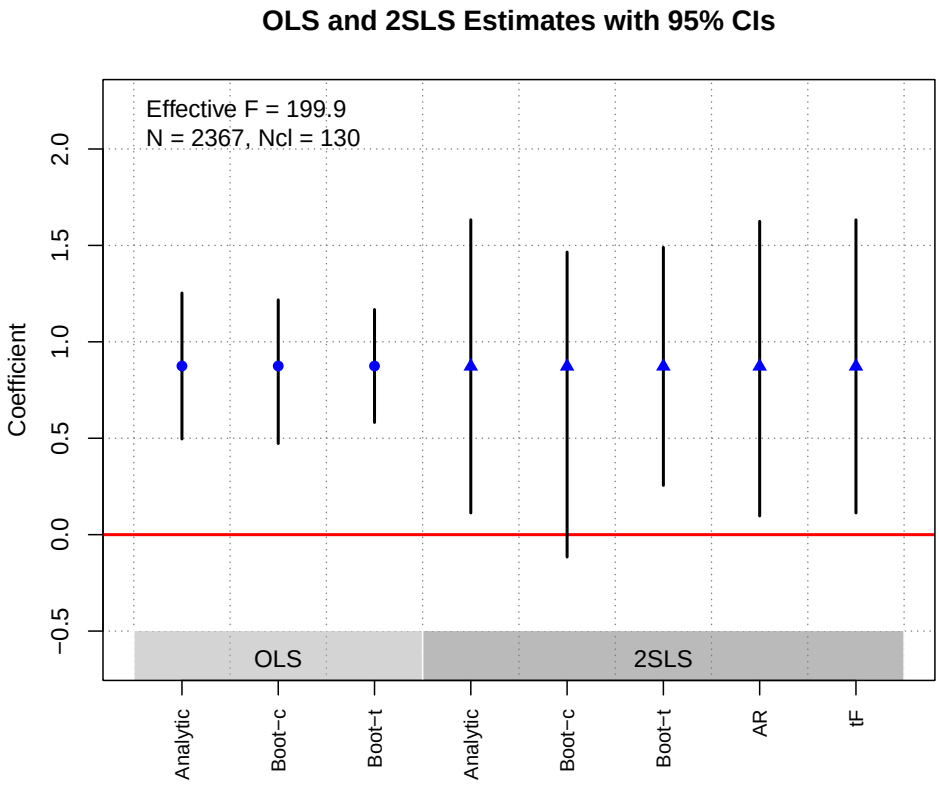
```
df <-readRDS("./rawdata/jop_Ziaja_2020.rds")
D <- "l.CMgnh"
Y <- "v2x.polyarchy.n"
Z <- "l.ZwvCMgwh94"
controls <-c("l.pop.log.r", "l.gdpcap.log.r", "l.war25")
cl<- "cnamef"
FE<- c("cnamef", "periodf")
weights<-NULL
(g<-ivDiag(data=df, Y=Y, D=D, Z=Z, controls=controls, FE =FE,
  cl =cl,weights=weights, cores = cores))
```

```
## $est_ols
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.8746 0.1931 4.5298  0.4962   1.2531       0
## Boot.c   0.8746 0.1941 4.5058  0.4727   1.2175       0
```

```
## Boot.t   0.8746 0.1931 4.5298  0.5819   1.1673       0
##
## $est_2sls
##            Coef     SE      t CI 2.5% CI 97.5% p.value
## Analytic 0.8726 0.3877 2.2505  0.1126   1.6325  0.0244
## Boot.c   0.8726 0.4022 2.1698 -0.1160   1.4654  0.1000
## Boot.t   0.8726 0.3877 2.2505  0.2556   1.4896  0.0030
##
## $AR
## $AR$Fstat
##         F       df1       df2         p
##    4.8018    1.0000 2365.0000    0.0285
##
## $AR$ci.print
## [1] "[0.0971, 1.6248]"
##
## $AR$ci
## [1] 0.0971 1.6248
##
## $AR$bounded
## [1] TRUE
##
##
## $F_stat
##  F.standard    F.robust   F.cluster F.bootstrap F.effective
##   1158.1467    775.0850    199.9166    199.1035    199.9166
##
## $rho
## [1] 0.586
##
## $tF
##        F       cF     Coef       SE        t   CI2.5%  CI97.5%  p-value
## 199.9166   1.9600   0.8726   0.3877   2.2505   0.1126   1.6325   0.0244
##
## $est_rf
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l.ZwvCMgwh94 0.0599 0.0273  0.0285 0.0292  -0.0075    0.1064       0.1
##
## $est_fs
##                Coef     SE p.value   SE.b CI.b2.5% CI.b97.5% p.value.b
## l.ZwvCMgwh94 0.0686 0.0049       0 0.0049   0.0614    0.0807         0
##
## $p_iv
## [1] 1
##
## $N
## [1] 2367
```

```
##
## $N_cl
## [1] 130
##
## $df
## [1] 129
##
## $nvalues
##      v2x.polyarchy.n l.CMgnh l.ZwvCMgwh94
## [1,]            2038      24          2283
##
## attr(,"class")
## [1] "ivDiag"
```

```
plot_coef(g)
```



References

Acharya, A., Blackwell, M., and Sen, M. (2016). The political legacy of american slavery. *The Journal of Politics*, 78(3):621–641. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 105.

Alt, J., Marshall, J., and Lassen, D. (2016). Credible sources and sophisticated voters: when does new information induce economic voting? *The Journal of Politics*, 78(2):327–342. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 108.

Arias, E. and Stasavage, D. (2019). How large are the political costs of fiscal austerity? *The Journal of Politics*, 81(4):1517–1522. Cited on pages 2 and 110.

Baccini, L. and Weymouth, S. (2021). Gone for good: Deindustrialization, white voter backlash, and us presidential voting. *American Political Science Review*, 115(2):550–567. Cited on pages 1 and 5.

Barth, E., Finseraas, H., and Moene, K. (2015). Political reinforcement: how rising inequality curbs manifested welfare generosity. *American Journal of Political Science*, 59(3):565–577. Publisher: Wiley Online Library. Cited on pages 1 and 42.

Bhavnani, R. and Lee, A. (2018). Local embeddedness and bureaucratic performance: evidence from india. *The Journal of Politics*, 80(1):71–87. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 113.

Blair, R. A., Di Salvatore, J., and Smidt, H. M. (2022). When do un peacekeeping operations implement their mandates? *American Journal of Political Science*, 66(3):664–680. Cited on pages 1 and 45.

Blattman, C., Hartman, A., and Blair, R. (2014). How to promote order and property rights under weak rule of law? an experiment in changing dispute resolution behavior through community education. *American Political Science Review*, page 100–120. Publisher: JSTOR. Cited on pages 1 and 7.

Carnegie, A. and Marinov, N. (2017). Foreign aid, human rights, and democracy promotion: Evidence from a natural experiment. *American Journal of Political Science*, 61(3):671–683. Publisher: Wiley Online Library. Cited on pages 1 and 47.

Charron, N., Dahlström, C., Fazekas, M., and Lapuente, V. (2017). Careers, connections, and corruption risks: Investigating the impact of bureaucratic meritocracy on public procurement processes. *The Journal of Politics*, 79(1):89–104. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 118.

Charron, N. and Lapuente, V. (2013). Why do some regions in europe have a higher quality of government? *The Journal of Politics*, 75(3):567–582. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 115.

Chong, A., León-Ciliotta, G., Roza, V., Valdivia, M., and Vega, G. (2019). Urbanization patterns, information diffusion, and female voting in rural paraguay. *American Journal of Political Science*, 63(2):323–341. Publisher: Wiley Online Library. Cited on pages 1 and 50.

Cirone, A. and Van Coppenolle, B. (2018). Cabinets, committees, and careers: the causal effect of committee service. *The Journal of Politics*, 80(3):948–963. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 120.

Colantone, I. and Stanig, P. (2018). Global competition and brexit. *American political science review*, 112(2):201–218. Cited on pages 1 and 10.

Colantone, I. and Stanig, P. (2018). The trade origins of economic nationalism: Import competition and voting behavior in western europe. *American Journal of Political Science*, 62(4):936–953. Publisher: Wiley Online Library. Cited on pages 1 and 53.

Coppock, A. and Green, D. (2016). Is voting habit forming? new evidence from experiments and regression discontinuities. *American Journal of Political Science*, 60(4):1044–1062. Publisher: Wiley Online Library. Cited on pages 1 and 55.

Croke, K., Grossman, G., Larreguy, H., and Marshall, J. (2016). Deliberate disengagement: How education can decrease political participation in electoral authoritarian regimes. *American Political Science Review*, 110(3):579–600. Publisher: Cambridge University Press. Cited on pages 1 and 12.

De La O, A. (2013). Do conditional cash transfers affect electoral behavior? evidence from a randomized experiment in mexico. *American Journal of Political Science*, 57(1):1–14. Publisher: Wiley Online Library. Cited on pages 1 and 58.

Dietrich, S. and Wright, J. (2015). Foreign aid allocation tactics and democratic change in africa. *The Journal of Politics*, 77(1):216–234. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 123.

DiGiuseppe, M. and Shea, P. E. (2022). Us patronage, state capacity, and civil conflict. *The Journal of Politics*, 84(2):767–782. Cited on pages 2 and 126.

Dower, P., Finkel, E., Gehlbach, S., and Nafziger, S. (2018). Collective action and representation in autocracies: Evidence from russia's great reforms. *American Political Science Review*, 112(1):125–147. Publisher: Cambridge University Press. Cited on pages 1, 15 and 17.

Dube, O. and Naidu, S. (2015). Bases, bullets, and ballots: The effect of us military aid on political conflict in colombia. *The Journal of Politics*, 77(1):249–267. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 128.

Feigenbaum, J. and Hall, A. (2015). How legislators respond to localized economic shocks: Evidence from chinese import competition. *The Journal of Politics*, 77(4):1012–1030. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 131.

Flores-Macias, G. and Kreps, S. (2013). The foreign policy consequences of trade: China's commercial relations with africa and latin america, 1992–2006. *The Journal of Politics*, 75(2):357–371. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 133.

Gehlbach, S. and Keefer, P. (2012). Private investment and the institutionalization of collective action in autocracies: ruling parties and legislatures. *The Journal of Politics*, 74(2):621–635. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 136.

Gerber, A., Huber, G., and Washington, E. (2010). Party affiliation, partisanship, and political beliefs: A field experiment. *American Political Science Review*, 104(4):720–744. Publisher: Cambridge University Press. Cited on pages 1 and 20.

Goldstein, R. and You, H. (2017). Cities as lobbyists. *American Journal of Political Science*, 61(4):864–876. Publisher: Wiley Online Library. Cited on pages 1 and 60.

Grossman, G., Pierskalla, J., and Boswell Dean, E. (2017). Government fragmentation and public goods provision. *The Journal of Politics*, 79(3):823–840. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 138.

Hager, A. and Hilbig, H. (2019). Do inheritance customs affect political and social inequality? *American Journal of Political Science*, 63(4):758–773. Publisher: Wiley Online Library. Cited on pages 2, 63 and 65.

Hager, A. and Krakowski, K. (2022). Does state repression spark protests? evidence from secret police surveillance in communist poland. *American Political Science Review*, 116(2):564–579. Cited on pages 1 and 25.

Hager, A., Krakowski, K., and Schaub, M. (2019). Ethnic riots and prosocial behavior: Evidence from kyrgyzstan. *American Political Science Review*, 113(4):1029–1044. Cited on pages 1 and 22.

Healy, A. and Malhotra, N. (2013). Childhood socialization and political attitudes: Evidence from a natural experiment. *The Journal of Politics*, 75(4):1023–1037. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 141.

Henderson, J. and Brooks, J. (2016). Mediating the electoral connection: The information effects of voter signals on legislative behavior. *The Journal of Politics*, 78(3):653–669. Cited on pages 2, 144 and 146.

Hong, J. Y., Park, S., and Yang, H. (2022). In strongman we trust: The political legacy of the new village movement in south korea. *American Journal of Political Science*. Cited on pages 2 and 68.

Johns, L. and Pelc, K. (2016). Fear of crowds in world trade organization disputes: Why don't more countries participate? *The Journal of Politics*, 78(1):88–104. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 149.

Kapoor, S. and Magesan, A. (2018). Independent candidates and political representation in india. *American Political Science Review*, 112(3):678–697. Publisher: Cambridge University Press. Cited on pages 1 and 27.

Kim, J. (2019). Direct democracy and women's political engagement. *American Journal of Political Science*, 63(3):594–610. Publisher: Wiley Online Library. Cited on pages 2 and 70.

Kocher, M., Pepinsky, T., and Kalyvas, S. (2011). Aerial bombing and counterinsurgency in the vietnam war. *American Journal of Political Science*, 55(2):201–218. Publisher: Wiley Online Library. Cited on pages 2 and 73.

Kriner, D. and Schickler, E. (2014). Investigating the president: Committee probes and presidential approval, 1953–2006. *The Journal of Politics*, 76(2):521–534. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 151.

Kuipers, N. and Sahn, A. (2022). The representational consequences of municipal civil service reform. *American Political Science Review*, pages 1–17. Cited on pages 1 and 30.

Laitin, D. and Ramachandran, R. (2016). Language policy and human development. *American Political Science Review*, 110(3):457–480. Publisher: Cambridge University Press. Cited on pages 1 and 32.

Lei, Z. and Zhou, J. A. (2022). Private returns to public investment: Political career incentives and infrastructure investment in china. *The Journal of Politics*, 84(1):455–469. Cited on pages 2 and 154.

Lelkes, Y., Sood, G., and Iyengar, S. (2017). The hostile audience: The effect of access to broadband internet on partisan affect. *American Journal of Political Science*, 61(1):5–20. Publisher: Wiley Online Library. Cited on pages 2 and 75.

Lerman, A., Sadin, M., and Trachtman, S. (2017). Policy uptake as political behavior: evidence from the affordable care act. *The American Political Science Review*, 111(4):755. Publisher: Cambridge University Press. Cited on pages 2 and 156.

López-Moctezuma, G., Wantchekon, L., Rubenson, D., Fujiwara, T., and Pe Lero, C. (2020). Policy deliberation and voter persuasion: Experimental evidence from an election in the philippines. *American Journal of Political Science*. Cited on pages 2 and 78.

Lorentzen, P., Landry, P., and Yasuda, J. (2014). Undermining authoritarian innovation: the power of china's industrial giants. *The Journal of Politics*, 76(1):182–194. Publisher: Cambridge University Press New York, USA. Cited on pages 2 and 159.

McClendon, G. (2014). Social esteem and participation in contentious politics: A field experiment at an lgbt pride rally. *American Journal of Political Science*, 58(2):279–290. Publisher: Wiley Online Library. Cited on pages 2 and 80.

Meredith, M. (2013). Exploiting friends-and-neighbors to estimate coattail effects. *American Political Science Review*, page 742–765. Publisher: JSTOR. Cited on pages 1 and 35.

Nellis, G. and Siddiqui, N. (2018). Secular party rule and religious violence in pakistan. *The American Political Science Review*, 112(1):49. Publisher: Cambridge University Press. Cited on pages 1 and 37.

Pianzola, J., Trechsel, A., Vassil, K., Schwerdt, G., and Alvarez, R. (2019). The impact of personalized information on vote intention: Evidence from a randomized field experiment. *The Journal of Politics*, 81(3):833–847. Publisher: The University of Chicago Press Chicago, IL. Cited on pages 2 and 161.

Ritter, E. and Conrad, C. (2016). Preventing and responding to dissent: The observational challenges of explaining strategic repression. *American Political Science Review*, 110(1):85–99. Publisher: Cambridge University Press. Cited on pages 1 and 40.

Rueda, M. (2017). Small aggregates, big manipulation: Vote buying enforcement and collective monitoring. *American Journal of Political Science*, 61(1):163–177. Publisher: Wiley Online Library. Cited on pages 2 and 83.

Schleiter, P. and Tavits, M. (2016). The electoral benefits of opportunistic election timing. *The Journal of Politics*, 78(3):836–850. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 164.

Schubiger, L. I. (2021). State violence and wartime civilian agency: Evidence from peru. *The Journal of Politics*, 83(4):1383–1398. Cited on pages 2 and 166.

Sexton, R., Wellhausen, R., and Findley, M. (2019). How government reactions to violence worsen social welfare: evidence from peru. *American Journal of Political Science*, 63(2):353–367. Publisher: Wiley Online Library. Cited on pages 2 and 85.

Spenkuch, J. and Tillmann, P. (2018). Elite influence? religion and the electoral success of the nazis. *American Journal of Political Science*, 62(1):19–36. Publisher: Wiley Online Library. Cited on pages 2 and 88.

Stewart, M. and Liou, Y. (2017). Do good borders make good rebels? territorial control and civilian casualties. *The Journal of Politics*, 79(1):284–301. Publisher: University of Chicago Press Chicago, IL. Cited on pages 2 and 169.

Stokes, L. (2016). Electoral backlash against climate policy: A natural experiment on retrospective voting and local resistance to public policy. *American Journal of Political Science*, 60(4):958–974. Publisher: Wiley Online Library. Cited on pages 2 and 90.

Tajima, Y. (2013). The institutional basis of intercommunal order: Evidence from indonesia's democratic transition. *American Journal of Political Science*, 57(1):104–119. Publisher: Wiley Online Library. Cited on pages 2 and 93.

Trounstine, J. (2016). Segregation and inequality in public goods. *American Journal of Political Science*, 60(3):709–725. Publisher: Wiley Online Library. Cited on pages 2 and 95.

Urpelainen, J. and Zhang, A. T. (2022). Electoral backlash or positive reinforcement? wind power and congressional elections in the united states. *The Journal of Politics*, 84(3):1306–1321. Cited on pages 2 and 171.

Vernby, K. (2013). Inclusion and public policy: Evidence from sweden's introduction of noncitizen suffrage. *American Journal of Political Science*, 57(1):15–29. Publisher: Wiley Online Library. Cited on pages 2 and 98.

Webster, S. W., Connors, E. C., and Sinclair, B. (2022). The social consequences of political anger. *The Journal of Politics*, 84(3):1292–1305. Cited on pages 2 and 174.

West, E. (2017). Descriptive representation and political efficacy: Evidence from obama and clinton. *The Journal of Politics*, 79(1):351–355. Publisher: University of Chicago Press Chicago, IL. Cited on pages 3 and 176.

Wood, A. K. and Grose, C. R. (2022). Campaign finance transparency affects legislators' election outcomes and behavior. *American Journal of Political Science*, 66(2):516–534. Cited on pages 2 and 100.

Zhu, B. (2017). Mncs, rents, and corruption: Evidence from china. *American Journal of Political Science*, 61(1):84–99. Publisher: Wiley Online Library. Cited on pages 2 and 103.

Ziaja, S. (2020). More donors, more democracy. *The Journal of Politics*, 82(2):433–447. Publisher: The University of Chicago Press Chicago, IL. Cited on pages 3 and 179.