

Trends in Public Expenditure on Elementary Education in India

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Trends over the last 25 years suggest that nearly 80% of the social sector spending has come from state budgets. Taken together with other economic happenings in the country, the centre's role in financing social welfare, including elementary education, is likely to decline further. Analysing broad trends in total and per student spending on elementary education across major states in two financial years, this comment indicates how the centre could best incentivise states to spend differently on elementary education.

The union finance minister has been criticised by commentators for inadequate allocations to the social sector—including health and education—in the budget for the financial year (FY) 2016–17. Looking at elementary education, and specifically at the Sarva Shiksha Abhiyan (ssa), the numbers suggest that central government allocations increased less than 2% in nominal terms between FY 2015–16 and FY 2016–17. As a matter of fact, overall allocations for the ssa have been declining since FY 2013–14.

However, trends over the last 25 years suggest that nearly 80% of social sector spending, including elementary education, has come from states' own budgets (*Business Line* 2015). Thus, a full picture of expenditure on elementary education will be clear only when both the ssa and non-ssa expenditure are taken into account. Moreover, the Fourteenth Finance Commission recommendations have led to an increase in union taxes devolved to states, from 32% to 42%, and a consequent decrease in funding through centrally sponsored schemes (css). This means that the centre's role in financing the social sector is likely to continue declining. Going forward, tracking social sector spending, including elementary education, will require analysing state budgets.

This article uses data for FY 2011–12 and FY 2014–15 to analyse broad trends in total and per student spending on elementary education across major states, and indicates how the centre could use its funds to best incentivise states to spend differently on elementary education.

Methodology

The centre and the states co-finance the ssa. A separate state implementation society (sis) (known by different names in different states) has been created to implement the ssa. Before 2014–15, the centre and the states would transfer money to the bank account of this society, which

would undertake the expenditure. As a result, while the states' share of the ssa was reflected in their budget documents, the centre's share was channelled directly into the society, thus not being reflected in state budgets. So, calculating the overall (ssa and non-ssa) expenditure before 2014–15 involves, one, subtracting the state share of the ssa from state budgets, which yields non-ssa spending by the state, and, two, then adding ssa spending separately from the ssa annual work plan and budget documents. This procedure requires two data sources—state budget documents, and the minutes and costing sheets available on the ssa website.

In 2014–15, this fund flow pattern was changed. Now the centre's share reaches the state treasury first, and not the ssa society. This simplifies the data collection process—one needs to collect data only from state budgets.

Results

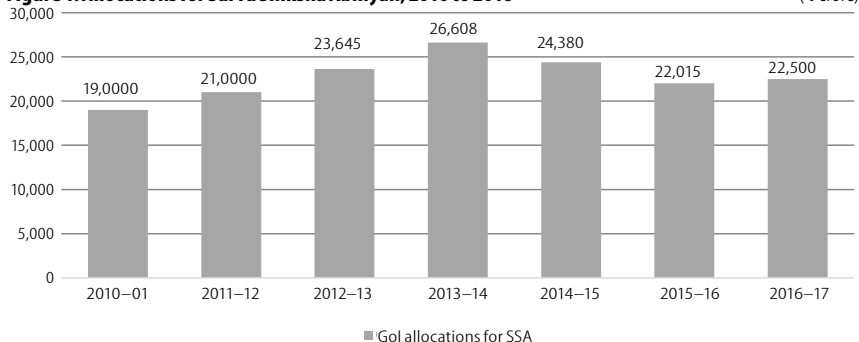
(i) Significant increase in nominal terms, but not much in real terms: Data collated from 18 states indicates that the overall expenditure on elementary education increased by 26% in nominal terms between FY 2011–12 and FY 2014–15. In real terms, however, the increase is marginal at 6%, excluding West Bengal (Table 1, p 24).¹

Tamil Nadu, Haryana, Uttar Pradesh, Rajasthan, and Gujarat witnessed the highest increases in both nominal and real expenditure. In contrast, West Bengal, Odisha, and Bihar saw only modest increases in nominal expenditure, with Odisha and Bihar seeing declines in real expenditure (data for West Bengal is not available).²

(ii) Decline in spending as a proportion of gross domestic product: Despite an increase in nominal terms, as a proportion of gross domestic product (GDP), there has been a marginal decline in elementary education spending in real terms.³ In FY 2011–12, education expenditure constituted 1.57% of the GDP, while in FY 2014–15 it constituted 1.38% of the GDP.

(iii) Increases in per student expenditure, but significant variations continue: Looking at total expenditure can be

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Figure 1: Allocations for Sarva Shiksha Abhiyan, 2010 to 2016

■ Gov allocations for SSA

Figures from 2010–11 to 2015–16 are revised estimates. For 2016–17, they are budget estimates. Source: *Expenditure Budget*, Vol 2; Union Budget, various years.

misleading due to significant variation in student population across states. Hence, we calculate public expenditure on elementary education per student enrolled in government and aided schools.⁴

Per student expenditure is defined as the total expenditure on elementary education divided by the total enrolment in government and aided schools (Table 2, p 25).

Nominal per student expenditure increased by 37% between 2011–12 and 2014–15 if we include the students in government and aided schools. Most states saw significant increases in per student expenditure. Rajasthan, Haryana, and Madhya Pradesh saw an increase of 50% or more while the lowest increases were recorded by Odisha, Bihar, and West Bengal (less than 20%). These states also recorded a decline in real expenditure per student, and their per student expenditure was among the lowest.

What drives per student expenditure? A change in per student expenditure is the result of changes in total expenditure (numerator) and enrolment (denominator). However, in a number of states such as Chhattisgarh, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Rajasthan, and Uttarakhand, the increase in per student expenditure is driven more by a decline in enrolment than any increase in total real expenditure (Table 3, p 25).

However, significant inter-state variations in the amount spent per student continue to exist. The ranking of the states in terms of per student spending has not changed much. The top four states and the bottom four states are the same in both the years. Himachal Pradesh spent the highest nominal amount per student at ₹39,343 in FY 2014–15. This was

followed by Haryana and Uttarakhand who spent ₹27,163 and ₹26,236, respectively. In contrast, Bihar spent only ₹5,298 per student, followed by West Bengal (₹7,001) and Jharkhand (₹8,020).

(iv) Decreasing gap between per student expenditures in Kendriya Vidyalayas and other government schools: It has long been believed that per student expenditure in Kendriya Vidyalayas (kvs) is much higher than that of government schools. In the mid-2000s, average per student expenditure in government schools was reported to be 16% of that in kvs (Raina 2006). But in 2014–15, the average (median) expenditure in government schools (at ₹16,151) was 58% of that in kvs (₹27,723)⁵ (kvs Portal 2015). Haryana, Himachal Pradesh, and Uttarakhand have spent more per student than the average per student expenditure in kvs.

Table 1: Nominal and Real Expenditure on Elementary Education, 2011–12 and 2014–15

States	Nominal Expenditure		Percentage of Change	Real Expenditure		Percentage of Change
	2011–12	2014–15		2011–12	2014–15	
Unified Andhra Pradesh	8,561	8,439	-1*	8,561	6,990	-18
Bihar	9,265	10,771	16	9,265	8,311	-10
Chhattisgarh	4,608	5,642	22	4,608	4,778	4
Gujarat	8,003	10,547	32	8,003	9,223	15
Haryana	3,805	5,570	46	3,805	4,621	21
Himachal Pradesh	1,883	2,361	25	1,883	2,079	10
Jharkhand	3,251	4,107	26	3,251	3,542	9
Karnataka	7,319	9,021	23	7,319	7,303	0
Kerala	4,062	5,037	24	4,062	4,189	3
Madhya Pradesh	8,244.5	10,527	28	8,244.5	8,579	4
Maharashtra	15,188	18,317	21	15,188	15,585	3
Odisha	4,688	5,169	10	4,688	4,329	-8
Punjab	1,662	2,050	23	1,662	1,745	5
Rajasthan	8,283.5	11,519	39	8,283.5	9,636	16
Tamil Nadu	6,357	10,264	61	6,357	8,635	36
Uttarakhand	1,870	2,248	20	1,870	1,958	5
Uttar Pradesh	1,8126	25,578	41	18,126	20,452	13
West Bengal	7,897	8,118	3	7,897	NA	NA
Total	1,23,073	1,55,285	26	1,15,176**	1,21,954**	6

* In 2014–15, actual expenditure for AP was not available and thus revised estimates have been used, which could be the reason for a small decline in total elementary education expenditure; ** the total excludes West Bengal.

Source: Collated from state budgets.

Of course, the strict comparison between the two should not be stretched beyond a point. State governments bear a responsibility to ensure access, and might operate schools despite relatively lower enrolments, while kvs have no such obligation. However, evidence suggests that learning levels in kvs tend to be higher (kvs Portal nd) than those in government schools, which raises questions on how best to utilise resources to ensure a move towards better learning outcomes.

Discussion

To summarise, our analysis shows tremendous diversity in per student expenditure in both FY 2011–12 and FY 2014–15. Second, the difference between per student expenditure in government schools and kvs diminished considerably between the two years. Finally, a large portion of the increase in real per student expenditure can be explained by declining enrolment, as total elementary education has not increased much. All this needs to be juxtaposed with the Fourteenth Finance Commission's recommendation on tax devolution, which is likely to leave the centre with a smaller pool of money to finance elementary education.

The question then is how best can the centre use its limited resources to encourage states to spend—and spend efficiently—on quality learning?

Table 2: Per Student Expenditure, 2011–12 and 2014–15 (including students in government and aided schools)

States	Nominal Expenditure		Percentage of Change	Real Expenditure		Percentage of Change
	2011–12	2014–15		2011–12	2014–15	
United Andhra Pradesh	13,010	14,087	8	13,010	11,668	-10
Bihar	4,535	5,298	17	4,535	4,088	-10
Chhattisgarh	11,987	16,151	35	11,987	13,677	14
Gujarat	13,036	17,106	31	13,036	14,959	15
Haryana	17,315	27,163	57	17,315	22,535	30
Himachal Pradesh	27,290	39,343	44	27,290	34,651	27
Jharkhand	5,725	8,020	40	5,725	6,916	21
Karnataka	12,852	16,914	32	12,852	13,694	7
Kerala	13,858	19,419	40	13,858	16,149	17
Madhya Pradesh	7,951	11,927	50	7,951	9,720	22
Maharashtra	11,351	14,712	30	11,351	12,518	10
Odisha	8,055	9,367	16	8,055	7,845	-3
Punjab	7,246	9,142	26	7,246	7,782	7
Rajasthan	11,575	19,391	68	11,575	16,220	40
Tamil Nadu	9,823	16,914	72	9,823	14,229	45
Uttarakhand	19,268	26,236	36	19,268	22,849	19
Uttar Pradesh	8,354	13,102	57	8,354	1,0476	25
West Bengal	5,939	7,001	18	5,939	NA	NA
Grand total	8,434	11,523	37			

Enrolments for Flash Statistics and state report cards in 2011 do not match. To get proportions of private aided, Flash Statistics have been used. Private aided numbers in Himachal Pradesh and Rajasthan for 2014–15 were not available. However, they have been assumed to be around 0 as the proportions were less than 1% in 2011–12.

Source: Collated from state budget documents; enrolment figures taken from NUEPA (2011, 2014); the proportions of private aided taken from NUEPA (2011) for 2011; and reports generated from the DISE portal.

Table 3: Percentage of Change in Enrolment and Total Elementary Education Expenditure

	Percentage of Change in Enrolment (1 to 8 — Government + Aided Schools)	Percentage of Change in Total Real EE Expenditures	Percentage of Change in Real per Student Expenditures
United Andhra Pradesh	-9	-18	-10
Bihar	-0.5	-10	-10
Chhattisgarh	-9.1	4	14
Gujarat	0.4	15	15
Haryana	-6.7	21	30
Himachal Pradesh	-13	10	27
Jharkhand	-9.8	9	21
Karnataka	-6.3	0	7
Kerala	-11.5	3	17
Madhya Pradesh	-14.9	4	22
Maharashtra	-6.9	3	10
Odisha	-5.2	-8	-3
Punjab	-2.2	5	7
Rajasthan	-17	16	40
Tamil Nadu	-6.2	36	45
Uttarakhand	-11.7	5	19
Uttar Pradesh	-10	13	25
West Bengal	-12.8	NA	NA

Enrolments for Flash Statistics and state report cards in 2011 do not match. To get proportions of private aided, Flash Statistics have been used. Private aided numbers in Himachal Pradesh and Rajasthan for 2014–15 were not available. However, they have been assumed to be around 0 as the proportions were less than 1% in 2011–12.

Source: Collated from state budget documents; enrolment figures taken from NUEPA (2011, 2014); the proportions of private aided taken from NUEPA (2011) for 2011; and reports generated from the DISE portal.

One potential way could be the three-window approach described here (and discussed in detail in Aiyar et al 2015). The first window would consist of block grants for physical infrastructure (as

defined by norms in the Right of Children to Free and Compulsory Education [RTE] Act 2009) to be given to states depending on their distance from the norms. This will ensure that the states lagging behind will get more resources, which they can utilise to achieve basic infrastructure, but without being told what is to be prioritised. The second window could be a formula-based untied grant designed specifically to fund state-specific and state-led proposals to improve learning. The third window could be a performance-based incentive for the states that show improvements against the targets set. By providing finances in this manner, the drawbacks of the CSS mode of funding with its one-size-fits-all approach, rigid norms, and lack of flexibility would be addressed. It would also allow for a focus on learning goals.

The recent announcement by the centre on initiating a scheme for quality improvement in grades I to IX, the Unique National Initiative for Quality Universal Education or UNIQUE, seems to be a step in this direction. While the modalities of

the initiative are yet to be made public, according to a “Transforming India” vision e-book (DoARPG 2016), the scheme emphasises the need to focus on quality education and the importance of linking finances to need, equity, and performance. With the new education policy awaited, and given the poor state of learning levels in our country, this is the time to break away from traditional funding models, focusing on an outcome-based financing model for elementary education.

NOTES

- Real expenditure has been obtained by obtaining the GDP deflator for 2014–15 using state GDP data for 2014–15 with base year 2011–12. GDP figures for West Bengal are not available. Hence West Bengal is excluded while computing change in combined expenditure of the states.
- Data for West Bengal is not available. However, India's GDP deflator is 18%, and every single state in India (with the exception of Goa) has a deflator of more than 14%. Hence, it is likely that West Bengal also saw a decline in real expenditure, of more than 10%.
- We have focused only on the states mentioned here for this calculation. West Bengal has been excluded.
- Expenditure on government-aided schools primarily constitutes expenditure on teacher salaries. However, there may be state variations on other items provided.
- Expenditure includes expenditures on construction and other activities.

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