

Private Schools in Rural India: Some Facts

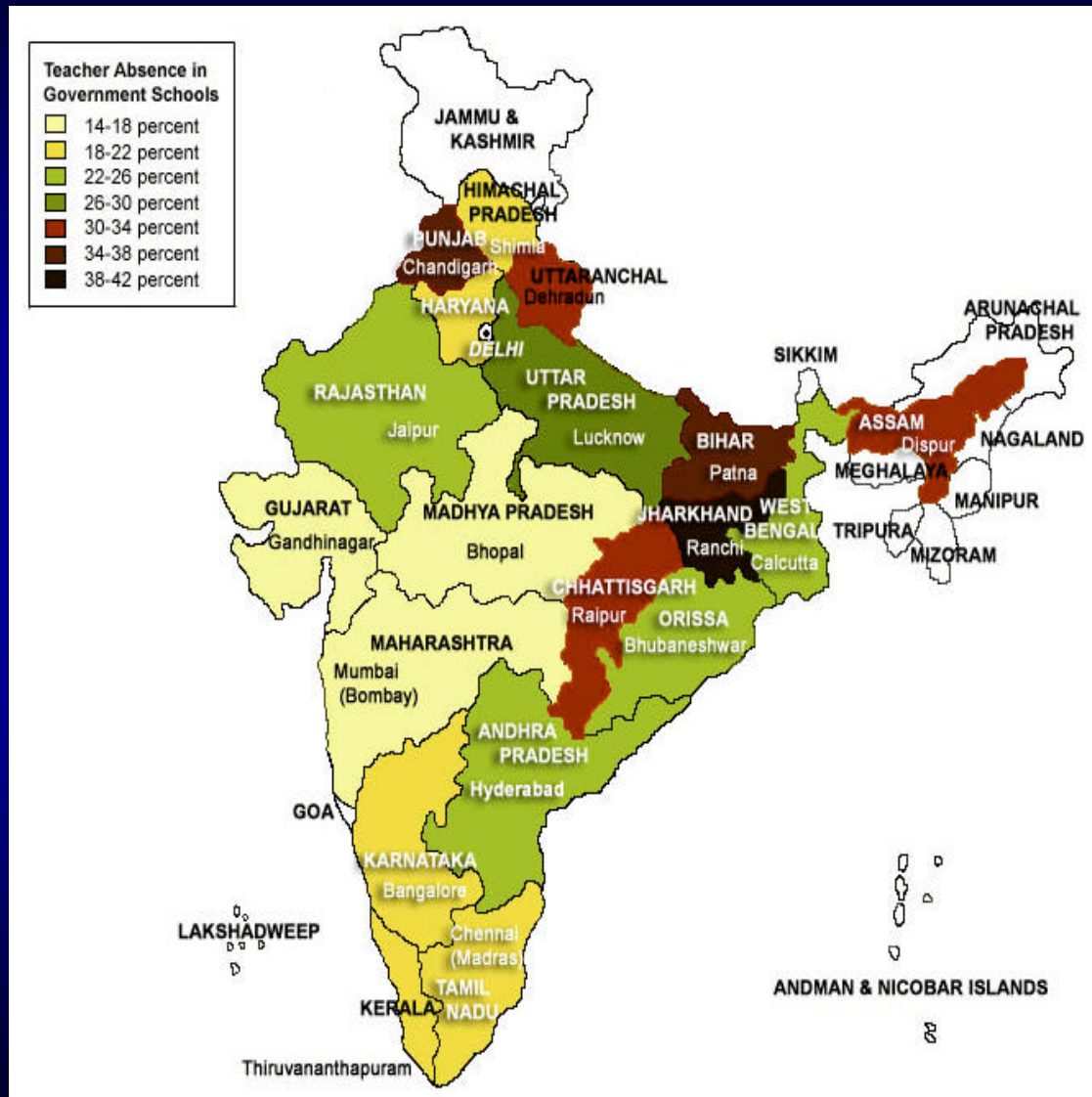
Karthik Muralidharan (Harvard)
Michael Kremer (Harvard)

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Survey of Schools and Teachers

- Unannounced visits to primary schools and primary health centers in 6 countries
 - Focused on public schools and clinics
 - But we also covered rural private schools in India
 - If a village had more than one school, we made a list of ALL the schools in the village and randomly sampled up to 3 schools in the village including at least one government and one private school if both types of schools existed in the village
 - Covers both private recognized and unrecognized schools
- Representative sample of 20 Indian states representing 98% of the population
- Enumerators conducted *direct physical verification* of teacher presence and activity

All India Teacher Absence Map (Public Schools)



State	Teacher Absence (%)
Maharashtra	14.6
Gujarat	17.0
Madhya Pradesh	17.6
Kerala	21.2
Himachal Pradesh	21.2
Tamil Nadu	21.3
Haryana	21.7
Karnataka	21.7
Orissa	23.4
Rajasthan	23.7
West Bengal	24.7
Andhra Pradesh	25.3
Uttar Pradesh	26.3
Chhatisgarh	30.6
Uttaranchal	32.8
Assam	33.8
Punjab	34.4
Bihar	37.8
Jharkhand	41.9
Delhi	-
All India Weighted	25.2%

Teacher Absence across Institutional Forms

Absence Rate by School Type

Difference Relative to Government-Run Schools

	Teacher Absence	No Fixed Effects	Village/ Town Fixed Effects	Village/ Town Fixed Effects + Controls*
Government Run Schools	25.2%	-	-	-
Non-formal Schools	26.9%	1.7%	-2.7%	-2.4%
Private Aided Schools	20.1%	-5.1%**	-1.3%	-0.4%
Private Unaided Schools	22.8%	-2.4%	-3.8%**	-7.8%**

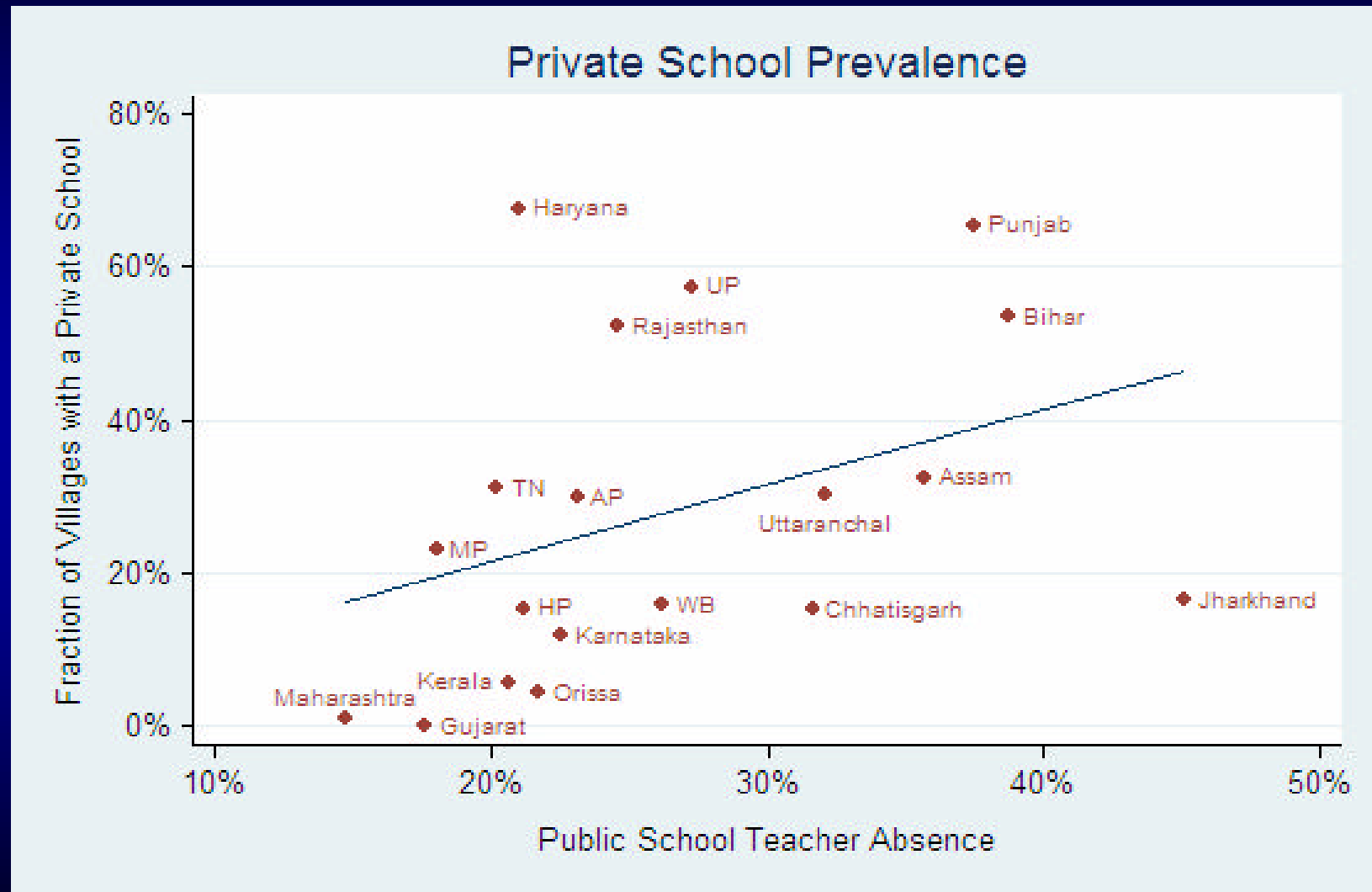
* Controls include a full set of visit-level, teacher-level, and school-level controls,

** Difference significant at the 1% level

Distribution of Private Schools Across States

State	% of villages with a private unaided school	State	% of villages with a private unaided school
Gujarat	0	Andhra Pradesh	0.299
Maharashtra	0.01	Uttaranchal	0.302
Orissa	0.044	Tamilnadu	0.311
Kerala	0.057	Assam	0.325
Karnataka	0.118	Rajasthan	0.522
Chhatisgarh	0.152	Bihar	0.535
Himachal Pradesh	0.153	Uttar Pradesh	0.574
West Bengal	0.159	Punjab	0.654
Jharkhand	0.165	Haryana	0.676
Madhya Pradesh	0.23	All India	0.281

Public School Failure & Private School Entry

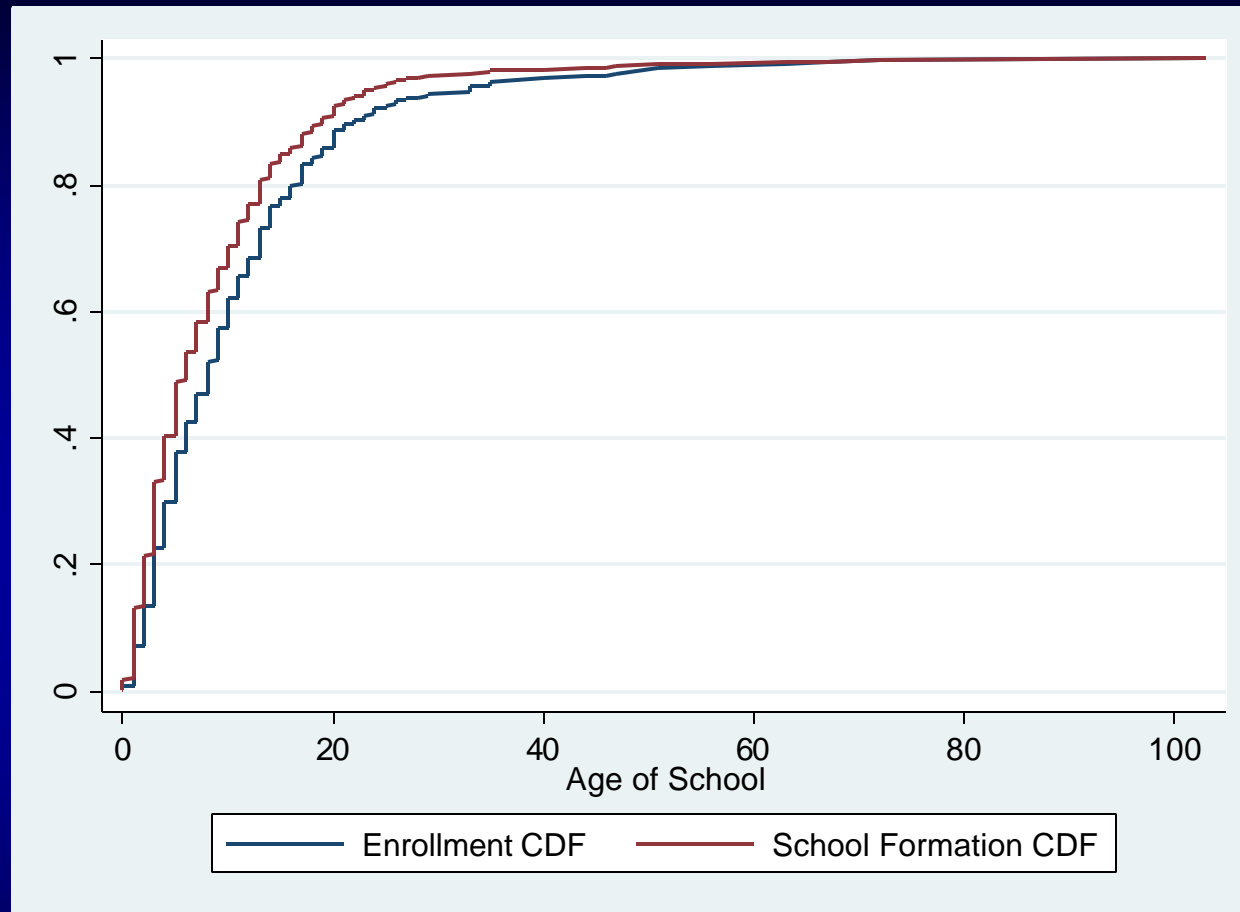


Correlates of Private School Existence

Dependent Variable = 1 if Village Has a Private School, 0 if it does not

	[1]	[2]	[3]	[4]
Log Village Population	0.114 [0.012]***	0.157 [0.014]***	0.125 [0.037]***	0.159 [0.017]***
Log Pupil Teacher Ratio	0.089 [0.022]***	0.042 [0.026]	0.034 [0.051]	0.037 [0.027]
Mean Public School Absence in Village	0.292 [0.065]***	0.114 [0.060]*	0.214 [0.103]*	0.108 [0.053]**
Log State GDP/Capita			-0.298 [0.157]*	
Log District Consumption/Capita				-0.121 [0.059]**
Constant	-0.962 [0.101]***	-1.065 [0.117]***	0.851 [0.975]	-0.352 [0.366]
State Fixed Effects	No	Yes	No	Yes
Observations	1523	1523	1450	1523
R-squared	0.1	0.33	0.12	0.33

Private School Enrollment Patterns



- There has been a sharp increase in rural private school prevalence in recent years.
- Nearly 50% of the private schools in the sample were less than 5 years old and over 70% were less than 10 years old (in 2003)
- Around 40% of total enrollment in private schools in rural India is in schools that were less than 5 years old and over 60% is in schools less than 10 years old

Economics of Rural Private Schools

- The main feature of the private schools is that they pay much lower salaries to teachers.
 - This allows them to hire more teachers, reduce multi-grade teaching, and have significantly lower pupil teacher ratios
- Total monthly revenue of a private school (median ~ Rs. 4,000) is often less than the cost of one regular teacher in govt. schools
 - Private School Fees and Enrollment
 - Median = Rs. 63/month (\$1.5) and 72 students
 - Mean = Rs. 120/month (\$2.8) and 88 students
 - Even if we assume that ALL the revenues of the private schools are used to pay teacher salaries, we calculate the upper bound of median teacher salary in private schools less to be less than Rs. 1000/month (with a mean of ~ Rs. 1750/month)
- Even conservatively, private school teacher salaries are typically not more than 1/5 that of regular govt. school teacher salaries (and often around 1/10th).
 - The mean salary of regular govt. school teachers in Andhra Pradesh for instance is Rs. 7,500/month (~Rs. 10,000/month including benefits)

Sources of Competitive Advantage of Private Schools

	Public	Private	Difference	Difference with State FEs	Difference with Village FEs
Mean Total Enrollment	141.9	98.3	43.6***	49.6***	80.7***
Mean Number of Teachers	3.6	5.2	-1.6***	-1.48***	-0.87***
Pupil-Teacher Ratio	43.43	19.16	24.3***	29.6***	34.43***
Log Pupil-Teacher Ratio	3.58	2.78	0.8***	0.93 ***	1.05 ***
Multigrade teaching	0.71	0.51	0.2***	0.20***	0.11***
Average grade of starting teaching English	2.62	1.67	0.95***	1.27***	1.35***
Fraction of teachers engaged in teaching activity	44.3%	50%	-5.7% ***	-8.6% ***	-9.3% ***
Average Student Attendance	64.4%	75.7%	-11.3% ***	-12.1% ***	-13.4% ***

- Combining the effects of a lower pupil-teacher ratio, and higher teaching activity leads to a child in a private school having 3-4 times more “teacher contact time” than in the public schools
- Private schools are much more likely to take action against shirking teachers
 - 35 head teachers out of ~600 private schools in the sample reported having fired a teacher for repeated absence as opposed to only 1 head teacher in nearly 3000 government schools
 - Shirking teachers in private schools are 175 times more likely to have action taken against them!

Who are the Private School Teachers?

- Fieldwork and interviews suggest that the availability of these inexpensive teachers is being driven by local educated unemployed youth who are typically
 - Unable to find regular jobs
 - Unwilling (and not needed) to work in agriculture
 - Not looking at teaching as a "long term" career
- Teaching suits them well because
 - Short working day of 4-6 hours allows time for further study via correspondence courses or in colleges following a different shift
 - Allows them to look for jobs on the side
 - Provides 'respectability' and income

Private School Teacher Demographics

	Public	Private	Difference	Difference with State FEs	Difference with Village FEs
Average age of teachers	40.28	29.61	10.67***	11.92***	12.35***
Fraction of college graduates among teachers	0.39	0.49	-0.10***	-0.03*	-0.01
Fraction of teacher certificate holders among teachers	0.80	0.28	0.52***	0.61***	0.64***
Fraction of female teachers	0.36	0.41	-0.05	-0.00	0.02
Fraction of local teachers	0.23	0.46	-0.23***	-0.26***	-0.24***

- The data tend to confirm these anecdotes regarding the teacher demographics of private schools
 - Significantly younger
 - Much lower fraction of teaching certificates
 - Which are typically required for jobs as regular govt. school teachers
 - Much larger fraction of "local" teachers
- Might explain why the absence rates are not even lower given the high probability of action being taken
 - Market clearing wage implying no "efficiency wage" premium

Who Attends the Rural Private Schools?

	Public	Private	Difference	Difference with state FEs	Difference with village FEs
Average Rooms in House	2.423	2.914	-0.742***	-0.574***	-0.560***
Fraction of children taking tuition	0.169	0.212	-0.043***	-0.041***	-0.066***
% of Literate fathers	0.71	0.804	-9.4%***	-0.118***	-0.146***
% of Literate mothers	0.445	0.542	-9.7%***	-0.122***	-0.163***
% of Fathers with education 10 grades or higher	0.242	0.432	-19%***	-0.208***	-0.236***
% of Mothers with education 10 grades or higher	0.087	0.197	-11%***	-0.117***	-0.129***

- As expected, the children attending private schools come from more advantaged backgrounds relative to those attending public schools
 - More educated parents
 - Better asset indicators
- However, the absolute levels of parental education of children attending private schools is quite low
 - Thus while private schools cater to the better off in the rural areas, many of their students come from disadvantaged backgrounds
 - For instance, 20% of the private school students are first generation learners, which while lower than the 30% in public schools, is still quite significant

Private vs. Public – Performance Comparison

Regression of Mean Student Test Score (in Std. Deviations) on School Type and Controls

Private School	0.57***	0.50***	0.40***	0.38***	0.41***
Controls					
Family Demographics & Private Tuition	No	Yes	Yes	Yes	Yes
School-level variables	No	No	Yes	Yes	Yes
State Fixed Effects	No	No	No	Yes	No
Village Fixed Effects	No	No	No	No	Yes
Observations	29462	27242	25561	25571	25571
R-squared	0.05	0.09	0.1	0.14	0.43

•significant at 10%; ** significant at 5%; *** significant at 1%,

Conclusions (1 of 2 - Facts)

- Private unaided fee-charging schools are widespread in rural India – especially in areas with dysfunctional public schools
 - The number of these private schools appears to be growing rapidly
 - Note that this is RURAL India – urban prevalence much higher by most accounts
- Salaries paid by the private schools are much lower
 - This allows them to hire many more teachers, offer smaller classes and less multi-grade teaching, and significantly higher “teacher contact” time
 - Suggests that public school teachers are earning large rents on average
- Measures of private school performance (teacher attendance, teaching activity, student attendance) are superior to those of the public schools – especially with village fixed effects
 - Private schools also have much better teacher accountability
- While children attending private schools come from advantaged backgrounds relative to those attending public schools, many of them come from very modest backgrounds

Conclusions (2 of 2 - Implications)

- Policies to improve primary education in India should also consider the role of the private sector – especially given their disproportionate presence in poorly performing states
 - For instance, it would be easy to offer/extend short training courses for teachers in private unaided schools
- There is likely to be great scope for public-private partnerships in education, in the form of voucher programs or otherwise
 - One question is whether there will be an adequate supply response, but the evidence suggests that private schools are already widespread and that new schools can be created rapidly
- Some political economy considerations
 - Elite exit and income stratification
 - Draft Education Bill and the reservations debate
 - Deep culture of control
- Substantial scope for experimentation followed by rigorous evaluation before sweeping policy changes