Per Pupil Expenditure in the Government Schools of Uttar Pradesh, and the Rate of Reimbursement to Private Schools under the Right To Education Act: An Update

by

Professor Geeta Kingdon (UCL Institute of Education, University College London) and Professor Mohd. Muzammil (Former Vice Chancellor, Agra University)

July 2018

Abstract

This short paper first presents estimates of Indian states' per pupil expenditure (PPE) on government schools for recent years, including those for Uttar Pradesh, from three existing studies. Secondly, the paper makes fresh estimates of the PPE on government schools of Uttar Pradesh using the UP budget's expenditure information, and using enrolment data from the District Information System on Education (DISE), thus updating previous estimations of PPE by the same authors in 2015. The paper finds that in 2018-19 in the government schools of Uttar Pradesh, PPE was Rupees 3064 per month, which compares with the Rs. 450 per month upper limit of reimbursement notified by the Uttar Pradesh government for the reimbursement of private schools under the Right to Education Act. This suggests that the notified amount does not represent an actual calculation of the PPE on government schools in UP, thus violating the reimbursement provisions of the Right to Education Act.

Key words : Right to Education Act 2009; Per pupil expenditure of government schools; Reimbursement to private schools; India

JEL code: I21

Acknowledgment: The author gratefully acknowledges the research assistance of Prashant Verma with the statistical analysis of data. Any errors are the author's. Associations: The author is president of the board of a K-12 Registered Society non-profit private school in India, and a member of the secondary school exam board of a north Indian state.

Per Pupil Expenditure in the Government Schools of Uttar Pradesh, and the Rate of Reimbursement to Private Schools under the Right To Education Act: An Update

The Right to Education (RTE) Act enacted by the central Government of India in August 2009 guarantees free and compulsory education in a neighbourhood school to all children aged 6-14 years old. This legislation specifies the duties of the government in the provision of schooling, lays down norms and standards for the government 'recognition' of private schools, and makes provision for the education of disadvantaged children in private schools.

Section 12(1)(c) of the RTE Act 2009 requires private schools to allocate at least 25% of their seats to children from designated 'economically weaker sections and disadvantaged (EWSD) groups'. Section 12(2) provides for government reimbursement of expenditure incurred by the private schools in teaching these children. It specifies that the reimbursement to private schools will be equal to the per-pupil-expenditure (PPE) incurred by the state government in its own schools, or the actual amount charged as fee by the private school, whichever is the lower. Section 12(2) says that a private unaided schools that provides free education to EWSD children under the Act:

Section 12(2): "....shall be reimbursed expenditure so incurred by it to the extent of per-child expenditure incurred by the state, or the actual amount charged from the child, whichever is less, in such manner as may be prescribed".

This means that, for each RTE child they admit, private schools whose fee level is *greater than* the government schools' PPE will get reimbursed per child an amount equal to the government schools' PPE; and private schools whose fee level is *lower than* the government schools' PPE will get reimbursed per child the actual fee level they charge from their fee-paying students.

The private schools whose fee level is greater than the government schools' PPE are typically those that pay the same teacher salary levels as in government schools, and/or have high expenditure on advanced facilities and infrastructure for students' learning, personality development and comfort¹.

¹High fee schools may provide: Interactive Smart Boards, hired e-Content; internet for web learning resources; computer lab; hands-on maths lab, language lab for pronunciation; physics, chemistry, biology, robotics, labs; ACs; lifts; swimming pools; all-weather astro-turf sports fields; gym; high-end sports, music and sound equipment, school bands, specialist teachers; air-conditioned classrooms; personality development activities; national and international educational trips; expert speakers, quality-assurance staff; in-service teacher training with experts, careers advisory service, study-abroad counsellor, psychological counsellor, nurse, specialist teachers recruited from abroad, etc.

The intent of section 12(1)(c) of the RTE Act is to enable economically weaker section and disadvantaged (EWSD) children to have access to education in all manner of private schools, including the high fee private schools. As such, in asking state governments to reimburse such 'high fee' private schools an amount equal to the PPE in government's own schools, the intent of the Act could be two-fold: firstly, to ensure that the high fee private schools are compensated for admitting disadvantaged children, to prevent the burden of 25% EWSD children being borne by the remaining 75% fee-paying children, whose fees would otherwise be increased to make up for the revenue shortfall. Secondly, the intent behind reimbursing schools adequately for education EWSD children could be to ensure that these children are as properly looked after as fee-paying children, given equal opportunities, and not discriminated against.

The state rules for the implementation of the RTE Act have been passed by the legislature of Indian states and notified in their respective state government gazettes. These rules specify the exact formula for the calculation of the reimbursement amount and the frequency with which the amount has to be assessed. The Uttar Pradesh RTE Rules were notified in the gazette of the UP government in July 2011. Rule 8(2) of the Uttar Pradesh RTE Rules 2011 gives the formula for reimbursement calculation as follows:

Rule 8(2): "The annual recurring expenditure incurred by the State Government from its own funds and from funds provided by the Central Government and by any other authority on elementary education in respect of all schools established owned or controlled by it or by the local authority, divided by the total number of children enrolled in all such schools as on 30th September, shall be the per-child expenditure incurred by the State Government."

This rule is very similar to that contained in the Model Rules of the RTE Act issued by the central government in 2010 and similar to the equivalent rule in other states' RTE Rules. The UP RTE Rule 8(2) quoted above makes clear that the state government has to assess the reimbursement amount based on the total enrolment in government schools on the 30th September each year, since enrolment varies each year.

Different state governments of India have followed the reimbursement calculation rule to different extents. Some states have notified the (upper limit of the) reimbursement amount through Government Orders (GOs) as a seemingly arbitrary number because they do not state that the declared amount is the per pupil expenditure (PPE) in government schools, for example Uttar Pradesh's GO dated 20 June 2013; other states have explicitly stated that the amount they are notifying for reimbursement is the per pupil expenditure on government schools, for example Tamil Nadu's GO dated 24th July 2017 and Delhi state's GO dated 4th July 2018. Some governments have assessed the reimbursement amount just once and never revised it, e.g. Uttar Pradesh declared it in June 2013 and has not revised it since then. Other states have revised it several times, e.g. Delhi, Uttarakhand, etc. The rate of RTE reimbursement to private schools in each state is given in Table 1.

Table 1

State	Annual rein per stu		Monthly reimbursement per student		
	2014-15	2018-19	2014-15	2018-19	
	(a)	(b)	(c)	(d)	
Tamil Nadu	23,805	28,206	1,984	2,351	
Meghalaya	27,451	27,451	2,288	2,288	
Delhi	14,280	19,176	1,190	2,225	
Himachal Pradesh	19,111	19,111	1,593	1,593	
Maharashtra	13,474	17,329	1,123	1,444	
Uttarakhand	10,320	16,560	860	1,380	
Karnataka	11,848	16,000	987	1,333	
Rajasthan	16,596	15,029	1,383	1,252	
Bihar	5,580	5,580	465	465	
Uttar Pradesh	5,400	5,400	450	450	

Declared upper limit of government reimbursement to private schools (per child) under the RTE Act, 2014-15 and 2018-19

Source: Various websites, newspaper reports and Government Orders. Specifically, the figures quoted above for Uttar Pradesh, Tamil Nadu, Delhi and Rajasthan are from Government Orders of the respective states. The Tamil Nadu figure quoted in the table is the simple average of the reimbursement rate notified for each separate class 1 to 8 in the Tamil Nadu Government Gazette of 24th July 2017. Delhi government's reimbursement rate for private schools under the RTE Act was revised previously in 2016 and then again through a GO dated 4th July 2018. The Uttar Pradesh reimbursement GO is dated 20th June 2013, and it has never been revised.

While these reimbursement limits are meant to represent the per pupil expenditure in state governments' elementary (primary + upper primary) schools, it is not clear whether actual calculations of per pupil expenditure within the public school system in the state were formally made or whether, in some cases, an arbitrary reimbursement rate has been declared. For example, Tamil Nadu's government gazette of 24th July 2017 specifically mentions that it is declaring the per pupil expenditure in the government school system of the state, i.e. in this case an actual calculation was made. However, in the case of Uttar Pradesh a round figure of Rs. 450 pm per child has been mentioned as the reimbursement rate, without specifying if this is the per pupil expenditure of the state on government schools.

Meanwhile, there is some academic research estimating the per pupil expenditures in the different states of India, for the year 2014-15 by Dongre and Kapur (2016) and for the year 2011-12 by Pritchett and Aiyar (2014). There is also research by the World Bank (2016) for eight major states of India, and by Kingdon and Muzammil (2015) for government PPE for Uttar Pradesh for three recent years. Finally, a study by Bose et. al. (2017) from the National Institute of Public Finance and Policy (NIPFP) estimates the per pupil expenditure for eleven major states for 2015-16. Table 2 sets out the findings of the multi-state studies.

Table 2Government funded schools' per pupil expenditure (PPE) – 2014-16

	Annual Per Pupil Expenditure			Monthly Per Pupil Expenditure			
State	<u>Dongre &</u> <u>Kapur</u> <u>(2016)</u>	<u>World</u> <u>Bank</u> (2016)	<u>NIPFP</u> (2017)	<u>Dongre &</u> <u>Kapur</u> <u>(2016)</u>	<u>World</u> <u>Bank</u> (2016)	<u>NIPFP</u> (2017)	
	(a)	(b)	(c)	(d) = (a)/12	(e) = (b)/12	(f)=(c)/12	
Andhra Pradesh	14,087			1,174			
Bihar	5,298	6,249	5,929	442	520	494	
Chhattisgarh	16,151		16,099	1,346		1,342	
Gujarat	17,106	41,806		1,426	3,483		
Haryana	27,163			2,264			
Himachal Pradesh	39,343			3,279			
Jharkhand	8,020		8,979	668		748	
Karnataka	16,914		17,751	1,410		1,479	
Kerala	19,419	39,679		1,618	3,306		
Madhya Pradesh	11,927	12,663	14,384	994	1,055	1,199	
Maharashtra	14,712		16,502	1,226		1,375	
Orissa	9,367	10,317	11,630	781	860	969	
Punjab	9,142	17,158		762	1,430		
Rajasthan	19,391		17,600	1,616		1,467	
Tamil Nadu	14,229	38,252	20,427	1,186	3,188	1,702	
Uttar Pradesh	13,102	21,815	18,348	1,092	1,918	1,529	
Uttarakhand	26,236		28,931	2,186		2,411	
West Bengal	7,001			583			
India (major states) Mean	11,523	23,492	16,053	1,091	1,958	1,338	

Source: Dongre and Kapur (2016) for 2014-15; World Bank (2016) for 2015-16; NIPFP Working paper 201 for 2015-16.

Note: The World Bank estimates are for government schools' per pupil expenditure only, whereas the Dongre and Kapur and NIPFP estimates are for government and aided schools taken together, but expenditure on aided schools is virtually the same as that in government schools, since teacher salaries and Sarva Shiksha Abhiyan (SSA) entitlements are the same in both school-types. The World Bank study includes government expenditure on teachers' pensions, which appears not to have been included in the other two studies.

Dongre and Kapur (2016) estimate per pupil expenditure (PPE) in government and aided schools together, for 2014-15. Their estimate for Tamil Nadu – Rs. 14,229 – is about half the PPE amount that the Tamil Nadu government itself notified for year 2016-17 in its Government Gazette on 24th July 2017 (Rs. 28,206), and it is unlikely that this huge difference is entirely due to the two-year time gap between the two estimates, and/or due to Dongre and Kapur including the aided schools. Similarly, there is a significant difference between Dongre and Kapur's and the World Bank's PPE estimates for Uttar Pradesh for the same year 2014-15 and in UP there are hardly any aided elementary schools (due to which Dongre and Kapur's estimates could be lower). Such discrepancies highlight the importance of picking up the relevant items of education expenditure from wherever they may dwell within the government budget.

Estimating Uttar Pradesh (UP) government schools' per pupil expenditure

Table 3 presents a calculation of the per pupil expenditure in the government elementary school system, using education expenditure data from the UP education budget for various years, and using official data on government elementary school student numbers from the District Information System on Education (DISE) for Uttar Pradesh for various years.

The Table 3 is self-explanatory. The methodology for the calculation of the government elementary schools' Per Pupil Expenditure (PPE) is to divide 'Total Revenue expenditure on government elementary education' in column D by the 'Number of Students in class 1-8 in government elementary and secondary schools' in column E. Further to get monthly PPE in the last column, we divide the annual PPE by 12.

Table 3 shows that PPE in government elementary schools has risen sharply over the 5 year period between 2013-14 and 2018-19, by two and a half times (more precisely by 2.54 times), from Rs. 1063 per month to Rs. 2696 pm. This is because of two contributory factors.

Firstly, there was a steep increase in government's total education expenditure, which rose by 2.24 fold, from Rs. 22601 crore in 2013-14 to Rs. 50,655 crore in 2018-19. Apart from generous annual teacher salary increments of about 8.5 percent year after year, and an increase in the total number of teachers, there were two other major reasons for cost increases in government schools:

- (a) In February 2014, UP government announced the regularisation of 1,77,000 socalled 'para' teachers, and about 140,000 were regularised by 2016. The salaries of these para teachers first jumped from Rs. 3500 pm to Rs. 29,300 in 2014-15, but then a Supreme Court judgment of July 2017 revoked this regularisation and their salaries were revised downwards to Rs. 10,000 pm from autumn 2017, which was still a nearly 300 percent increase from its pre-2014 levels.
- (b) the Seventh Pay Commission's salary recommendations were announced and implemented in 2017, which increased teacher salaries by about 18.5 percent in that one year of 2017.

Year	Revenue expenditure on govt. primary and upper primary schools	Revenue expenditure on govt. upper primary classes in secondary schools	Revenue expenditure on pensions of govt. elementary teachers*	Total Revenue expenditure govt. elementary education	Number of students in classes 1-8 in govt. elementary & secondary schools	Annual per pupil expenditure	Monthly per pupil expenditure
	('crore)	('crore)	('crore)	('crore)		(Rupees)	(Rupees)
	(A)	(B)	(C)	(D=A+B+C)	(E)	$(\mathbf{F} = \mathbf{D}/\mathbf{E})$	(G=F/12)
2013-14	18622	597	3382	22601	17712153	12760	1063
2014-15	22900	486	3959	27345	17096925	15994	1333
2015-16	30931	535	4000	35466	16602729	21362	1780
2016-17	37994	604	5000	43598	15657255	27845	2320
2017-18	45420	619	N/A	46039	15657255	29404	2450
2018-19	49953	702	N/A	50655	15657255	32352	2696

 Table 3

 Calculation of per pupil expenditure on UP government elementary schools

Source: For columns (A), (B) and (C), the sources are: the Uttar Pradesh Budget 2015-16, which gives actual expenditure for 2013-14; Uttar Pradesh Budget 2016-17, which gives actual expenditure for 2014-15; Uttar Pradesh Budget 2017-18, which gives the actual expenditure for 2015-16; and Uttar Pradesh Budget 2018-19, which gives actual expenditure for 2016-17, gives the revised expenditure for 2017-18 and gives the estimated expenditure for 2018-19. For student numbers in government elementary schools in column D, the source is the UP government's District Information System on Education (DISE) data from www.dise.in. A detailed description of the Sources with relevant page numbers etc. and explanatory notes about the above data are given in Annex 1.

Note: The estimated annual per pupil expenditure in the second last column (Rs 12,760) for 2013-14 is fairly consistent with the PPE for UP in Pritchett and Aiyar (2014). They report the PPE in UP in 2011-12 to be Rs 10,997. Inflation rate in 2012-13 was 4.6% and in 2013-14, it was 9.0% (MOSPI, 2018). Thus, Rs. 10,997 in year 2011-12 would be Rs. 12,538 in 2013-14, i.e. very similar to our estimate of Rs. 12,760 ! In 2014-15 and 2015-16, the UP government's elementary education budget rose significantly due to the regularisation of 177,000 para teachers under the Samajwadi Party government. In 2017-18 it rose significantly due to the implementation of the recommendations of the Seventh Pay Commission salary scales for teachers.

Note: There is a small 6.5% difference between the estimates of per pupil expenditure in 2014-15 and 2015-16 in Table 3 above (which are based on actual expenditure and on actual enrolment from DISE data in these years) on the one hand, and the equivalent numbers in Kingdon and Muzammil (2015) for the same years, which are based on 'revised estimate' for 2014-15 in the Budget of 2015-16 and the 'estimate' for 2015-16 in the Budget of 2015-16. For example, in Kingdon and Muzammil (2015), the per pupil expenditure for 2014-15 was Rs. 1425 pm whereas here in Table 3 above, it is Rs. 1333 pm. This is because the 'actual expenditure' of 2014-15 as shown in the Budget of 2016-17 was somewhat lower than the 'revised expenditure' in the Budget of 2015-16 which was the latest information available at the time of writing the 2015 paper.

Secondly, there was a steady year-on-year decline in the number of students studying in government schools in UP – a 13.1% decline over 3 years, from 2014 to 2016 – as per official DISE data. The enrolment figures until 2016-17 are taken from the latest available published DISE data but the enrolment numbers for 2017-18 and 2018-19 – which are not yet available – are assumed to remain the same in the past three years, i.e. it is assumed that there have been no further reductions in total enrolment in government schools in UP since 2016-17.

The effect of the 'double whammy' of substantially increased expenditure and the substantially declined total government school enrolment, has been to cause the PPE to balloon sharply.

We have made per pupil expenditure calculations only for government *elementary* schools, i.e., expenditure on children and teachers in classes 1 to 8 in government run schools – whether they are 'primary-only' schools, or 'primary with upper primary' schools, or 'upper primary with secondary + higher secondary' schools.

Since most government secondary schools have upper primary sections, it is difficult to divide up the government's secondary education expenditure into the part pertaining to junior grades (classes 6 - 8) and the part relating to the secondary grades (classes 9 - 12). However, it is possible to get a fairly acceptable estimate of the upper primary PPE in government schools in the manner set out in Appendix 1.

The PPE in 2018-19 is an estimated Rs 2,696 per month, which is six times the reimbursement amount fixed (Rs 450 pm per child) by the Government of Uttar Pradesh in clause 2(b) of its Government Order (GO) dated 20th June 2013. This reimbursement amount has not been revised upwards in all the intervening years. Thus, the UP government's maximum reimbursement amount is a mere 15% of the estimated per pupil expenditure on government elementary schools in 2018-19. Thus, while the RTE Act requires state governments to pay a reimbursement to private schools upto the Per-Pupil-Expenditure in its own (government school) system, the UP state government has undertaken to pay only 15% of its own schools' PPE to private schools for educating these poor children.

Adjustments

The PPE estimate of Rs. 2696 pm in 2018-19 is an underestimate for two major reasons. Firstly, although the UP budget shows/includes the UP state government's expenditure on Sarva Shiksha Abhiyan items on UP's government schools, it does not show the central government's expenditure on SSA items for UP children in public schools i.e. not all government expenditure on education has been added in. This is important because the formula given for the calculation of the PPE in Rule 8(2) of the Uttar Pradesh Right to Education Rules 2011 explicitly mentions the inclusion of the educational funds provided by the Central Government. It gives the exact formula for the PPE calculation as follows: "The total annual recurring expenditure incurred by the State Government, from its own funds, and funds provided by the Central Government and by any other authority on elementary education in respect of all schools established, owned or controlled by it or by the local authority, divided by the total number of children enrolled in all such schools as on 30th September, shall be the per-child expenditure incurred by the State Government". The Explanation given immediately below Rule 8(2) excludes the government's expenditure on aided schools and the children enrolled in aided schools.

The second reason why the PPE shown in Table 3 is an underestimate of the true PPE is that the pupil numbers (the denominator) are over-estimated due to inflated enrolments in the school-returns DISE data, reflecting a tendency among state government officials to present a rosier picture of school education than the one that actually prevails.

Adjusting for inflation of enrolment

The source of data for the student enrolment figures (column E) in Table 3 above was the District Information System on Education (DISE) data. DISE data is collected via a Data Capture Format sent to schools and thus, it is school-returns data. Some questions have been raised – from time to time – about the veracity and trustworthiness of (*school-returns based*) enrolment data from DISE. In September 2015, the DISE enrolment data for the Lucknow district were reviewed by the District Magistrate who ordered for a survey to be carried out by the district Basic Education Officer (Basic Shiksha Adhikari). The survey showed that 18% of students in Lucknow were "absent for long period" and the District Magistrate ordered the cancellation of the admission of many of the elementary school children whose names were in the enrolment registers as they were deemed not to be enrolled (Times of India, 2015a). This is fairly consistent with the findings of the SchoolTELLS survey of 80 rural primary schools in 5 districts of Uttar Pradesh² where each school was visited 4 times in the year 2007-08, and it was found that 15% of students in the enrolment registers were never present in the school in any of the four survey visits, i.e. 15% of the total primary school enrolment was fake. And this is disregarding the absenteeism among children who are not fake enrolments³.

A joint survey by the Comptroller and Auditor General (CAG) and the Mid Day Meal Authority (MDMA) reported in (*Times of India*, 2015b) showed that there is widespread over-reporting of enrolments in the enrolment registers of public schools in Uttar Pradesh, with "over 10% students mentioned in class register being absent all through the year in nearly every government school".

It has been widely suggested that there are economic incentives for government schools to over-report enrolments since grains for mid-day meals, cloth for school uniforms, scholarship money for SC/ST students, and the number of teachers appointed, all these increase with the reported number of enrolled children in a school, and there are no penalties for over-reporting enrolments.

Finally, a recent report of the Comptroller and Auditor General (CAG, 2017) showed that there were about 10%% more students in elementary school than there are children in the state, implying that there is large-scale over-reporting of school enrolments. Secondly, and

²Rural parts of districts Agra, Shrawasti, Mahoba, Bijnor and Lucknow.

³ Surveys by the Ministry of Human Resource Development (MHRD) and the Annual Status of Education Report (ASER) suggest that just over half the children who enrol have a tenuous connection with the school in UP. The ASER survey for 2015 shows student attendance rates in UP government schools as 55.1% in primary and 54.7% in upper-primary schools. Thus, when UP elementary schools show a pupil teacher ratio of 33 according to their enrolment data, this amounts to about 17 pupils per teacher actually present in school any day.

more worryingly, the same CAG report – which surveyed 428 elementary schools in UP in 2016 – found that the attendance rate was a mere 27% (CAG 2017, p. 26 and Appendix 2.1.18), showing that a very high proportion of so-called 'enrolled' children in fact have a tenuous connection with the school, representing no meaningful school participation, and the CAG report remarked that the UP state officials had reported an attendance rate of 61% to 91% at the AWP&B (Annual Work Plan and Budget) process in Delhi. This large discrepancy (27% versus 61%-91%) suggests that officials may have some incentive to inflate pupil enrolments just as they felt compelled to inflate pupil attendance rates.

In Table 4, we adjust downward the DISE government school enrolment figure by 18% in each year (in line with the estimate of enrolment-inflation in the CAG/MDMA report of 2015), and thus present a revised calculation of per pupil expenditure. The adjustment results in the PPE estimate for 2018-19 rising to Rs 3,064 per month per child.

Year	Revenue expenditure on govt. primary and upper primary schools	Revenue expenditure on govt. upper primary classes in secondary schools	Revenue expenditure on pensions of govt. elementary teachers*	Total Revenue expenditure govt. elementary education	Number of students in classes 1-8 in govt. elementary & secondary schools	Annual per pupil expenditure	Monthly per pupil expenditure
	('crore)	('crore)	('crore)	('crore)		(Rupees)	(Rupees)
	(A)	(B)	(C)	$(\mathbf{D} = \mathbf{A} + \mathbf{B} + \mathbf{C})$	(E)	$(\mathbf{F} = \mathbf{D}/\mathbf{E})$	(G=F/12)
2013-14	18622	597	3382	22601	15586695	14500	1208
2014-15	22900	486	3959	27345	15045294	18175	1515
2015-16	30931	535	4000	35466	14610402	24274	2023
2016-17	37994	604	5000	43598	13778384	31642	2636
2017-18	45420	619	N/A	46039	13778384	33414	2785
2018-19	49953	702	N/A	50655	13778384	36764	3064

 Table 4

 Revised calculation of per pupil expenditure in UP government elementary schools, after correcting enrolment numbers

Source: Same as in Table 3 but the DISE enrolment has been reduced by 18%, to adjust for the over-reported fake enrolments.

Discussion

Our estimation shows that the per pupil expenditure in the government elementary schools in Uttar Pradesh is Rs 2,696 per month per child if we ignore the over-reporting of enrolment in government schools, but it is Rs 3,064 per month per child, if DISE student enrolment figures are revised to adjust for the reported fake enrolments, where the extent of adjustment (18%) is provided by government agencies' (CAG and MDMA's) own estimation of over-reporting in government school enrolments. And the figure of Rs 3,064 per month is an under-estimate

of the true per pupil expenditure in the government school system since it does not include the Central government's share of the Sarva Shiksha Abhiyan funds spent on public schools in Uttar Pradesh. Our estimate of the per pupil expenditure in government elementary schools is consistent with that in Pritchett and Aiyar (2014) for Uttar Pradesh, as shown in the note below Table 3.

In fixing the reimbursement amount for private schools for RTE admissions, most states have not publicly presented their calculations of the per pupil expenditure in their government school system, nor explained the basis for determining their fixed reimbursement amount.

Fixing the reimbursement amount at the accurately estimated and annually updated actual government per pupil expenditure is important for three reasons. Firstly, in order for state governments to be compliant with the legal requirement in clause 12(2) of the RTE Act. Secondly, large financial losses due to low government reimbursement may force private schools to reduce the quality of their provisioning, which would be worrying in the context of the concerns about the already low quality of schooling in the country. Thirdly, some private schools may be tempted to discriminate against the RTE-admitted children if they attract an unfair and illegally-low reimbursement amount, which would be contrary to the inclusive intention of the RTE Act.

Apart from the amount of reimbursement, there is also the question of the timing of the reimbursement. In UP's reimbursement scheme, there is provision for payment of the first tranche of reimbursement amount after 15th October of the year of admission of the students, implying a 6.5 month wait for reimbursement at the earliest, whereas salary and other costs have to be incurred by private schools from day one of the admission.

Moreover, there is a question of large backlogs of unpaid reimbursements. In many states where RTE admissions began several years ago, reimbursement delays of 2-3 years have been experienced by many private schools, and there is no provision for compensation or for penalty payment at market interest rate for such delays. Further, even when reimbursements are given, they are a small fraction of the due amount: there is much journalistic evidence, with many newspaper reports of thousands of millions of rupees of unpaid reimbursement amount in several states.

These reimbursement issues are important to the successful implementation of section 12(1)(c) of the RTE Act. In order to ensure that disadvantaged children are as equally welcomed, cherished and nurtured as the fee-paying children within the private schools, it is important that private schools do not perceive them as a financial burden because they experience that they are reimbursed only a fraction of the amount that the law mandates for their reimbursement, and with long delays.

Annex 1

Sources and Explanations Related to Table 3

Sources of data in Table 3

- For 'Revenue Expenditure on elementary education' data (Table 3, column A), the source is the Uttar Pradesh Budget 2015-16, which gives actual expenditure for 2013-14, Uttar Pradesh Budget 2016-17, which gives actual expenditure for 2014-15 and revised expenditure for 2015-16 and Uttar Pradesh Budget 2018-19, which gives actual expenditure for 2016-17, revised expenditure for 2017-18 and estimated expenditure for 2018-19.
- For Revenue Expenditure on upper primary classes in secondary schools (Table 3, column B), the source is page 19, Anudaan Sankhya 72 of the UP Budget 2015-16, 2016-17 and 2017-18 (Khand 5, Bhaag 8), from where the expenditures have been taken in the same way as above. The way of getting to the number shown in Table 3's Column B is shown in Annex 2.
- For 'Expenditure on Pensions of elementary teachers' data (Table 3, column C), the source is, Anudaan Sankhya 62, of the UP Budget 2015-16 (Page 87) and 2016-17 (Page 91) (Khand 5 Bhaag 7) as well; the item is titled "Basic shiksha parishad ke seva-nivritt karmikon / seva-nivritt shikshakon ki pension evam seva-nivritti suvidhayen". However, it is not clear whether this includes the pensions of upper primary section teachers who teach in government *secondary* schools. If it excludes them, then our estimated PPE will be an under-estimate. But here one thing is important that from 2017-18 onwards budget of pensions has been included in the UP Budget (Abudaan Sankhya 72, Bhaag 8), therefore the figures for 2017-18 & 2018-19 are not mentioned in column 'C' as they are already included in column 'A'.
- For 'Number of students in government elementary schools' data (Table 3, column E) for the year 2013-14, 2014-15, 2015-16 and 2016-17 the source is the government's own data published in the District Information System of Education (DISE)'s State Report Card for UP for the year 2013-14, 2014-15, 2015-16 and 2016-17, downloaded from www.dise.in. The DISE state report cards are not yet published for the years 2017-18 or 2018-19. Although enrolment fell every year from 2013 to 2016 as evident from DISE data, we assume more conservatively that there was no fall in the enrolment between 2016 and 2018.

Explanations related to data in Table 3

The increase in UP's recurrent elementary education budget (in column A) from 2013-14 to 2014-15 is a very large 30.3% and, the further increase from 2014-15 to 2015-16 is yet again

a large 30.8%. The major reason for this (apart from generous increase in Dearness Allowance of 15% per annum in these years, plus increase in basic pay of 3% per annum), appears to be that the UP government announced in February 2014 – just before the Code of Conduct for national elections of April 2014 came into effect – that it will regularise the services of 177,000 para teachers. They were getting a salary of Rs 3,500 per month, but as regular teachers they got from July 2014 a salary of approximately Rs 29,300 pm and from July 2015, a salary of Rs 31,405 pm, and some were regularised in 2014-15 and some in 2015-16. However, due to a Supreme Court order the regularisation of these 177,000 para teachers was revoked in July 2017 and the Uttar Pradesh government reverted them to their para teacher post, but at a salary of Rs. 10,000 pm.

There are other ways of reaching the per pupil expenditure figures seen in Table 3. To illustrate: In July 2015, average (rather than 'starting') teacher salary in UP government primary schools was approximately Rs 43,600 per month. We know this because Table 6.3 in Vimala Ramachandran (2015) cites data provided by the UP SCERT showing that in 2014, at 15 years' work-experience, primary level teacher salary was Rs 39,683 pm and the upper primary level teacher salary (which is the same as secondary teachers' salary) it was Rs 47,716 pm. The 2015 salary rate is likely to be 10% higher. Taking only the average teacher salary for primary teachers only i.e. Rs 39,683, (and disregarding the upper primary teachers' average salary in 2015. We then divide Rs 43,600 by 33 (the pupil teacher ratio in government elementary schools, as per the UP DISE data), which gives the teacher salary cost of the government schools as Rs 1321 per child per month. Rs 1321 per child per month is only the *teacher salary* expenditure per child.

In theory, since clause 9 of the GO of 8th May stipulates salary expenditure to be 80% of total fee revenue (and thus 80% of total costs in all schools, since by law all schools are non-profit entities), so total (100%) per-child expenditure will be Rupees 1651 per child per month.

But, one would need to add to that *cost of administration and management of schools* by the Basic Shiksha Adhikari (BSA), District Inspector of Schools (DIOS), including the cost of office buildings, equipment, and their maintenance, the cost of vehicles, their maintenance and their fuel⁴. Adding these to the Rs 1651, as well as the costs of government providing free mid-day meals every day, free uniform, free textbooks, as well as adding the cost of pension, PF and gratuity to retiring teachers staff, *the per pupil expenditure by government on its own schools is likely to be similar to the Rs 1780 per month per child calculated in Table 3* through a different method. In other words, the two methods appear to triangulate.

⁴This is to parallel private schools' costs of administration and management, staff training, data maintenance for compliance with the requirements of various government departments (Registrar of Societies, Income Tax and TDS, the PF and ESI Organisations, the DIOS, BSA, Nagar Nigam, Regional Transport Office, etc.), and costs incurred on facilities such as offices, vehicles, computers, IT equipment (e.g. Interactive Smart Boards, Tablets, etc.), internet connectivity, fire-equipment, library, labs, water-tanks, ACs, swimming pools, sports grounds, furniture and their maintenance.

Annex 2 Calculating the government's expenditure on junior section classes 6-8 within government secondary schools

The first column of the Annex Table below (column (a)) shows the total revenue expenditure on secondary education – in both government and aided schools taken together. We first isolate the expenditure only on students of classes 6 - 8 who are studying within secondary schools, by making the simplifying assumption that all 'secondary' schools go upto class 12, i.e. are higher secondary schools. Thus, classes 6 - 8 are 3 grades out of 7 grades in the school. Thus, expenditure on classes 6-8 in secondary schools can be assumed to be threesevenths $(3/7^{\text{th}})$ of the total secondary education expenditure, and this is shown in column (b) of the Annex Table below. Lastly, we need to isolate the students studying in grades 6-8 *only* in government schools and not in aided schools. The last two lines at the bottom of Page 18, Anudaan Sankhya 72 of the UP Budget 2015-16 (Khand 5, Bhaag 8) shows the plan and nonplan expenditure on government secondary schools ('Rajkiya madhyamik vidyalayas') and on aid to non-government secondary schools ('ghair sarkaari madhyamik vidyalayon ko sahayata'). This shows that salary expenditure on government secondary schools is Rs 1,20,53,640,000 (1205 crore, or Rs. 12,050 million) and on aided schools is 5,65,65,433,000 (5657 crore, or Rs. 56,570 million), and this implies that the government's salary expenditure on government secondary schools is about 17.55% of the government's total salary expenditure on government and aided secondary schools. Thus, we have multiplied the 'revenue expenditure on classes 6-8 in secondary schools' in column (b) below by 0.1755 and the resulting figure (in column (c) is the government of UP's recurring expenditure on students studying in classes 6-8 within government secondary schools.

The figures for the other rows of the table have been further made with the help of UP Government Budgets of 2016-17 and 2018-19, using the figures as mentioned in the explanation of Table 3 Column 'A'.

Year	Revenue expenditure on secondary education (all classes 6 – 12) (in Govt. & Aided schools) ('crore)	Revenue expenditure on secondary education (only in classes 6 – 8) (in Govt. & Aided schools) ('crore)	Revenue expenditure on junior classes 6 – 8 in secondary schools but in ONLY Govt schools ('crore)	
2013-14	7943	3404	597	
2014-15	6467	2772	486	
2015-16	7350	3150	553	
2016-17	8037	3444	604	
2017-18	8230	3527	619	
2018-19	9335	4001	702	

Annex Table Government expenditure on secondary schools

References

- CAG (2017) *Report of the Comptroller and Auditor General of India on General and Social Sector* (For the year ended 31 March 2016), Report No. 02 of the year 2017. Comptroller and Auditor General of India.
- DISE (various years) District Information System of Education www.dise.in/statereportcards/
- Dongre, Ambrish, Avani Kapur, and Vibhu Tewary (2014), "How Much Does India Spend Per Student on Elementary Education?", Accountability Initiative, Centre for Policy Research, Oct. 2014. http://www.cprindia.org/sites/default/files/working_papers/working_paper_series1.pdf
- Dongre, Ambrish and Avani Kapur (2016) "Trends in Public Expenditure on Elementary Education in India", *Economic and Political Weekly*. Vol. 51, Issue No. 39, 24 Sep, 2016.
- GOUP (Various Years) Budget, Government of Uttar Pradesh, Lucknow.
- Kingdon, Geeta and Mohd. Muzammil (2015) "Government per pupil expenditure in Uttar Pradesh: Implications for the reimbursement of private schools under the RTE Act", CSAE Working Paper WPS/2015-18, Department of Economics, University of Oxford. <u>http://www.csae.ox.ac.uk/materials/papers/csae-wps-2015-18-2.pdf</u>
- MOSPI (2018) Ministry of Statistics and Programme Implementation, https://data.gov.in/node/3785261/download ; https://data.gov.in/resources/all-india-consumerprice-index-ruralurban-july-2017-base-2012100 BASE=100 in 2012
- NIPFP (2017) "Resource requirements for Right to Education (RTE): Normative and the Real" Working Paper No. 201, published on 09-Dec-2017 by Sukanya Bose, Priyanta Ghosh and Arvind Sardana, National Institute of Public Finance and Policy, New Delhi.
- Pritchett, Lant and Yamini Aiyar (2014), "Value-subtraction in Public Sector Production: Accounting Versus Economic Cost of Primary Schooling in India", Working Paper 391 December 2014. http://www.cgdev.org/sites/default/files/CGD-Working-Paper-391-Pritchett-Aiyar.pdf
- Ramachandran, Vimala (2015) "Teachers in the Indian Education System: Synthesis of a Nine state study", NUEPA, National University of Educational Planning and Administration. New Delhi.
- Supreme Court of India (25 July, 2017) https://www.sci.gov.in/supremecourt/2015/38787/38787_2015_Judgement_25-Jul-2017.pdf
- Times of India (2015a) "BSA SURVEY 18% primary students in city skip schools" page 2, 29 Sept. 2015. http://epaperbeta.timesofindia.com//Article.aspx?eid=31813&articlexml=BSA-SURVEY-18-primary-students-in-city-skip-29092015002036
- Times of India (2015b) "UP schools drawing funds for non-existing students: Classes lie vacant but bags, meals, uniforms for lakhs", page 4, 2nd Nov. 2015. http://epaperbeta.timesofindia.com//Article.aspx?eid=31813&articlexml=UP-schools-drawing-funds-for-non-existing-students-02112015004030)
- World Bank (2016) Value for Money From Public Expenditure on Education in India, authored by Kingdon, G., S. Sinha and V. Kaul. South Asia Region, Global Education Practice, World Bank, New Delhi.