Executive Summary

1. RATIONALE FOR RESEARCH: GOALS, SIGNIFICANCE AND CONTRIBUTION

Public schools in India are frequently viewed as sites of decay where little teaching or learning happens.\(^1\) On any given school-day, 24.8 percent of public primary schoolteachers are absent across India (Kremer et al, 2005). Not surprisingly, a recent study found that 55 percent of 5\(^{th}\) Grade students in public schools failed a basic test of reading comprehension (NCERT, 2007). Dismissing or suspending errant teachers might appear to be a solution, but this rarely happens in India (Kremer et al, 2006).\(^2\) Instead, policy has attempted to solve the problem of accountability by training, motivating and incentivizing teachers. Absenteeism rates, however, remain high and accountability elusive.

In this dissertation I argue that an important reason for low teacher accountability lies in policy’s primary focus on teachers, and failure to take account of the role of other stakeholders — especially politicians and government officials — in the schooling process. Using representative primary data from seven districts in three Indian states, I describe how the institutional environment in which teachers operate is influenced by politicians and government officials, frequently through informal channels and for personal gain. I also demonstrate how this compromises teacher accountability. Prior to this study, large-scale representative data on such issues did not exist. This dissertation explains how teachers, politicians and government officials depend on each other; when these dependencies turn coercive; and why such dependencies could lead to poor schooling outcomes. I explain why two seemingly unrelated events — absenteeism and transfers — are fundamentally linked, and symptomatic of a larger accountability problem. I follow this by revisiting the data on teacher absence used by Kremer et al (2005) and find evidence to suggest that teachers’ political power is, in fact, associated with absenteeism.

The main contribution of this dissertation is to show that teacher accountability is a deep-rooted structural problem. It is embedded in the incentives and disincentives prevalent in a deeply hierarchical and complex democracy, such as India, where large sections of the population live in poverty and have low levels of literacy. As I show, the circumstances of the job frequently presents teachers with contradictory demands, making it difficult for them to educate students satisfactorily. The research suggests that policies shaped by a nuanced understanding of teachers’ job conditions in their entirety — especially in terms of their interaction with the wider institutional and political landscape in which they operate — may be more powerful for addressing accountability issues.

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\(^1\) Throughout this dissertation, I use the term government schools and public schools interchangeably.

\(^2\) Chronic absenteeism is rarely punished in public schools in India — of 2900 randomly selected public schools, only one headmaster reported having dismissed a teacher for absenteeism (Kremer et al, 2006).
2. RESEARCH QUESTIONS

This dissertation asks the following main questions, the motivation for which is discussed in the following section summarizing the theoretical framework.

1. What are the strategic linkages between teachers and politicians?
   a. Why do politicians need teachers?
   b. Why do teachers need politicians?

2. Is there a quantitative association between teacher absence and (a) whether a teacher is a member of a political party, (b) whether a teacher has ever run for office, and (c) union membership?

3. Are teacher transfers discretionary on a large scale? What are the types of transactions that take place?

3. THEORETICAL FRAMEWORK AND RELEVANT LITERATURE

This thesis uses a political economy framework for analyzing the problem of teacher absence and transfers. A political economy framework is particularly useful because it allows us to understand how economic outcomes such as work effort, and economic concepts such as optimization, incentives, and constraints, are influenced by political factors (Drazen, 2000).

In the problem of accountability being studied, there are two economic outcomes: the first reflects teacher presence and work effort (or lack thereof), and the second reflects the optimal allocation of teachers to schools.

Each of these outcomes is influenced by political variables. Formal rules on teacher attendance and effort are explicitly negotiated by unions. Deviations from these rules are implicitly protected by unions; their bargaining power resulting from their ability to influence electoral outcomes. First, union leaders can organize an important and large component of the electorate — teachers — and influence its voting behavior (Pratichi Report, 2002; Moe, 2005; Sharma, 2009). Next, being widely dispersed geographically, union members can undertake informal campaigns for candidates, and thereby influence the voting behavior of the average voter (Moe, 2005). The collective power of teachers — or more accurately, the belief thereof, ultimately protects them from being disciplined for professional transgressions.

However, since not all teachers are absent all the time, the mechanism explaining teacher absence requires further investigation. Specifically, it could be that a select group of teachers has influential political connections protecting them from disciplinary action for repeated absences. This group of teachers is able to maintain such connections because politicians value them for their ability to mobilize a much larger group of teachers through teachers’

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3 A final research question, not discussed in this summary but present in the dissertation, examines the role of intermediaries or “middlemen” for facilitating extra-legal transactions. The data provide a suggestive account of the positional power of political middlemen, operating in collusion with government clerks, in running markets for services that are important to teachers such as transfers as well as more mundane issues such as reimbursements.
unions, and thereby generate a collective response that may or may not be favorable to the politician. The belief in the collective power of teachers, nevertheless, remains.

Just as teachers can help politicians build political capital, they can also erode their political base. Politicians are, therefore, unlikely to risk their relations with teachers at a collective level by undertaking strict teacher policies. Yet, knowing how powerful individual teachers in this collective can be, politicians need to be able to control their behavior by credibly promising them incentives and threatening with disincentives. This function is achieved by keeping transfers discretionary.

Transfers are important because they can alter the working conditions of teachers considerably in a system that is otherwise uniform in terms of pay and benefits. Most states, however, do not have stable and transparent transfer policies. A nascent qualitative literature suggests that transfers are typically kept discretionary and conducted by politicians and/or bureaucrats based on subjective criteria. They allegedly form the bedrock of a patronage-based system where powerful politicians and bureaucrats oblige politically-helpful teachers with transfers of their choice, regardless of school need, and punish disobedience with undesirable transfers (Sharma, 2009).

In summary, the structure of incentives and disincentives in this system gives rise to two sets of relations: a collective-level one, where the politician is at the mercy of teachers as a collective, and an individual-level one, where individual teachers are at the mercy of a politician. This potentially blurs the distinction between who is patron and who is client, creating a basic problem for accountability, since neither teacher nor politician is uniformly answerable to the other. Figure 1 provides a schematic explanation of the political economy problem created by this system of relations. The upper-half shows the collective-level relationship and the lower-half the individual-level one.

Figure 1: The Political Economy of Interdependencies between Politicians and Teachers

4 One reason unions have not lobbied persistently on transfers is because — assuming an excess demand for desirable posts and an excess supply of undesirable ones — a discretionary process for transfers works to the advantage of teachers with connections. It gives them a competitive edge over other teachers. In this sense, transfers are fundamentally different from issues such as salary or absence since teachers are in direct competition with each other, making it difficult to have a collective response that works in the interest of every teacher.
4. DATA

I use two main sources of data to answer my questions: (1) primary data collected by me in 2007-08 to understand the beliefs and expectations of teachers, politicians and officials, and (2) secondary data on teacher absence collected by the World Bank (WB) in 2002-03 and employed by Kremer et al (2005; 2006).

The WB dataset collected information on teacher absence on the basis of three random visits to 2930 public primary schools yielding 12140 teacher observations. In addition, the dataset provides information on school facilities and teachers’ background characteristics, including whether a teacher has ever run for office, and union and party membership.

The WB dataset, however, does not provide crucial information on the mechanism behind teachers’ political power, and the constraints to such power. This defines the underlying structure of incentives and disincentives in the system, and collecting data on this is crucial for understanding why government schools fail and what reform should focus on. To address this gap, I collected primary data from 2340 public schoolteachers, across 930 randomly selected schools, in selected districts in three large Indian states: Rajasthan, Madhya Pradesh (MP) and Karnataka. The states were chosen because of differences in teacher absenteeism, literacy levels and teacher-contract practices. Districts in each state were chosen to provide variation in terms urbanicity and percent population tribal. Interviews with local politicians and bureaucrats, as well as group-discussions with teachers were also conducted to contextualize survey results.

The (teacher) survey asks questions in three key areas: (1) Basic information including demographic information, educational qualifications of self and parents and job contract-type; (2) Teachers’ professional engagements, including the time spent on teaching and on government-assigned non-teaching work; (3) Beliefs about work environment, including the need for connections, their type, and the bribe paid for routine and non-routine services. Beliefs are important because it is frequently threats, beliefs and rumors that influence behavior. The FGDs and interviews have a common framework for all the states, and expand on specific survey results.

| TABLE 1: STATE-WISE DESCRIPTION OF PRIMARY DATA |
|----------------|----------------|----------------|
|                | RAJASTHAN | MP | KARNATAKA |
| Districts      | 2         | 3  | 2          |
| Schools        | 200       | 300| 430        |
| Completed teacher surveys | 330     | 494| 1516       |
| Teachers       | 9         | 8  | 10         |

5 Literacy reduces the likelihood that people will be manipulable and dependent on educated people, such as the teacher. The nature of contracts determines how easily a teacher can be fired, and the connections teachers might invest in to reduce the likelihood of being fired.

6 Districts are key administrative units in India with populations ranging from 400,000 to over 6 million. They are also the highest tier of local government.
In Rajasthan and MP, I randomly selected 100 schools per district using the District Information System of Education database. I used a stratified random sampling methodology, stratifying along urbanicity. Sampling was done proportional to population. I hired surveyors to administer the questionnaire to two teachers per school. In Karnataka, I randomly selected 210 and 220 schools per district respectively, but here the questionnaire was administered to all teachers who were available when the surveyors visited. FGD teachers were selected to account for diversity along age, gender and contract type. Politicians and government official interviews were based on availability.

5. RESULTS

5.1: Politicians, Teachers and Government Officials: A System of Relations

The primary data support a core hypothesis of the dissertation by providing considerable evidence of clientilism. Teachers in every district agreed that (1) politicians use teachers informally for campaigning, and (2) teachers control polling booths and hence the fate of an election: they can make a politician win an election. As Figure 2 shows, although there is considerable variation across districts, no district is free of such beliefs. The belief in teachers being able to influence elections is non-trivial.\(^7\)

\[\begin{array}{|c|c|c|c|}
\hline
\text{Local politicians} & 2 & 2 & 2 \\
\hline
\text{Government official} & 3 & 3 & 2 \\
\hline
\end{array}\]

\(^7\) All teachers were requested to write their names (for cross-verification purposes), but also informed this was not required. If they chose to write their names, they were assured of confidentiality. Since using government employees such as teachers to campaign informally is illegal, it is likely the estimates presented above are underestimates.
system to be able to get a transfer. As Figure 3 shows, in every district over 50 percent of teachers agreed that if a teacher wanted to be transferred, he/she would need connections. Having a connection, however, is not enough. Over 30 percent of teachers in every district agreed with the statement: “Most teachers believe that even if they have a contact, they will still have to pay some money to get the posting they want.”

![Figure 3: Teacher Transfers](image)

That politicians are able to create a credible threat is evident in Figure 4 where at least 10 percent of teachers in every district report being frequently harassed by politicians and their middlemen, as well as government officials, for reasons unrelated to teaching.

![Figure 4: Frequently Harassed for Reasons Unrelated to Teaching](image)

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8 In the dissertation I report the English version of the questionnaire. However, what was actually administered was translated into the local language and captures the context of corruption more accurately.
5.2: Teacher Absences and Political Power

Next, I use the WB dataset on teacher absence to examine the extent to which teacher absenteeism is explained by teachers' political influence. Three measures of absence are used: absent on at least one of three visits; absent on at least two of three visits; and unauthorized absent at least once. The five main covariates are binary variables for whether a teacher: (a) is the member of a political party; (b) has ever run for political office; (c) is the member of a union; (d) is a headteacher; and (e) is male. The control variables are age and binaries for whether the teacher (1) has a college degree; (2) was born in the same village/town as the school; (3) taught at a school in a rural area. In addition, binaries for states, districts and schools are included in alternative specifications.

Across models, I find evidence to suggest that members of political parties have a significantly greater likelihood of absence. I also find that teachers who ran for office were significantly more likely to have been unauthorized absent. I find limited evidence in support of union membership predicting absence. An important reason for this could be that, on average, it is not so much a teacher’s membership in formal institutions such as unions per se that determines whether she can get away with absences, but her position in informal institutions and power hierarchies. This determines how effectively she can use unions.

5.3: Gaming Teacher Transfers

In the case of two districts of Karnataka, the primary data show that almost a third of teachers in the sample had requested a transfer at least once in their careers. Of these, only 50 percent were successful in getting a transfer. A transfer could either happen quickly or it could take a long time. Teachers who were successful in getting a transfer within a year reported a mean time of 2.60 months; otherwise it took on average 2.32 years. The data suggest teachers in the former category knew people who would hasten the process or paid bribes to jump the queue: 71 percent agreed teachers needed connections in order to get a transfer since the routine process took too long. Further, 73 percent agreed teachers needed to pay bribes in addition to having a connection.

Table 2 provides an illustrative account of what teachers said was “the going rate” for getting a transfer. Teachers were asked to specify (if applicable) the minimum and maximum amount they were aware of being paid as bribes for getting a transfer. In the pooled sample, the minimum average amount is approximately Rs 11000, which exceeds a new teacher’s monthly salary of Rs 6800 by approximately 60 percent. The average of the maximum amount is Rs 20286. The median amounts of each are lower at Rs 5000 for the minimum and Rs 10000 for the maximum. Clearly, teachers are willing to pay a lot.

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9 The three political variables are not highly correlated. The correlation between running for office and union membership is 0.03; between running for office and political party membership is 0.28; and between union membership and political party membership is 0.03.
10 This refers to the period up until the survey was administered.
11 The questionnaire asks the respondent task-wise whether he/ she knows another teacher who has paid a bribe, how many such teachers he/ she knows and what was the minimum and maximum “going rate” for each task is. The response rate on this question was low (approximately 10 percent of the sample), understandably because many teachers also mentioned their names in a previous section of the questionnaire. Due to the small number of responses, the results relating to bribe amounts should be treated as illustrative and not representative.
Table 2: Bribe Paid for Transfers versus Monthly Salary

<table>
<thead>
<tr>
<th></th>
<th>Amount in Rs</th>
<th>n</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pooled Sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Bribe (Mean)</td>
<td>10932</td>
<td>152</td>
<td>10</td>
</tr>
<tr>
<td>Maximum Bribe (Mean)</td>
<td>20286</td>
<td>159</td>
<td>10.5</td>
</tr>
<tr>
<td>Minimum Bribe (Median)</td>
<td>5000</td>
<td>152</td>
<td>10</td>
</tr>
<tr>
<td>Maximum Bribe (Median)</td>
<td>10000</td>
<td>159</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Teacher's Salary</td>
<td>6800</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Teacher's Salary at Retirement</td>
<td>20000</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

6. LIMITATIONS OF STUDY

The findings in this dissertation are just the tip of the iceberg of a complex problem where many of the underlying phenomena are difficult to measure. While I am able to show how teachers, politicians and bureaucrats depend upon each other, and when these dependencies turn coercive, there are limitations in both the data and the methods that should be borne in mind when interpreting the results and attempting policy recommendations. Key among these is that the primary data rely on teacher reports of corruption; not actual observation of corrupt events. The data are representative for teachers, but not for politicians and bureaucrats. In the secondary data, information on a teacher’s political successes, and position in the union hierarchy would provide greater insight on a teacher’s political power. Finally, both primary and secondary data are cross-sectional, limiting the possibility for causal inference.
SELECTED BIBLIOGRAPHY


Kremer, Michael; Chaudhury, Nazmul; Rogers, F. Halsey; Muralidharan, Karthik and Hammers, Jeffrey (2006). Teacher Absence in India: A Snapshot. *Journal of the European Economic Association*.


