

# Guideline for the replication of the results in ‘Teachers, Electoral Cycles and Learning in India’ by Sonja Fagernäs and Panu Pelkonen

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## A. Data availability

The access to the two key data sets (items 1 and 2) in this research is controlled by the institutions that collect the data, but they are provided for research purposes by request. The rest of the data (items 3 and 4) were obtained online and are included in the replication appendix.

1. ASER data household files 2005-2012. These files are provided by the ASER Centre, New Delhi (<http://www.asercentre.org/>). They have typically made the data available via Dropbox after an application.

2. DISE data 2005-2012. These data are held at The National Institute of Educational Planning and Administration (NIEPA), New Delhi. Web access to the data is being improved, and access can be requested via the contacts in this link <http://udise.in/contactus.htm>, or this: <http://14.139.60.146/DownloadRawData/RawData/RawData.aspx>. However, we obtained the bulk files for DISE by visiting NIEPA and copying the whole ORACLE database, and we would recommend that researchers take this route. The ORACLE database can be converted into CSV files and the content of these files is documented in the UDISE website (<http://udise.in/udise.html>). Below we list the files that we required for the paper.

Other data sets:

3. State Assembly Election data: Winning party, and characteristics of the MLA by constituency from 1999 to 2012 for each state and election constituency were obtained from the website of the Indian Electoral Commission.

4. Crime statistics by Indian Police districts: Source detailed in /IndiaTeachers/violence/datasource\_IPC.txt

These two data sets are included as part of the replication materials.

## B. Code files

In the documentation below, we list the required STATA do-files recursively, starting with 1) the code files that produce the paper’s results and followed by 2) the intermediate code files that produce the data files required in 1). The original raw data files required are coloured in red. For each do-file, we list the key outputs that they produce, and the data files that are required.

The directory paths in the stata do-files and this guide are in the original Linux/Unix format (/abc/def). To execute the do-files, the paths may need to be changed.

### 1) Code files that produce the tables and figures in the paper

/IndiaTeachers/ResourceCycle/cycle\_tch.do

Produces Table 1, Table 4 columns 1 and 5, Appx Table A3, Table 11, Appx Table X2, Table 5

Calls do-file /IndiaTeachers/ResourceCycle/eventgraphs.do to produce Figure 2

Also produces the following data files:

/IndiaTeachers/Politicalcycle/districtexitrates2.dta

/IndiaTeachers/Politicalcycle/exitvolatility.dta

Requires the following data files:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean\_fix.dta (produced by DISE\_prepare\_Dec13.do and Fix\_Teachers\_Dec13.do)

/DISE\_Dec13/DISE\_clean\_Dec13/turnover\_schools\_primaries.dta (produced by turnover\_schools\_Dec13.do)

/IndiaTeachers/AssemblyElec/2000-2012-DistrictPoliticsMatrix.dta (produced by appendelec.do)

The construction of these data files is described below in part 2).

/IndiaTeachers/ResourceCycle/cycle\_sch2012.do

Produces [Table 2](#), [Table 4 columns 2-4](#), [Table 12](#), [Appx Table X1](#)

Requires the following data files:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean\_fix.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/turnover\_schools\_primaries.dta  
/IndiaTeachers/Turnover/polcycle\_all.dta (produced by /Turnover/Politicalcycle.do)  
/IndiaTeachers/Census/districts2011.dta (India Census 2011 raw data, not used in the paper)

**/ASER/aser\_polcycle.do**

Produces [Table 3](#), [Table 7](#), [Table 8](#), [Table 9](#), [Appx Table X3](#), [Table 10](#)

Calls do-file /ASER/asер\_polcycle\_eventgraphs.do to produce [Figure 3](#), [Figure 4](#) and [Figure 5](#).

Requires the following data files:

/ASER/aser05hh.dta (original ASER 2005 household file in STATA format)  
/ASER/aser06.dta (original ASER 2006 household file in STATA format)  
/ASER/aser07hh.dta (original ASER 2007 household file in STATA format)  
/ASER/aser08.dta (original ASER 2008 household file in STATA format)  
/ASER/aser2009.dta (original ASER 2009 household file in STATA format)  
/ASER/aser2010.dta (original ASER 2010 household file in STATA format)  
/ASER/aser2011.dta (original ASER 2011 household file in STATA format)  
/ASER/aser2012.dta (original ASER 2012 household file in STATA format)  
/DISE\_Dec13/DISE\_clean\_Dec13/distname\_list0212.dta (list of DISE district codes and names)  
/IndiaTeachers/AssemblyElec/2000-2012-DistrictPoliticsMatrix (produced by appendelec.do)  
/IndiaTeachers/Census/districts2011.dta (not used in the paper)  
/IndiaTeachers/Politicalcycle/districtexitrates2.dta (produced by cycle\_tch.do)  
/IndiaTeachers/Politicalcycle/exitvolatility.dta (produced by cycle\_tch.do)

**/IndiaTeachers/violence/policedata.do**

Produces [Table 13](#), [Appx Table A4](#)

Requires the following data files:

/IndiaTeachers/violence/dstrIPC2001-12.dta (Original data from gata.gov.in converted to STATA)  
/IndiaTeachers/violence/distlist.dta (List of districts in DISE 2005-2012)  
/IndiaTeachers/violence/handmatched\_state\_distname\_year.dta (Police district - DISE district mapping)  
/IndiaTeachers/AssemblyElec/2000-2012-DistrictPoliticsMatrix (produced by appendelec.do)

## 2) Code files that are pre-requisites for the code files above

**/DISE\_Dec13/DISE\_clean\_Dec13/Fix\_Teachers\_Dec13.do**

Produces:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean\_fix.dta

Requires:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean.dta

**/DISE\_Dec13/DISE\_clean\_Dec13/turnover\_schools\_Dec13.do**

Produces:

/DISE\_Dec13/DISE\_clean\_Dec13/turnover\_schools\_primaries

Requires:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_KEYVAR\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_MASTER\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_ENROLMENT\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_BLDEQP\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_PINCENTIVES\_clean.dta

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_EXAMRESULT\_clean.dta

### **/DISE\_Dec13/DISE\_clean\_Dec13/**DISE\_prepare\_Dec13.do****

Produces (not all used in the paper):

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_KEYVAR\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_CONSTITUENCY\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_MASTER\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_ENROLMENT\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_EXAMRESULT\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_BLDEQP\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_PINCENTIVES\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_REPEATERS\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_BLOCK\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_PANCHAYAT\_clean.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_VILLAGE\_clean.dta

Requires:

/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_TEACHER\_part1.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_TEACHER\_part2.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_KEYVAR.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_CONSTITUENCY.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_MASTER.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_ENROLMENT.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_EXAMRESULT.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_BLDEQP.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_PINCENTIVES.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_BLOCK.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_PANCHAYAT.txt  
/DISE\_Dec13/DISE\_full\_csv\_Dec13/STEPS\_VILLAGE.txt

### **/IndiaTeachers/AssemblyElec/**appendlec.do****

Produces:

/IndiaTeachers/AssemblyElec/2000-2012-DistrictPoliticsMatrix.dta

Requires:

/IndiaTeachers/AssemblyElec/All2008coded2.csv (Raw data on election results)  
/IndiaTeachers/AssemblyElec/All2008coded1.csv (Raw data on election results)  
/IndiaTeachers/AssemblyElec/All2011coded2.csv (Raw data on election results)  
/IndiaTeachers/AssemblyElec/All2011coded1.csv (Raw data on election results)  
/IndiaTeachers/AssemblyElec/All2012coded2.csv (Raw data on election results)  
/IndiaTeachers/AssemblyElec/All2012coded1.csv (Raw data on election results)

Also requires all these State-specific election results files in the same folder (raw election results):

1999-AP.dta 2001-AS.dta 2002-UP.dta 2004-AP.dta 2006-KL.dta 2007-UT.dta 1999-AR.dta 2001-KL.dta  
2002-UT.dta 2004-AR.dta 2006-PY.dta 2009-AP.dta 1999-GO.dta 2001-PY.dta 2003-CH.dta 2004-KT.dta  
2006-TN.dta 2009-AR.dta 1999-KT.dta 2001-TN.dta 2003-DE.dta 2004-MH.dta 2006-WB.dta 2009-HY.dta  
1999-MH.dta 2001-WB.dta 2003-HP.dta 2004-OR.dta 2007-GO.dta 2009-JH.dta 1999-SK.dta 2002-GO.dta  
2003-MP.dta 2004-SK.dta 2007-GU.dta 2009-MH.dta 2000-BH.dta 2002-GU.dta 2003-MZ.dta 2005-  
BH\_v2.dta 2007-HP.dta 2009-OR.dta 2000-HY.dta 2002-JK.dta 2003-NL.dta 2005-HY\_v2.dta 2007-  
MR.dta 2009-SK.dta 2000-MR.dta 2002-MR.dta 2003-MG.dta 2003-RS.dta 2005-JH\_v2.dta 2007-PB.dta  
2000-OR.dta 2002-PB.dta 2003-TP.dta 2006-AS.dta 2007-UP.dta

/IndiaTeachers/AssemblyElecBoundaries/CodedToExcel2000-2012.csv

### **/Turnover/politicalcycle.do**

Produces:

/IndiaTeachers/Turnover/polcycle\_all.dta

Requires:

/DISE\_Dec13/DISE\_clean\_Dec13/STEPS\_TEACHER\_clean\_fix.dta  
/DISE\_Dec13/DISE\_clean\_Dec13/turnover\_schools\_primaries.dta  
/IndiaTeachers/AssemblyElec/2000-2012-DistrictPoliticsMatrix.dta