Replication materials for "When Pay Outs Pay Off: Conditional Cash-Transfers and Voting Behavior in Brazil 2002—2010"

Cesar Zucco
Department of Political Science
Rutgers University
zucco@polisci.rutgers.edu

This version: January 24, 2013

Replication materials include three data files and eight files with R scripts for the different analyses presented in the paper. The replication code relies on the RData format data files, which are included in the .zip file "replication materials". The data files have also been deposited in AJPS's dataverse in stata/subsetable format for convenience.

Data Files

The three files include the following data:

- `bolsafamiliadataset.RData` Includes municipal level observations used in the aggregate analysis in the paper. It combines electoral results, socio-economic indicators, geographic information, as well as conditional cash transfer coverage for all municipalities in Brazil, between 2002 and 2010. All data are from publicly available sources on the web (TSE, IBGE, IPEADATA, and MDS), except for the 2002 CCT data, which was obtained directly from the Social Development Ministry (MDS).
  - codeibge Official numeric identifier of the municipality
  - mun Municipality name
  - state State
  - region Macro-region
  - alcance.2002 CCT scope (from MDS and IBGE, see paper for details)
  - alcance.2006 CCT scope (from MDS and IBGE,see paper for details)
  - alcance.2010 CCT scope (from MDS and IBGE,see paper for details)
  - dgdpH.1.2002 Growth relative to preceding year (from IPEADATA)

- dgdpH.1.2006 Growth relative to preceding year (from IPEADATA)
- dgdpH.1.2010 Growth relative to preceding year (from IPEADATA)
- dgdpH.2.2002 Growth relative to two years earlier (from IPEADATA)
- dgdpH.2.2006 Growth relative to two years earlier (from IPEADATA)
- dgdpH.2.2010 Growth relative to two years earlier (from IPEADATA)
- dilma.vs.2010 Dilma's vote share in first round of 2010 election (from TSE)
- dilma.vs.2010.2 Dilma's vote share in second round of 2010 election (from TSE)
- distcap Distance to capital city (from IBGE, in km/10)
- fam.2002.cct Families covered by CCTs (from MDS)
- fam.2006.cct Families covered by CCTs (from MDS)
- fam.2010.cct Families covered by CCTs (from MDS)
- families.2002.ba Families covered by Bolsa Alimentação (from MDS)
- families.2002.be Families covered by Bolsa Escola (from MDS)
- fhc.vs.1998 Cardoso's vote share in the 1998 elections (from TSE)
- gini.2000 Gini coefficient (from IBGE)
- hdi.2000 Human Development Index (from IPEADATA)
- incgov.2002 Party of incumbent governor (from TSE)
- incgov.2006 Party of incumbent governor (from TSE)
- incgov.2010 Party of incumbent governor (from TSE)
- lula.vs.1998 Lula's vote share in 1998 election (from TSE)
- lula.vs.2002 Lula's vote share in first round of 2002 election (from TSE)
- lula.vs.2002.2 Lula's vote share in second round of 2002 election (from TSE)
- lula.vs.2006 Lula's vote share in first round of 2006 election (from TSE)
- lula.vs.2006.2 Lula's vote share in second round of 2006 election (from TSE)
- mayorpty.2000 Mayor's party (from TSE)
- mayorpty.2004 Mayor's party (from TSE)
- mayorpty.2008 Mayor's party (from TSE)
- nonwhite.2000 Share of population that is not white (from IBGE)
- nonwhite.2010 Share of population that is not white (from IBGE)
- pent.2000 Share of population that is pentecostal (from IBGE)
- pent.2010 Share of population that is pentecostal (from IBGE)
- pib.2002 Municipal GDP (from IPEADATA)
- pib.2006 Municipal GDP (from IPEADATA)
- pib.2009 Municipal GDP (from IPEADATA)
- pop.2002 Population (from IPEADATA)
- pop.2006 Population (from IPEADATA)
- pop.2010 Population (from IPEADATA)
- psdb.vs.1998 PSDB vote share for the lower house (from TSE)
- psdb.vs.2002 PSDB vote share for the lower house (from TSE)
- pt.vs.1998 PT vote share for the lower house (from TSE)
- pt.vs.2002 PT vote share for the lower house (from TSE)
- pt.vs.2006 PT vote share for the lower house (from TSE)

  - pt.vs.2010 PT vote share for the lower house (from TSE)
  - serra.vs.2002 Serra's vote share in first round of 2002 election (from TSE)
  - serra.vs.2002.2 Serra's vote share in second round of 2002 election (from TSE)
  - spentH.2002.cct Expenditures per head in CCTs (see paper for details)
  - spentH.2006.cct Expenditures per head in CCTs (see paper for details)
  - spentH.2010.cct Expenditures per head in CCTs (see paper for details)
  - targetalcance.2006 Target of CCT coverage,as share of the population (from MDS)
  - targetbf.2006 Target of CCT coverage, in number of families (from MDS)
  - tot.fam2002 Estimated number of families in the municipality (computed from IBGE)
  - valid.2002 Valid votes for president (from TSE)
  - valid.2002.2 Valid votes for president (from TSE)
  - valid.2006 Valid votes for president (from TSE)
  - valid.2006.2 Valid votes for president (from TSE)
  - valid.2010 Valid votes for president (from TSE)
  - valid.2010.2 Valid votes for president (from TSE)
  - valid.depfed.1998 Valid votes for lower house (from TSE)
  - valid.depfed.2002 Valid votes for lower house (from TSE)
  - valid.depfed.2006 Valid votes for lower house (from TSE)
  - valid.depfed.2010 Valid votes for lower house (from TSE)

- `individualdataset2006.RData` Includes individual level observations from a Vox Populi survey taken close to the 2006 elections. It includes only a subset of the variables in the survey, as well as some municipal level data. The complete survey is available from CESOP, upon request.
  - mun Municipality name
  - state State
  - bf 1=Bolsa Familia beneficiary; 0 otherwise
  - bf.fam 1=Family member is Bolsa Familia beneficiary; 0 otherwise
  - bf.conhecido 1= Knows a Bolsa Familia beneficiary; 0 otherwise
  - lula Voted for Lula
  - sexo Gender
  - idade Age
  - escola Schooling level.
  - renda Income level
  - metropolitan Metropolitan municipality
  - region Region
  - renda2 Simplified income category
  - hdi.2000 Human development index of municipality
  - spentH.2002.cct Expenditures per head with CCTs in the municipality
  - spentH.2006.cct Expenditures per head with CCTs in the municipality
  - alcance.2006 CCT scope in the municpality
  - alcance.2002 CCT scope in the municpality

  - gdpH.2002 GDP per capita of the municipality
  - gdpH.2006 GDP per capita of the municipality.
  - distcap Distance to capital city (in km/10)
  - growth Growth rate over the previous year

- `individualdataset2020.RData` Includes individual level observations from the last wave of the Brazilian Electoral Panel Study survey taken close to the 2010 elections. It includes only a subset of the variables in the survey, as well as some municipal level data.
  - mun Municipality name
  - state State
  - bf 1= Bolsa Familia beneficiary; 0 otherwise
  - dilma 1= voted for Dilma; 0 otherwise
  - sexo Gender
  - idade Age
  - escola Years of schooling
  - renda Income category
  - metropolitan Metropolitan municipality
  - region Macroregion
  - bf.conhecido Knows a beneficiary
  - knowpol Knows a politician
  - partyid Party ID
  - ptID Identifies with the PT
  - renda2 Reduced income categories
  - nonwhite Nonwhite
  - hdi.2000 Human development index of the municipality
  - spentH.2002.cct: Expenditures per head with CCTs in the municipality
  - spentH.2006.cct: Expenditures per head with CCTs in the municipality
  - spentH.2010.cct: Expenditures per head with CCTs in the municipality
  - alcance.2006 CCT scope in the municpality
  - alcance.2002 CCT scope in the municpality.
  - alcance.2010 CCT scope in the municpality
  - distcap Distance to capital city (in km/10)
  - gdpH.2002 GDP per capita of the municipality
  - gdpH.2006 GDP per capita of the municipality
  - gdpH.2010 GDP per capita of the municipality
  - growth Growth rate over the previous year

R script files

Users should save all the files in the same directory, and simply change the path for the working directory at the start of each file. All scripts contain brief instructions at the start of the file. The first six files generate output files that are saved to the working directory, and later collected by `_replic.figures&tables.AJPS.R`.

- `_replic.ols.AJPS.R` This is replication file #1. It performs the OLS analysis of the effects of CCT coverage on incumbent presidential candidate vote share.
- `_replic.ols.party.AJPS.R` This is replication file #2. It performs the OLS analysis of the effects of CCT coverage on incumbent party vote share.
- `_replic.gps.AJPS.R` This is replication file #3. It performs the GPS matching analysis of the effects of CCT coverage on incumbent presidential candidate vote share.
- `_replic.gps.party.AJPS.R` This is replication file #4. It performs the GPS matching analysis of the effects of CCT coverage on incumbent party vote share.
- `_replic.ind2006.AJPS.R` This is replication file #5. It performs the analysis of the effects of being a CCT beneficiary on vote intention at the individual level in 2006.
- `_replic.ind2010.AJPS.R` This is replication file #6. It performs the analysis of the effects of being a CCT beneficiary on vote recall and party IT at the individual level in 2010.
- `_replic.figures&tables.AJPS.R` This file should be ran after the preceding six files, as it collects, organizes and publishes the output generated by those files. It produces graphs and tables used in the paper
- `_replic.Functions.AJPS.R` This file contains auxiliary functions used in the other scripts. It is not invoked directly by the user.