

The Privatization of Child Learning in Rural India

Rohini Somanathan and Michael Walton

The expansion of private schooling

- Schools:

TABLE 1: PERCENTAGE SHARE OF RECOGNISED
PUA SCHOOLS IN ALL SCHOOLS
BY AREA AND LEVEL

School Level	UP (Per Cent)		India (Per Cent)	
	1978	1986	1978	1986
Rural				
Primary	1.9	2.9	0.8	1.0
Junior	24.6	31.6	3.3	5.0
Secondary	7.1	8.2	2.2	7.8
Urban				
Primary	21.1	34.4	9.2	16.6
Junior	33.0	51.9	11.9	24.4
Secondary	4.3	5.4	7.2	14.7
Rural+Urban				
Primary	3.7	6.8	1.6	2.6
Junior	25.9	35.5	4.7	8.6
Secondary	6.1	7.2	3.6	10.0

Source: Computed from NCERT (1982)
Tables 49 and 55, NCERT (1992)
Table 53 and UP Report of Fourth All-
India Education Survey (GOUP 1982).

1978-1986: share private doubled in UP

1990s: widespread access in north India

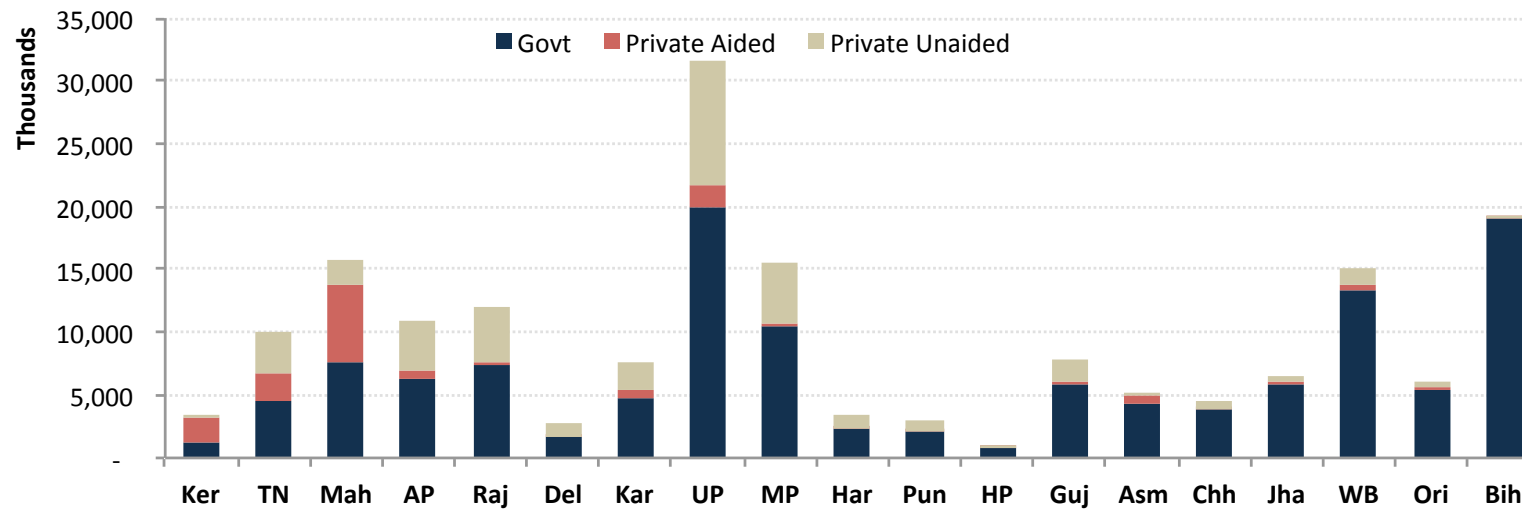
2010: 19% (grades 1-8) privately managed

- Enrollment: 30% (grades 1-8) children attend a private school, increase of 1 percentage point annually since 2006

State-variations in private management

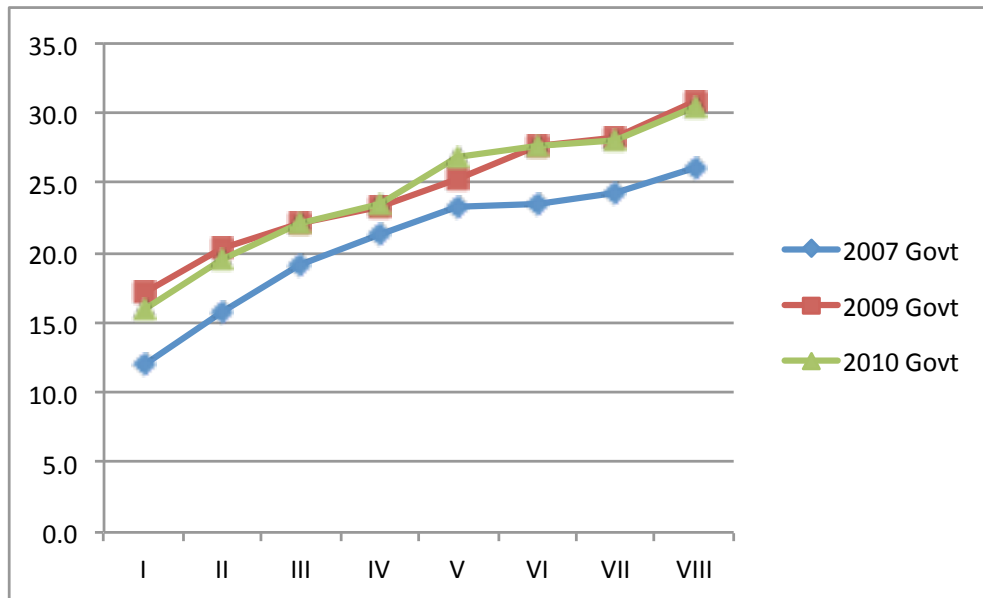
	Government	Private	Private-Aided	Private-Unaided
2006-07	967,263	225,691		
2007-08	1,002,915	243,895	70,667	173,228
2008-09	1,035,178	249,920	72,893	177,027
2009-10	1,048,046	254,178	71,206	183,102

Source: DISE



Supplementary tuition

- About 15% of government school children in grade 1, 30% for grade 8.
- In 2007, 12% in grade 1 and 26% in grade 8.
- These numbers are very large by international standards



Source: ASER surveys

Our questions?

- Why private?

How real are perceived gains? What is the nature of these gains?

- For whom?

Are there systematic gender differences? How large?

- When?

Is the choice of private options binary for households or is there mixing by age, gender and progress through school?

The ASER surveys

- Large, nationally representative sample
 - For 2007, we have 315,080 households and about 724,000 children between 3 and 16

- school and tuition choices for all children between 5-16 are recorded
 - allows us to observe mixing within households

- Identical test instrument (grade 2 level) allows us to compare children in different institutional settings.
 - local language reading and comprehension, arithmetic, english word and sentence comprehension. ■

Schooling and Tutoring by State

State	Government	Private	Tutoring
West Bengal	85.4	6.5	68.8
Orissa	89.1	4.4	47.7
Bihar	89.0	5.0	45.5
Kerala	46.8	51.5	38.4
Tamil Nadu	79.2	19.7	25.8
Jharkhand	83.3	10.0	25.3
Andhra Pradesh	64.3	29.4	25.3
Rajasthan	62.5	30.4	21.3
Punjab	61.4	30.3	21.0
Haryana	55.6	40.9	18.0
Jammu & Kashmir	65.8	32.0	17.9
Maharashtra	70.6	28.2	15.2
Uttarakhand	72.4	24.7	12.8
Gujarat	85.4	10.2	11.8
Madhya Pradesh	81.9	14.8	11.6
Uttar Pradesh	57.3	35.8	10.7
Karnataka	79.4	16.8	10.7
Himachal	77.1	22.0	9.1
India	73.0	21.8	23.6

Mixing within households

Children	% Private			% Tuition		
	None	All	Some	None	All	Some
1	77	23	0	78	22	0
2	72	17	10	75	16	8
3	69	12	19	75	11	14
4	64	10	26	73	9	19
Total	71	15	14	75	15	10

Mother's education	% Tuition	% Private school	% Both
No schooling	13	17	3
Class 5	20	22	5
Class 8	24	29	8
Class 10	31	38	13
All levels	19	22	6

Source: ASER, 2007, Child Data

Household choices by child grade

	Govt.	Private	Govt. & Private	Total
Grades Attended				
Primary	79.6	16.6	3.8	100.0
Middle	77.1	20.3	2.6	100.0
High	65.1	33.0	2.0	100.0
Multiple Levels	63.9	16.5	19.6	100.0
Total	72.4	17.7	9.8	100.0
N	189,754	46,815	26,051	262,620

	No Tuition	All Tuition	Some Tuition	Total
Grades Attended				
Primary	80.9	15.5	3.6	100.0
Middle	75.5	22.4	2.1	100.0
High	65.2	32.4	2.4	100.0
Multiple Levels	71.8	14.5	13.8	100.0
Total	76.0	16.7	7.4	100.0
N	200,156	43,072	19,392	262,620

Learning by school environment

	Private & Tuition	Private	Govt. & Tuition	Govt	Not in School	Total
Local language						
No alphabets	2.4	4.9	3.6	8.3	28.3	8.0
Alphabets	8.2	13.1	9.1	16.8	15.5	14.7
Words	12.0	14.0	12.3	17.4	14.8	15.8
Paragraphs	13.3	13.8	15.8	16.9	13.3	15.9
Simple stories	64.1	54.2	59.2	40.6	28.1	45.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mathematics						
Cannot recognize numerals	2.5	5.0	4.1	8.5	26.8	8.2
Recognizes one-digit numbers	7.3	13.1	9.3	17.2	16.0	14.9
Recognizes two-digit numbers	14.4	18.6	14.3	21.6	19.9	19.8
Two-digit subtraction	19.9	20.9	21.8	22.3	17.6	21.6
Division (3 digit by 1 digit)	56.0	42.4	50.5	30.4	19.6	35.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
English						
No english alphabets	5.2	10.3	10.5	23.7	44.6	20.3
English alphabets-small	10.3	14.2	12.5	15.4	11.6	14.4
English alphabets-capitals	8.7	14.1	11.7	18.8	14.9	16.5
English words	19.1	20.6	22.1	18.6	14.1	19.1
English sentences	56.7	40.8	43.1	23.5	14.9	29.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	25,756	80,939	68,882	332,147	31,661	539,385

Fixed-effects estimates: choices

	(1) Private	(2) Private	(3) Tuition	(4) Tuition
Male	0.03*** (31.34)	0.03*** (33.07)	0.02*** (20.18)	0.02*** (20.26)
Age	-0.001*** (-4.54)	0.004*** (13.46)	0.009*** (34.14)	0.010*** (42.11)
Middle school	0.04*** (24.23)	0.03*** (18.26)	0.02*** (11.25)	0.01*** (4.58)
High school	0.10*** (41.75)	0.06*** (26.01)	0.08*** (38.19)	0.06*** (29.06)
Mother Schooled	0.09*** (72.76)		0.07*** (63.83)	
Children in HH	-0.01*** (-23.56)		-0.01*** (-20.52)	
Constant	0.18*** (63.35)	0.14*** (56.48)	0.08*** (27.99)	0.07*** (32.30)
Fixed Effects	Village	Household	Village	Household
Clusters	15646	256455	15646	256455
Adj R-squared	0.33	0.64	0.37	0.71
Obs	501752	505210	501752	505210

Fixed-effects estimates: learning

	(1)	(2)	(3)	(4)	(5)	(6)
	Reading	Reading	Mathematics	Mathematics	English	English
Private	0.07*** (42.92)	0.04*** (15.70)	0.06*** (43.22)	0.04*** (15.60)	0.10*** (64.60)	0.06*** (20.94)
Tuition	0.08*** (48.65)	0.07*** (22.78)	0.09*** (58.10)	0.09*** (26.91)	0.09*** (55.64)	0.09*** (27.24)
Male	0.002* (1.96)	0.005*** (3.86)	0.012*** (11.84)	0.014*** (10.58)	0.010*** (9.43)	0.011*** (8.56)
Age	0.07*** (242.41)	0.07*** (99.69)	0.06*** (196.86)	0.05*** (76.30)	0.04*** (141.16)	0.03*** (54.27)
Birth Order	-0.01*** (-13.39)	-0.05*** (-32.96)	-0.01*** (-10.94)	-0.05*** (-29.37)	-0.00 (-0.09)	-0.03*** (-18.51)
Middle school	0.21*** (126.87)	0.17*** (78.35)	0.22*** (135.04)	0.20*** (92.90)	0.24*** (147.14)	0.22*** (108.40)
High school	0.15*** (58.47)	0.07*** (19.38)	0.25*** (99.74)	0.19*** (57.50)	0.38*** (154.12)	0.34*** (105.09)
Mother Schooled	0.04*** (32.65)		0.04*** (30.10)		0.04*** (33.56)	
Children in HH	0.003*** (4.89)		0.007*** (11.13)		0.002** (3.13)	
Constant	-0.39*** (-113.41)	-0.18*** (-20.38)	-0.38*** (-111.29)	-0.16*** (-18.34)	-0.29*** (-87.12)	-0.13*** (-14.48)
Fixed Effects	Village	Household	Village	Household	Village	Household
Clusters	15629	254650	15624	254395	14910	239754
Adj R-squared	0.50	0.56	0.49	0.54	0.48	0.56
Obs	494899	498234	493929	497235	464626	467655

Lessons for policy

- Private options chosen even by very poor families
- In terms of household choices, gender effects small once girls are in school
- Gains to private school exist, larger for english than other subjects, but not enormous
- More effective public provision, certainly has a role, especially for Bihar.