

Absence: Electoral Cycles and Teacher Absenteeism in India

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Introduction

The Problem of Absenteeism

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- Within India, absence varied from 15 percent in Maharashtra to 42 percent in Jharkhand (Kremer et al. 2005)

The Problem of Absenteeism

- Public sector workers are often absent...
- ...and when present are rarely teaching.

- Chaudhury et al. (2005) found that of those present, only 50 percent of teachers were teaching when random audits were conducted.

The Problem of Absenteeism

- Public sector workers are often absent...
- ...and when present are rarely teaching.
- And it is expensive: \$1.5 Billion/year

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3. Recovers some of the money lost to absenteeism

Empirical Puzzle: Absence & Electoral Cycles

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- Teachers work as election monitors, campaign for political parties (Beteille 2016; Larreguy, Montiel Olea, & Querubin, 2017)
- Independently campaign for their preferred candidates (Kingdon & Muzammil 2001)

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- Increased monitoring by mid-level bureaucrats reduced absence (Chaudhury et al. 2005)

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What explains variations in absence across time and space and incentives to monitor front-line functionaries?

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- Teachers are embedded in larger networks of political accountability. They both:
 1. Respond to political pressures from their principals in a principal-agent relationship...
 2. And are independent political agents of their own accord.

I show that politicians can exert strong control over teachers *when they are incentivized to do so*, and this has spillovers for service provision quality.

Data & Methods

School Report Cards

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- Self-reported data on school infrastructure, enrollment, staffing for universe of government schools and large private school in India.

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- Geographic location & teacher attendance.
- 1,300,000 government and 525,000 private schools in data from 2006 to 2018 academic years.
- 10,000,000 and 3,000,000 school-year observations respectively.

- Electoral results for every state-level election from 2001 to 2021

Geo-Referencing Schools

- Match locations of schools to electoral constituencies

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- Match locations of schools to electoral constituencies
- Have been able to match approximately 85 percent of schools across India.

Results

Leverage the staggered nature of Indian elections in a repeated event study design:

Estimation Strategy

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$$Y_{i,t} = \sum_{j \in -2,2} \alpha_j m_{j,i,t} + \beta_1 y_{i,t-1} + Z_{i,t} + \gamma_i + \zeta_t + \mu_{i,t,d}$$

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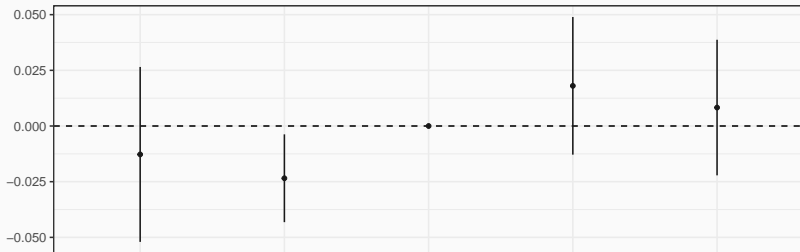
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- i identifies school
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- $m_{j,i,t}$ is an indicator variable that equals one when school i is j years away from the state election.

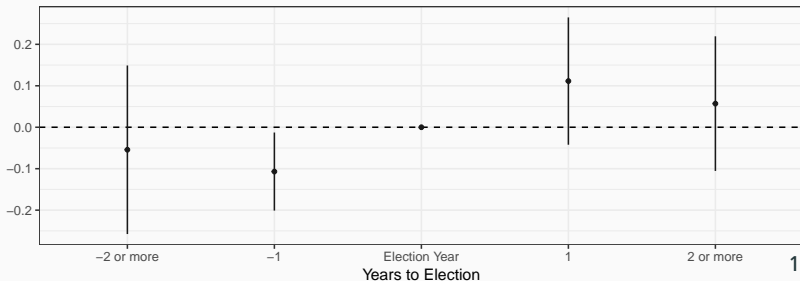
Electoral Cycles and Absenteeism

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A: Probability Absent



B: Average Number of Absences



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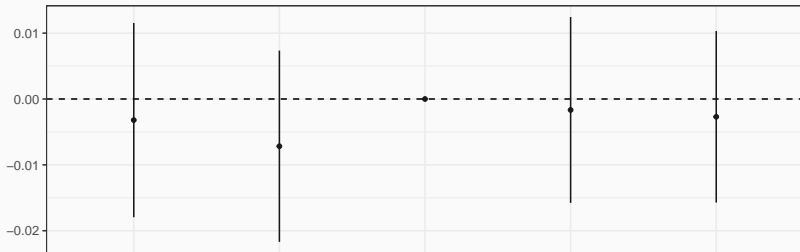
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- If results are spurious, should seem similar electoral cycle in private sector.

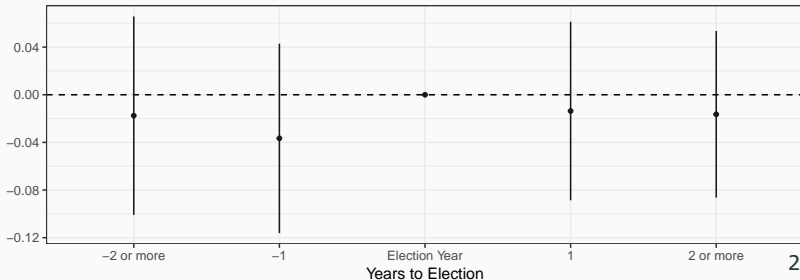
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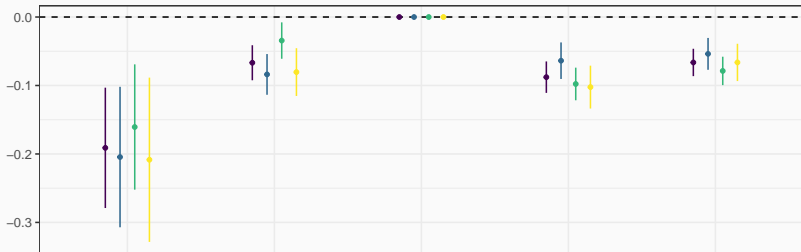
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- **Mechanisms:** Fewer competitive parties in constituency result in *greater decrease* in absenteeism
- **Mechanisms:** Electoral competitiveness and match between ruling party at state and constituency level *do not* lead to reduced absenteeism.
- **Data Concerns:** Replicate analysis with separate cross-national independently collected audits from the Indian Human Development Survey (IHDS) and find similar rates of absenteeism.

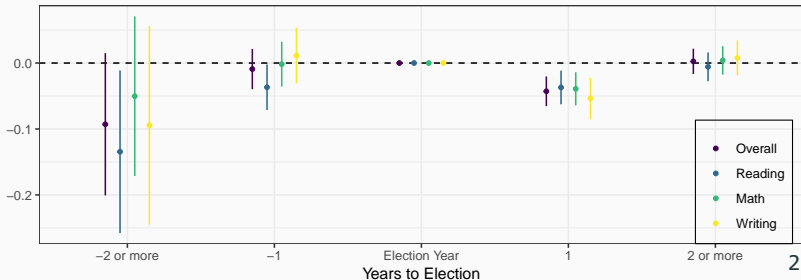
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A: Test Scores for Students in Government Schools



B: Test Scores for Students in Private Schools



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- Depending on your preferred specification, results in a fiscal recovery between \$36,080,163 and \$75,703,081

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- Suggestive evidence that when it is easier for teachers and political parties to strike bargains, absence will be reduced
- Question for policy is how to extend these incentives over the entire electoral cycle?

Thank You

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<https://www.emmerichdavies.com/files/Davies, Emmerich - Absence.pdf>