

HOW MUCH DOES INDIA SPEND PER STUDENT ON ELEMENTARY EDUCATION?

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1. INTRODUCTION

The last few years have seen significant changes in the quantum and composition of financing the elementary education (henceforth, EE) sector in India. Traditionally, financing EE was the primary responsibility of individual state governments. But the launch of the Sarva Shiksha Abhiyan (SSA) in 2001 has resulted in a significant increase in Government of India's (GOI) funding for EE. In fact, between 2001 and 2013, GOI's EE budget increased over 11-fold from Rs. 3,577 crore to Rs. 39,622 crore¹. Consequently, while states still contribute the larger share of education expenditure, their share in the total has been declining since 2000 (from 87.7% in 2000-01 to 75.3% in 2010-11)^{2,3}. In 2010, Parliament passed the Right to Free and Compulsory Education (RTE) Act—making it an obligation on states to ensure that every child between 6 to 14 years of age is in a school. The passing of the RTE Act and the obligations on state governments to implement it has resulted in an increasing reliance, particularly among fiscally weaker states, on GOI funds (Accountability Initiative 2013; 2012).

In addition to the changing nature of public expenditure on EE, private expenditure on EE has also increased. The recent District Information System for Education (DISE) numbers indicate that 36% of the students at elementary level are enrolled in schools operated by private management (aided and unaided) (Mehta 2013). Between 2007 and 2013, the percentage of children in private schools in rural India increased from 20% to 29% (ASER 2013). Some states, such as Kerala, have nearly 70% of their children from rural areas in private schools. Households are also spending more than just school fees on education. Twenty four percent of children in rural India attend paid tuitions. In fact, more than half the children in rural parts of Bihar, West Bengal and Odisha take paid tuitions (ASER 2013).

However, despite these changes, updated estimates on the public and private expenditure on EE are not available. This paper attempts to fill this gap. It provides a methodology and estimates of per student public expenditure on those who are enrolled in government schools, and per student private expenditure on those who are enrolled in private schools for 20 major states in India for the year 2011-12⁴. Going further, the paper also provides estimates of total public expenditure and total private expenditure, and hence total expenditure on EE in India.

Our findings indicate that India spent 1.75% of the GDP (centre and states combined) on EE, while private expenditure, admittedly an underestimation, was 0.71% of the GDP. Richer states spent less on EE as a % of their GDP, compared to the poorer states. There is significant variation across states in public expenditure per government school student and private expenditure per private

1. www.Indiabudget.nic.in

2. Figures are for total education, not just elementary. However, given that EE now constitutes the largest share of total elementary education, it is reflective of the overall trend.

3. MHRD 2013. Figures for 2010-11 are revised estimates.

4. 2011-12 has been used as it was the latest financial year for which expenditure data is available from state budget documents.

school student. Variation in public expenditure per government school student is higher than variation in private expenditure per private school student. On an average, higher the per capita income, higher is the public and private expenditure per government school student and per private school student, respectively. Differences in public expenditure on teacher salaries per government school student are also an important reason why public expenditure per government school student differs so dramatically across states. Preliminary analysis shows that higher per student public expenditure (and per student private expenditure) is associated with higher proportion of students being able to read or do math of a particular level. But we argue that this fact should not be taken to mean that more expenditure is needed to improve learning levels because government expenditure on EE is highly inefficient. It produces low levels of outcomes at high expenditure. Changing this requires reorganising the financial architecture by prioritising learning outcomes and demanding accountability toward learning outcomes from all officials, above everything else.

The remaining paper is divided into the following sections. Section 2 discusses estimation of public expenditure on elementary education. Section 3 describes methodology for calculating private expenditure. Section 4 discusses the main findings and Section 5 concludes.

2. ESTIMATION OF PUBLIC EXPENDITURE ON ELEMENTARY EDUCATION (EE)

Initially, education (including EE) was the primary responsibility of individual state governments. In 1976, education was included in the Concurrent List of the Constitution, making it a joint responsibility of both, GOI and state governments⁵.

Expenditure on EE comes primarily from state governments. States incur most of the recurring expenditure on teacher salaries as well as state-specific entitlement schemes. Calculating expenditure by state governments requires going through individual state budget documents, many of which are not easily available online⁶. Collating is further complicated by the fact that each state budget reports educational expenditure differently. For instance, while some states, such as Karnataka and Tamil Nadu, have separate departments for EE, in case of others, such as Kerala, EE is mentioned under several major heads of accounts which includes 'general education', 'technical education', 'sports and youth services' and 'art and culture' (De and Endow, 2008). Moreover, expenditure on EE is funded not just through the education department. For instance, Department of Tribal Welfare provides money for scholarship, uniforms and even building schools, which need to be included in calculating total expenditure on EE. Other departments funding EE include Ministry of Railways, Defence, Labour and Employment, Social Justice & Empowerment, Culture, Tribal Development, Development of North Eastern Region and Department of Women & Child Development. In fact,

5. The Concurrent List consists of 52 items, the legislation of which rests with both the Central government as well as state governments.

6. For more details, see <http://accountabilityindia.in/accountabilityblog/2438-rants-public-finance-junkie>

in recent years, a significant share of expenditure on EE is incurred by departments other than department of education, and its proportion has been increasing over time (MHRD 2013)⁷.

In recent years, GOI has increased its contribution to EE through the launch of Centrally Sponsored Schemes (CSS) such as Sarva Shiksha Abhiyan (SSA), Kasturba Gandhi Balika Vidyalaya (KGBV) and the Mid-Day Meal (MDM) scheme⁸. CSS have some key features. First, GOI and state governments share funding for CSS. For instance, funds for SSA are shared in 65:35 ratio, while funds for cooking cost under MDM have a 75:25 ratio⁹. Second, CSSs may have different modes of fund transfer. Funds for SSA are routed through an autonomous implementation society (known as the State Implementation Society (SIS)) and thus, do not flow through the state treasury. In contrast, funds for MDM are routed via the state treasury. Detailed financial information on these CSS is available on individual scheme websites.

Given the multiple sources and manner of funding for EE, calculating total expenditure becomes complicated. The next sub-section described the methodology we've adopted to calculate public expenditure on EE.

2.1 Methodology to calculate public expenditure on Elementary Education

Calculating total public expenditure on EE involves adding a) expenditure incurred in the state budget available from individual state budget documents, and b) funds flowing through the SIS, from the Approved Annual Plan and Budget (AWP&B) for SSA^{10 11}.

Data for EE was manually collected from state budget documents. In order to ensure that we included the entire quantum of expenditure, we extracted the specific head of account for EE (2202.01 – revenue expenditure, and 4202.01.201 – capital expenditure) rather than looking only at the department of education. The total expenditure on EE in the state budget, however, includes the state expenditure for SSA but does not include GOI expenditure for SSA. In order to avoid double counting, the state expenditure for SSA was netted out.

7. Other departments constituted 32% of the total share of revenue expenditure on education as a whole in 2011-12.

8. Centrally Sponsored Schemes (CSS) are those that are funded directly by the Central ministries/ departments and implemented by states or their agencies. This assistance tends to be in areas that are predominantly or have traditionally been state subjects, where the Centre wishes to motivate states to take up programmes and provides additional funding.

9. For special category states, the ratio is 90:10.

10. State budget includes expenditures incurred on MDM and other CSS such as Strengthening of Teacher Training Institutions that flow through the state treasury. Since funds for SSA flowed through the society route, they were added separately. The calculations may miss out some expenditure incurred under general category (where it is difficult to extract the exact expenditure on elementary education), but these would be minimal.

11. The AWP&B is the total estimated annual work plan submitted by respective state governments to GOI's planning board known as the PAB. Once approved, the AWP&B forms the basis of release of funds under SSA and expenditures incurred.

Finally, the last step entailed adding the total expenditure incurred under SSA which, as previously mentioned, is transferred through state autonomous bodies. Total SSA expenditure (GOI and state share) was collected from AWP&B documents and Project Approval Board (PAB) minutes, available on the SSA portal¹². Since PAB minutes are revised frequently based on the supplementary plan, in order to obtain the most updated figures for a particular year, we have used the PAB minutes for the next year. For instance, PAB 2012-13 has been used to obtain 2011-12 figures for expenditures. It is important to note that for some states, since the PAB meetings occur before the end of the financial year, the expenditure figures may be actual expenditure till January and then anticipated expenditure for February and March¹³.

Table 1 (column 1) gives the total public expenditure on EE. In 2011-12, Uttar Pradesh spent the highest at Rs. 18,126 crores, followed by Maharashtra at over Rs. 15,000 crores. On the other hand, smaller states of Himachal Pradesh, Punjab and Uttarakhand spent less than Rs. 2,000 crores.

Per student expenditures

Looking at total expenditure, however, can be misleading as there is significant variation in student population across states. Thus, in order to get a more comparative picture, we calculate public expenditure on EE per student enrolled in government schools¹⁴. It is derived by dividing total public expenditure by total enrollment in elementary sections (Sections I-VIII) in government schools. Total enrollment was obtained from DISE State Report Cards 2011-12¹⁵.

The results are in column 3 of Table 1, and discussed in section 4. Median expenditure per student is Rs. 12,768. Chhattisgarh is just below the median, while Gujarat is just above the median.

3. METHODOLOGY TO ESTIMATE PRIVATE EXPENDITURE ON ELEMENTARY EDUCATION (EE)

This section describes the methodology to estimate private expenditure i.e. expenditure incurred by households on school fees, exams fees, tuition fees, any other fees, conveyance, books, stationery,

12. www.ssa.nic.in

13. An alternative methodology can be collating total EE expenditure from the state budget and simply adding the GOI release for SSA. This would be a simpler method as it would not require netting out state share of SSA from the state budgets. However, SSA has a significant degree of under-spending. Not all GOI releases are spent. Thus, adding GOI releases could be an overestimate of expenditure. Hence, we prefer the methodology used in this paper.

14. Note that public expenditure per student enrolled in elementary sections of government schools as estimated here is an over-estimation since the numerator includes expenditure on private aided schools, while denominator doesn't include students in private aided schools. This over-estimation is a matter of concern mainly for states like Kerala, Maharashtra and Tamil Nadu where a significant proportion of students are enrolled in such schools. The other option was to include number of students in private aided schools in the denominator. However, money towards private aided schools is only for teacher salaries, and would have resulted in underestimation of public expenditure per student enrolled in government schools. Further, this would have created problems in estimating private expenditure on EE, which will be clear in section 3.

15. It is important to note here that we are not calculating the per child expenditure but the per-student. While expenditure on elementary may include expenditure on out-of-school children (OOSC), we have not included the number of OOSC in calculating per student expenditures. This however, should not make a significant difference as expenditure on mainstreaming OOSC is a very small proportion of total EE expenditure.

uniform, private coaching etc. We use data from 64th round of NSS since it is the latest data which provides information on expenditure on education by households¹⁶.

Our method consists of first, calculating per student private expenditure for those who attend government schools (including local body schools) and private schools (aided and unaided), separately. We adjust these numbers for inflation between 2007-08 and 2011-12. Next, we estimate number of students enrolled in government schools and private schools in 2011. Multiplication of per student expenditure and number of students gives total private expenditure on those who attend government schools and private schools separately. Adding these gives us total private expenditure (for all those who are enrolled in schools, whether public or private). Finally, dividing aggregate private expenditure by total number of students enrolled in private schools gives per student private expenditure.

An easier method could have been directly calculating (combined) per student private expenditure without distinguishing between the type of school in which they are enrolled, and adjusting it for inflation. But we avoid this method because (combined) per student private expenditure is essentially a weighted average of per student private expenditure of those who are enrolled in government and private schools weighted by proportion of students attending government and private schools. Since these proportions are likely to have changed substantially, it would be inappropriate to use (combined) per student private expenditure.

The step-by-step process undertaken to calculate private expenditure on EE is outlined below:-

Step 1: Estimating per student private expenditure attending government schools, and private schools, 2007-08

First, we estimate per student private expenditure for students in grades one to eight, attending government schools, and private schools (i.e. private and private aided) separately, using 2007-08 NSS round (see columns 1 and 2 of Table 2)¹⁷. With the implementation of the RTE act, government schools no longer charge any fees, and provide textbooks and uniforms to the enrolled children free of cost. Hence, we have excluded school fees, exam fees, and cost of books and uniforms, while calculating private expenditure for children attending government schools.

Step 2: Estimating GDP deflators and inflation between 2007-08 and 2011-12

Next, per student private expenditure numbers obtained for 2007-08 are updated for the year 2011-12 using inflation numbers calculated on the basis of state-specific GDP deflators¹⁸. The GDP deflators are calculated as the ratio of current state GDP to constant state GDP for 2007-08 and 2011-12. Inflation rate was thus calculated using the following formula:

$$(\text{GDP Deflator 2011-12} - \text{GDP Deflator 2007-08}) / \text{GDP Deflator 2007-08} \quad (I)$$

16. Education in India: 2007-08 – Participation and Expenditure, NSS 64th round, July 2007-June 2008

17. Number of observations is indicated in table A.1 in appendix.

18. Data on GSDP has been obtained from Central Statistical Organisation website, downloaded in July, 2013.

Step 3: Estimating per student private expenditure attending government schools, and private schools, 2011-12

Step 1 and 2 enable us to obtain inflation-adjusted private expenditure on EE for students attending private schools (column 3 of Table 2), and inflation-adjusted private expenditure on EE for students attending government schools (column 4 of Table 2). Median expenditure per student attending private schools is Rs. 5,959. Chhattisgarh is just below the median, while Maharashtra is just above the median.

In order to obtain aggregate private expenditures, we need to multiply per student private expenditures by number of students enrolled in government schools and private schools, i.e.

Total private expenditure for students attending private schools =

Per capita private expenditure for students attending private schools * number of students enrolled in private schools (II)

Total Private Expenditure for students attending government schools =

Per capita private expenditure for students attending government schools * number of students enrolled in government schools (III)

Enrollment in government schools is easily available from DISE State Report Cards¹⁹. But number of students enrolled in private schools at the elementary level needs to be estimated²⁰.

Step 4: Estimating number of students enrolled in private schools

We adopt the following strategy to obtain the number of students enrolled in private schools at elementary level:

- a. Obtain number of children in the age group of 6 to 14 years from 2011 Census²¹.
- b. Obtain percentage of OOSC in rural areas from ASER 2011 survey²².
- c. Assume that percentage of OOSC is same in rural and urban areas, and thus, obtain number of children in the age group of 6 to 14 years who are enrolled in school²³.
- d. Subtract number of children enrolled in government schools (obtained from DISE) from total number of children in the age group of 6 to 14 years enrolled in school (obtained in (c) above), which gives us number of children enrolled in private schools²⁴.

All these steps are illustrated in Table 3. Column 6 of Table 3 shows that private schools are highly prevalent across the country. Out of 20 major states, 10 states have more than half their students in

19. DISE State report cards, 2011-12 were used for the calculations. These are available online at: <http://www.dise.in/Downloads/Publications/Publications%202011-12/State%20Report%20Cards%202011-12.pdf> Accessed on August 16, 2014.

20. Though coverage of private unaided schools by DISE has improved over time, it's not complete.

21. http://www.censusindia.gov.in/2011census/population_enumeration.aspx Accessed on December 19, 2013

22. ASER survey is generally carried out between September and November every year.

23. No estimate OOSC in urban areas is available.

24. A concern here is that not all of the students enrolled in the elementary sections would be in the age group of 6 to 14 years.

private schools. In Kerala, 79% students attend a private school. Both Tamil Nadu and Maharashtra have a high percentage as well, with 60% students attending private schools.

The critical step here is the assumption (c) that proportion of OOSC is identical in rural and urban areas, which is unlikely to be the case²⁵. This assumption leads to overestimation of number of OOSC in urban areas, and hence, overall number and proportion of OOSC. As a result, we underestimate number of children enrolled in private schools. Therefore, estimates obtained in this paper are lower bound of true private expenditure on EE.

Step 5: Estimating total private expenditure for students attending private schools

Once we have obtained number of students enrolled in private schools, the next step is to calculate, state-wise, total private expenditure for students enrolled in private schools (as per (II)), and total private expenditure for students enrolled in government schools (as per (III)). The figures are in columns 1 and 2 of Table 4.

Step 6: Estimating total private expenditure for students (whether enrolled in government or private schools)

Addition of private expenditure for those who are enrolled in private schools, and private expenditure for those who are enrolled in government schools gives us aggregate private expenditure for all students who are enrolled in schools at elementary level, government or private (column 3 of Table 4)

Step 7: Estimating private expenditure per student (whether enrolled in government or private schools)

We divide total private expenditure on EE by number of school-going children in age group of 6 to 14 years to obtain private expenditure per student (column 4 of Table 4).

Finally, having calculated both, total public and total private expenditure on EE, we obtain total expenditure on EE (indicated in column 1 of Table 5). Dividing total expenditure by number of students enrolled in elementary sections give us per student expenditure on EE (column 2 of Table 5). This per student expenditure is nothing but an addition of per student private expenditure (column 3), and per student public expenditure (column 4) on EE. Note that per student public expenditure is derived as total public expenditure on EE divided by number of students enrolled in elementary sections, whether private or government. This number is different from public expenditure per student enrolled in government schools (as reported in column 3 of Table 1).

The next section discusses some of the main findings emerging from this data from the perspective of adequacy and prioritisation of spending on EE, composition and effects on learning outcomes.

25. Analysis of data from NSS 64th round suggests that proportion of OOSC is higher in rural areas compared to urban areas.

4. STYLISED FACTS

4.1 India, spends around 2.5% of its GDP on Elementary Education²⁶

As early as 1966, the education commission chaired by D. S. Kothari had recommended that India should allocate at least 6% of its national income to education. Similar sentiments have been reiterated since then including in the Common Minimum Programme (CMP) of the UPA government (Tilak 2007).

EE constitutes the largest share of total education financing, 50% in 2011-12. Our calculations indicate that India spends 1.75% of its GDP on EE²⁷. This is higher than in 2007-08 and 2008-09 when total public expenditure (Centre and state) as a proportion of GDP was 1.51% and 1.52%, respectively (MHRD 2011, MHRD 2012)²⁸. Increased share of EE in GSDP indicates that expenditure on EE has grown more than growth in GSDP. Private expenditure constitutes 0.71% of overall GSDP. Thus, India, as a whole, spends almost 2.5% of its GDP on EE.

4.2 Higher the per capita income, lower is the public expenditure on EE, as a proportion of GSDP

While expenditure on EE constitutes the largest share of total education spending, there are differences across states on the proportion of total incomes spent on EE.

Figure 1 shows that higher the per capita income, lower is the proportion of GSDP spent on EE. Bihar which has the lowest per capita income in the country spends about 3.7% of its GSDP on EE, while Haryana, the state with the highest per capita income spends 1.24%. Punjab and Himachal Pradesh offer interesting comparisons. Even though their per capita incomes don't differ dramatically, Himachal Pradesh spends 2.96% of its GSDP, while Punjab spends only 0.64%.

4.3 Per capita income is also an important determinant of absolute levels of per student public spending

While there is an inverse relationship between per capita income and expenditure on EE (as a % of GSDP), in absolute terms, it's the opposite - higher per capita income is associated with, on an average, higher amount spent per student in government schools, as shown in Figure 2²⁹. Kerala

26. Note that the analysis excludes the states in the North-east and the Union Territories (UTs).

27. We add up the spending on EE and divide it by sum of GSDP.

28. See Mehrotra (2004) for an international comparison of spending on EE as a % of GNP. Further, see Chakrabarti and Joglekar (2006), Tilak (2006) and Tilak (2007) for past trends on spending on public education (not just elementary) as a % of GDP.

29. Similarly, on average, higher the per capita income, higher is the amount spent per student enrolled in private schools. Households in Himachal Pradesh, Punjab and Haryana spend the highest per student enrolled in private schools. On the other hand, households in Uttar Pradesh, Madhya Pradesh, Bihar and Jharkhand spend the lowest amount per student enrolled in private schools. Results are available with the author.

spends highest amount per student enrolled in government schools, followed by Himachal Pradesh, Maharashtra, and Uttarakhand. On the other hand, Bihar, West Bengal and Jharkhand are the lowest spenders. Surprisingly, Punjab which ranks much higher in terms of per capita income, spends much lower amount per student enrolled in government schools compared to all relatively less developed states except the three mentioned above.

These numbers raise important questions. Low expenditure (in relative and absolute terms) on EE, especially in poorer states can be due to low resource base, relatively low priority attached to EE or (relatively) higher number of school-age children (Mehrotra 2004). One of the important goals of CSSs such as SSA was to address the issue of low resource base and fiscal constraint faced by the States to increase their expenditure on EE. Consequently, as mentioned in the beginning, GOI funding for EE increased significantly. Per capita income, however, continue to play an important role in per student spending across states, even today. Further research would be needed to understand whether this difference is a consequence of fiscally weaker states still trying to “catch-up” with states with higher per capita income or whether there is a “substitution effect” i.e., states, in reaction to increased central funding, may be using centre’s CSS money to substitute their own expenditure (from their own tax collection). Consequently, this results in ‘crowding out’ of state’s own expenditure and increasing dependence of central financing. (Mukherjee 2013; Chakraborty, Mukherjee and Amarnath, 2009). How the future Finance Commissions would tackle this divergence remains to be seen³⁰.

Next, we break down public expenditure on EE to understand its composition, and thereby reveal choices made by the state about where and how they allocate and spend this money.

4.4 Expenditure on teacher salaries constitutes the largest share of EE budget at state level

Expenditure on teacher salaries constitutes the largest share of overall EE budget at state level. An analysis of EE budget of six states indicates that expenditure on teacher salary is at least around 60% of total EE budget (column 1, Table 6)³¹. In states. such as Rajasthan, share of teacher salary is close to 90%³².

Expenditure on teacher salaries is determined by proportion of regular and para-teachers, and their respective pay-scales. There is wide variation across states in both these aspects. States, such as Bihar and Madhya Pradesh have higher proportion of para-teachers who are paid much lower than regular teachers. Surveys conducted by Accountability Initiative reveal that para-teachers in

30. One potential option can be the equalisation grants undertaken for the first time in the 12th Finance Commission.

31. A more detailed data on public expenditure on EE was collected for these six states.

32. A number of research studies (Kingdon 2005, Muralidharan and Kremer 2007, Goyal and Pandey 2009) have shown that teacher salaries also contribute to differences between per student public expenditures on those going to government schools versus per student private expenditure on those going to private schools. In fact, after the Sixth Pay Commission, private school teachers are, on average paid, less than 1/6th to 1/8th the salary of government school teachers (Goyal and Pandey 2009, Muralidharan 2014).

Nalanda and Purnea (in Bihar) receive Rs. 6,400-6,800 per month, while the regular teachers receive around Rs. 23,000-28,000, on an average. Corresponding figures are around Rs. 6,000 and Rs. 17,800 for Sagar in Madhya Pradesh (Accountability Initiative 2013). This allows the states to hire a larger number of teachers at much lower cost, keep teacher expenditure per student relatively low (column 3, Table 6). More importantly, it gives the states some flexibility to spend on other components which they deem essential for provision of EE. Thus, as can be seen in Table 7, in Bihar and Andhra Pradesh, total expenditure on teachers (salaries, training and teaching inputs) was relatively lower than in Rajasthan and Himachal Pradesh. Consequently, both states spent a larger proportion on school infrastructure at nearly 20%. Interestingly, Bihar also spends a significant proportion of its total EE expenditure on children entitlements schemes to incentivise children to enroll and attend a school (Accountability Initiative, 2013).

Finally, the following sub-section explores the relation between expenditure and learning outcomes. Note that the observations here are based on very preliminary analysis. The limited purpose here is to point out possible directions in which research can be extended, and not to draw any conclusions.

4.5 Is there a relationship between expenditure and learning outcomes

Figures 3-6 show the relationship between public expenditure per student in government school, and reading and math levels of students (calculated from ASER 2011)^{33 34}. The figures indicate a positive relationship between the two, i.e. higher per student public expenditure is associated with higher proportion of students being able to read/ do math at a particular level³⁵.

Does it imply that more should be spent per student in a government school if we want to improve the learning outcomes? Not really. We must look at what the opportunity costs or alternative uses are of this expenditure. Even though a full-fledged analysis is beyond the purview of this paper, a simple example would be comparing per student costs and learning outcomes in government and private schools as shown in Table 8. It indicates that, in every state, learning outcomes in private schools are better than the government schools, while per student spending is much lower as compared to government schools³⁶. This 'double' inefficiency ends up imposing a huge burden on India, amounting to 2.78% of GDP³⁷. This reveals that there is a dire need to ask hard questions, and take tough decisions to make expenditure more 'efficient', to get more bang for the buck, so to speak.

33. Results are similar when ASER 2012 numbers are used.

34. We have looked at expenditures rather than allocations as allocations reflect intention to spend and do not reflect the reality of both quantum of funds available as well as state capacity for expenditure.

35. The relationship holds even after controlling for per capita income (results not shown here). Similar relationship is found between private expenditure on those who attend private schools and learning outcomes.

36. The difference in learning outcomes persists even when students' background characteristics are taken into account, although the magnitude declines. See Dr. Wilima Wadhaw's article in ASER 2009. For more on effects on learning outcomes of attending private schools vis-a-vis government schools, see Desai et al 2008, French and Kingdon 2010, Goyal 2009, Muralidharan and Sundararaman 2013, and Singh 2013. This literature confirms that private schools are more effective in improving learning outcomes.

37. For details about this startling finding, see Pritchett and Aiyar 2014, forthcoming.

Since 2012, there have been some important policy shifts. The 12th Five Year Plan explicitly articulated learning improvement to be a key policy goal. This was followed by MHRD's renewed articulation of the importance of meeting the learning challenge. Consequently, MHRD launched the 'Padhe Bharat, Badhe Bharat' scheme with a focus on learning. But is this going to be enough to solve the 'learning challenge'?

This scheme is a good starting point but the need of the hour is to rework the education system such that it moves away from its preoccupation with input delivery to one that prioritises learning outcomes. This pre-occupation has left us in a situation where means to an end have become an end itself. How to get the system to prioritise learning outcomes not just in policy documents but also in actual practice, i.e. in terms of plans, finances and actions of education bureaucracy all the way down to schools is going to be India's greatest challenge in elementary education in the next few years.

REFERENCES

- Accountability Initiative (2012): PAISA Report. Centre for Policy Research, New Delhi
- Accountability Initiative (2013): PAISA District Studies (2013), Centre for Policy Research, New Delhi (forthcoming)
- ASER Centre (2011): Annual Status of Education Report, New Delhi
- ASER Centre (2013): Annual Status of Education Report, New Delhi
- Chakrabarti A and R Joglekar (2006): "Determinants of Expenditure on Education: An Empirical Analysis Using State Level Data", *Economic and Political Weekly* Vol. 41, No. 15 (Apr. 15-21, 2006), pp. 1465-1472
- Chakraborty, P, A Mukherjee and H. K. Amarnath (2009): "Macro Policy Reform and Sub National Finance: Why is the Policy Space of the States Shrinking? ", *Economic and Political Weekly*, Vol.XLIV, No.14, New Delhi
- De, A and T Endow (2008): "Public Expenditure on Education in India: Recent Trends and Outcomes", RECOUP Working Paper No. 18, Collaborative Research and Dissemination (CORD), New Delhi
- Desai, S, A Dubey, R Vanneman and R Banerjee (2008): "Private Schooling in India: A New Educational Landscape", *Brookings-NCAER India Policy Forum*, Vol. 5, The Brookings Institution
- French, R and G Kingdon (2010): "The Relative Effectiveness of Private and Government Schools in Rural India: Evidence from ASER Data", DoQSS Working Paper, No. 10-03, Institute of Education, University of London
- Goyal, S (2009): "Inside the House of Learning: The Relative Performance of Public and Private Schools in Orissa", *Education Economics*, 17(3), pp 315-327
- Goyal, S and P Pandey (2009): "How do Government and Private Schools Differ? Findings from Two Large Indian States", *South Asia Human Development Sector Report 30*, World Bank, Washington DC. Available online at: <http://datatopics.worldbank.org/hnp/files/edstats/INDwp09b.pdf>
- Kingdon, G. (2005): "Private and Public Schooling: The Indian Experience", prepared for conference Mobilizing the Private Sector for Public Education (Conference Volume - forthcoming). Kennedy School of Government, Harvard University, 2006. <http://www.hks.harvard.edu/pepg/PDF/events/MPSPE/PEPG-05-15geeta.pdf>
- Mehrotra, S (2004): "Reforming Public Spending on Education and Mobilising Resources: Lessons from International Experience", *Economic and Political Weekly*, Vol 39 No. 09, February 28, 2004, pp 987-997
- Mehta, A. C. (2013): "Elementary Education in India: Progress Towards UEE: Analytical Tables, 2012-13", National University of Educational Planning and Administration and Department of School Education and Literacy, MHRD, Government of India

Ministry of Human Resource Development (2013): Analysis of Budgeted Expenditure on Education 2009-10 to 2011-12, MHRD, Government of India, New Delhi

Ministry of Human Resource Development (2012): Analysis of Budgeted Expenditure on Education 2008-09 to 2010-11, MHRD, Government of India, New Delhi

Ministry of Human Resource Development (2011): Analysis of Budgeted Expenditure on Education 2007-08 to 2009-10, MHRD, Government of India, New Delhi

Mukherjee, A (2013): "Targeting Education Financing on the Marginalized: Lessons from Implementation of Sarva Shiksha Abhiyan and Right to Education in India", background paper prepared for Education for All Global Monitoring Report 2013/4, UNESCO

Muralidharan, K (2014): "Understanding the relative effectiveness of government and private schools in India", Ideas for India. Available at: http://ideasforindia.in/article.aspx?article_id=245 [Accessed 17 Aug. 2014]

Muralidharan, K and M Kremer (2007): "Public and Private Schools in Rural India", Prepared for conference Mobilizing the Private Sector for Public Education (Conference Volume - forthcoming). Kennedy School of Government, Harvard University, 2006. <http://econweb.ucsd.edu/~kamurali/papers/Published%20Edited%20Volume%20Chapters/Public%20and%20private%20schools%20in%20rural%20india%20%28Final%20Pre-Publication%29.pdf>

Muralidharan, K, J Das, A Holla, A Mohpal (2014): "The Fiscal Cost of Weak Governance: Evidence from Teacher Absence in India", NBER Working Paper No. 20299. July 2014

Muralidharan, K and V Sundararaman (2013): "The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India", NBER Working Paper no. 19441, National Bureau of Economic Research, Cambridge, MA

Singh, A (2013): "Size and Source of the Private School Premium in Test Scores in India", Mimeo, University of Oxford

Tilak, J. B. (2006): "On Allocating 6 percent of GDP to Education", Economic and Political Weekly Vol. 41, No. 7 (Feb. 18-24, 2006), pp. 613-618

Tilak, J. B. (2007): "The Kothari Commission and Financing of Education", Economic and Political Weekly Vol. 41, No. 7 (Feb. 18-24, 2006), pp. 613-618

TABLE 1: PUBLIC EXPENDITURE ON EE (2011-12)

State	Total public expenditure (Rs. crore)	Enrollment in government schools (According to DISE)	Per govt. school student public expenditure (incl. students only in public schools; excluding private aided schools)
Andhra Pradesh	8,561	61,75,060	13,864
Assam	4,539	41,74,185	10,874
Bihar	9,265	2,05,19,815	4,515
Chhattisgarh	4,608	37,89,376	12,160
Gujarat	8,003	59,82,181	13,377
Haryana	3,805	21,35,714	17,817
Himachal Pradesh	1,883	6,95,417	27,073
Jammu & Kashmir	2,110	11,52,609	18,304
Jharkhand	3,251	53,90,338	6,031
Karnataka	7,319	47,83,689	15,300
Kerala	4,062	10,07,249	40,328
Madhya Pradesh	8,244.5	1,02,21,216	8,066
Maharashtra	15,188	72,31,470	21,002
Odisha	4,688	55,65,229	8,424
Punjab	1,662	21,93,899	7,577
Rajasthan	8,283.5	71,55,509	11,576
Tamil Nadu	6,357	42,26,225	15,042
Uttarakhand	1,870	9,07,931	20,596
Uttar Pradesh	18,126	1,95,85,396	9,255
West Bengal	7,897	1,32,56,933	5,957

Source: Author calculations

TABLE 2: PRIVATE EXPENDITURE ON EE—2007-08 AND 2011-12

State	Private expenditure per student (Private aided and unaided)- NSS 2007-08	Private expenditure per student (Government and local)- NSS 2007-08	Private expenditure per student (Private aided and unaided)- inflation-adjusted, 2011-12	Private expenditure per student (Government and local)- inflation-adjusted, 2011-12
Andhra Pradesh	4,050.67	146.01	5,507.44	198.52
Assam	4,871.78	237.36	6,552.79	319.26
Bihar	3,233.42	242.29	4,630.26	346.97
Chhattisgarh	4,559.37	101.54	5,957.46	132.67
Gujarat	5,023.02	207.19	6,580.52	271.44
Haryana	6,260.33	332.88	8,949.02	475.84
Himachal Pradesh	8,034.73	285.21	11,128.76	395.04
Jammu & Kashmir	4,919.76	402.68	6,987.69	571.93
Jharkhand	3,869.00	172.25	4,695.89	209.06
Karnataka	4,664.68	135.03	6,361.91	184.16
Kerala	4,101.34	342.48	5,413.46	452.05
Madhya Pradesh	2,984.25	144.92	3,866.46	187.76
Maharashtra	4,425.29	212.46	5,961.03	286.19
Odisha	4,382.88	306.36	5,761.21	402.71
Punjab	6,772.28	305.13	9,081.77	409.18
Rajasthan	3,242.36	162.42	4,871.59	244.03
Tamil Nadu	5,634.55	203.05	7,518.85	270.95
Uttarakhand	4,316.50	260.34	5,693.78	343.41
Uttar Pradesh	2,284.67	168.35	3,106.68	228.92
West Bengal	4,927.57	541.95	6,788.98	746.68

Source: Author calculations using NSS 2007-08

TABLE 3: ESTIMATING NUMBER & PROPORTION OF STUDENTS IN PRIVATE SCHOOLS (ELEMENTARY LEVEL)

State	Enrolment in government schools (According to DISE)	% Out-of-school children (6-14)-ASER 2011	Population 6-14 years (Census 2011)	Total enrollment	Private enrolment (Total enrollment - government enrollment)	% of children enrolled in private schools (private & private aided)
Andhra Pradesh	61,75,060	2.80%	14,04,894	1,36,71,076.97	74,96,016.97	54.83
Assam	41,74,185	4.19%	63,11,350	60,46,904.44	18,72,719.44	30.97
Bihar	2,05,19,815	2.95%	2,58,84,060	2,51,20,480.23	46,00,665.23	18.31
Chhattisgarh	37,89,376	2.40%	50,78,983	49,57,087.41	11,67,711.41	23.56
Gujarat	59,82,181	2.66%	1,07,99,915	1,05,12,637.26	45,30,456.26	43.10
Haryana	21,35,714	1.37%	46,47,445	45,83,775.00	24,48,061.00	53.41
Himachal Pradesh	6,95,417	0.55%	11,12,722	11,06,602.03	4,11,185.03	37.16
Jammu & Kashmir	11,52,609	2.46%	25,22,690	24,60,631.83	13,08,022.83	53.16
Jharkhand	53,90,338	4.65%	73,78,660	70,35,552.31	16,45,214.31	23.38
Karnataka	47,83,689	2.79%	98,90,833	96,14,878.76	48,31,189.76	50.25
Kerala	10,07,249	0.08%	48,65,196	48,61,303.84	38,54,054.84	79.28
Madhya Pradesh	1,02,21,216	2.23%	1,51,59,950	1,48,21,883.12	46,00,667.12	31.04
Maharashtra	72,31,470	1.08%	1,85,44,808	1,83,44,524.07	1,11,13,054.07	60.58
Odisha	55,65,229	3.71%	75,95,282	73,13,497.04	17,48,268.04	23.90
Punjab	21,93,899	1.56%	44,72,651	44,02,877.64	22,08,978.64	50.17
Rajasthan	71,55,509	4.49%	1,47,16,568	1,40,55,794.10	69,00,285.10	49.09
Tamil Nadu	42,26,225	0.85%	1,06,49,321	1,05,58,801.77	63,32,576.77	59.97
Uttarakhand	9,07,931	1.09%	19,86,077	19,64,428.76	10,56,497.76	53.78
Uttar Pradesh	1,95,85,396	6.13%	4,56,67,504	4,28,68,086.00	2,32,82,690.00	54.31
West Bengal	1,32,56,933	4.32%	1,57,24,524	1,50,45,224.56	17,88,291.56	11.89

Source: Author calculations

TABLE 4: TOTAL & PER STUDENT PRIVATE EXPENDITURE (2011-12)

State	Total private expenditure for students attending private schools (Rs. crore)	Total private expenditure for students attending public schools (Rs. crore)	Total private expenditure for students attending private schools and public schools (Rs. crore)	Per student private expenditure (Rs.)
Andhra Pradesh	4,128.39	122.59	4,250.97	3,109.46
Assam	1,227.15	133.27	1,360.42	2,249.78
Bihar	2,130.23	711.97	2,842.20	1,131.43
Chhattisgarh	695.66	50.27	745.93	1,504.78
Gujarat	2,981.28	162.38	3,143.66	2,990.36
Haryana	2,190.77	101.63	2,292.40	5,001.12
Himachal Pradesh	457.60	27.47	485.07	4,383.42
Jammu & Kashmir	914.01	65.92	979.93	3,982.42
Jharkhand	772.57	112.69	885.27	1,258.27
Karnataka	3,073.56	88.09	3,161.65	3,288.29
Kerala	2,086.38	45.53	2,131.91	4,385.47
Madhya Pradesh	1,778.83	191.91	1,970.74	1,329.62
Maharashtra	6,624.53	206.96	6,831.48	3,723.99
Odisha	1,007.21	224.12	1,231.33	1,683.64
Punjab	2,006.14	89.77	2,095.91	4,760.33
Rajasthan	3,361.54	174.61	3,536.15	2,515.79
Tamil Nadu	4,761.37	114.51	4,875.88	4,617.83
Uttarakhand	601.55	31.18	632.73	3,220.92
Uttar Pradesh	7,233.18	448.35	7,681.54	1,791.90
West Bengal	1,214.07	989.86	2,203.93	1,464.87

Source: Author calculations

TABLE 5: PUBLIC, PRIVATE AND COMBINED EXPENDITURE (TOTAL AND PER CAPITA) ON EE

State	Total expenditure on EE (Rs. crore)	Per student expenditure on EE (Total expenditure / total enrolment)	Per student private expenditure on EE (incl. govt and private school students)	Per student public expenditure on EE (incl. govt and private school students)	Gross domestic state Product (GSDP, Rs. crore)	[Total expenditure/ GSDP]	Per capita income (NSDP)	[Per student total expenditure/ per capita income]
Andhra Pradesh	12,811.97	9,371.59	3,109.46	6,262.13	6,55,181	1.96	68,969.69	13.59
Assam	5,899.53	9,756.28	2,249.78	7,506.5	1,26,544	4.66	37,250	26.19
Bihar	11,945.14	4,755.14	1,131.43	3,623.71	2,46,487	4.85	22,691.12	20.96
Chhattisgarh	5,353.88	10,800.45	1,504.78	9,295.66	1,39,515	3.84	46,743.45	23.11
Gujarat	11,146.22	10,602.69	2,990.36	7,612.33	6,11,767	1.82	89,667.98	11.82
Haryana	6,097.52	13,302.39	5,001.12	8,301.28	3,07,606	1.98	1,09,063.55	12.2
Himachal Pradesh	2,372.82	21,442.41	4,383.42	17,058.99	63,812	3.72	74,693.52	28.71
Jammu & Kashmir	3,089.67	12,556.41	3,982.42	8,573.98	65,979	4.68	44,533	28.2
Jharkhand	4,136.01	5,878.73	1,258.27	4,620.46	1,30,505	3.17	35,652.14	16.49
Karnataka	10,480.56	10,900.36	3,288.29	7,612.06	4,63,243	2.26	69,051	15.79
Kerala	6,193.98	12,741.39	4,385.47	8,355.92	3,15,206	1.97	80,924	15.74
Madhya Pradesh	10,966.31	7,398.73	1,329.62	6,069.11	3,09,687	3.54	37,994.5	19.47
Maharashtra	21,901.2	11,938.82	3,723.99	8,214.83	12,48,453	1.75	1,01,314.29	11.78
Odisha	5,919.58	8,094.04	1,683.64	6,410.4	2,15,899	2.74	41,896	19.32
Punjab	3,758.14	8,535.64	4,760.33	3,775.31	2,59,223	1.45	78,593.94	10.86
Rajasthan	13,462.77	9,578.09	2,515.79	7,062.3	4,16,755	3.23	53,735.27	17.82
Tamil Nadu	11,233.15	10,638.66	4,617.83	6,020.83	6,39,025	1.76	84,496	12.59
Uttarakhand	2,502.72	12,740.21	3,220.92	9,519.29	93,162	2.69	79,939.81	15.94
Uttar Pradesh	25,807.66	6,020.25	1,791.9	4,228.35	6,84,173	3.77	30,050.69	20.03
West Bengal	10,101.28	6,713.95	1,464.87	5,249.08	5,44,282	1.86	55,222	12.16

Source: Author calculations

TABLE 6: PER STUDENT TEACHER SALARIES

States	Proportion of budget for teacher salaries	Public expenditure per government school student	Public expenditure on teacher salaries per government school student	Public expenditure excluding teacher salaries per government school student
Andhra Pradesh	66%	13,864	9,097	4,768
Bihar	59%	4,515	2,659	1,857
Himachal Pradesh	80%	27,073	21,582	5,492
Madhya Pradesh	63%	8,066	5,058	3,008
Maharashtra	66%	21,002	13,893	7,110
Rajasthan	87%	11,576	10,058	1,518

Source: Author calculations

TABLE 7: COMPONENT-WISE EXPENDITURES ON EE

States/ Components	Andhra Pradesh	Bihar	Madhya Pradesh	Maharashtra	Rajasthan	Himachal Pradesh
Teachers (Salary, training and teaching inputs)	69%	62%	74%	69%	88%	82%
School infrastructure	17%	18%	11%	5%	5%	4%
Children entitlements and children mainstreaming	6%	13%	7%	3%	1%	2%
Quality	1%	0%	1%	0%	0%	1%
Management	3%	1%	5%	14%	5%	6%
Misc	0%	-5%	1%	0%	0%	1%
MDM	4%	11%	1%	9%	NA	5%
Total	100%	100%	100%	100%	100%	100%

Source: Accountability Initiative (2013)

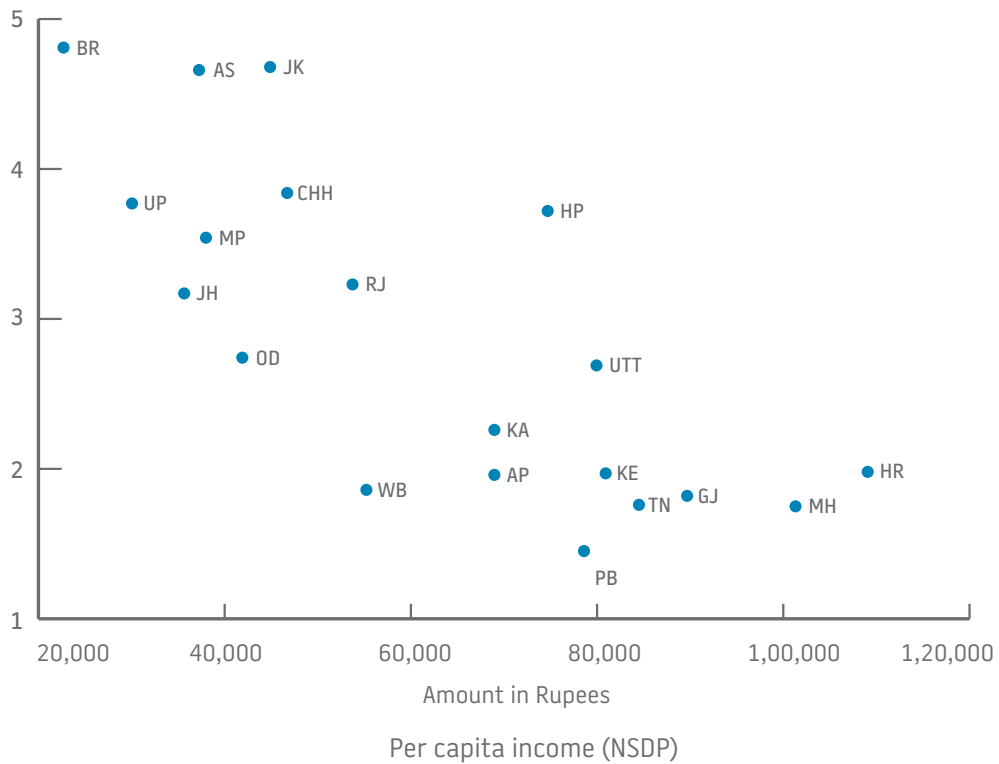
Note: Figures have been rounded off

TABLE 8: PER STUDENT PUBLIC AND PRIVATE EXPENDITURE, AND LEARNING OUTCOMES

State	% Children in std. 1-2 who can read letters, words or more		% Children in std. 3-5 who can read std. 1 text or more		% Children in std. 1-2 who can recognise numbers 1-9 or more		% Children in std. 3-5 who can do subtraction or more		Private expenditure per student enrolled in private school	Public expenditure per student enrolled in gov. school	Ratio (col. 10/ col. 9)
	Gov. school	Private school	Gov. school	Private school	Gov. school	Private school	Gov. school	Private school			
Andhra Pradesh	81.39	94.14	65.81	78.47	85.02	95.08	59.89	72.61	5,507.44	13,864	2.52
Assam	70.8	85.87	48.18	59.63	73.5	85.83	33.6	48.25	6,552.79	10,874	1.66
Bihar	57.87	83.17	51.95	79.45	61.75	84.14	48.76	76.02	4,630.26	4,515	0.98
Chhattisgarh	73.35	90.38	51.07	68.39	72.24	89.5	38.56	58.09	5,957.46	12,160	2.04
Gujarat	78.73	92.93	62.72	77.42	78.89	91.69	43.39	64.17	6,580.52	13,377	2.03
Haryana	71.43	92.03	59.55	85.28	75.09	92.83	52.81	80.95	8,949.02	17,817	1.99
Himachal Pradesh	89.82	97.91	79.95	90.5	93.21	98.42	70.97	85.74	11,128.76	27,073	2.43
Jammu & Kashmir	86.92	96.66	45.81	79.55	88.67	96.73	39.14	73.6	6,987.69	18,304	2.62
Jharkhand	61.05	83.61	46.97	69.52	61.07	83.65	38.47	59.24	4,695.89	6,031	1.28
Karnataka	83.35	93.32	59.82	69.27	83.63	94.09	46.45	58.98	6,361.91	15,300	2.40
Kerala	95.68	97.91	80.06	83.97	95.34	97.69	61.41	71.42	5,413.46	40,328	7.45
Madhya Pradesh	59.92	82.65	39.31	67.56	58.52	81.01	26.33	50.88	3,866.46	8,066	2.09
Maharashtra	90.22	93.01	74.88	85.48	90.6	92.35	51.59	65.67	5,961.03	21,002	3.52
Odisha	66.05	89.32	53.5	78.81	63.8	88.45	40.1	66.81	5,761.21	8,424	1.46
Punjab	85.99	89.75	75.28	75.96	88.44	93.11	72.55	75.2	9,081.77	7,577	0.83
Rajasthan	55.93	80.79	44.91	67.5	57.45	80.85	31.65	57.84	4,871.59	11,576	2.38
Tamil Nadu	58.94	71.85	51.43	49.68	65.19	77.88	40.59	49.65	7,518.85	15,042	2.00
Uttarakhand	75.37	89.66	64.07	77.24	73.12	89.03	49.75	66.59	5,693.78	20,596	3.62
Uttar Pradesh	52.25	79.49	34.67	66.06	54.38	81.63	23.77	50.58	3,106.68	9,255	2.98
West Bengal	79.49	93.44	58.23	74.77	84.24	94.39	50.95	67.28	6,788.98	5,957	0.88

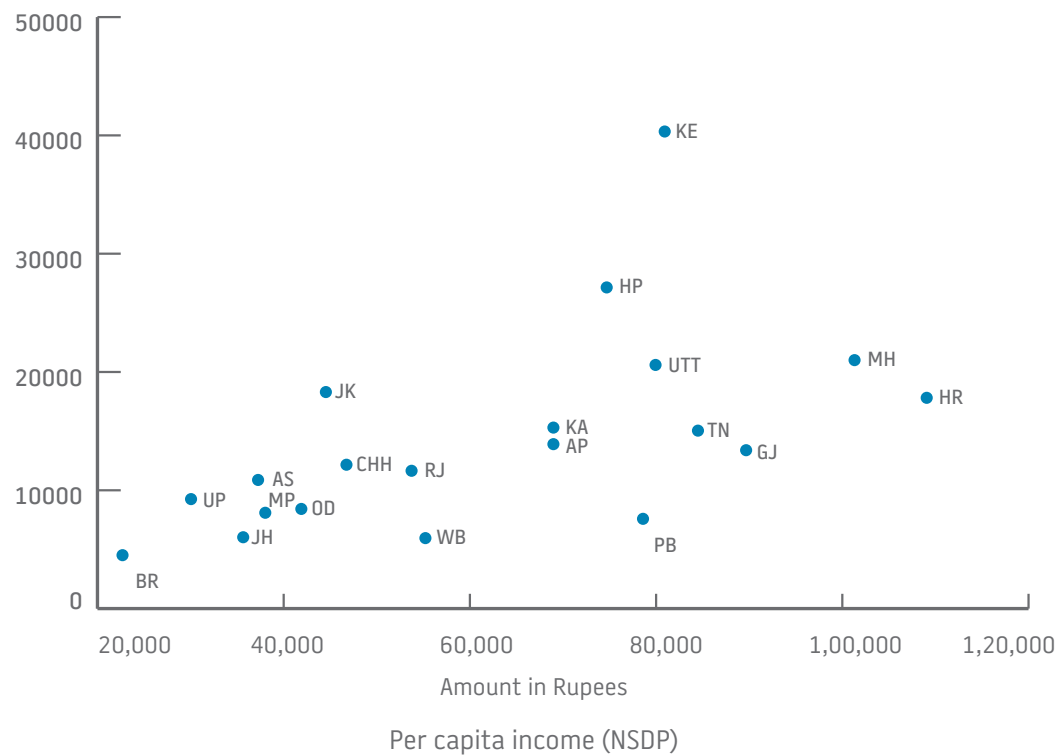
Source: Author calculations from ASER 2011

FIGURE 1: PER CAPITA INCOME & PUBLIC EXPENDITURE ON EE (AS A % OF GSDP)



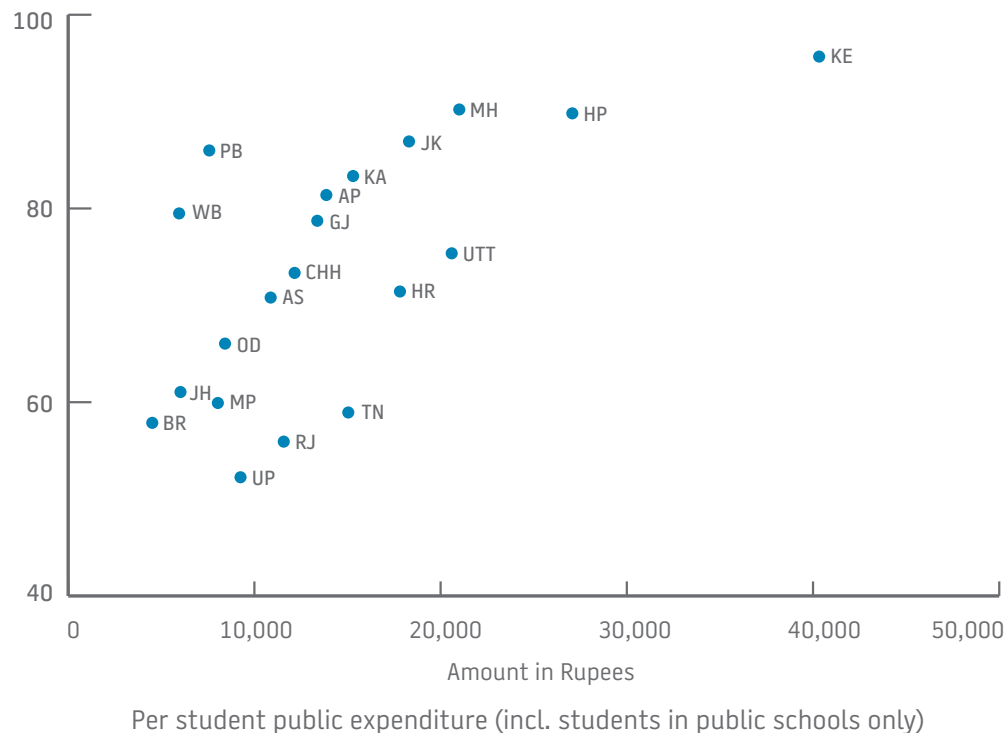
Source: Author calculations, data collected from Central Statistical Organisation

FIGURE 2: PER CAPITA INCOME AND PUBLIC EXPENDITURE PER STUDENT ENROLLED IN GOVERNMENT SCHOOL (RS.)



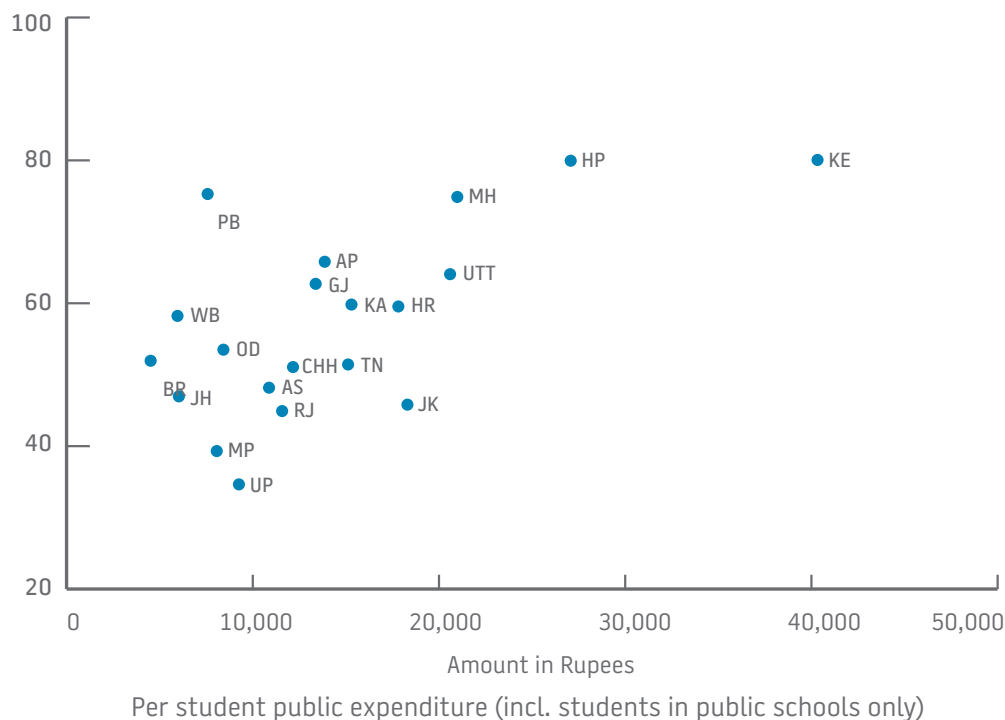
Source: Author calculations, data collected from Central Statistical Organisation

FIGURE 3: PUBLIC EXPENDITURE PER STUDENT ENROLLED IN GOVERNMENT SCHOOLS AND PROPORTION OF CHILDREN IN GRADES 1 AND 2 WHO CAN READ LETTERS, WORDS OR MORE



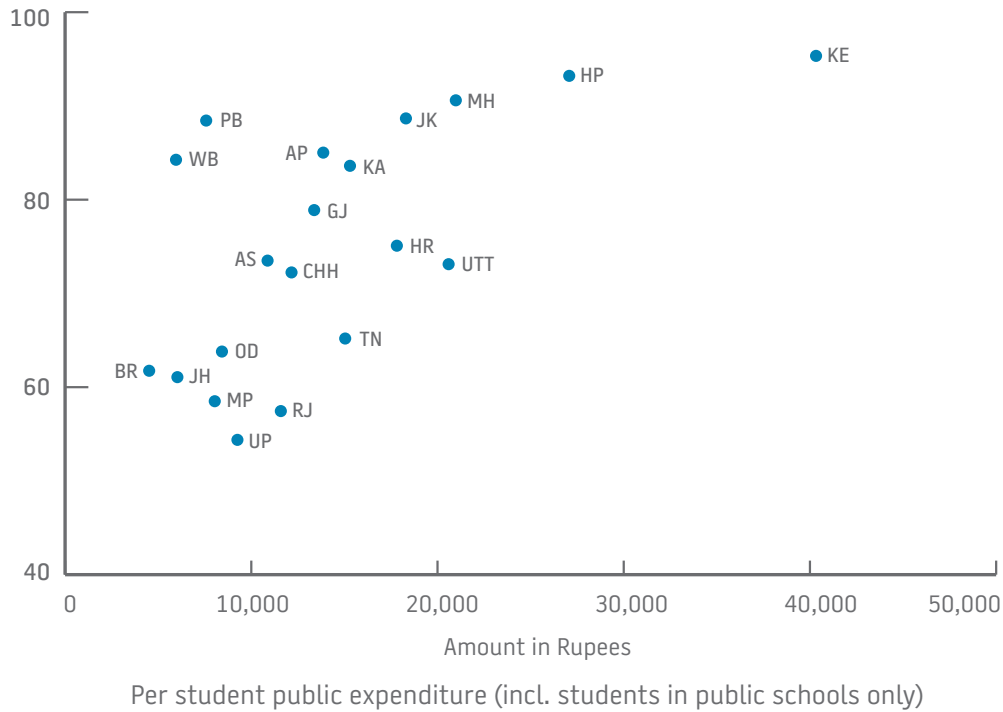
Source: Author calculations from ASER, 2011

FIGURE 4: PUBLIC EXPENDITURE PER STUDENT ENROLLED IN GOVERNMENT SCHOOLS AND PROPORTION OF CHILDREN IN GRADES 3 TO 5 WHO CAN READ GRADE 1 LEVEL TEXT



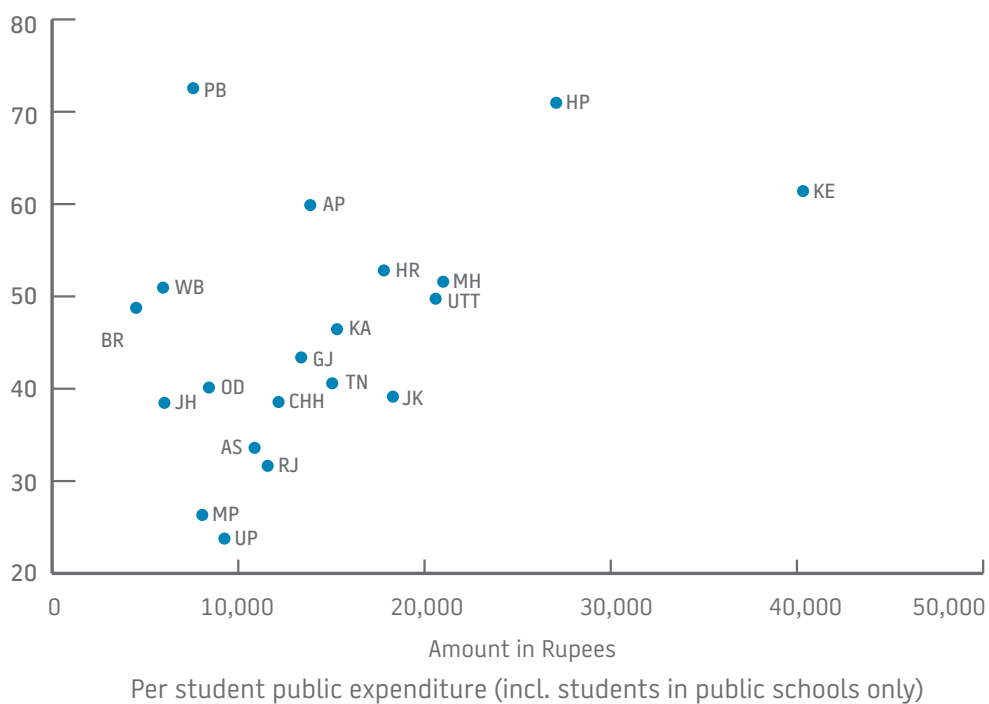
Source: Author calculations using ASER 2011

FIGURE 5: PUBLIC EXPENDITURE PER STUDENT ENROLLED IN GOVERNMENT SCHOOLS AND PROPORTION OF CHILDREN IN GRADES 1 TO 2 WHO CAN RECOGNISE NUMBERS 1-9 OR MORE



Source: Author calculations from ASER 2011

FIGURE 6: PUBLIC EXPENDITURE PER STUDENT ENROLLED IN GOVERNMENT SCHOOLS AND PROPORTION OF CHILDREN IN GRADES 3 TO 5 WHO CAN DO SUBTRACTION OR MORE



Source: Author calculations using ASER 2011

APPENDIX

TABLE A.1: NUMBER OF STUDENTS IN THE NSS 64TH ROUND WHO ARE AT ELEMENTARY (GRADES ONE TO EIGHT) LEVEL

State	Public schools	Private schools	Public and private schools
Andhra Pradesh	1,528	957	2,500
Assam	968	134	1,104
Bihar	4,004	451	4,470
Chhattisgarh	858	148	1,011
Gujarat	1,283	427	1,719
Haryana	393	434	833
Himachal Pradesh	464	172	639
Jammu & Kashmir	399	288	692
Jharkhand	1,022	174	1,206
Karnataka	959	426	1,391
Kerala	238	480	718
Madhya Pradesh	2,367	719	3,113
Maharashtra	1,948	836	2,795
Odisha	1,568	197	1,770
Punjab	430	553	1,008
Rajasthan	1,447	975	2,440
Tamil Nadu	1,220	681	1,901
Uttarakhand	435	261	698
Uttar Pradesh	4,020	2,356	6,448
West Bengal	2,209	311	2,527

Source: Author calculations using NSS 2007-08