The "Scissors Effect" of COVID 19 Pandemic on State Finances: Emerging Evidence on Expenditures

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Abstract

The COVID pandemic imposed dual pressures on state finances. Contraction in revenues was coupled with an increased pressure to expand public spending to counter the adversities of the pandemic. Evidence from 26 states suggest that aggregate revenues fell by about 5 per cent in the pandemic year, 2020-21. Despite this fall, States have maintained a 5 per cent average growth rate of aggregate spending. Public expenditure in social sector grew at a significantly higher rate than economic services. Within social services, health expenditure in 15 selected major states grew at 16 per cent, the highest among all. This rise in health spending has however, come at the cost of expenditures in a number of other important sectors. Expenditures in education and nutrition remained nearly stagnant in the pandemic year.

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Introduction

The COVID pandemic imparted a negative shock to economies worldwide, and India is not an exception. Across the globe, countries have witnessed sharp contraction in revenues following the pandemic leading to anticipated decline in public spending and increase in government debt. In India too, the pandemic resulted in erosion of revenues both at the level of States and the Union government, and this led to speculations on its impact on public expenditure and debt levels. The compressed revenues were coupled with increased pressure to expand public spending on health, social security and other sectors to deal with economic adversities arising from the pandemic. The concern on the impact of the pandemic was particularly heightened by the fact that the economy was already on a downslide when the pandemic struck. The dual pressure of loss of revenues and need for increased spending was expected to hit hard the finances of the state governments. The 15th Finance (FC) commission expressed a particular concern on this dual pressure and called it a "scissor effect" of the pandemic on state finances.

Countries have adopted a variety of approaches to combat the fiscal stress associated with the COVID-19 pandemic. The United States and China made extra funds available in the budget by using existing laws for emergency and disaster situations (Barroy *et.al.* 2020). In France Germany and Italy, the government used 'decrees' to ensure adequate resources for service providers (Barroy *et.al.* 2020). Several other countries reprioritized and rationalized recurrent and non-urgent spending to meet the expenditure needs (Barroy *et.al.* 2020, Curristine *et. al.* 2020, Gbohoui and Medas, 2021). Many countries also resorted to extra-budgetary sources of funds to facilitate additional spending on health and other sectors during the pandemic (Rahim *et.al*. 2020). In general, a combination of public funds, private donations and external aids have been used to increase the size of the revenue pool across countries to meet the. needs of the pandemic (Rahim *et.al*. 2020). Early evidence on a number of high income countries also indicate that health spending increased significantly in the pandemic year (WHO 2021). In most low and middle income countries however, the pattern is yet to be documented (WHO 2021).

In India, the impact of the pandemic on revenue collection in States is expected to set in through two channels: shrinkage in states' own revenues and decline in transfers from the Union government. Revenues are predominantly mobilized by the Union government, and a low revenue buoyancy at the Union level can result in lower transfers to State governments. The dependence of States on Central transfers varies across States, and the impact of the pandemic on State revenues will depend on the relative contribution and buoyancy of own revenues *vis-a-vis* central transfers in individual States. On the expenditure front, the effect of pandemic is likely to be more pronounced in states, as they bear bulk of the public expenditure responsibilities in the Indian Union. With shrinking revenues and evolving expenditure needs, States are likely to have rationalized and reprioritized public spending, and the adjustments made are likely to reflect state-specific policy responses to the pandemic.

The extent of fiscal stress in states have been gradually unfolding. Estimates provided by the Comptroller and Auditor General (CAG) suggested that the total receipts of 16 major States up to the third quarter (Q3) of 2020-21 was lower by 11.55 per cent as compared to the receipts up to Q3 in 2019-20 (Mukherjee and Badola 2021). This decline in total receipts in most States was largely driven by a fall in states' own tax collection in the form of GST, and tax devolution from the Union government (Mukherjee and Badola 2021). States' own revenues were lower by about 12 per cent, while tax devolution declined by 22.9 per cent in the same period. Union budget 2021 also indicated that the revised estimates of tax devolution to States was about 30 per cent lower than the budget estimates of the Union government in the pandemic year 2020-21 (Mukherjee and Badola 2021).

The significant fall in tax devolution from the Union to States has been partially compensated by grants-in-aid. Revised estimate of grant-in-aid released by the Union government to States was about 8 per cent higher than budget estimates in 2020-21. Importantly, there has been no reduction in grants-in-aid to States for centrally sponsored (CSS) or central sector schemes (CS), and this is expected to extend some relief to social sector spending in States. The grants recommended by the XVth Finance Commission (FC) for the year 2020-21 have also been largely adhered to, and the revised estimates of release of FC grants were about 22 per cent higher than the budget estimates. The gains in grant-in-aid were however, inadequate to compensate for the fall in tax devolution, resulting in a net decline in aggregate transfers to States. This decline has squeezed the fiscal space for expenditure in states and increased revenue and fiscal deficits. Although States have curbed aggregate expenditures to an extent, the curb was inadequate to counter the revenue squeeze. which in turn led to a significant rise in revenue and fiscal deficits at the state-level (Mukherjee and Badola 2021).

The shrinkage in fiscal space for expenditures may lead to expenditure restructuring. The extent and nature of this restructuring will however, depend on size of the revenue shock, sectoral priorities and other social and economic policies undertaken to counter the adversities of the pandemic.

In this paper, we attempt to highlight aggregate trends in revenues and expenditures of States in the pandemic year 2020-21 *vis-a-vis* 2019-20 (the reference year), and the response of State governments to the squeezing fiscal space. Specifically, we analyse changes in sectoral expenditures with a view to understand varied response across states in protecting social sector spending in general, and health spending in particular, *vis-a-vis* spending in economic sectors following the pandemic.

Data Sources and Methodological Issues

Much of the existing evidence on aggregate revenues and expenditures are either based on revised estimates or on "actual" figures for part of the year. We use "actual" figures for each of the months of the fiscal year 2020-21. For aggregate trends in revenues and expenditures, we use Monthly key indicators (MKIs) compiled by the Comptroller and Auditor general (CAG) of India for 26 states. Further, for sectoral expenditures within social services, we use Monthly Civil Accounts (MCAs) provided by the office of the Principal Auditor General (PAG) in 15 major States.[4] MKIs provided by the office of CAG do not provide break-up of expenditures by sectors, and therefore, we resort to MCAs for detailed expenditure analysis. Disaggregated information on expenditures by major budget heads provided in MCAs, allows us to examine changes in the composition of social sector spending in different States.

Aggregate Revenues and Expenditures

In 2020-21, the pandemic year, aggregate receipts of the 26 states declined by 4.6 per cent from the level of 2019-20. The decline in aggregate receipts was registered after a positive growth of around 2 per cent in the two years prior to the pandemic, between 2018-19 and 2019-20 (Table 1). Notably, in the first three quarters of the financial year 2020-21, receipts declined by around 11 per cent, but with higher receipts in the 4th quarter, the aggregate decline was contained at 4.6 per cent. The shortfall in States' receipts is also reflected in the fact that the difference between the 'actual' receipts and 'budget estimate' in the pandemic year was lower than the two years preceding the pandemic. In 2020-21, 'actual' receipts was about 22 per cent lower than the year's budget estimate in comparison to around 18 and 9 per cent in 2019-20 and 2018-19 respectively (Table 1). As a share of aggregate GSDP of all States, revenue receipts fell by about 1.5 per cent between 2018-19 and 2020-21.

The aggregate fall in tax and non-tax revenues was substantially higher than aggregate receipts. Between 2019-20 and 2020-21, total tax receipts (including tax devolution from the Union government) and non-tax revenues fell by 9 per cent, while grant-in-aid to States grew by 19 per cent (Table 1). The increase in grant-in-aid from the Union government partly compensated the sharp fall in tax and non-tax revenues in States. In 2020-21, 'actual' sum of tax and non-tax receipts fell short by about 25 per cent from the budget estimate. The corresponding shortfall in 2018-19 and 2019-20 was much lower; 5 per cent and 15 per cent respectively. For grant-in-aid to states, 'actual' releases to States were about 86 per cent of B.E. in in 2020-21, which was higher than the two previous years.

[4] The States included are Andhra Pradesh, Haryana, Jharkhand, Karnataka, Himachal Pradesh, Gujarat, Telangana, Chhattisgarh, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and Maharashtra.

Table 1: Aggregate receipts and expenditure of States and growth rates, 2018-19 to 2020-21

	Growth rate		Actuals to Budget Estimate (B.E.) 2018-19	Actuals to Budget Estimate (B.E.) 2019-20	Actuals to Budget Estimate (B.E.) 2020-21
	2018-19 to 2019-20	2019-20 to 2020-21			
A. Total Receipts (B+C)	2.1	-4.6	90.9	81.9	77.8
B. Total Revenue Receipts (B.1 +B.2)	2.2	- 3.6	91.3	82.2	77.8
B.1 Tax + Non-tax Revenues	-1.2	-8.9	95.0	85.4	75.4
B.1.1 Tax Revenues (including State share in Central taxes)	-3.9	-5.3	95.2	83.1	76.9
B.1.2 Non-tax Revenues	23.6	-35.3	93.1		62.4
B 2. Grant-in-aid and Contribution	19.6	19.1	75.8	82.8	86.8
C. Capital Receipts (non-debt)	-1	-68	74.8	69.7	69.9
D. Borrowings	13	56			
E. Total Expenditure (E.1+E.2)/(F+G+H)	5.2	4.9	86.1	81.6	86.5
E.1 Revenue Expenditure	6.2	5.7	87.9	84.1	88.2
E.2 Capital Expenditure	-8.7	1.9	76.6	66.8	76.8
F. Expenditure on General Services	5.5	6.2			
G. Expenditure on Social Services	9.0	6.1			
H. Expenditure on Economic Services	4.0	3.7			

Source: Monthly Key Indicators (MKIs) compiled by the Comptroller and Auditor General (CAG), Government of India.

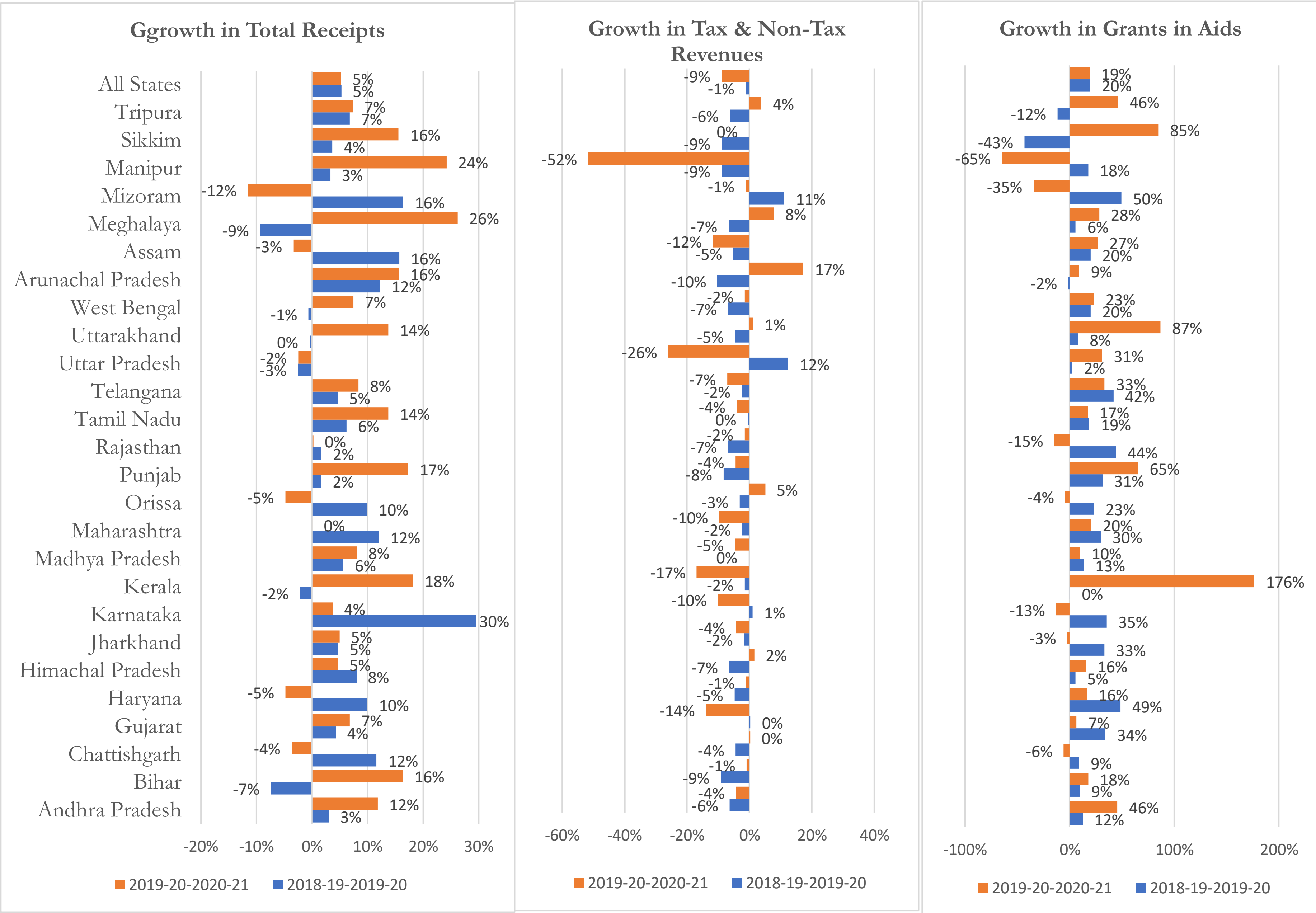

Ggrowth in Total Receipts
Growth in Tax & Non-Tax Revenues
Growth in Grants in Aids
All States
Tripura
Sikkim
Manipur
Mizoram
Meghalaya
Assam
Arunachal Pradesh
West Bengal
Uttarakhand
Uttar Pradesh
Telangana
Tamil Nadu
Rajasthan
Punjab
Orissa
Maharashtra
Madhya Pradesh
Kerala
Karnataka
Jharkhand
Himachal Pradesh
Haryana
Gujarat
Chattishgarh
Bihar
Andhra Pradesh
-20% -10% 0% 10% 20% 30%
-60% -40% -20% 0% 20% 40%
-100% 0% 100% 200%
2019-20-2020-21
2018-19-2019-20

Table 2. Growth in Tax and non-tax receipts, grant-in-aid and total receipts of States (per cent)

States	Tax + Non-tax Receipts	Grant-in-aid	Total Receipts (Rev + non-debt Cap)
Andhra Pradesh	-4.4	45.7	2.4
Bihar	-0.9	17.8	3.8
Chhattisgarh	0.2	-5.9	-1.3
Gujarat	-14.0	6.6	-10.5
Haryana	-1.1	16.4	-5.4
Himachal Pradesh	1.5	15.5	8.8
Jharkhand	-4.2	-2.5	-3.9
Karnataka	-10.1	-12.8	-10.6
Kerala	-16.9	176.4	7.1
Madhya Pradesh	-4.7	9.9	-1.5
Maharashtra	-9.8	20.5	-5.1
Orissa	5.0	-4.5	3.2
Punjab	-4.4	65.4	11.4
Rajasthan	-1.5	-14.6	-13.7
Tamil Nadu	-4.1	17.3	-0.7
Telangana	-7.2	33.4	-2.6
Uttar Pradesh	-26.0	31.1	-20.1
Uttarakhand	1.2	86.9	24.4
West Bengal	-1.5	23.2	3.9
Arunachal Pradesh	17.2	9.0	15.0
Assam	-11.7	26.7	0.6
Meghalaya	7.8	28.3	13.7
Mizoram	-1.2	-34.6	-19.7
Manipur	-51.7	-65.0	-58.2
Sikkim	-0.1	84.8	15.6
Tripura	3.8	46.2	20.8
All States	**-8.9**	19.1	-4.6

Source: Monthly Key Indicators (MKIs) compiled by the Comptroller and Auditor General (CAG), Government of India.

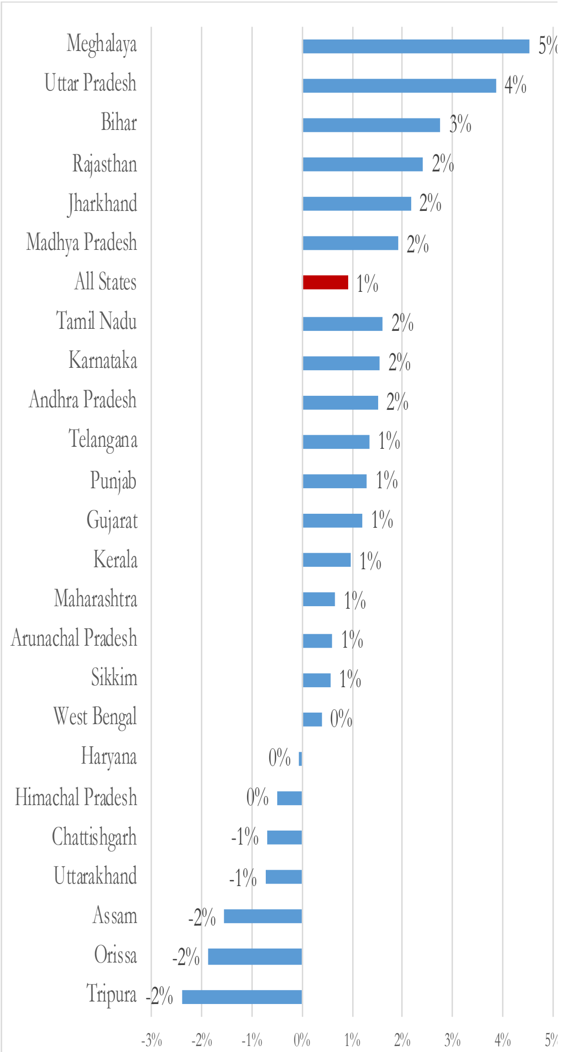
A state-wise analysis shows that aggregate receipts fell by more than 10 per cent in Gujarat, Karnataka, Rajasthan, Uttar Pradesh, Mizoram and Manipur, by 5-10 per cent in Maharashtra and Haryana, and less than 5 per cent in the rest of the states (Table 2). Interestingly, aggregate receipts did not fall in 13 out of the 26 states under study (Table 2). In fact, in Punjab, and a number of small and hilly states like Uttarakhand, Arunachal Pradesh, Meghalaya, Sikkim and Tripura aggregate receipts increased by more than 10 per cent. Kerala and Himachal Pradesh also registered a growth of 5-10 per cent in aggregate receipts. (Table 2). In many of these states, the positive growth in receipts was steered by a substantial grant-in-aid from the Union government (Table 2). Tax and non-tax receipts fell in almost all major States except Chhattisgarh, Odisha, Himachal Pradesh, Uttarakhand, Meghalaya and Tripura, but grant-in-aid increased in most states compensating for the loss in tax and non-tax revenues (Table 2). A typical example is that of Kerala. In Kerala, tax and non-tax receipts fell by nearly 17 per cent in the pandemic year, but owing to a substantial grant-in-aid from the Union government, receipts increased by 7 per cent. In other states like Gujarat, Maharashtra and Uttar Pradesh, the increase in grant-in-aid only ensured that the fall in total receipts is lowered.

Notably, tax and non-tax revenues are united in nature, and a fall in these untied resources cannot be compensated by tied grant-in aid. A major part of grant-in-aid is tied towards Central sector (CS) and Centrally Sponsored schemes (CSS) and are not available for reprioritization. This implies that the fall in tax and non-tax revenues in States is likely to result in a significant contraction in untied resources at the state-level. The non-negative growth in grant-in-aid however, has positive implications for the social sector. Bulk of the CS and CSS schemes are for the social sector, and an increase in grant-in-aid in most States will ensure that expenditure on social sector schemes initiated by the Union government is not unduly curtailed in the pandemic year.

Table3 : Fiscal Deficit as per cent of GSDP

	Fiscal Deficit		
	2019-20	2020-21	Increase
Andhra P	4.1	5.6	1.5
Bihar	2.1	4.8	2.8
Chhattisgarh	5.2	4.5	-0.7
Gujarat	1.6	2.8	1.2
Haryana	3.9	3.9	-0.1
Himachal P	3.4	2.9	-0.5
Jharkhand	2.5	4.7	2.2
Karnataka	2.3	3.9	1.5
Kerala	2.9	3.9	1.0
Madhya P	3.4	5.3	1.9
Maharashtra	2.0	2.6	0.7
Orissa	3.7	1.8	-1.9
Punjab	3.1	4.4	1.3
Rajasthan	3.6	6.0	2.4
Tamil Nadu	3.3	4.9	1.6
Telangana	3.3	4.7	1.3
Uttar Pradesh	-0.7	3.2	3.9
Uttarakhand	3.0	2.3	-0.7
West Bengal	3.0	3.4	0.4
Arunachal P	3.7	4.3	0.
Assam	4.4	2.9	-1.5
Meghalaya	3.3	7.8	4.5
Manipur	3.5	27.0	23.4
Sikkim	6.3	6.9	0.6
Tripura	5.9	3.5	-2.4
All States	2.6%	3.9%	1.3

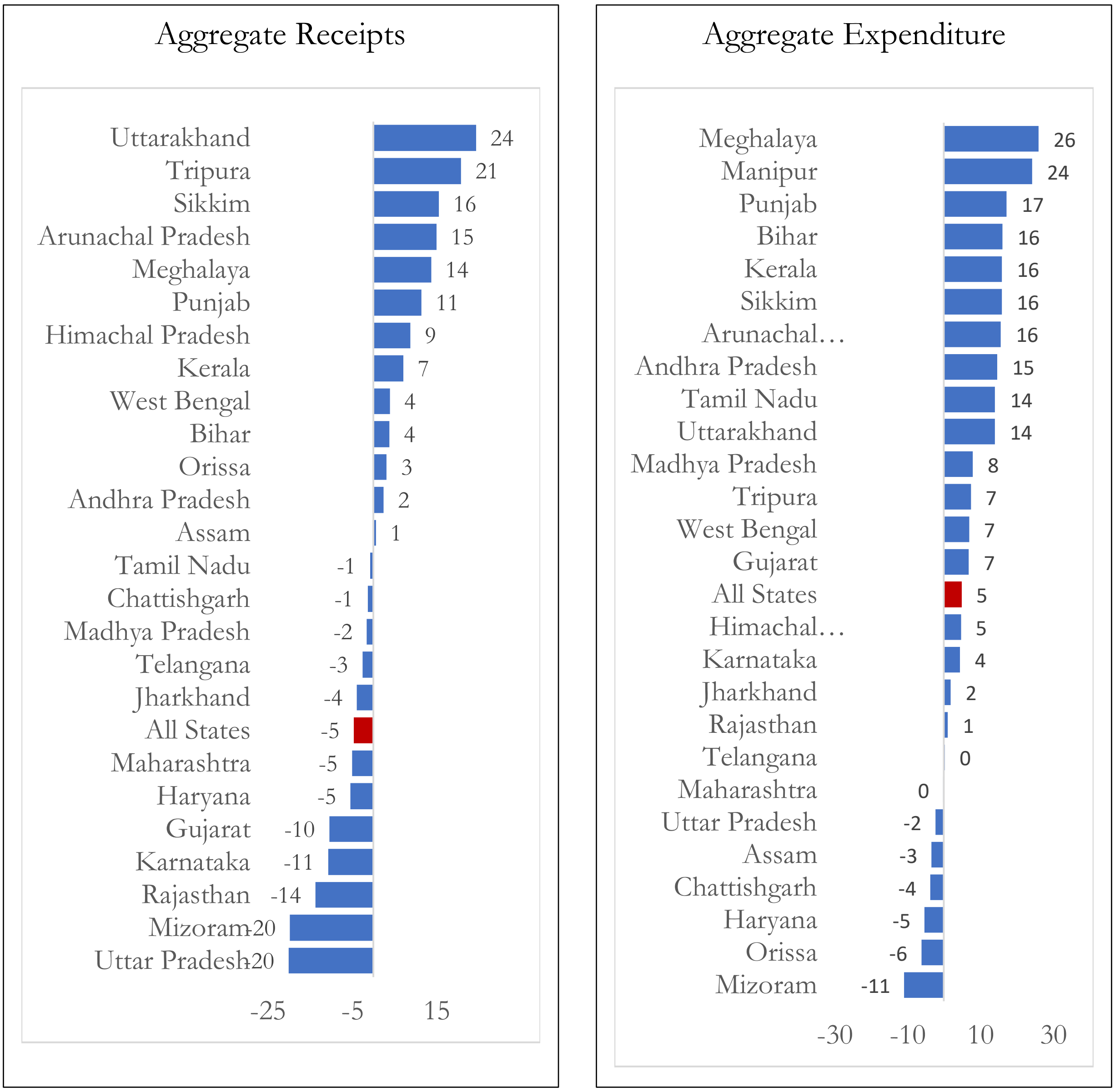
Growth of Fiscal Deficit as a per cent of GSDP in 2020-21 over 2019-20



Source: Author estimations based on Monthly Key Indicators compiled by the Comptroller and Auditor General (CAG), Government of India.

States have covered up the fall in untied resources through additional borrowing. This is mirrored in the fact that borrowings increased by around 56 per cent in the pandemic year; a growth nearly 4 times over the pre-pandemic year (Table 1). It is notable that fiscal deficit increased by 1 per cent of GSDP between 2019-20 and 2020-21 (from around 3 to 4 per cent). A state-wise disaggregation suggests that fiscal deficit and borrowings were among the highest in the States of Uttar Pradesh, Bihar, Jharkhand and Rajasthan. The case of Uttar Pradesh was particularly acute. Aggregate receipts declined by 20 per cent in the pandemic year, which resulted in an increase of fiscal deficit of about 3.9 per cent of GSDP, the highest among the 26 states under study (Table 2 and Table 3).

Figure 2: Growth of receipts and expenditure in 2020-21 over 2019-20 (per cent)



With additional borrowing, States ensured that aggregate expenditures grew by 4.9 per cent in the pandemic year despite the fall in receipts (Table 1). This nominal increase ensured that expenditure to GDP ratio remained around the same level as the pre-pandemic year. Among major states, the increase was remarkable in States like Andhra Pradesh, Bihar, Kerala, Punjab, Tamil Nadu and Uttarakhand. In these States, expenditures grew by 14-17 per cent in 2020-21. This was facilitated by the fact that aggregate receipts did not decline significantly in these States. There was however, some decline in expenditures in Chhattisgarh, Odisha, Haryana and Uttar Pradesh. In Odisha and Haryana, expenditures fell by 5-6 per cent, in Chhattisgarh 3.6 per cent and about 2 per cent in Uttar Pradesh.

It is interesting to note the differences in expenditure choices by States in the pandemic year. In States like Tamil Nadu, expenditures grew by 14 per cent despite a marginal fall in receipts. In contrast, states like Odisha curtailed public spending, despite a positive growth in receipts. Haryana curtailed expenditures roughly at the same rate as the fall in receipts. Madhya Pradesh, Gujarat, Karnataka and Rajasthan maintained a positive growth of expenditures despite a fall in receipts. Uttar Pradesh, which registered the highest fall in receipts, ensured that expenditures were not curtailed very steeply in the pandemic year.

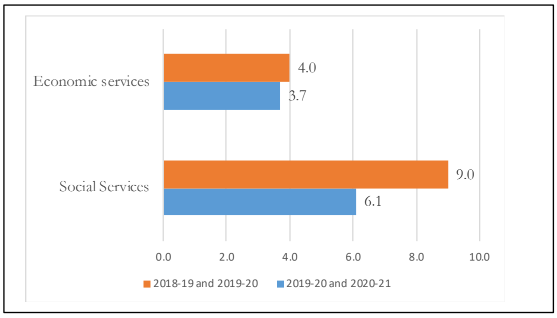
Social Sector Expenditures

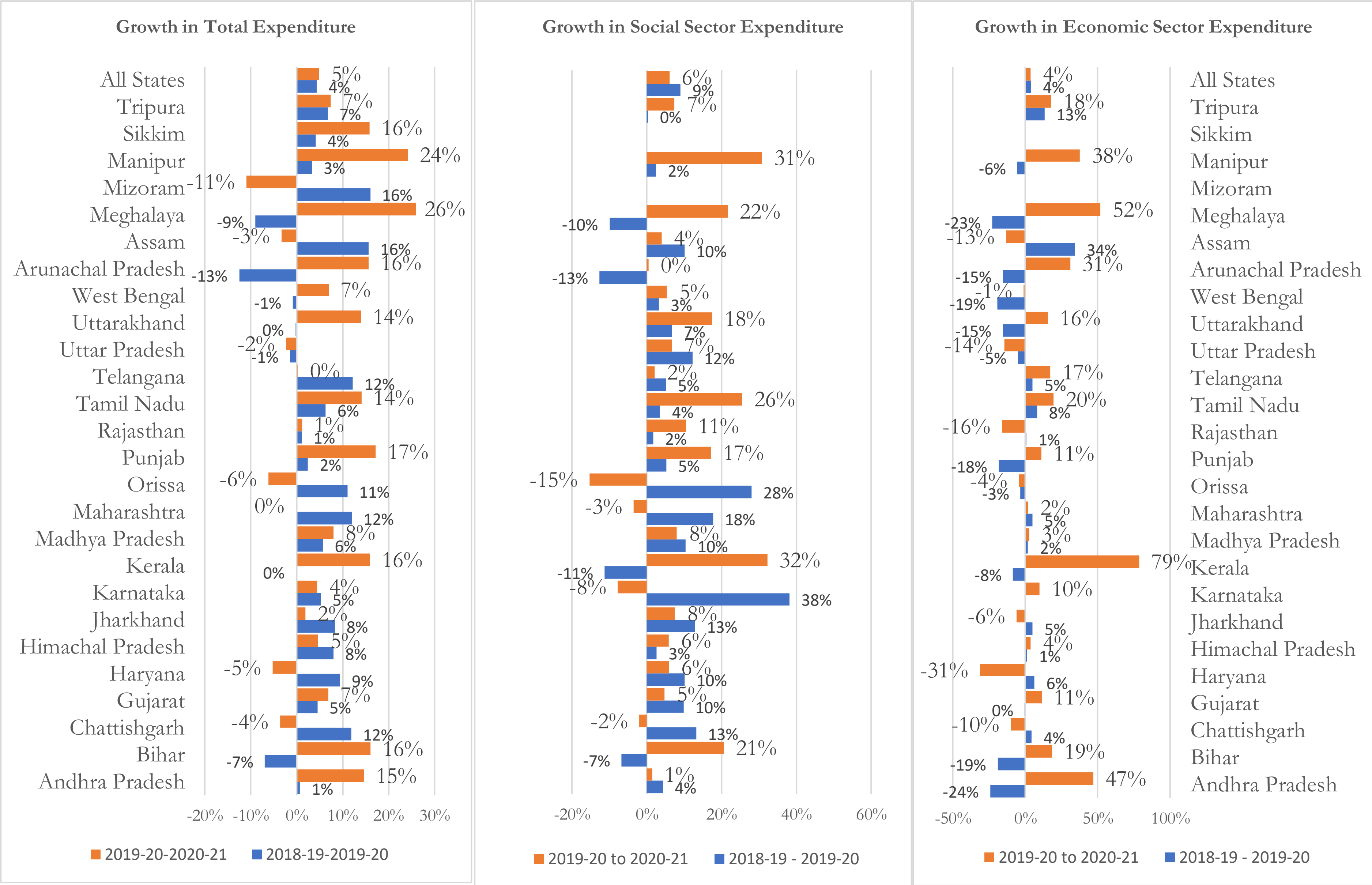
Much of the growth in expenditures was driven by increase in spending on social services. The rate of growth of economic services was significantly lower than social services. Expenditures in social services registered a growth of about 6 per cent while economic services grew at 3.7 per cent. Interestingly, growth rates of expenditure in social services were highest in the states of Kerala and Tamil Nadu. Despite the aggregate rise, a few states registered a fall. There was a 15 per cent decline in expenditure on social services in Odisha, around 8 per cent in Karnataka and 2-3 per cent in Chhattisgarh and Maharashtra. Capital expenditures within economic services was particularly curtailed; registering a negative growth rate in the pandemic year. Interestingly, within social services, while revenue spending grew at 4 per cent, capital spending registered a sharp 29 per cent growth rate in the pandemic year.

Figure 3 : Growth rate of expenditures between 2018-19 and 2019-20 (per cent)

Between 2019-20 and 2020-21	
Social services	**6.1**
Revenue	4
Capital	29
Economic services	**3.7**
Revenue	8
Capital	-5

Source: Monthly Key Indicators (MKI), CAG

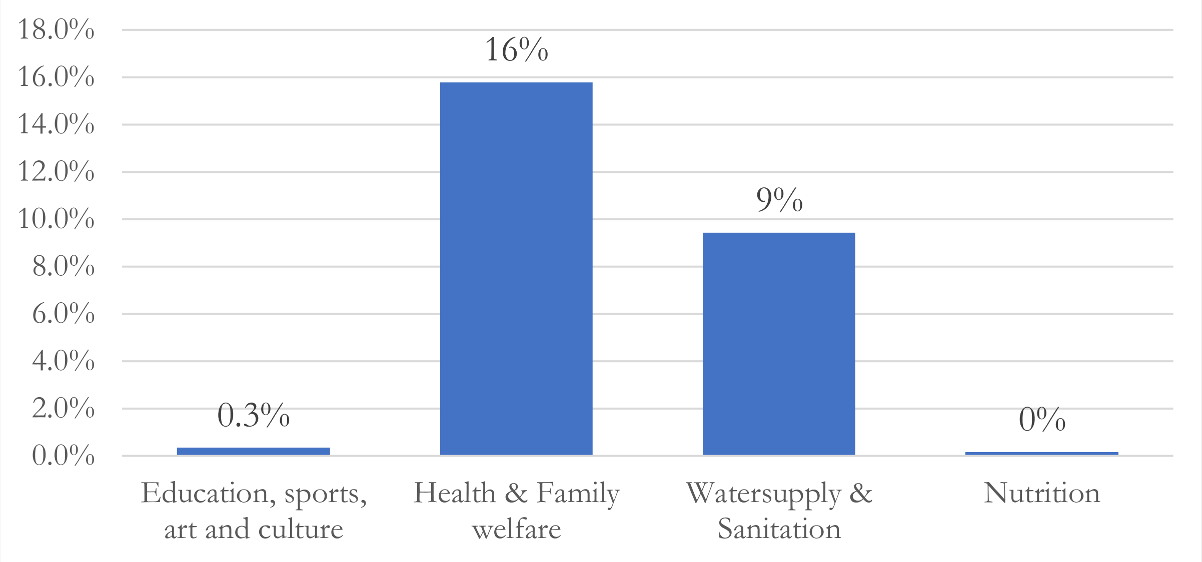




Source: Monthly Key Indicators (MKI) compiled by Comptroller and Auditor general of India (GAG)

A disaggregation of social sector expenditures suggest that there was a steep rise in health expenditures in the pandemic year. Health expenditures grew at around 16 per cent in the 15 major states under study (Figure 4). These have however, come at a cost of negligible or very low growth in a number of other important sectors like education and nutrition. Growth in education and nutrition was less than 0.5 per cent (Figure 4). Interestingly, expenditure on water supply and sanitation grew at around 9 per cent, which may be due to the increased need for sanitization services during COVID 19.

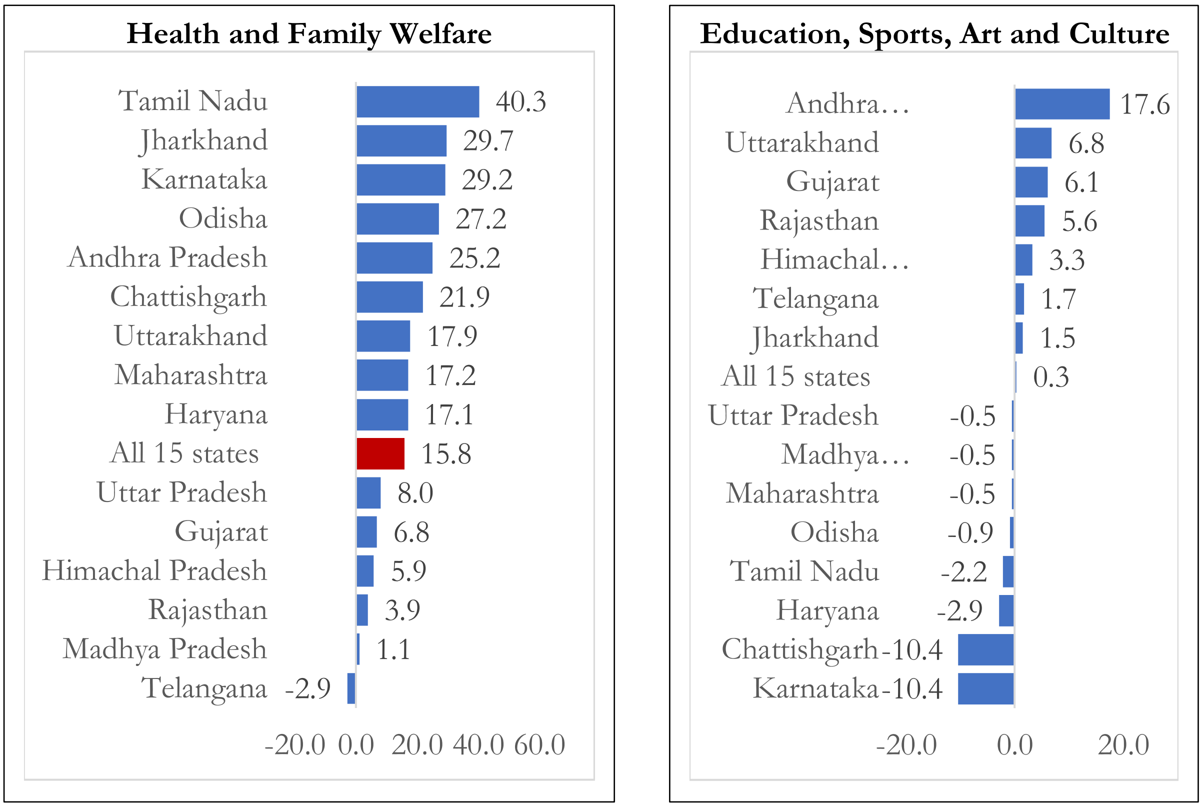
Figure 4: Growth of selected services within social sector between 2019-20 and 2020-21 (per cent)



Source: Monthly Civil Accounts (MCAs), compiled by the Office of the Principal Auditor General in respective States.

Among the 15 states under study, Tamil Nadu registered the highest growth rate in health expenditure (40 per cent). Karnataka, Jharkhand Odisha and Andhra Pradesh and Chhattisgarh also registered a growth rate of 25-30 per cent in health expenditures. Telangana is the only state which registered a negative growth (-3 per cent) in health expenditures. While health expenditures grew in almost all States, education expenditures fell in 7 of the 15 States in nominal terms. Karnataka and Chhattisgarh registered the highest fall in education expenditures (around 10 per cent). Nutrition expenditures also fell sharply in Jharkhand, Telangana, Chhattisgarh, Madhya Pradesh and Tamil Nadu.

Figure 5 : Growth in expenditure on Education, sports, art and culture and Health and family welfare in 2020-21 over 2019-20



Source: Monthly Civil Accounts (MCAs), compiled by the Office of the Principal Auditor General in respective States.

Summary

The COVID pandemic led to shrinkage in revenues and increased pressure for expansion of public spending. This laid the ground for restructuring and reprioritizing expenditures at the state-level to meet the needs of the crisis hour. Preliminary evidence on revenues and expenditures in States in early part of the pandemic year (2020-21) indicated a significant fall in revenues and an increase in deficit in a number of states. In the absence of "actual" figures for the pandemic year, the evidence was however, partial in nature.

Our analysis using "actual" figures for each month of the pandemic year reinforces the earlier evidence on contraction in revenues and increased deficit. Further, our analysis highlights the inter-state differences in bridging the revenue-expenditure gap, social sector priorities *vis-à-vis* economic services and growth of spending in core sectors like health and education.

Results indicate that despite a fall of around 5 per cent in aggregate revenues, States have been able to maintain an average growth rate of 5 per cent in expenditures. Much of this growth has been driven by social services. Expenditure on social services grew by about 6.1 per cent, as against 3.7 per cent in economic services. Within social services, health expenditures grew by 16 per cent, the highest among all sectors. This has however, come at a cost of expenditure in a number of other important sectors like education and nutrition.

The evidence above is only indicative in nature as these are based on aggregate figures for a limited set of states. The budgets of State governments for the year 2022-23 will provide deeper insights into the nature of expenditures incurred, particularly health spending during the pandemic year.

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