Replication Materials

Trading Old Errors for New Errors? The Impact of Electronic Voting Technology on Party Label Votes in Brazil

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Replication materials include two data files, two files with `R` code for the analysis, and the supplemental information appendix to the paper in pdf format. Please download all files and save them locally. Open the `R` files in your system and change the path of the working directory to match you local folder.

The current version of the replication code relies on the `checkpoint` package for `R`, which should allow for exact replication of the results, even if the other packages have been modified after the writing of the paper. For best results, the replication code should be run in a brand new `R` session, without loading any of any current packages.

Description of the Materials

1. `Zucco & Nicolau SI.pdf`: Supplemental information for paper
2. `_replic_1996.R`: R code to replicate analysis, figures, and graphs for the 1996 elections
3. `_replic_1996_depfed.R`: R code to replicate analysis, figures, and graphs for the 1998 elections
4. `data-RDDdepfed.RData`: File containing municipal level data for the analysis of the elections for the lower chamber of Congress (*Deputados Fed-*

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erais). Includes data for 1998, which is the year of interest, but also for other years that are included as placebo tests. Full set of variables is as follows:

- `codeibge` Code of municipality
- `urna` Dummy indicator for EVS in 1998
- `eleitorado` Registered voters (in 1998)
- `eleitorado.1996` Registered voters (in 1996)
- `comparecimento.1994` Turnout in 1994
- `comparecimento` Turnout in 1998
- `comparecimento.2002` Turnout in 2002
- `brancosfed.1994` Blank votes in 1994
- `nulosfed.1994` Null votes in 1994
- `hdi.1991` Human development index of municipality
- `hdi.2000` Human development index of municipality
- `pibpc.1999` GDP per capita of the municipality
- `pibpc.1996` GDP per capita of the municipality
- `mun` Municipality name
- `state` State acronym
- `region` Macro-region of the country
- `distcap` Distance to capital city (in 10 meters)
- `brancosfed` Blank votes in 1998
- `nulosfed` Null votes in 1998
- `nomfed` Nominal (non-legenda) votes in 1998
- `legfed.1994` Legenda votes in 1994
- `legfed` Legenda votes in 1998
- `legfed.2002` Legenda votes in 2002
- `pmdblegfed` Legenda votes for PMDB in 1998
- `pfllegfed` ... for PFL
- `psdblegfed` ... for PSDB
- `ptlegfed` ... for PT
- `ppslegfed` ... for PPS
- `pdtlegfed` ... for PDT
- `ppblegfed` ... for PPB
- `ptblegfed` ... for PTB
- `pllegfed` ... for PL
- `psblegfed` ... PSB
- `psdlegfed` ... PSD
- `nonwhite.1991` Share of nonwhite population in 1991
- `pent.1991` Share of pentecostal christians in 1991
- `lula.vs.1998` Lula's vote share in 1998
- `fhc.vs.1998` Cardoso's vote share in 1998
- `ciro.vs.1998` Ciro's vote share in 1998
- `psdb.vs.1994` PSDB's vote share for lower chamber in 1994
- `pt.vs.1994` PT's vote share for lower chamber in 1994
- `brancospres.1998` Blank votes for president in 1998
- `nulospres.1998` Null votes for president in 1998
- `comparecimentopres.1998` Turnout for president in 1998
- `brancospres.1994` Blank votes for president in 1994
- `nulospres.1994` Null votes for president in 1994
- `comparecimentopres.1994`: Turnout for president in 1994
- `urna1998` Predicted EVS usage indicator from legal threshold
- `invalidpresshare.1998` Share of invalid votes in 1998 for president
- `brancospresshare.1998` Share of blank votes in 1998 for president
- `nulospresshare.1998` Share of null votes in 1998 for president
- `legendafedshare.1998` Share of legenda votes for federal deputy
- `invalidpresshare.1994` Share of invalid votes in 1994 for president
- `brancospresshare.1994` Share of blank votes in 1994 for president
- `nulospresshare.1994` Share of null votes in 1994 for president
- `legendafedshare.1994` Share of legenda votes for federal deputy in 1994

5. `data-RDDvereadores.RData`: File containing municipal level data for the analysis of the elections for the municipal assemblies (*Vereadores*). Includes data for 1996, which is the year of interest, but also for other years that are included as placebo tests. Full set of variables is as follows:

   - `codeibge` Code of municipality
   - `urna` Dummy indicator for EVS in 1996
   - `eleitorado` Registered voters (in 1996)
   - `comparecimento` Turnout in 1996
   - `hdi.1991` Human Development Index
   - `pibpc.1996` GDP per capita
   - `state` State acronym
   - `region` Macro region
   - `distcap` Distance to capital city (in 10 meters)
   - `brancos` Blank votes for mayor in 1996
   - `nulos` Null votes in for mayor 1996
   - `brancosv` Blank votes for vereador in 1996
   - `nulosv` Null votes in for vereador 1996
   - `validosv` Valid votes for vereador in 1996
   - `nom` Nominal votes for vereador in 1996
   - `leg` Legenda votes for vereador in 1996
   - `comparecimento2000` Turnout in 2000
   - `leg2000` Legenda votes in 2000
   - `pref` Mayor's party
   - `pmdb` Votes for the PMDB
   - `pfl` ... for the PFL
   - `psdb` ... for the PSDB
   - `ppb` ... for the PPB
   - `pdt` ... for the PDT
   - `ptb` ... for the PTB
   - `pl` ... for the PL
   - `psb` ... for the PSB
   - `pt` ... for the PT
   - `psd` ... for the PSD
   - `pmdbleg` Legenda votes for the PMDB
   - `pflleg` ... for the PFL
   - `psdbleg` ... for the PSDB
   - `ppbleg` ... for the PPB
   - `pdtleg` ... for the PDT
   - `ptbleg` ... for the PT
   - `plleg` ... for the PL
   - `psbleg` ... for the PSB
   - `ptleg` ... for the PT
   - `psdleg` ... for the PSD
   - `nonwhite.1991` Share of non-whites
   - `pent.1991` Share of pentecostal christians
   - `fhc.vs.1994` Cardoso's vote share in 1994
   - `psdb.vs.1994` PSDB's vote share for lower chamber in 1994
   - `pt.vs.1994` PT's vote share for lower chamber in 1994