

## The State of States in India

A 360-degree view



*Published by Economic Policy and Research, National Stock Exchange of India Ltd.*

*Copyright © 2020 by National Stock Exchange of India Ltd. (NSE)  
Exchange Plaza, Bandra Kurla Complex  
Bandra (East), Mumbai 400 051 INDIA*

Any/all Intellectual Property rights in this report including without limitation any/all contents/information/data forming a part of this report shall at all times vest with NSE. No part of this report may be sold/distributed/licensed/produced/transmitted in any form or manner by any means (including without limitation - electronic, mechanical, photocopying, recording or otherwise) to any person/entity whatsoever without the prior written permission of NSE. Extracts from this report may be used or cited provided that NSE is duly notified and acknowledged as the source of such extract.

This report is intended solely for information purposes. This report is under no circumstances intended to be used or considered as financial or investment advice, a recommendation or an offer to sell, or a solicitation of any offer to buy any securities or other form of financial asset. The Report has been prepared on best effort basis, relying upon information obtained from various sources. NSE does not guarantee the completeness, accuracy and/or timeliness of this report neither does NSE guarantee the accuracy or projections of future conditions from the use of this report or any information therein. In no event, NSE, or any of its officers, directors, employees, affiliates or other agents are responsible for any loss or damage arising out of this report. All investments are subject to risks, which should be considered prior to making any investments.

## Table of Contents

Executive Summary.....	4
Introduction .....	7
State of agriculture.....	9
Development in non-agricultural sectors .....	13
Progress in human development.....	19
Fiscal health of states .....	25
Infrastructure: Essential to achieve long-term growth.....	39
Financial inclusion: A long way to go.....	41
The State of States Index: Significant interlinkages across categories.....	45
References .....	50



*This page intentionally left blank.*



## Executive Summary

### **The State of States Index: A Scorecard of Indian States**

Seventy-three years after Independence, India's states have remained at significantly different stages of development. Widespread disparities in economic, social, financial and fiscal parameters abound, and these differences have actually widened on multiple dimensions over the last decade. For instance, per capita real income of the top five states was Rs176k in FY12, ~5x that of bottom five states (Rs35k), and this gap has only increased since then. Over this period, the per capita real income for the country as whole improved from Rs63,462 in FY12 to Rs87,828 in FY18 (CSO). Thanks to the different nature of their economies, States differ widely not just on income levels but also on the source of that income, but widely divergent growth trajectories, esp. in the move away from Agriculture, has widened the gulf between them.

There are multiple reasons behind the rising inequalities. Richer states have managed to have better infrastructure through large investments on roads, power generation, rural development, internet connectivity, etc. that helped them to attract additional FDI and achieve higher productivity. States with high per capita income are financially inclusive with better banking and non-banking financial services which facilitated them to get easy and cheap access to capital. Several rich states have performed better in human development indicators as they spent more on Health and Education, which is again necessary to improve productivity. In case of India, growth is largely driven by Services sector that employs high-skilled labourers and mainly located in major cities, exacerbating inequalities across states/districts. These trends notwithstanding, a few states continue to do well in Agriculture with the help of minimum support price, better public distribution system and irrigation facilities.

Despite having a plethora of Centrally Sponsored Schemes with an objective of reducing such inequalities, recent data reveals no sign of convergence in development spending, because of which disparities persist across states. With this backdrop, we have explored the overall performance of Indian states across multiple dimensions and attempts to rank them through a performance score we call the *State of States Index* (SSI) based on multiple dimensions of economic, social, financial and fiscal indicators.

Comparative assessment of states is not new and there are several studies that analysed and ranked states based on performance on one or metrics. We believe our score stands out on varied nature of the fields it incorporates, in order to provide a composite picture of the performance of a state. This approach is in contrast to the selective methodology used frequently, cf., fiscal health, development indicators, technological adherence, to name a few. We try and combine indicators across a wide range of areas and hope to convey the notion that a state being the sum total of all these, and perhaps more. Dimensions included comprise fiscal health, the state of agriculture, contribution of non-agricultural sectors, human development, infrastructure and lastly, financial inclusion, all of which are complementary towards capturing the overall development of states and identify their strengths and weaknesses. It needs hardly be said that the trajectory of growth for states in the next decade would be driven by factors different from those in the past three decades. We believe a holistic look would help illustrate this perspective better.

Each of our dimensions are measured using several component indicators. For instance, fiscal health captures States' revenue and expenditure patterns, their dependency on central transfers and overall debt burden, while the state of agriculture includes cropping intensity, share of irrigated area, per worker value addition in agriculture and average yields to measure agricultural productivity and its dependency on rainfall across states. Banking and non-banking financial services are both included, as penetration of mutual funds, number of investors registered over the last 10 years to capture financial inclusion of all states. We have also taken social indicators and infrastructure that play a pivotal role to drive economic growth in the medium- and long-term.

The score for each dimension is calculated as an average of all normalised indicators using equal weightage. The SSI index is then calculated as a simple average of all those scores across six categories, and states are placed in four bands – Excellent, Good, Average and Poor. We summarise some of the major takeaways of the study.

**Inequality amongst states on the rise:** Barring a few exceptions like Bihar and Jharkhand, per capita incomes of states have remained on a divergent trajectory over the past few years, owing to marginally higher growth in the (relatively) richer states. India's top 10 states averaged 8.7% growth in FY18, vis-à-vis the 7.9% seen in the bottom 10. There are multiple reasons behind the growing inequalities including easy access to capital from both the internal and external sources, easy availability of skilled labour force, growing business opportunities and better infrastructure facilities. As a result, the coefficient of variation—a measure to capture variations—of per capita GSDP rose significantly across states between FY12 and FY18.

**A few states have done remarkably well in Agriculture:** Punjab, Delhi and Haryana performed quite well with high cropping intensity, irrigation coverage and yields in food-grains, which has converted to a higher GVA in agriculture per worker. Punjab and Haryana have also been benefited from a higher per capita government spending on Agriculture through better public distribution system and minimum support price. In contrast, several rich states including Maharashtra, Karnataka were laggards in agricultural sector with lower productivity, lack of irrigation facilities and lower cropping intensity.

**On the fiscal front, government capex muted and states' dependency on the Center rose post GST-era:** Government capital spending declined sharply due to a continuous rise in revenue expenditure and limited scope of revenue expansion particularly post GST implementation. This, in turn, rose capital scarcity over the years and deteriorated the prospect of long-term growth in several states. At the same time, states have become highly dependent on central transfers, which may have deteriorated further post the coronavirus pandemic amid more than 60-day nationwide lockdown and slow unlock process since then due to continuous surge in total number of cases.

**On average, Delhi and Telangana scored highest in terms of fiscal health,** while Punjab and Rajasthan have been placed at the bottom. Delhi has been the top performer with a large share of own revenue receipts, low fiscal deficit and relatively small outstanding debt as a share of GSDP. Few poor states including Orissa and Bihar performed relatively well, while Punjab and Rajasthan are placed at the bottom as they had done extremely poor in almost all parameters. Their situation deteriorated with a high debt to GSDP ratio and high fiscal deficit over the last five years on average.

**States performance is somewhat similar in infrastructure and financial inclusion:** Barring a few exceptions, states with better infrastructure have generally performed better in financial inclusion. Delhi has been the top performer in both the dimensions with significantly high capital spending on infrastructure and a large investment in financial sector. Notably, Delhi's per area capex was far more than any other state in India. Government spent around Rs771m per sq.km in FY20, which was almost 23x of govt. capex per area done by the second highest state-Goa. Similar trend was seen for private capex as well. Private capex in Delhi was almost 8x of the second highest state-Haryana. As a result, Delhi has done remarkably well in terms of road connectivity, power availability and financial services. On the contrary, North-eastern states along with Uttar Pradesh, Jharkhand and Uttarakhand remained in the bottom with low infrastructure scores due to lower roads connectivity, insufficient power supply and lower capex per area by both govt. and private sectors.

**The trend has been quite different in case of human development indicator:** Higher public spending on Health and Education helped Kerala to top in human development

indicator, followed by Tamil Nadu and Himachal Pradesh. Overall, southern and northern states have performed much better in terms of Education and Health, while eastern states have done extremely poor. Notably, Bihar has been worst performer with highest drop-out rate and lowest Gross Enrolment Ratio (GER). Among others, Jharkhand and Uttar Pradesh have recorded high child mortality rate and low enrolment ratio largely due to lack of public health care services and good education institute.

**Overall, Delhi, Goa and Haryana have been best performers in terms of the *State of States Index (SSI)*...**: Delhi performed exceptionally well across all dimensions except human development indicator, followed by Goa and Haryana. They have done quite well in financial inclusion and leading in both agricultural and non-agricultural sectors, even as they were laggards in human development indicators. In contrast, Kerala and Tamil Nadu performed well in both economic and human development indicators. Unlike others, Punjab scored well with the help of agriculture and relatively high human development indicators, even though the state has performed poorly in fiscal health, non-agricultural sectors as well as financial inclusion.

**...while Nagaland, Assam, Jharkhand have been placed at the bottom:** Nagaland performed extremely poor with lowest financial inclusion, poor state in agriculture, fiscal health and human development indicators. Among other poor performers, Rajasthan, Manipur, Jharkhand and Assam were laggards in multiple dimensions. Rajasthan scored lowest in fiscal health, while Manipur performed poorly in agricultural sector, financial inclusion as well as on fiscal health. Assam ranked lowest in infrastructure development and its performance was poor in agriculture and human development as well.

**Covid-19 may have deteriorated States' overall performance:** The coronavirus outbreak has led to an unprecedented fall in tax collections, among other facets of the economy. Post GST implementation, states are having to look up to the Center to meet their finances. Recent data, comprising 17 states, reveals that the pandemic and continuous surge in Covid-19 cases in India has led to a sudden rise in fiscal deficit over the first quarter in FY21. Over the period, gross fiscal deficit (GFD) for these 17 states has increased by almost 120% in FY21 to Rs1.2trn by the end of June, as compared to Rs546bn in FY20. This was largely led by 34% decline in tax revenue and 4% rise in unavoidable revenue expenditure, even as states managed to increase total non-tax revenue by almost 21%. As a result, states had to reduce total capital expenditure by almost 50% over the period to restrict total increase in GFD over the period. The pandemic would have adverse impact on economic growth as well. However, the impact will not be uniform across states. This would largely depend on the number of coronavirus cases, positivity rates and case fatality rates across states, and their share of GSDP in non-essential activities as they continue to take several stringent measures on phased manner to contain its spread.

## Introduction

Indian states are in different stages of their development with widespread disparities in economic, social, financial and fiscal parameters. These differences have widened across multiple dimensions over the last decade. For instance, the country's top five states averaged Rs176K in per capita real income in FY12, ~4x that of the bottom five states. Wide even as it is, this gap actually rose further, to ~4.4x by FY18. In other words, the rich states have become richer, even in real terms.

There are several reasons for the widening disparity: (i) Rich states invested more on infrastructure to increase overall productivity, attracted more FDI and achieved higher growth in the long-term; (ii) They are financially inclusive with greater coverage to banking and non-banking financial services, which has helped them to provide easy and cheap access to capital; (iii) Several rich states are doing better in human development indicators (HDI) as they spent more on public healthcare services and education institutes; (iv) India's growth is largely driven by the Services sector that employs high-skilled labourers and is mainly located in major cities, exacerbating inequalities across states/districts.

Despite the presence of a plethora of Centrally Sponsored Schemes (CSS) with an objective of reducing such inequalities, recent data reveals no sign of convergence in development spending, because of which disparities continue to persist across states. With this backdrop, we have analysed the overall performance of Indian states in greater detail and constructed a performance indicator called the *State of States Index (SSI)* based on multiple dimensions consisting of economic, social, financial and fiscal indicators.

Several studies have attempted to score Indian states based on their performance on different indicators. Illustratively, CRISIL recently has developed a Vulnerability Matrix to assess states during the Covid-19 pandemic era,<sup>1</sup> while the Niti Aayog has developed a composite index *viz.*, the Sustainable Development Goals (SDG) index comprising social, economic and environmental indicators in 2019.<sup>2</sup> Among others, Bhide and Panda assessed the quality of budgets with a composite index in 2002,<sup>3</sup> while Dholakia constructed a composite index considering three sub-indices measuring fiscal performance of states in 2005.<sup>4</sup>

Our analysis on the other hand has widened the scope and taken a holistic approach to create a score using multiple dimensions comprising Fiscal health, State of agriculture, Contribution of non-agricultural sectors, Human development, Infrastructure and Financial inclusion, which are complementary in nature to capture overall development of states and identify their strengths and weaknesses.

## Methodology

Each dimension under consideration in the analysis is measured using several indicators. Fiscal health captures States' revenue and expenditure patterns, their dependency on

---

<sup>1</sup> Viral Fever: Covid-19 impact on economy, corporate revenue and profitability. CRISIL Ltd. (April 30, 2020).

<sup>2</sup> SDG India: Index and Dashboard 2019-20. New Delhi: Niti Aayog. November 2019.

<sup>3</sup> Bhide, S. a. (2002). Evaluating Quality of Budgets with a Composite Index. *Economic and Political Weekly* 37, no. 13 (2002): 1177-180. Accessed August 10, 2020. [www.jstor.org/stable/4411914](http://www.jstor.org/stable/4411914).

<sup>4</sup> Dholakia, A. (2005). Measuring Fiscal Performance of States: An Alternative Approach. *Economic and Political Weekly*, 40(31), 3421-3428. Retrieved August 10, 2020, from [www.jstor.org/stable/4416963](http://www.jstor.org/stable/4416963).



central transfers and overall debt burden. Given the paramount importance of agriculture in India, we have taken several indicators like cropping intensity, share of irrigated area, per worker value addition in agriculture and average yields of food grains to measure agricultural development across states. We have also considered the per capita GSDP and share of non-agricultural sectors in gross output to measure contribution of non-agricultural sectors in the development process. The human development indicator (HDI), on the other hand, captures social development of states including educational and health outcomes, whereas infrastructure and financial inclusion play a pivotal role to drive economic growth in the medium- and long-term.

**Figure 1: Indicators to calculate the State of States Indicator (SSI)**

Dimension	Indicators
State of agriculture	Gross Value Added in Agriculture per worker, Gross irrigated (% of total cropped area), Yield of food-grains (kg/hectare), Cropping intensity.
Contribution of non-agricultural sectors	Share of GSDP in Construction, Share of GSDP in Manufacturing, Share of GSDP in Services, GSDP per capita.
Human development	Adjusted net enrolment ratio in Elementary and Secondary education, Average annual dropout rate at secondary level, GER in Higher education (18-23 years), % of teachers trained in Elementary and Secondary level, % of schools with pupil-teacher ratio $\leq 30$ , Under-5 mortality rate per 1,000 live births, % households with any usual member covered by health insurance, Number of physicians, nurses and midwives per 10,000 population.
Fiscal health	Per capita revenue, States' revenue growth (%YoY), Own tax and non-tax revenue (% of total revenue), Revenue expenditure (% of total revenue), Capex (% total expenditure), Fiscal Surplus (% GSDP), Outstanding debt (% GSDP).
Infrastructure	Road density per 100 sq. km, Power availability to Power requirement ratio, Govt. capex per area (Rs m/sq. km), Private capex in Road, Power generation, rural development, etc. per area (Rs m / sq. km).
Financial inclusion	Number of digital payment transactions through BHIM app, RuPay debit card and USSD per capita, % HHs with bank account under PMJDY, Beneficiary balance per PMJDY account (in Rs), Number of Investor registrations per lakh population, No. of banking offices per sq. km, MF AAUM % of GSDP, State-wise mutual fund penetration (Rs per capita), Number of E-transactions per '000 population.

Source: NSE.

The SSI is then estimated using the following steps. *First*, indicators are adjusted appropriately to ensure that an increase in an individual indicator captures an improvement in the state's performance. In other words, indicators that have a negative impact on a state's performance like outstanding debt, dependency on central transfers, child mortality rates, etc. are taken in reciprocal terms. *Second*, all indicators are normalized to the [0,1] scale using a min-max function, i.e., all indicators are mapped to identical scales from zero to one where zero represents the lowest performer and one as the highest. *Third*, the component score is calculated using an arithmetic mean. In the *final* step, the overall, *performance score* is calculated as a simple average of all six major dimensions. The scorecard then categorizes states based on their performance into four categories, viz., Excellent, Good, Average and Poor.

## State of agriculture

Even though agriculture generates merely 18% of India's gross output, it remains extremely important to the economy as more than 40% of total employment in 2020 were generated this sector (World Bank). Its significance has risen further post the unprecedented outbreak of Covid-19 as the sector maintained a decent growth of 3.4% in Q1FY21 GDP on YoY basis, while both Industry and Services recorded sharp declines by ~38% and 21% respectively amidst the sudden fall in global demand, a nationwide lockdown and the gradual unlock process thereafter. As a result, several states with a greater share in agriculture may have had a relatively lower impact during this pandemic. Hence it becomes imperative to understand where states stand in the agricultural sector.

In this analysis, we assessed overall performance of agriculture in each state using several indicators viz., gross value added in agriculture per worker, percentage of irrigated area, yield of food-grains and the cropping intensity (ratio of gross to net cropped area; to capture cropping intensity, overall productivity in agriculture and its dependency on rainfall).

**Figure 2: Sub-indicators for Agricultural development score**

Sub-Indicators	Meaning	Significance
Gross Value added in Agriculture per worker	Gross Value added per worker is calculated by dividing value added of agriculture sector by the number employed in the sector	A measure of labour productivity. Increased agricultural productivity provides better scope for agricultural development with more employment opportunities
Gross irrigated (as % of total cropped area)	The indicator is calculated as Gross irrigated divided by the total cropped area. It is expressed in percentage terms	This indicator measures sustained growth on the food production front and crucial for agricultural development
Food-grains total yield (kg/hectare)	Total yield of food-grains is calculated as food grains produced in Kg per hectare of land	It measures importance of food security, living standards and agricultural productivity
Cropping Intensity	Cropping intensity is expressed as the ratio of gross cropped area to net cropped area	Higher cropping intensity implies higher productivity per unit of arable land during one agricultural year. For instance, multiple crops in a year would lead to higher cropping intensity.

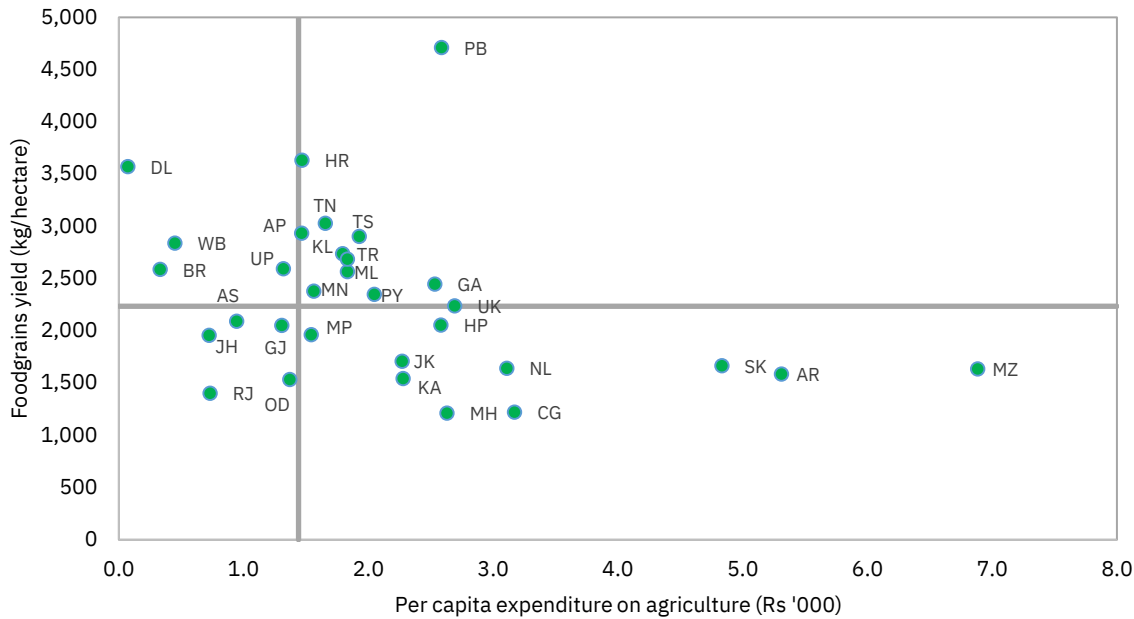
Source; Ministry of Agriculture, NSE.

**Delhi, Punjab have significantly high cropping intensity:** NCT Delhi recorded highest cropping intensity of 267% in FY16, followed by Punjab with 190% and West Bengal with 188%. Availability of better irrigation facilities and efficient use of agriculture tools contributed significantly to higher cropping intensity in these states. On the other hand, cropping intensity remains low in rainfed and dry regions, like Gujarat, Odisha, Telangana and Manipur.

**Higher public spending on Agriculture may not necessarily convert to higher yields:**

As we have shown in the following chart, there is a negative overall correlation between food-grains yield and per capita government expenditure on Agriculture as several factors like climate-adaptive sustainable agriculture practices, farm size, capacity development and the availability of private investment-driven technology are important to determine overall yield in Agriculture.

**Figure 3: Food-grains yield (Kg/hectare) vs per capita expenditure on Agriculture**

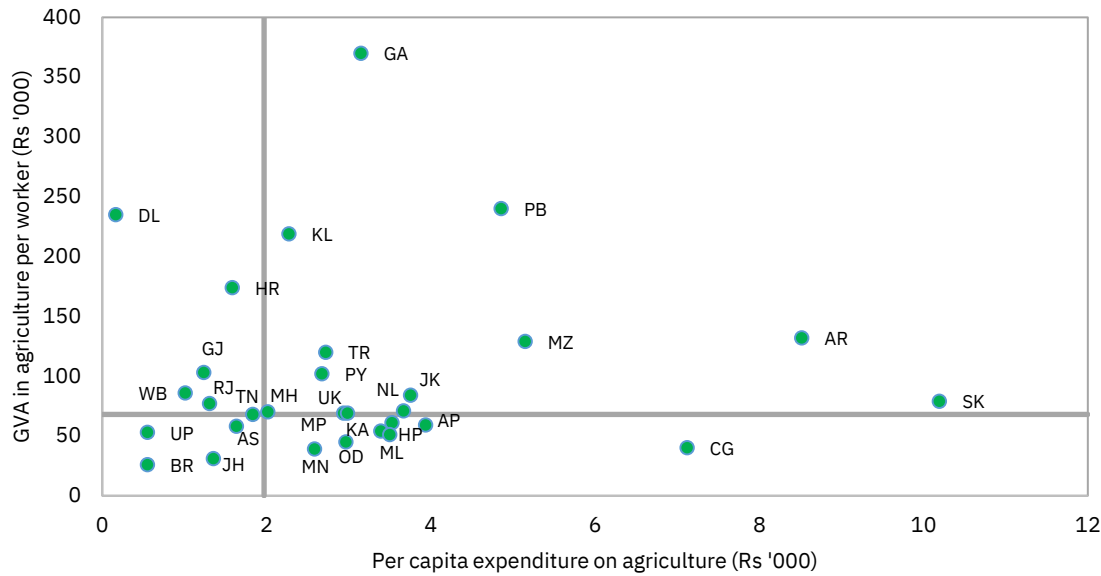


Source: EPWRF Database, NSE.

**However, additional public spending on Agriculture may increase its per worker GVA:**

As shown in the following chart, higher public spending on Agriculture has somewhat improved per worker GVA in the sector across several states including Goa, Kerala, Punjab. There are several exceptions, however. For instance, Delhi maintained a high per worker GVA despite having a low per capita expenditure. On the other hand, Chhattisgarh could not increase per worker GVA even as its public spending was significantly higher than the national average. Among others, Bihar, Uttar Pradesh, Assam and Jharkhand performed significantly poor partially due to lack of public spending in the sector.


**Figure 4: GVA per worker vs. per capita expenditure on Agriculture**



Source: Niti Aayog (SDG Report 2019), NSE.

**Overall, Punjab performed quite well in Agriculture, while Chhattisgarh has been placed at the bottom:** Punjab has done remarkably well in Agriculture with high irrigation coverage and cropping intensity. These may have helped the state to generate highest GVA per worker in agriculture and yields per hectare for food-grains. Overall, the state has been placed on top in Agriculture, followed by Delhi and Haryana. They have also done quite well across all indicators. Among others, West Bengal, Uttar Pradesh, Goa scored significantly high with high irrigation coverage and cropping intensity and food-grain yields.

In contrast, Chhattisgarh has been placed in the bottom position, marginally better than Maharashtra, Odisha and Jharkhand, as they poorly performed across all indicators. Among north-eastern states, Arunachal Pradesh, Assam, Manipur, Mizoram and Nagaland have done extremely poor due to unfavourable weather conditions, low irrigation and cropping intensity.

**Figure 5: State-wise agricultural development score**


States	Gross Value Added in Agriculture per worker	Gross irrigated (% of Total cropped area)	Total food-grain yield (kg/hectare)	Cropping Intensity (%)	State of Agriculture Score
Punjab	2.40	98.50	4,709	190.26	0.79
NCT Delhi	2.35	82.86	3,570	267.11	0.78
Haryana	1.74	88.74	3,632	184.84	0.63
West Bengal	0.86	58.82	2,839	188.45	0.43
Goa	3.70	24.68	2,447	120.92	0.41
Uttar Pradesh	0.53	80.18	2,594	159.11	0.41
Tripura	1.20	24.02	2,685	190.10	0.35
Tamil Nadu	0.70	56.61	3,028	125.69	0.33
Bihar	0.26	68.66	2,587	145.49	0.33
Kerala	2.19	17.90	2,736	129.88	0.32
Uttarakhand	0.69	49.41	2,236	155.02	0.30
Andhra Pradesh	0.59	50.53	2,934	121.31	0.30
Telangana	0.59	47.58	2,903	117.21	0.28
Madhya Pradesh	0.69	43.26	1,963	156.53	0.27
Gujarat	1.03	47.08	2,051	111.84	0.24
Meghalaya	0.51	37.32	2,566	123.35	0.23
Himachal Pradesh	0.61	21.02	2,053	169.16	0.22
Rajasthan	0.77	41.97	1,402	138.78	0.20
Sikkim	0.79	8.82	1,665	177.01	0.19
Arunachal Pradesh	1.32	18.73	1,584	132.94	0.18
Mizoram	1.29	14.48	1,634	130.19	0.17
Assam	0.58	9.16	2,091	144.92	0.15
Nagaland	0.71	21.20	1,641	131.21	0.14
Karnataka	0.54	34.18	1,542	120.01	0.14
Manipur	0.39	18.02	2,379	100.00	0.12
Jharkhand	0.31	14.22	1,957	130.74	0.12
Odisha	0.45	28.71	1,533	114.41	0.11
Maharashtra	0.68	18.24	1,212	136.50	0.11
Chhattisgarh	0.4	31.20	1,220	121.27	0.10

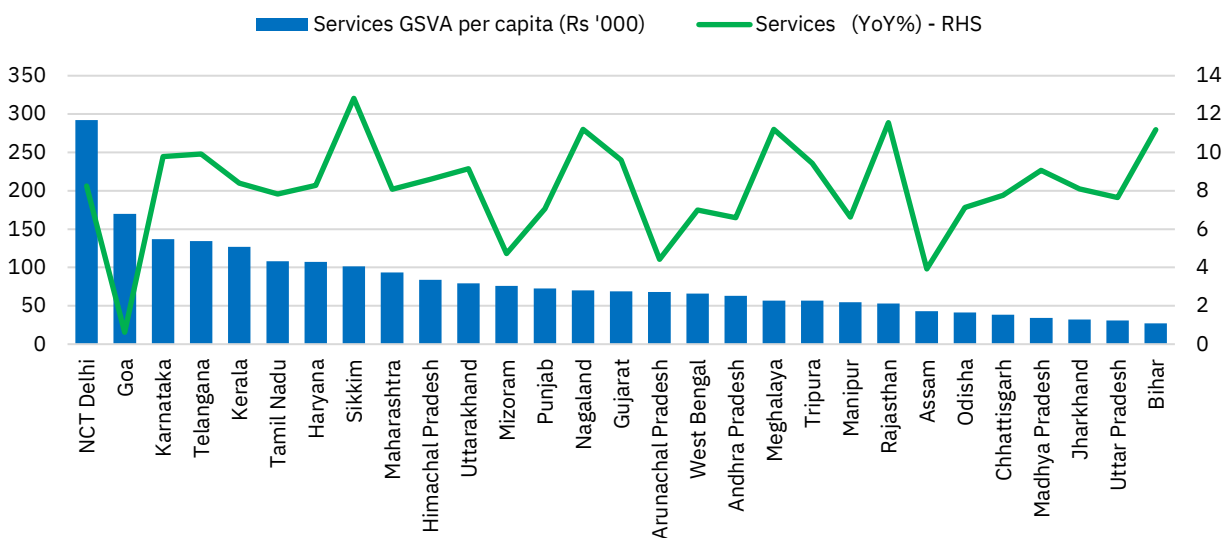
Source: EPW, MOSPI, NSE. SDG Report, Niti Aayog, Ministry of Agriculture.

## Development in non-agricultural sectors

Non-agricultural sectors include Manufacturing, Construction and Services that contributed around 82% to the total GVA of the country in FY20 and generated nearly 60% of its employment. Among these, Services as a sector plays a crucial role in India as it contributes ~55% of GVA in FY20; it has been a major contributor to total economic growth over a long period of time, followed by manufacturing and construction sectors.

There is a wide disparity in the contribution to this sector across states as shown in the following chart. While most of the states have a moderate contribution of services to GSVA; Delhi has been placed at the top with 85% share in services to GSVA, followed by Karnataka (65.2%) as in FY19. On the other hand, Sikkim, Gujarat and Chhattisgarh have been placed at the bottom with a contribution of 26.8%, 35.6% and 37.1% respectively. Moreover, this inequality may persist for a long period of time given the fact that the average growth rate of top 10 states remained close to that of the bottom 10 states. This implies that Convergence in the Service sector across states might extend over decades.

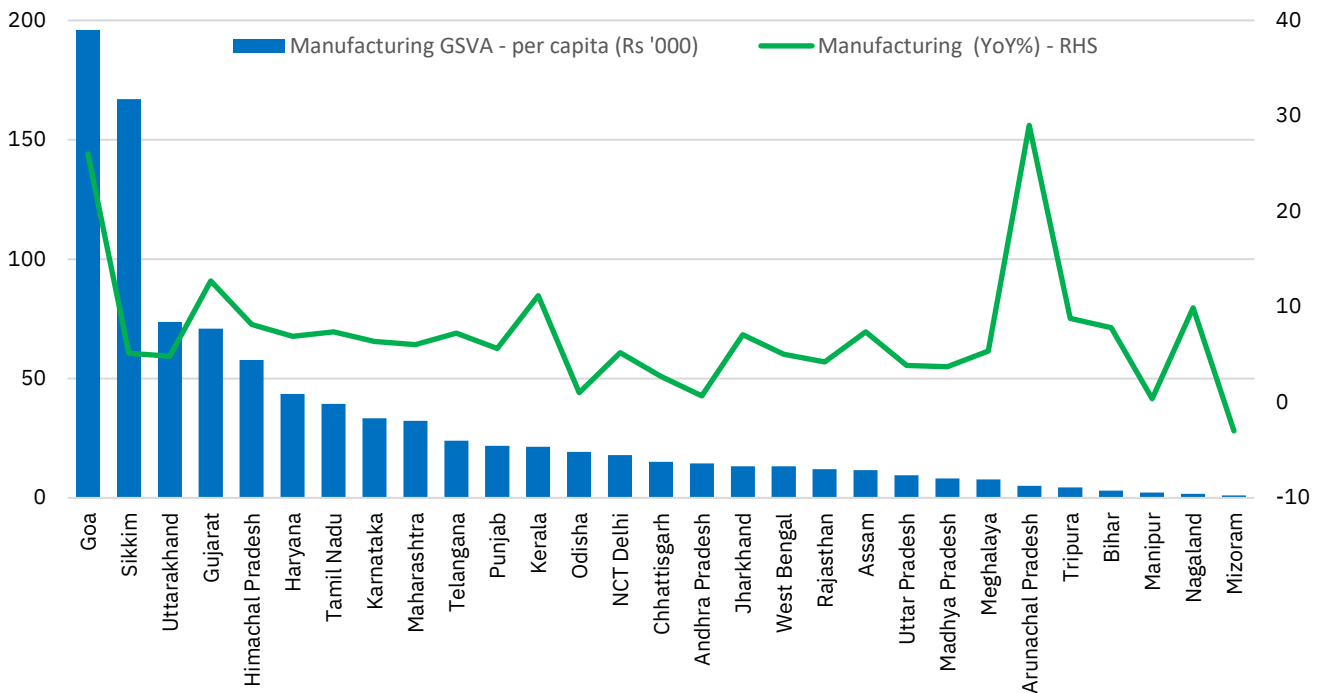
**Figure 6: State-wise share of Services sector in GSVA at current basic prices and its annual growth in FY19**



Source: CMIE: States of India. GSVA of Maharashtra taken as average of FY17 and FY18.

**Manufacturing is the second highest contributor to economic growth** in the country with 15% share in GSVA in FY20. In spite the initiation several policies like the Government's "Make in India", growth in the sector has struggled to accelerate. Over the last five fiscal years, the Manufacturing sector grew by merely 6.7% on average, significantly lower than in the Services sector. Moreover, this growth rate also showed meaningful disparity across states. It remained low for most of the states barring a few states like Arunachal Pradesh (29% in FY19), Goa (26.0%) and Gujarat (12.7%). A total of 10/29 states in this analysis grew at 5% or lower. Among major states, Andhra Pradesh and Odisha recorded growth rates of 0.7% and 1.0% respectively. There is a clear sign of divergence across states in the manufacturing sector as the top 10 states recorded an average growth of 9.1%, significantly higher than the bottom 10 states (7.3% in FY19).

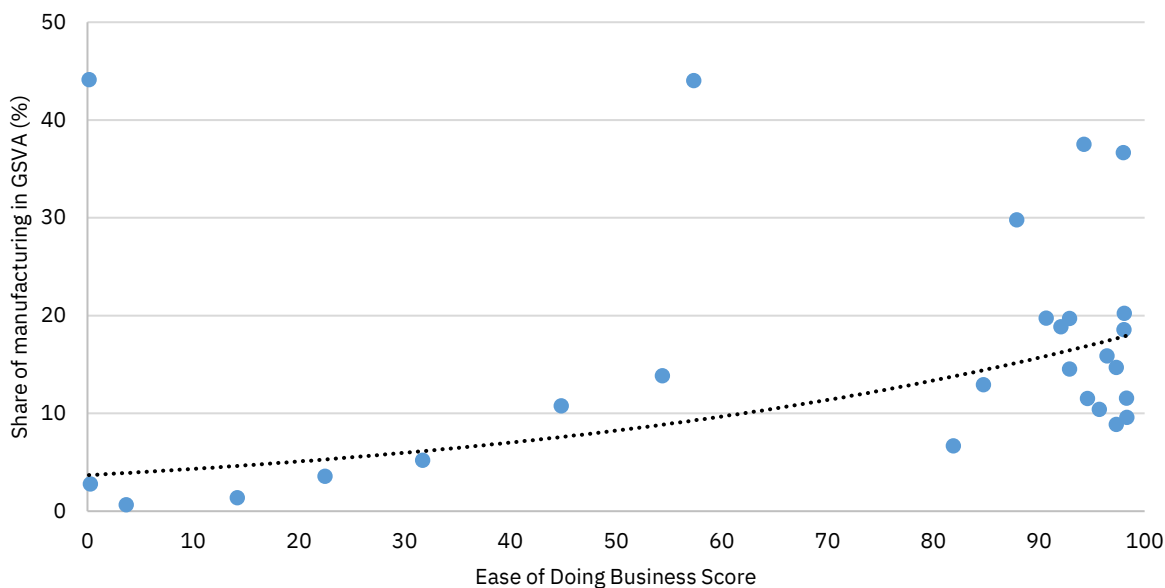
**Figure 7: State-wise share of manufacturing sector in GSDP at current basic prices and its annual growth in FY19**



Source: CMIE: States of India, NSE Note: Sorted in an increasing order of GSDP per capita. GSDVA of Maharashtra taken as average of FY17 and FY18.

**Overall ease of doing business has direct impact on manufacturing sector across states**, as it helps to attract additional investment from both the internal and external sources. Ease of doing business captures easy availability of capital, skilled labour and better infrastructure that in turn helps to start and expand businesses in the particular state.

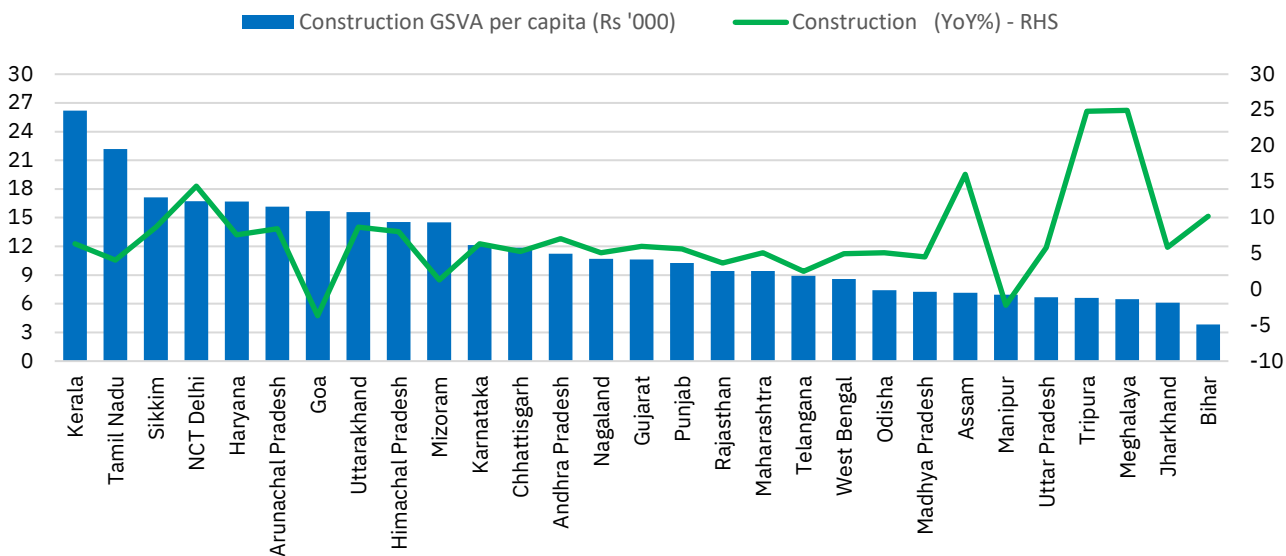
**Figure 8: Correlation between ease of doing business score and share of manufacturing in GSDVA across states**



Source: RBI, Department of Industrial Policy and Promotion, Government of India.

**The Construction sector is the second largest employer in the country** after Agriculture. With Rs13.8trn GSVA in FY20, the sector contributed around 7.6% over the year. There is a wide disparity across states in terms of overall contribution of the sector in GSVA, as shown in the following chart. The degree of inequality here, is however, low in the sector as compared to others, while there is a possibility of convergence in the medium-term as bottom 10 states grew by 10% in FY19 on average, which is much higher than the growth rate of top 10 states (6.4%) on average. Nevertheless, the per capita GSVA in Construction of top 10 states is around Rs17,540 on average, which is more than double that of the bottom 10 states (Rs6,700).

**Figure 9: State-wise GVA in Construction sector per capita and its annual growth in FY19**



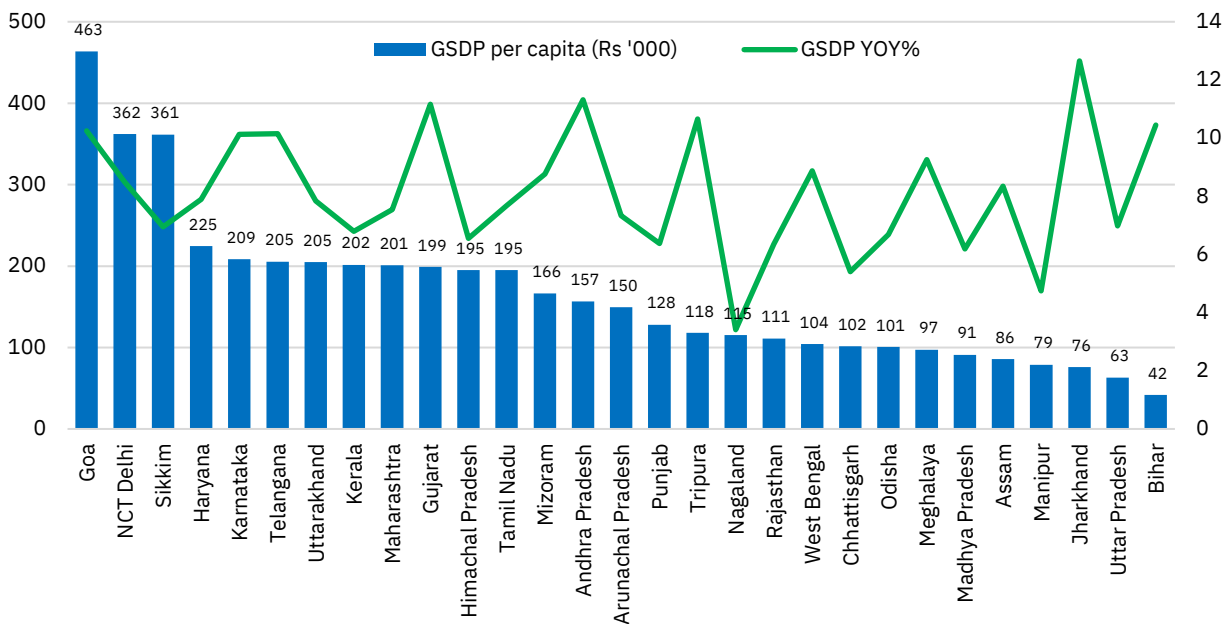
Source: CMIE: States of India, NSE Note: Sorted in an increasing order of GSDP per capita. GSVA of Maharashtra taken as average of FY17 and FY18.

**However, the recent convergence across states in the Construction sector may not offset rising inequality in per capita GSDP:** Overall inequality prevails across states as growth rate of per capita GSDP in top 10 states (8.7%) remained higher than the bottom 10 states (7.9%) in FY18, even as few poor states like Bihar and Jharkhand recorded relatively high growth over the year. There are multiple reasons behind that. In India, growth is mainly driven by service sector which is concentrated in a few states like Goa, Delhi, etc. They have been top performers with highest GSDP per capita of Rs 463k, and Rs 362k respectively, while Bihar and Uttar Pradesh being an agrarian state have been placed in the bottom of the list with GSDP per capita of merely Rs 42k and Rs 63k respectively.

There is a wide disparity across regions as well; per capita GSDP is relatively lower in Northern region than that of the Southern states; while the Western states fare well in this aspect. For example, Maharashtra and Gujarat have high per capita GSDP over the years of our period of study.

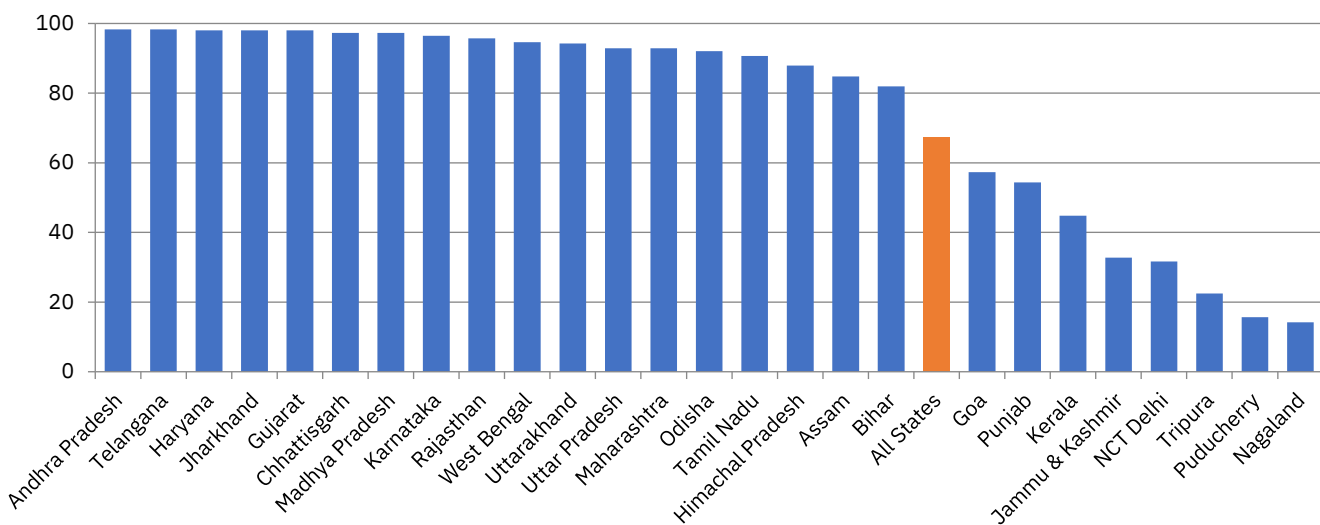


**Figure 10: Wide disparity across states in terms of per capita GSDP and the probability of convergence remains low**



Source: RBI State Finances, EPWRF, NSE Note: Data is taken as of FY18.

**Figure 11: Ease of doing business score across states in 2017**



Source: RBI, Department of Industrial Policy and Promotion, Government of India.

Keeping in mind the above findings, we have created an index based on GSDP per capita, share of Manufacturing, Construction and Services in total GSVA to capture economic development of each state in non-farm sectors their contribution to per capita GSDP over the year.


**Overall, Kerala and Goa lead in non-farm sectors; while Tripura and Madhya Pradesh have been placed in the bottom:** Kerala has been the top performer in non-agricultural sectors closely followed by Goa, Tamil Nadu and Delhi. In Kerala, high share of Construction and Services in GSVA made it the winner, whereas Goa being the top contributor in GSDP per capita and large share of manufacturing sector in GSDP makes it to the second spot. Tamil Nadu, Delhi, Uttarakhand, Sikkim, Himachal Pradesh and

Haryana are among well performing states in this section. In contrast, Tripura has been placed at the bottom with low contribution in Manufacturing and Construction, followed by Madhya Pradesh and Andhra Pradesh. Punjab being an agrarian state performs weakly in these parameters ranking much lower with a score of 0.29. Other states that perform poorly are Mizoram, Meghalaya, Assam, Nagaland, Odisha, Rajasthan and Bihar.

**Figure 12: Sub-indicators for estimating GSDP and Sector Composition score**

Sub-Indicators	Meaning	Significance
<b>GSDP per capita</b>	It is defined as Gross state domestic product divided by the states' population	This is a measure of per capita economic output of a state. An important indicator of economic performance and economic well being
<b>GSVA Manufacturing (% of GSVA)</b>	Gross value added (GVA) in manufacturing is the measure of the value of goods and services produced this sector of an economy. It is expressed in terms of percentage.	It measures the extent to which states through this sector are capable of boosting employment opportunities and ensuring better growth prospects
<b>GSVA Construction (%of GSVA)</b>	Gross value added (GVA) in Construction is the measure of the value of goods and services produced this sector of an economy. It is expressed in terms of percentage.	An important indicator of the development as it creates investment opportunities across various related sectors and significant contribution to national economy
<b>GSVA Services (%of GSVA)</b>	Gross value added (GVA) in Construction is the measure of the value of goods and services produced this sector of an economy. It is expressed in terms of percentage.	This indicator is indispensable for economic development in any economy and contributes significantly to export and provided large scale employment

Source: NSE.

**Figure 13: State-wise level of development in non-agricultural sectors**


States	GSDP per Capita (Rs '000)	Share of Manufacturing in GSVA at current basic prices (%)	Share of Construction in GSVA at current basic prices (%)	Share of Services in GSVA at current basic prices (%)	Development in Non-agri sectors
Kerala	202	10.8	13.1	63.7	0.56
Goa	463	44.0	3.5	38.1	0.55
Tamil Nadu	195	19.7	11.1	54.2	0.52
NCT Delhi	362	5.2	4.9	85.0	0.50
Uttarakhand	205	37.5	7.9	40.5	0.48
Sikkim	361	44.1	4.5	26.8	0.47
Himachal Pradesh	195	29.8	7.5	43.3	0.43
Haryana	225	20.2	7.8	49.9	0.43
Karnataka	209	15.9	5.8	65.2	0.41
Maharashtra	201	19.7	5.8	57.1	0.39
Gujarat	199	36.6	5.5	35.6	0.39
Chhattisgarh	102	14.7	11.5	37.1	0.37
Uttar Pradesh	63	14.5	10.2	47.2	0.35
Telangana	205	11.5	4.3	64.5	0.34
West Bengal	104	11.5	7.5	57.5	0.33
Manipur	79	2.8	8.5	66.4	0.33
Jharkhand	76	18.5	8.6	44.8	0.33
Arunachal Pradesh	150	3.2	10.3	43.2	0.33
Bihar	42	6.7	8.6	61.1	0.31
Meghalaya	97	8.2	6.9	60.5	0.31
Mizoram	166	0.6	9.1	47.6	0.31
Nagaland	115	1.4	8.6	56.4	0.31
Assam	86	12.9	8.0	48.0	0.30
Rajasthan	111	10.4	8.2	45.8	0.30
Odisha	101	18.9	7.2	40.2	0.29
Punjab	128	13.8	6.5	46.2	0.29
Andhra Pradesh	157	9.6	7.5	42.0	0.29
Madhya Pradesh	91	8.8	7.9	37.2	0.23
Tripura	118	3.6	5.5	46.9	0.20

Source: EPW, NSE. EPWRF and Population projections.

## Progress in human development

**India has been ranked 129<sup>th</sup> out of 189 countries globally** according to the 2019 Human Development Index published by the UNDP. The country continues to suffer in both Education and Health due to several factors including poor public services, unavailability of private facilities in remote areas and higher cost of such services in both rural and urban areas. In this section, we have constructed a human development indicator comprising both educational and health outcomes to understand how states have performed. In other words, the human development index helps us to assess the inequalities exists within the country in terms of education and health parameters.

**Figure 14: Sub-indicators to estimate Human Development score**

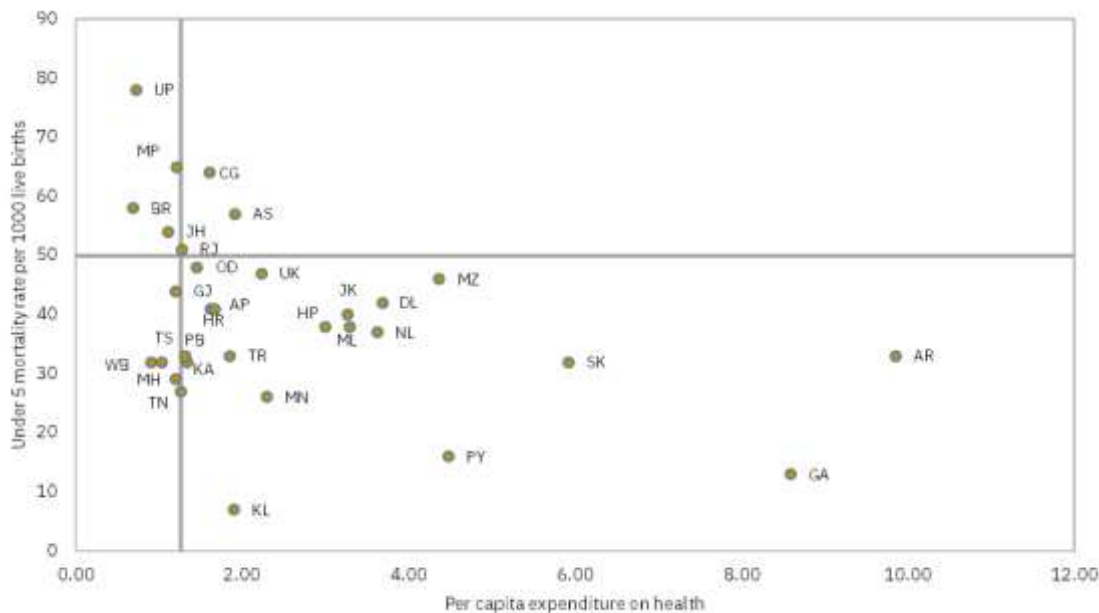
Sub-Indicators	Meaning	Significance
Adjusted Net Enrolment Ratio in Elementary (Class 1-8) and Secondary (Class 9-10) education	Adjusted net enrolment ratio in Elementary and Secondary education is calculated as the number of children in official school age who are enrolled either in Elementary or Secondary education expressed as a percentage of the total population of children in respective official school age.	It shows coverage of pupils in the official age group at level of Primary and Secondary education. A higher value indicates greater participation of school age population in the education system.
Average annual dropout rate at secondary level	Proportion of pupils from a cohort enrolled in secondary level at a given school year who are no longer enrolled in the following school year. Dropout rate by grade is calculated by subtracting the sum of promotion rate and repetition rate from 100.	A high dropout rate uncovers issues in the internal efficiency of the educational system. By comparing states based on this sub-indicator, it helps to recognize those which require greater policy emphasis. It is one of the key pointers for dissecting pupil flows from grade to grade within the educational cycle.
Gross Enrolment Ratio in Higher education (18-23 years)	Number of students enrolled in Higher education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education	A higher GER is indicative of greater degree of participation in the education system. It also presents an idea about capacity of education system to enrol students.
Proportion of trained teacher by education level (Elementary-secondary)	Number of teachers in a given level of education (elementary-secondary) who are trained is expressed as a percentage of all teachers in that level of education	This indicator measures the share of the trained teaching work force across states. A high value indicates that students are being taught by teachers who have appropriate and relevant training.
Percentage of schools with Pupil Teacher ratio less than/ equal to 30	Total number of pupils and students in the relevant level is divided by the number of qualified teachers in the same level	The pupil-teacher ratio is considered an important indicator of learning outcomes and overall quality of an education system. The higher the ratio, the lower the relative access of pupils to qualified teachers.
Under-5 mortality rate per 1000 live births	Under age 5 mortality is defined as the probability of a child born in a given year dying before reaching five years of age, and is expressed per 1000 live births.	This indicator presents a picture of child's health as well as the overall development and well-being of a population.
Percentage of households with any usual member covered by health scheme or health insurance	Percentage of any member in a household who is covered by health insurance or health scheme	It compares wide coverage of health insurance or schemes across states which holds great importance to understand expanding reach of government provided health services.
Total physicians, nurses and midwives per 10000 population	It is measure of essential health workers – Total physicians (includes include generalist and specialist medical practitioners), midwives and nurses expressed per '0000 population.	The health situation and the provision of services vary considerably from one State to another. This indicator shows availability of better trained human resources.

Source: Niti Aayog (SDG Report 2019), NSE.

**Wide disparities across states in health outcomes:** In spite of several government initiatives, child mortality rate remained high in many states. Uttar Pradesh and Madhya Pradesh have been the worst performers with 78 and 65 under-5 mortality rate (U5MR) per 1000 live births respectively, while Kerala and Goa improved the U5MR to merely 7 and 13 respectively in 2019.

**Higher public spending on health may have helped to reduce child mortality rates across states:** As shown in the following chart, there seems to be a negative correlation between per capita expenditure on health that has helped to improve overall health outcomes across many states like Kerala, Sikkim, Goa. On the other hand, Uttar Pradesh, Madhya Pradesh, Bihar have high U5MR largely due to lack of public spending on health. There are several exceptions too. Despite of having low per capita health expenditure, Maharashtra, Tami Nadu, Punjab could manage to keep the U5MR well below the national average, partly due to high out-of-pocket expenditure and availability of private health care facilities. However, their U5MR remain quite high on average as compared to U5MR of advances countries.

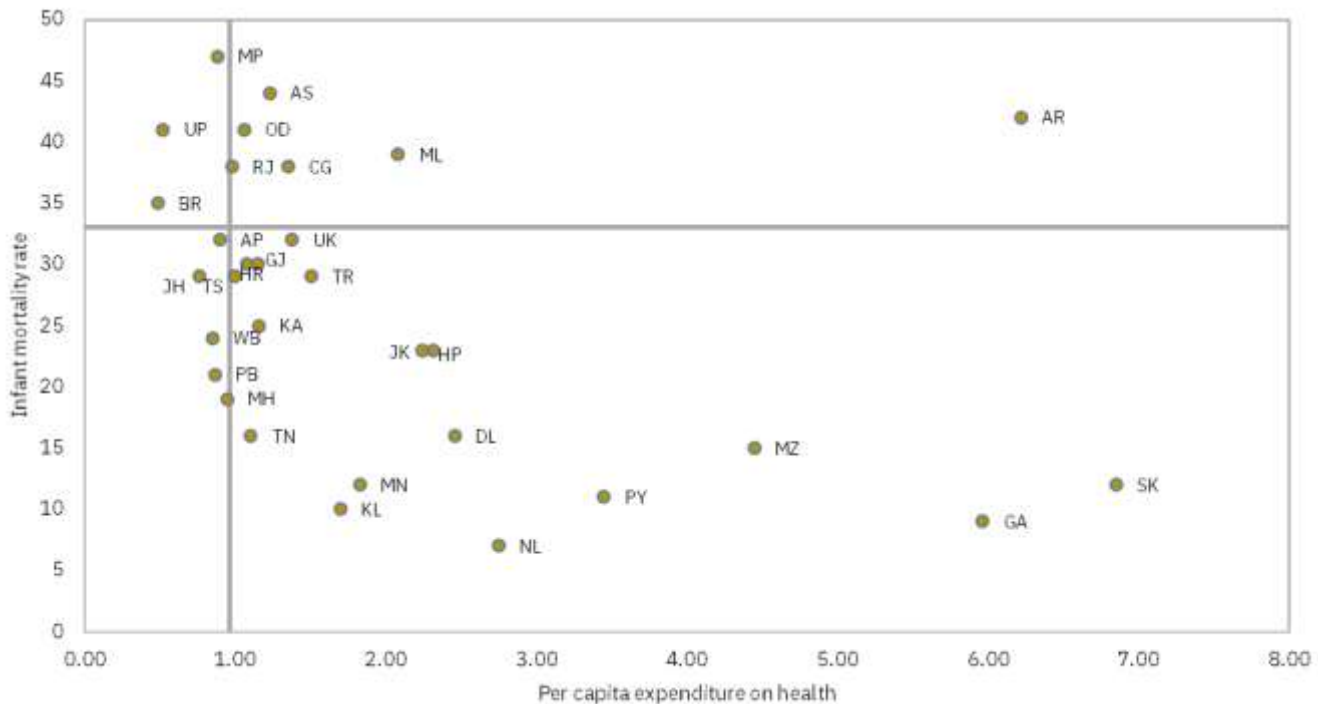
**Figure 15: Under-5 mortality rate vs. per capita expenditure on health**



Source: Niti Aayog (SDG Report 2019), NSE.

**The situation is somewhat similar in terms of infant mortality rate as well:** In this chart, the IMR (Infant Mortality Rate, defined as the number of deaths of children under the age of one per 1000 live births) is plotted against per capita health expenditure. The national average is 33 deaths per 1000 live births. Nagaland and Goa have performed extremely well with only 7 and 12 IMR respectively, while Madhya Pradesh and Assam were laggards with 47 and 44 IMR respectively. The per capita expenditure plays an important role as greater expenditure equating to better public health care services, that converted to lesser deaths.

**Figure 16: Infant mortality rate vs. per capita expenditure on Education**



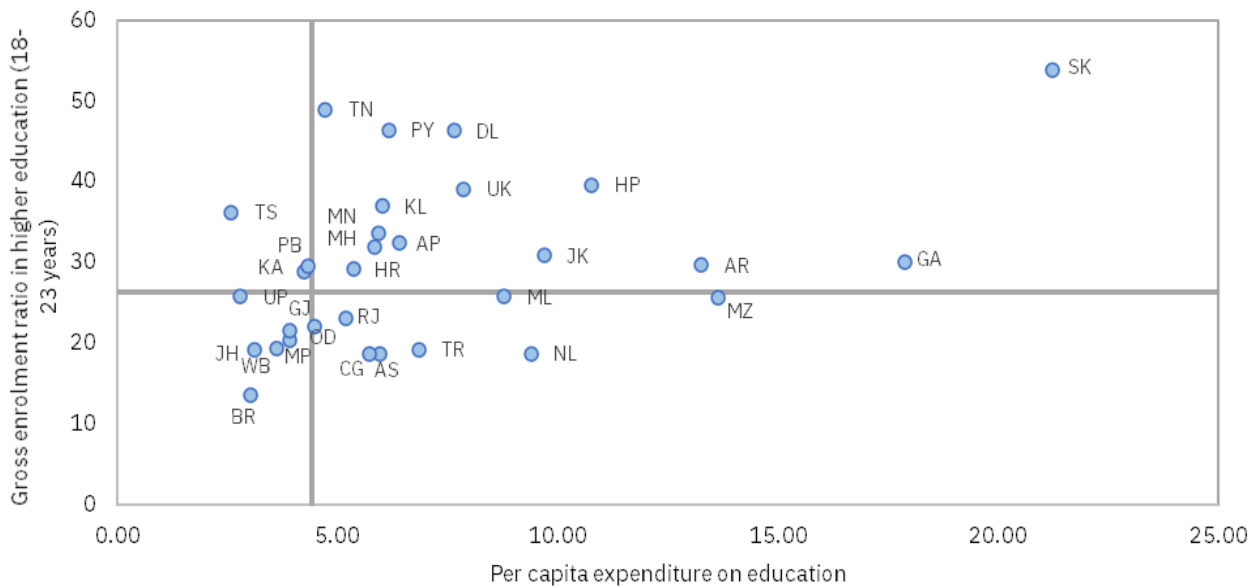
Source: Niti Aayog (SDG Report 2019), NSE.

**Several states have low health insurance coverage:** Merely 29% of households in India have at least one member covered under health scheme. Andhra Pradesh has the highest coverage (74.6%) followed by Chhattisgarh (68.5%) and Telangana (66.4%). Manipur languishing at the bottom with only 3.6% coverage followed by Nagaland and Uttar Pradesh who have about 6% of households with any usual member covered by health scheme or insurance. The recent policy initiative Ayushman Bharat undertaken by the Modi government may help to improve the situation significantly.

**In the Education sector, Tripura has been the top performer with highest adjusted net enrolment ratio in Elementary and Secondary education, and Goa has been second in FY20:** In India, adjusted net enrolment ratio in Elementary and Secondary education is 75.83. The north-eastern state Tripura has been able to achieve highest enrolment ratio of 94.72 followed by NCT Delhi (92.95) and Himachal Pradesh (92.87). Goa, Kerala and Tamil Nadu have also been performed well with high net enrolment ratio in both elementary and secondary levels. In contrast, Andhra Pradesh, Jharkhand, Madhya Pradesh and Uttar Pradesh recorded low enrolment ratio among major states.

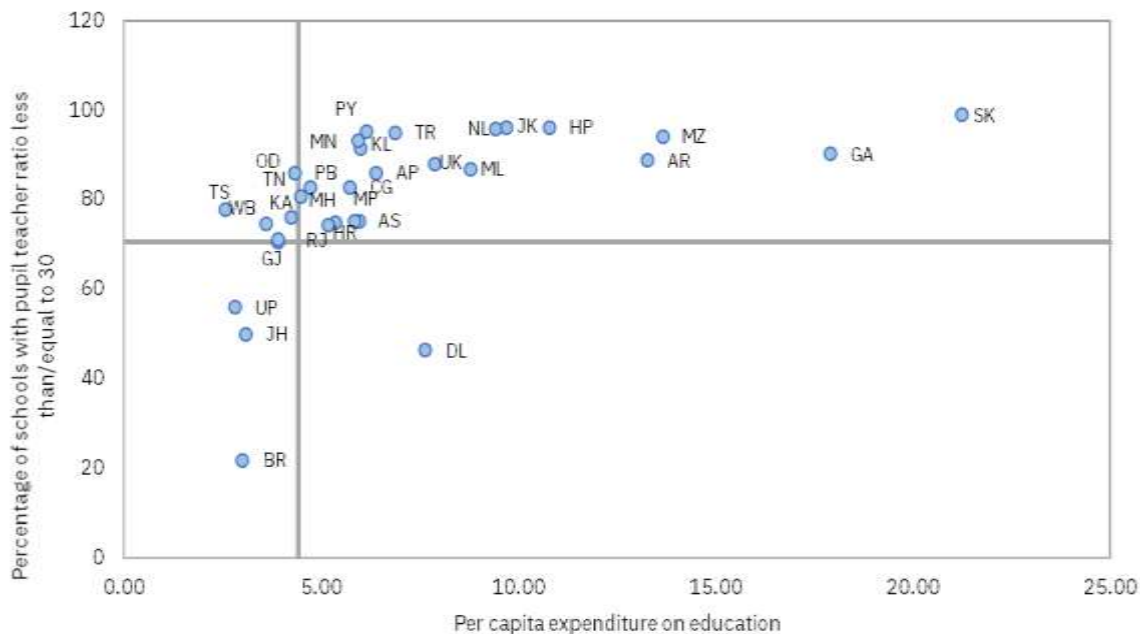
**Per capita government spending on Education is a leading determining factor to rise GER particularly in Higher education:** There is a clear positive relation with GER in Higher education and per capita public spending on Education as shown in the following chart. Several states including Sikkim, Himachal Pradesh, Delhi spent significantly large amount in Education which may have helped them to have better educational outcomes. Bihar, Jharkhand, West Bengal, on the other hand, have been worst performers in Education as they continue to spend a smaller amount on the sector.

**Figure 17: Gross enrolment ratio in Higher education (18-23 years) vs per capita expenditure on Education**



Source: Niti Aayog (SDG Report 2019), State Finance, NSE.

**Figure 18: Percentage of schools with pupil teacher ratio less than/equal to 30 vs per capita expenditure on Education**




Source: Niti Aayog (SDG Report 2019), NSE

**There are several other factors that affect educational outcomes** of a state viz., per capita income, availability of private educational institutes, training of teachers, active community participation, use of technology and pupil teacher ratio. Only 70.43% of schools in India have a pupil teacher ratio of less than or equal to 30 i.e., availability of at least one teacher for 30 students. Sikkim has performed quite well in Education as 99% of all its schools has pupil teacher ratio of less than or equal to 30, while Bihar has been placed at the bottom with lowest pupil teacher ratio partly due to lack of public spending in the state.

**Karnataka performed well with a large number of trained teachers:** In India, about 79% of teachers in elementary and secondary schools are trained. Assam, Bihar and Sikkim have less than 30% trained teachers at elementary and secondary level. Karnataka has been placed at the top with 99.66% of trained teachers followed by Punjab (99.14%) and Meghalaya (98.26%). States like Haryana, Himachal Pradesh, Mizoram, Madhya Pradesh and West Bengal have above 90% trained teachers by education level.

Overall, Kerala has been the top performer in human development indicator, closely followed by Tamil Nadu and Himachal Pradesh. On average, southern and northern states have performed much better in Education and Health, while eastern states have been placed at the bottom due to lack of public spending in these sectors and poor infrastructure in health care centres and public schools. Notably, Bihar is one of the worst performers with highest drop-out rate and lowest GER. Other poor performing states include Jharkhand and Uttar Pradesh. Many north-eastern states, Mizoram, Arunachal Pradesh and Tripura have done well with the help of trained teachers, low pupil teacher ratio and greater share of households with health insurance, despite of having poor connectivity and infrastructure.



**Figure 19: State-wise Human development score**


States	Adjusted Net Enrolment Ratio in Elementary and Secondary education	Average annual Dropout rate at secondary level (%)	Gross Enrolment Ratio in Higher education (18-23 years) (%)	% of teachers trained in Elementary and Secondary level (%)	% of schools with pupil-teacher ratio <= 30	Under-5 mortality rate per 1,000 live births	% households with any usual member covered by health insurance	Total physicians, nurses and midwives per 10,000 population	Human development Score
Kerala	92	13	37	44	91	7	48	112	0.76
Himachal Pradesh	93	7	40	92	96	38	26	67	0.64
Tamil Nadu	93	10	49	33	83	27	64	71	0.64
Mizoram	80	31	26	98	94	46	47	54	0.58
Arunachal Pradesh	79	30	30	98	89	33	58	24	0.58
Karnataka	86	26	29	100	76	32	28	72	0.57
Tripura	95	30	19	82	95	33	58	22	0.57
Andhra Pradesh	64	16	32	50	86	41	75	92	0.57
Punjab	79	9	30	99	86	33	21	56	0.54
Manipur	88	21	34	81	93	26	4	44	0.52
Telangana	83	22	36	47	78	32	66	11	0.50
Goa	90	16	30	50	90	13	16	25	0.50
Uttarakhand	77	9	39	87	88	47	20	15	0.49
Odisha	82	29	22	69	81	48	48	41	0.48
NCT Delhi	93	11	46	70	46	42	16	44	0.48
Meghalaya	68	28	26	98	87	40	35	28	0.48
Maharashtra	81	11	32	71	75	29	15	43	0.46
Chhattisgarh	77	24	19	55	83	64	69	16	0.44
Haryana	75	12	29	96	75	41	12	26	0.44
West Bengal	72	27	19	91	75	32	33	27	0.44
Sikkim	45	24	54	27	99	32	30	24	0.40
Madhya Pradesh	70	24	22	95	71	65	18	33	0.40
Gujarat	75	24	20	51	70	44	23	43	0.36
Rajasthan	72	15	23	32	74	51	19	50	0.33
Assam	81	28	19	19	75	57	10	23	0.27
Nagaland	56	31	19	50	96	37	6	1	0.26
Uttar Pradesh	69	13	26	50	56	78	6	13	0.25
Jharkhand	68	37	19	48	50	54	13	4	0.22
Bihar	77	40	14	25	22	58	12	19	0.15

Source: NSE, SDG Report, Niti Aayo. MOSPI.

## Fiscal health of states

**State governments has paramount importance in India:** According to the State list and the Concurrent list in Schedule Seven of the Constitution of India, Indian States are liable to develop Agriculture, Health, Education, Water, Sanitation, Communications, among other sectors with the help of their own revenue sources and revenue transfers from the Central Government. The mounting importance of state finances as a key tool for economic progress is evident from the fact that the size of overall development expenses of states has always been greater than the Center. However, wide disparity persists across states in terms of their revenue and expenditure pattern, and how they have controlled their fiscal deficits over time.

**On the revenue side, tax has been the prime source of income for states over the last two decades:** Overall, total revenue rose by a CAGR of ~15% to reach at Rs31.5trn in FY20, vs. Rs2trn in FY00, largely led by a sharp rise in revenue base i.e. per capita income and implementation of VAT in FY03. There are multiple revenue sources for states. Among them, tax revenue contributed more than 70% of total revenue receipts over the last 20 years.

Out of total tax revenue, around 27% came from share in Central taxes and 19.4% from SGST and 5% from taxes on property and capital transactions. Among others, states receive around 20.5% of total revenue receipts as grants from the Center to finance Central Plan Schemes and Centrally Sponsored Schemes.

**Figure 20: Revenue receipts (% share of total receipts) break up of all states combined**

Revenue receipts (as % of total revenue receipts)	FY00	FY05	FY10	FY15	FY16	FY17	FY18	FY19	FY20
1. Total revenue									
1.1 Tax revenue	70.6	71.9	68.7	70.2	73.8	74.3	74.8	70.9	71.7
1.1.1 State's Own Tax Revenue	48.9	50.8	47.3	49.0	46.2	44.6	48.7	44.3	44.7
1.1.1.a Taxes on Income	0.9	0.6	0.5	0.3	0.3	0.3	0.2	0.2	0.2
1.1.1.b Taxes on Property and Capital Transactions	4.7	6.0	5.9	5.9	5.7	4.9	5.3	5.0	5.1
1.1.1.c Taxes on Commodities and Services	43.3	44.2	40.9	42.7	40.2	39.4	43.1	39.1	39.4
SGST	0.0	0.0	0.0	0.0	0.0	0.0	15.2	19.3	19.4
Other taxes on Commodities and Services	43.3	44.2	40.9	42.7	40.2	39.4	27.9	19.8	20.0
1.1.2 Share in Central Taxes	21.7	21.1	21.5	21.2	27.6	29.7	26.1	26.5	27.0
1.2. Non-tax revenue	29.4	28.1	31.3	29.8	26.2	25.7	25.2	29.1	28.3
1.2.1 State's Own Non-Tax Revenue	14.5	12.8	11.6	9.0	8.4	8.3	7.7	7.8	7.8
1.2.2 Grants from the Centre	14.9	15.3	19.7	20.8	17.8	17.4	17.5	21.3	20.5
1.2.2.a Central Plan Schemes and Centrally Sponsored Schemes	4.0	3.2	4.2	3.6	3.8	2.7	9.5	11.9	12.1
1.2.2.b Other grants from Centre	10.9	12.1	15.4	17.2	14.0	14.7	8.0	9.4	8.4

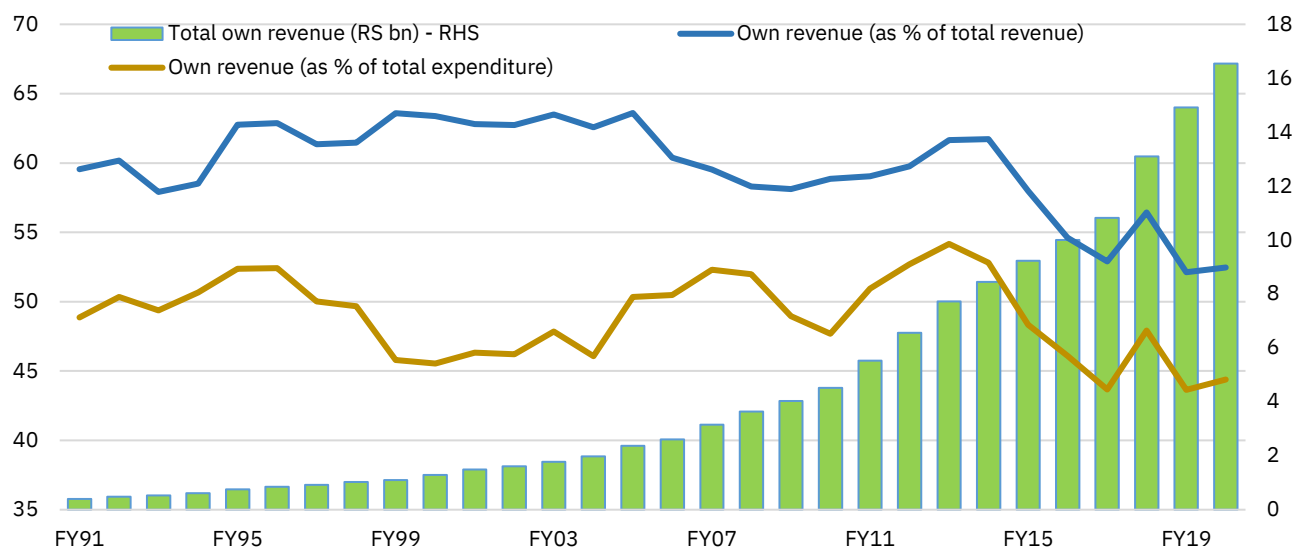
Source: RBI State Finances, NSE

**Figure 21: Revenue receipts growth of all states combined**

Revenue receipts (YoY%)	FY00	FY05	FY10	FY15	FY16	FY17	FY18	FY19	FY20
1. Total revenue	17.4	17.5	10.6	16.2	15.2	11.6	13.4	23.3	10.2
1.1 Tax revenue	14.3	17.9	9.3	8.4	21.1	12.4	14.1	16.8	11.5
1.1.1 State's Own Tax Revenue	15.4	18.3	12.8	9.4	8.7	7.8	23.8	12.2	11.1
1.1.1.a Taxes on Income	24.6	4.1	9.0	2.5	2.1	4.7	0.1	1.9	10.5
1.1.1.b Taxes on Property and Capital Transactions	13.5	22.4	9.0	8.1	10.7	-3.5	22.6	16.7	10.4
1.1.1.c Taxes on Commodities and Services	15.5	18.0	13.4	9.6	8.5	9.4	24.2	11.7	11.2
SGST	-	-	-	-	-	-	-	56.0	11.0
Other taxes on Commodities and Services	15.5	18.0	13.4	9.6	8.5	9.4	-19.7	-12.5	11.3
1.1.2 Share in Central Taxes	11.9	17.1	2.5	6.1	49.8	20.1	-0.4	25.5	12.1
1.2. Non-tax revenue	25.7	16.6	13.4	40.2	1.1	9.6	11.4	42.4	7.1
1.2.1 State's Own Non-Tax Revenue	22.9	24.5	9.0	8.4	7.0	10.3	6.0	24.2	9.9
1.2.2 Grants from the Centre	28.5	10.7	16.2	60.6	-1.5	9.3	14.0	50.5	6.1
1.2.2.a Central Plan Schemes and Centrally Sponsored Schemes	14.8	4.6	13.3	17.6	22.4	-19.4	290.4	55.2	12.1
1.2.2.b Other grants from Centre	34.3	12.4	17.0	73.9	-6.4	17.1	-37.8	44.9	-1.4

Source: RBI State Finances, NSE.

**States' dependency on centre increased post GST implementation:** Despite of a steady rise in states' own revenue, their dependency on central transfers increased significantly over the last five years partly due to the implementation of GST.

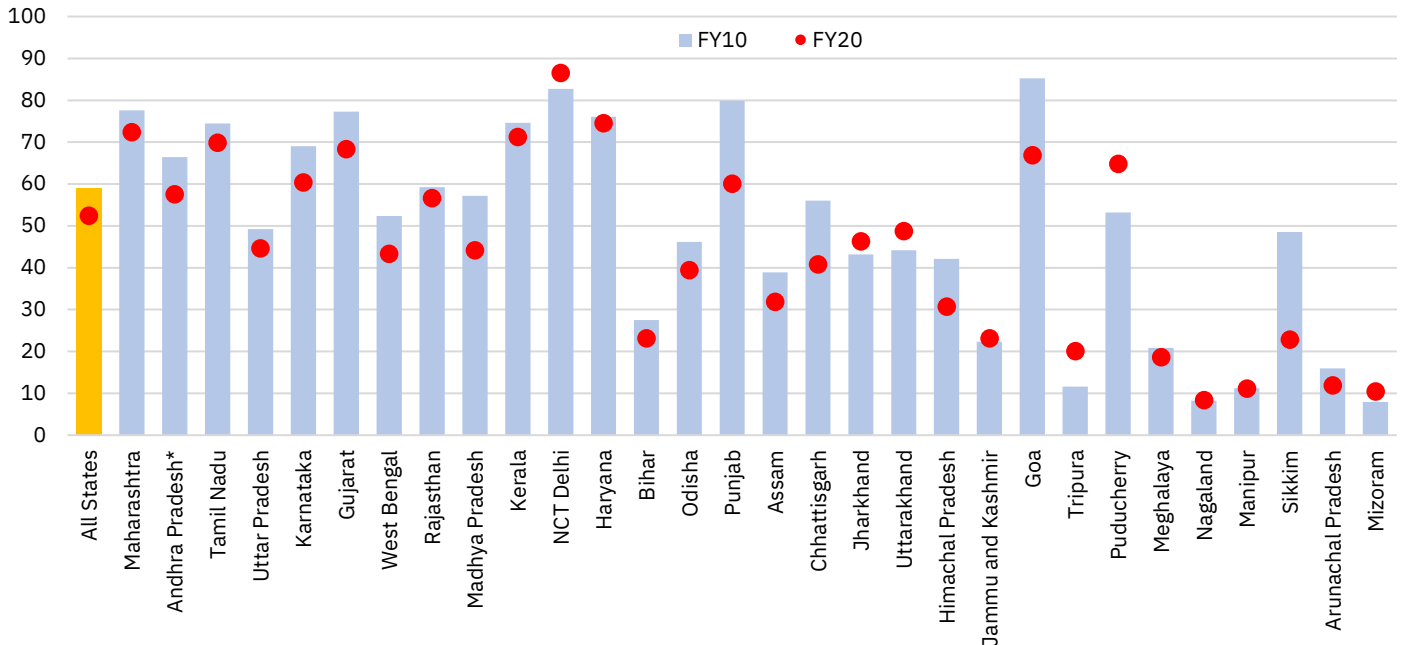
**Figure 22: States own revenue sources since FY91**


Source: RBI State Finances, NSE

**The degree of dependency varied widely across states:** The share of total revenues from own sources remained quite high in Haryana, NCT Delhi, Maharashtra, Tamil Nadu, Gujarat. In contrast, several North eastern states are highly dependent on central transfers. Over the last five years, Nagaland's revenue collection through own sources has been lowest followed by Manipur and Mizoram partly due to the Finance Commission

recommendation as poor states get a higher share of central revenue to finance their developmental activities.

**Figure 23: State-wise own revenue (as % of total revenue)**

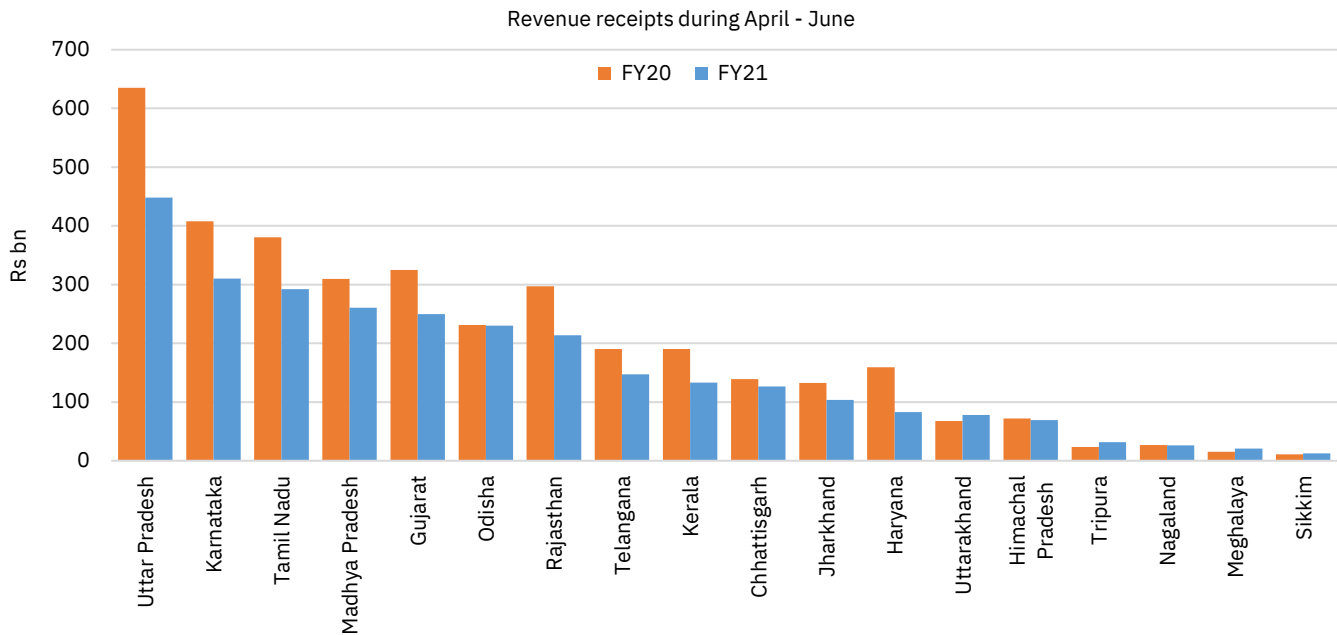


Source: RBI State Finances, NSE Note : States are sorted as per GSDP in FY18

**Revenue receipts plummeted in FY21 amid a strict lockdown:** During the pandemic quarter, revenue collections plunged due to stringent lockdown for over 60 days beginning March 25<sup>th</sup> followed by a gradual unlock process. Total receipts for these 17 states fell by 22% YoY in Q1 FY21, primarily led by a sharp drop in tax revenues.

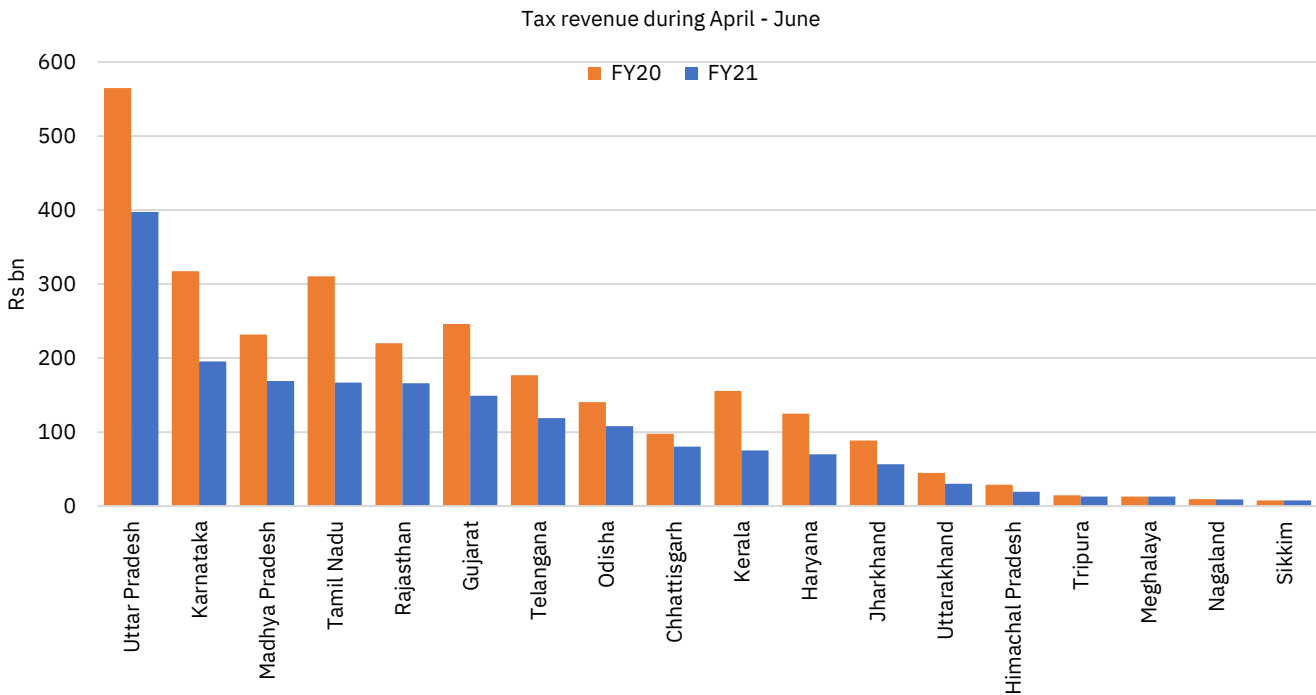
Except Sikkim, all other states recorded a decline in tax revenues in Q1 FY21, led by Kerala which reported a 52% YoY drop in tax collections, followed by Haryana and Tamil Nadu. Sikkim registered a modest 2% YoY increase in tax revenues, partly attributed to low incidence of COVID-19 infection in the first quarter. Other north-eastern states, however, witnessed a marginal decline in tax revenues, thanks to stringent lockdown measures taken by the Government, even as they have been less affected by the pandemic thus far. States, however, reported a strong growth in non-tax revenues, led by Uttarakhand, Telangana and Tamil Nadu.

**Figure 24: Impact of COVID-19 on revenue receipts in select states**

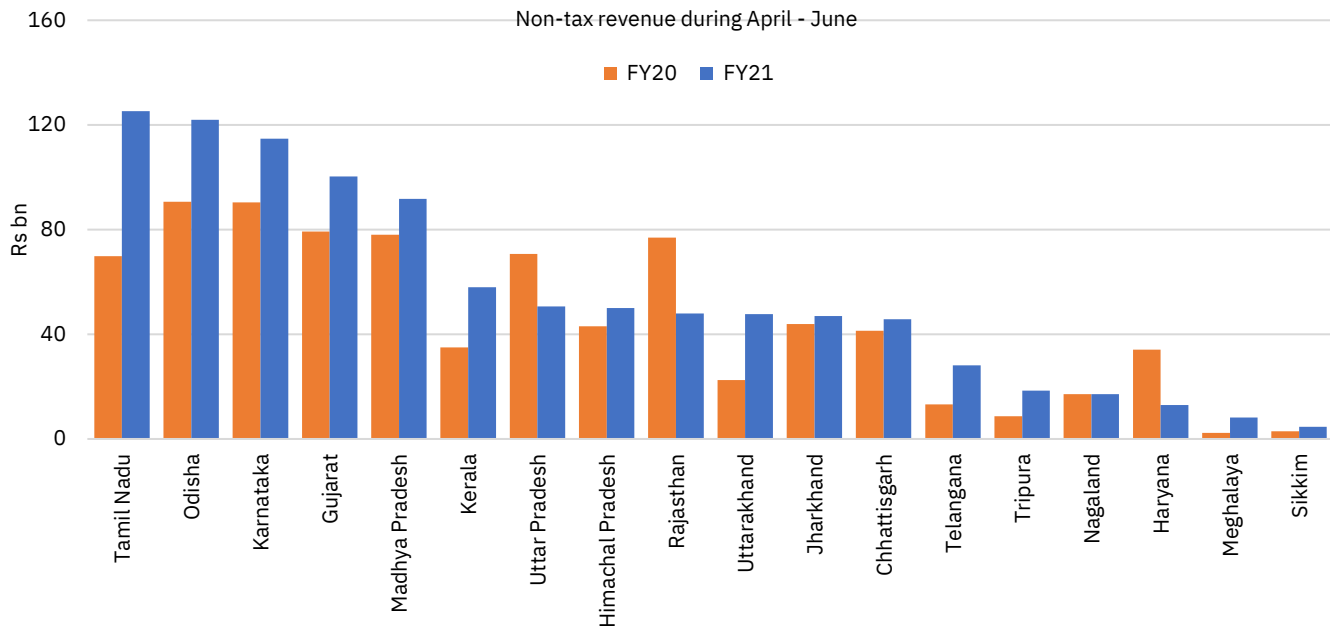


Source: RBI State Finances, CAG, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20.

**Figure 25: Impact of COVID-19 on tax-revenue in select states**



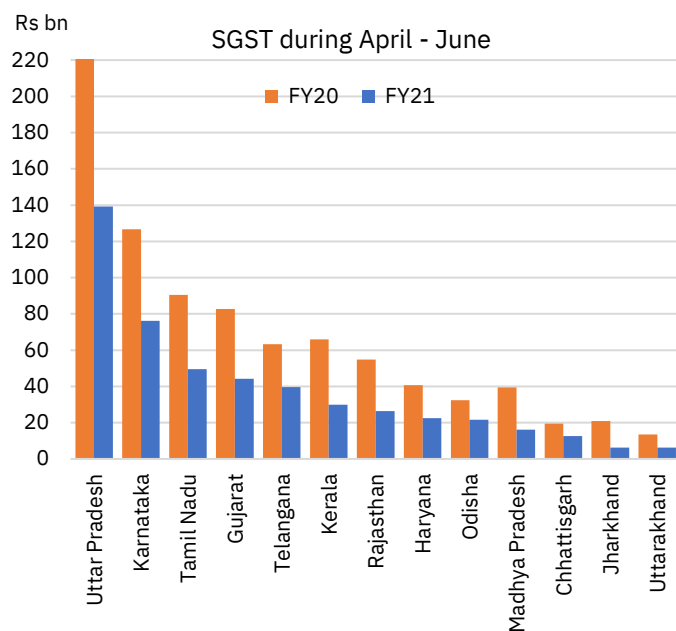
Source: RBI State Finances, CAG, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20

**Figure 26: Impact of COVID-19 on non-tax revenue in select states**


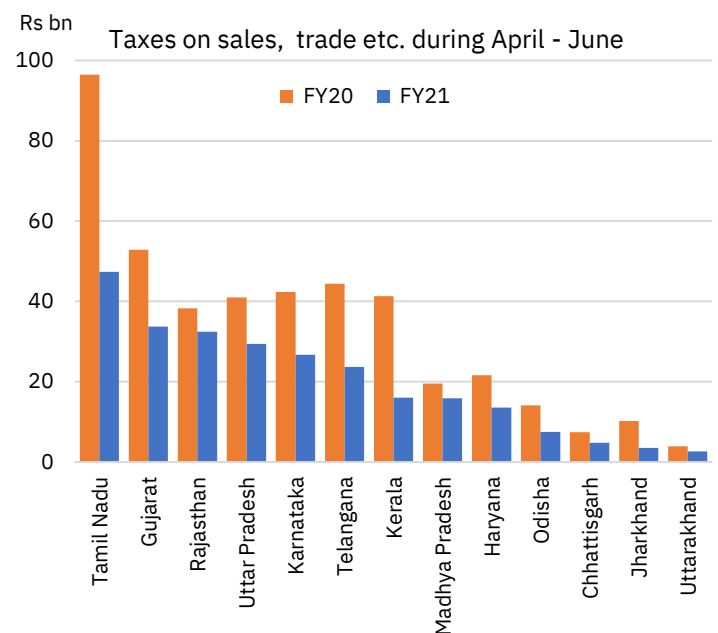
Source: RBI State Finances, CAG, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20.

**Rise in taxes on liquor and fuel could not offset total revenue fall from other sources:**

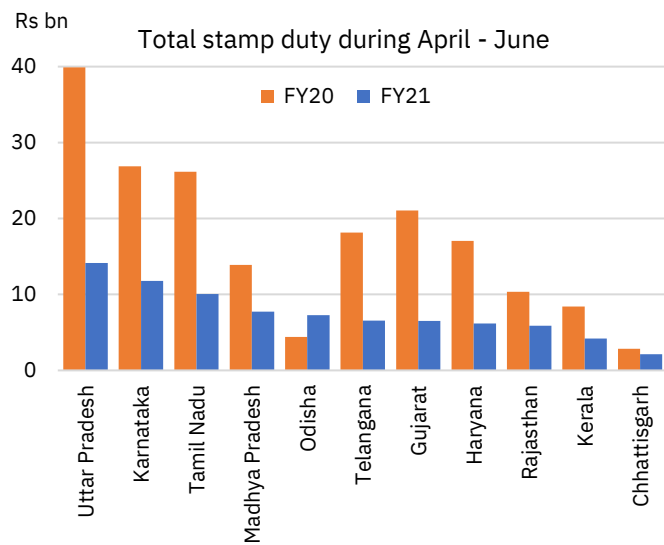
As shown in the following charts, States' tax revenue fell sharply across all categories. To overcome from the sudden fall in revenue receipts during the lockdown period, states made several attempts to increase fuel and liquor taxes and relaxed lockdown restrictions on liquor consumption, but it could not offset the overall decline in tax revenue given their low contribution to the overall revenues.

**Figure 27: Impact of COVID-19 on SGST in select states**


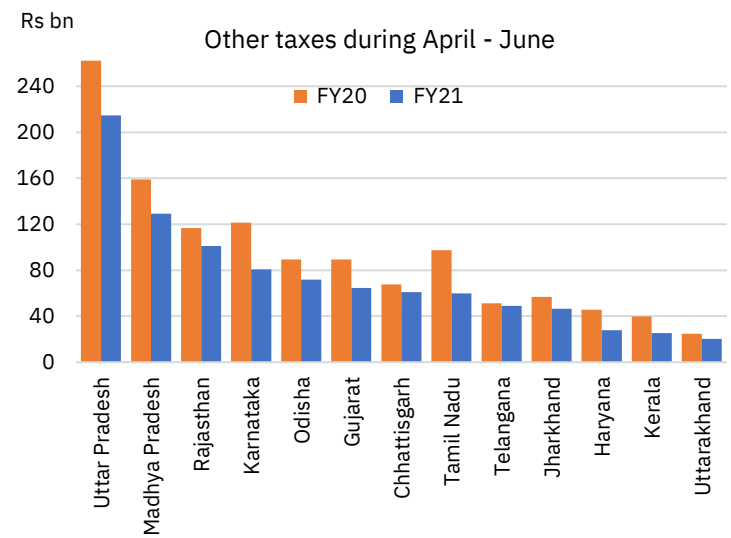
Source: RBI State Finances, CAG, NSE.

**Figure 28: Impact of COVID-19 on taxes on sales and trades in select states**


Source: RBI State Finances, CAG, NSE.

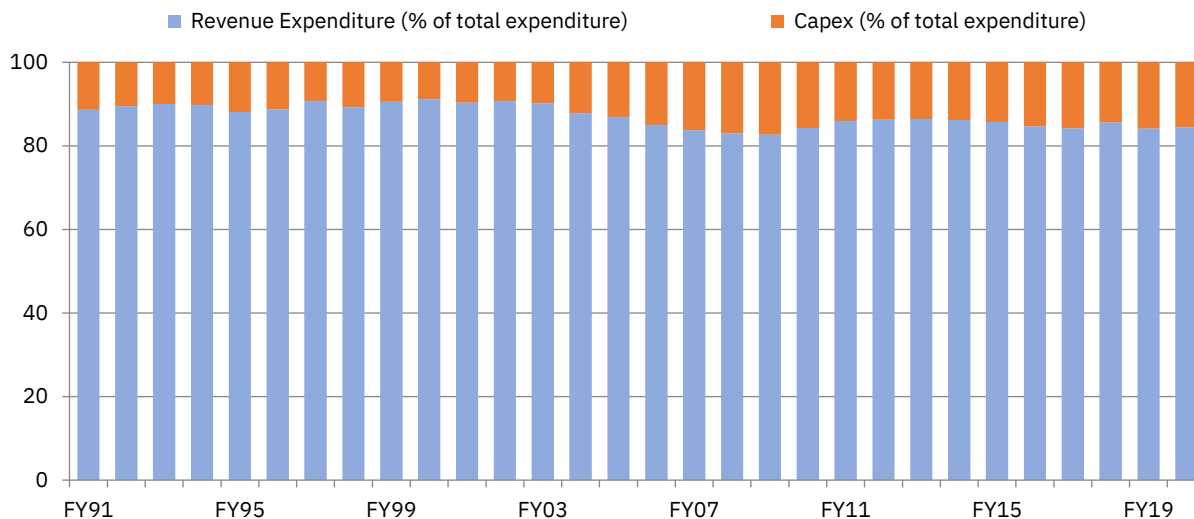
**Figure 29: Impact of COVID-19 on stamp duty collections in select states**


Source: RBI State Finances, CAG, NSE.

**Figure 30: Impact of COVID-19 on other taxes in select states**


Source: RBI State Finances, CAG, NSE.

**On the expenditure side, States in India are generally cash-strapped** as majority of their expenditure is just to pay salaries, pensions. As a result, capex remains low across many states to meet their FRBM fiscal targets. Besides, a sudden jump in outstanding debt under the UDAY scheme and providing farm loan waiver between FY15-FY18 had further deteriorated states fiscal condition and left no room to states for increasing capex.<sup>5</sup>

**Figure 31: All states expenditure pattern (as % of total expenditure)**


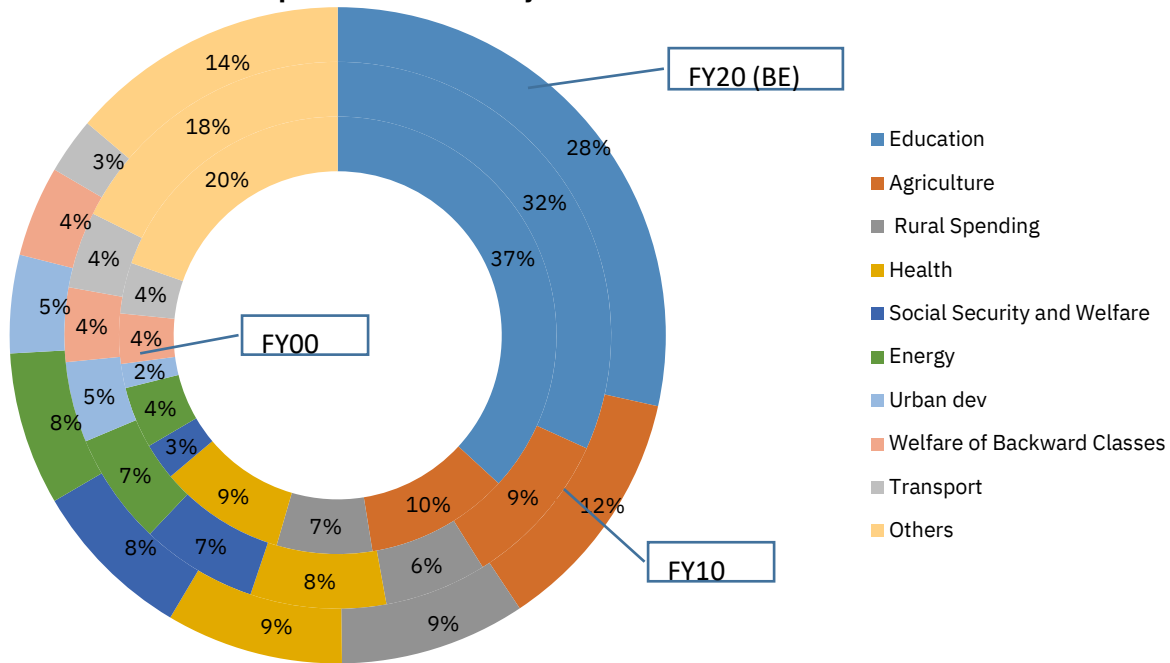
Source: RBI State Finances, NSE

**Out of total revenue spending, states continued to spend its largest share on Education** as many centrally sponsored schemes are linked with Education, followed by Agriculture, Rural development and Health. In Agriculture, states spent a large share to

<sup>5</sup> RBI State Finances: A study of Budgets (2018), Fiscal Position of State Governments, <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/2CHAPTER7266F72F84FF4E37974112DA9DDF6D0D.PDF>

procure farm produces at minimum support price, provisioning irrigation facilities and extension services for farmers.

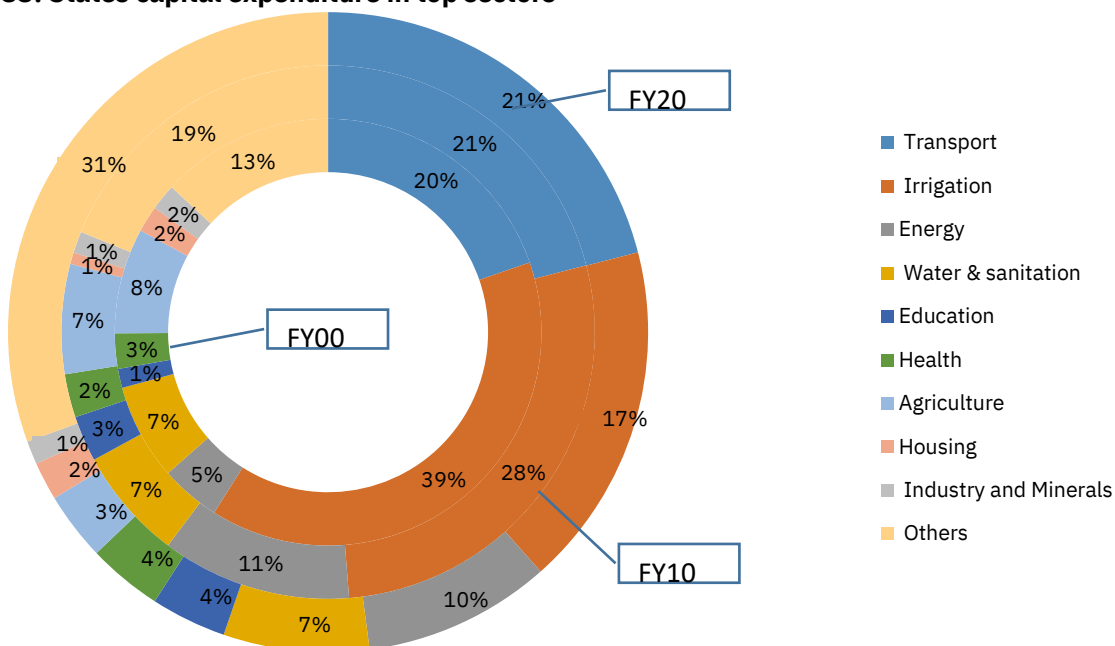
**Figure 32: States' revenue expenditure under major heads**



Source: RBI State Finances, NSE

**In case of capex; states spent more on Transport and Irrigation:** Capex on Transport maintained its share in total capex at around 21% over the last 20 years, while the share fell sharply in Irrigation from 39% in FY00 to merely 17% in FY20. Energy sector saw a renewed interest from the state government with a rise in their share of capex from 5% in FY00 to 11% in FY10 and remained stable thereafter. Among others, capex on Education and Health as percentage of total capex expenditure remained low throughout the period.

**Figure 33: States capital expenditure in top sectors**



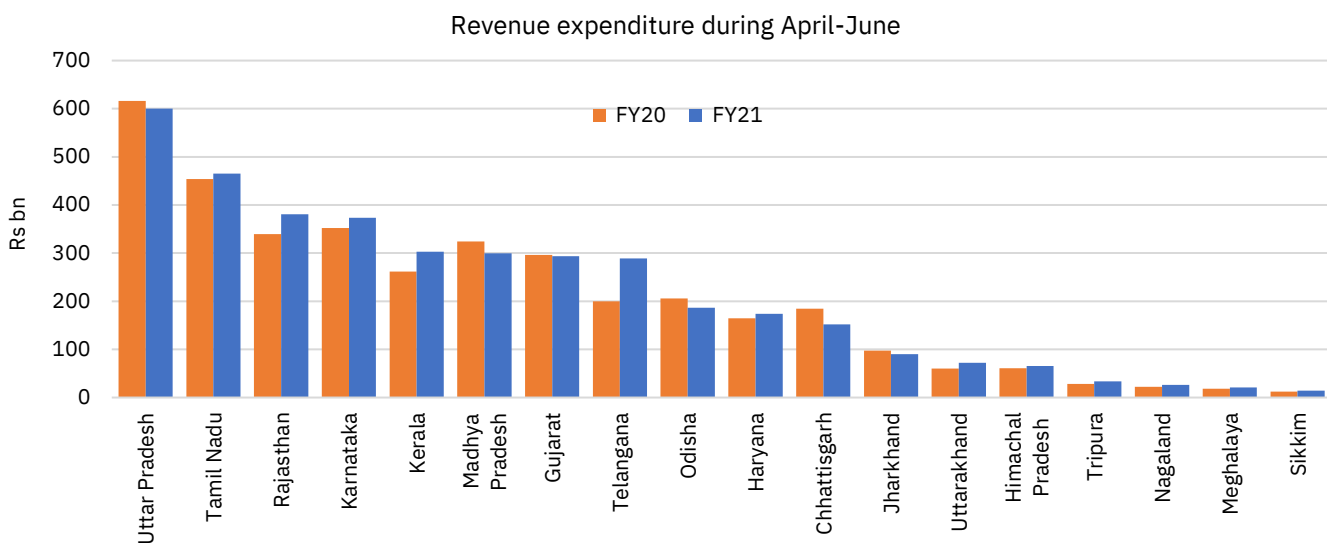
Source: RBI State Finances, NSE



## Revenue expenditure increased significantly in FY21 to meet additional health spending,....

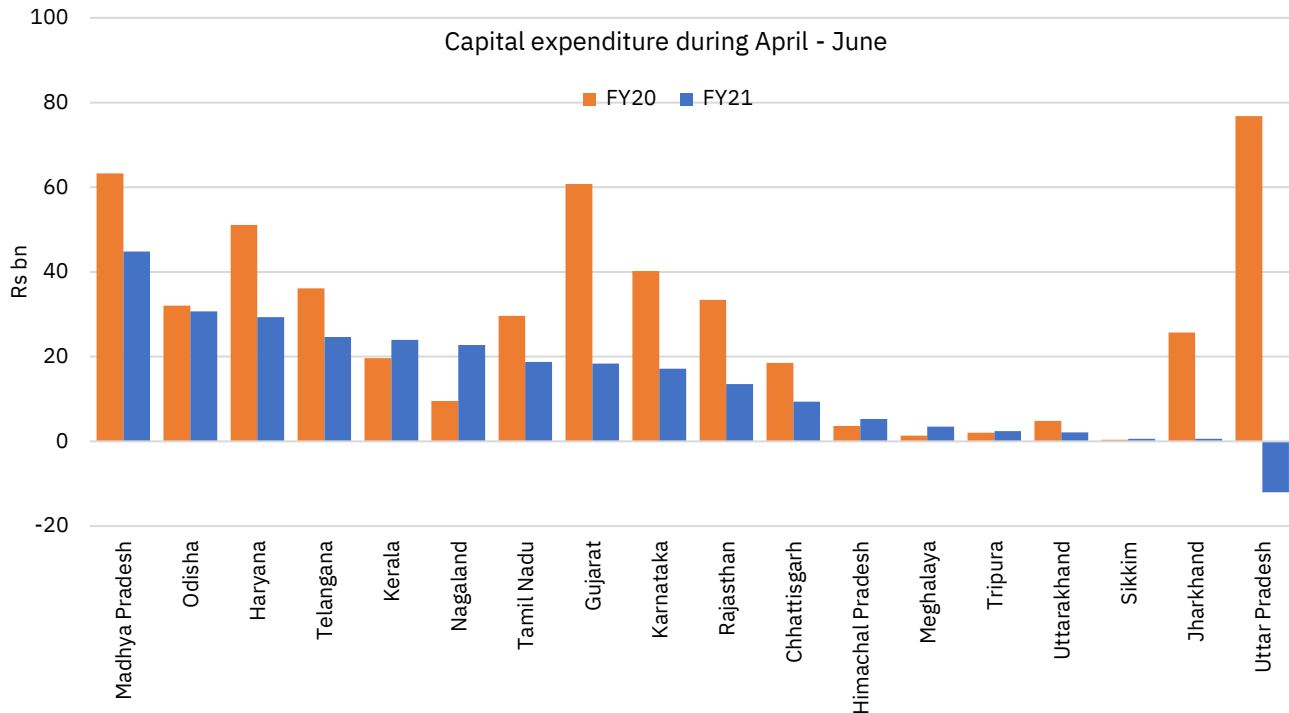
Out of 17 states, who reported their finances for Q1FY21, revenue expenditure of 13 states rose by ~15%YoY during Apr-Jun'20 primarily due to a sudden rise in health expenditure. Amongst these, Telangana's revenue expenditure rose by 45% to Rs289bn in Q1FY21 vs. Rs199bn in the same period last year. Kerala, Rajasthan and Uttarakhand saw their revenue expenses rising by ~16% YoY in Q1 FY21. In contrast, Chhattisgarh managed to cut down its revenue expenditure by 17% YoY to Rs 152bn in Q1 FY21. Odisha, Jharkhand and Uttar Pradesh also curtailed their revenue spending in the first quarter.

**Figure 34: Impact of COVID-19 on revenue expenditure in select states**



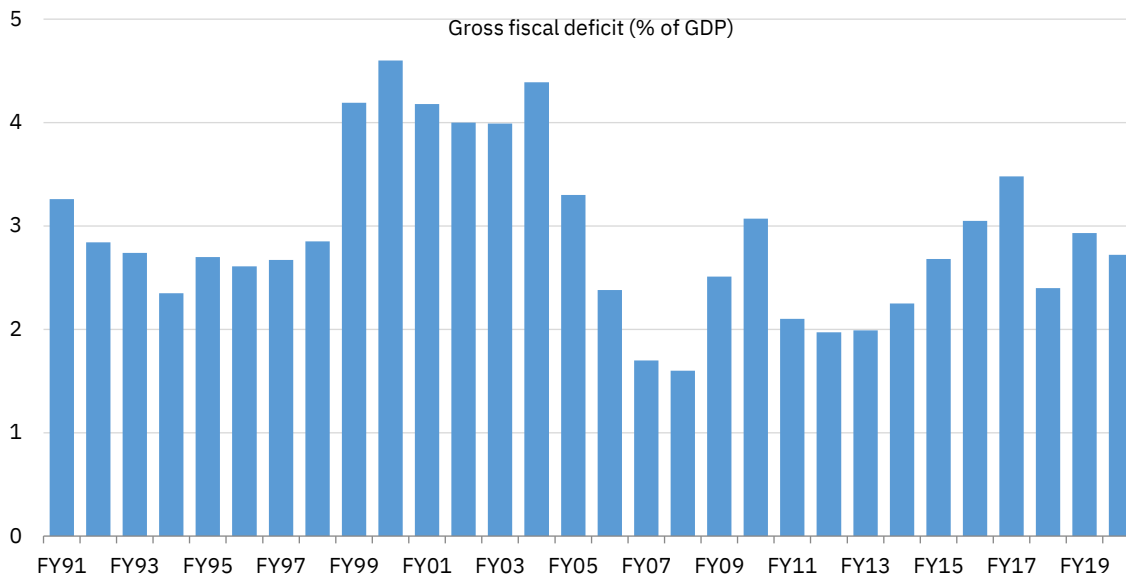
Source: RBI State Finances, CAG, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20.

**...which has been partly compensated by a sharp drop in capital expenditure:** Several states including Jharkhand, Karnataka, Chhattisgarh, Haryana and Telangana significantly reduced their capital expenditure in the first quarter of FY21 to make space for rising expenses on public healthcare. Notably, Jharkhand curtailed its capex by 98% YoY in Q1FY21, followed by Rajasthan (59%), Karnataka (57%), and Uttarakhand (57%). On the contrary, Kerala and several North-eastern states increased their capital spending capex during this period given they had limited impact of COVID-19 till June.

**Figure 35: Impact of COVID-19 on capex in select states**


Source: RBI State Finances, CGA, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20.

**Overall, states' fiscal situation deteriorated considerably till FY17:** States gross fiscal deficit increased significantly between FY12 and FY17 due to exorbitant rise in revenue expenditure, transfer of interest burden from the Center through the UDAY Scheme, lower growth in tax revenue amid slow economic growth over the latter half of the decade. The situation improved marginally since then, thanks to a sharp rise in total revenue growth, and a significant fall in capex growth particularly in FY18.

**Figure 36: Trend of gross fiscal deficit of Indian states**


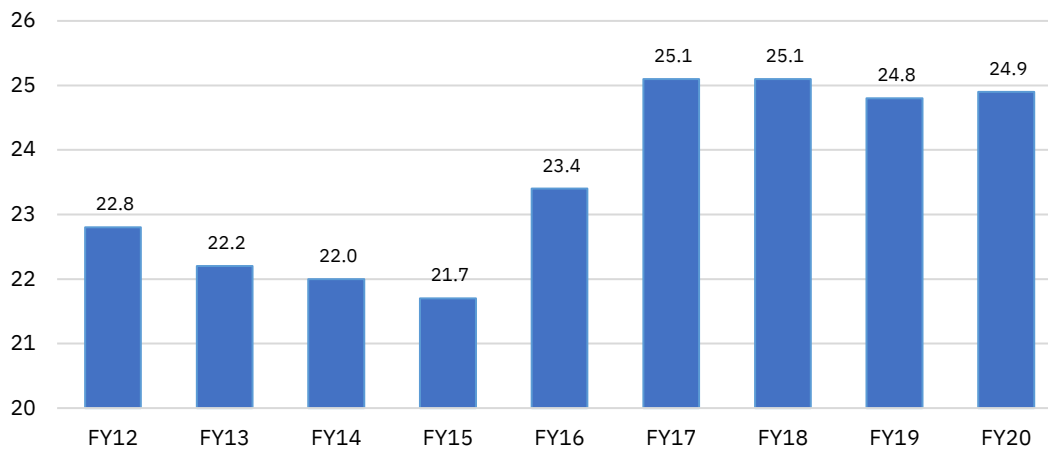
Source: CMIE Economic Outlook

**The situation has been quite different across states:** Gross fiscal deficit for certain states like Rajasthan was as high as 9.3% of GSDP in FY16, followed by Haryana, Jharkhand, Uttar Pradesh and Punjab largely due to the transfer of outstanding debt of

power distribution companies undertaken from the Central government under the UDAY scheme.<sup>6</sup> This further increased interest burden on the states. Besides, farm loan waiver schemes and pay revisions exaggerated the pressure in various states. Notably, Punjab's GFD rose to as high as 15% of GSDP in FY17 that had resulted a further rise in outstanding debt. However, on the positive side, small states like Arunachal Pradesh, Sikkim, Mizoram along with NCT Delhi reported a fiscal surplus between FY16-FY17 due to a sharp rise in their total revenue receipts.

**Outstanding liabilities jumped up in several states:** Outstanding liabilities of States accelerated sharply during the period FY17-FY18, following the issuance of UDAY bonds, from 21.7% in FY15 to 25.1% during FY17 and FY18.<sup>7</sup> As a result, 19 States/UTs crossed the 25% threshold limit according to the FRBM Act. Among major states, Punjab had highest outstanding debt as % of GSDP (~41%) in FY18, followed by Uttar Pradesh and West Bengal.

**Figure 37: Outstanding debt (as % of GSDP) of all states combined**



Source: RBI State Finances, NSE.

**Overall impact of COVID-19 on finances situation has been varied widely across states** as depicted in the following charts. Several states like Kerala, Rajasthan and Telangana have recorded a sharp jump in GFD as a share of total budgeted estimates. Kerala's fiscal deficit touched ~68% of its budget estimate of FY21 by the end of June, as against 35.7% in Q1 FY20 due to a sudden rise in revenue expenditure while total tax revenue fell sharply amid a strict lockdown. Telangana's GFD has crossed half of its budget estimates (i.e. 53.2%) in the first three months of the current fiscal. Karnataka's fiscal deficit in Q1FY21 has reached 17.5% of the budgeted estimate vs. a modest surplus in the same period last year.

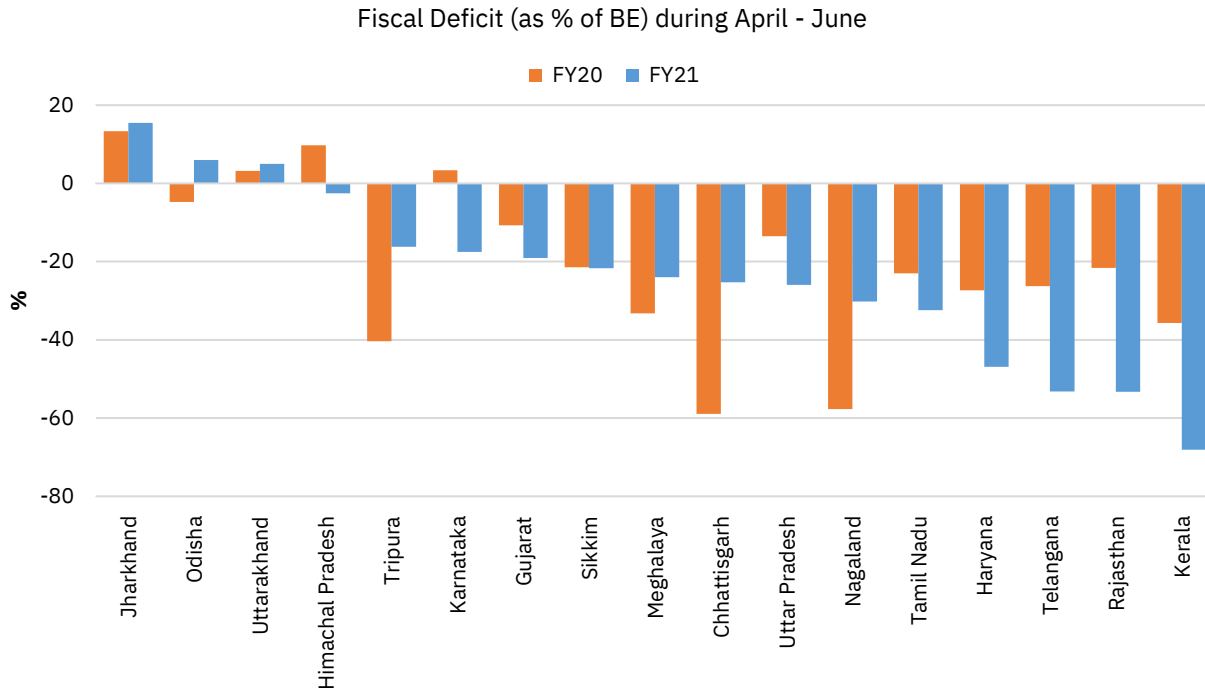
On the other hand, a few states including Jharkhand, Odisha and Uttarakhand have somehow managed to remain prudent during this unprecedented period, and have reported a fiscal surplus in Q1 FY21, partly attributed to a sharp drop in capital

<sup>6</sup> Joel Rebello, ET Bureau, June 26 2017, <https://economictimes.indiatimes.com/news/economy/finance/fiscal-deficits-highest-in-rajasthan-up-last-year/articleshow/59318009.cms>

<sup>7</sup> RBI State Finances: A study of Budgets (2019), Debt: States' medium term fiscal challenge, <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/O3CH300920191B65D1BDD955423F96BA64C93169312D.PDF>

expenditure. The fiscal situation of Chhattisgarh, Tripura and Nagaland has also improved, with their fiscal deficit as share of the budgeted estimates fell sharply in Q1 FY21.

**Figure 38: Impact of Covid-19 on states' fiscal deficit in Q1 FY21**



Source: RBI State Finances, CAG, NSE. Note: We considered only those states who disclosed fiscal deficit during April-June'20.


**Figure 39: State-wise gross fiscal deficit (as % of GSDP)**

States	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
All States	1.93	1.97	2.21	2.62	3.05	3.47	2.40	2.93
Andhra Pradesh*	2.08	2.15	1.97	3.99	3.41	4.88	3.77	3.47
Arunachal Pradesh	8.92	1.85	11.01	(2.89)	(1.02)	(4.31)	1.42	NA
Assam	1.15	0.97	2.13	2.77	(1.32)	2.41	3.22	NA
Bihar	2.39	2.32	2.63	3.26	3.25	3.90	2.95	4.51
Chhattisgarh	0.51	1.50	2.45	3.65	2.39	1.59	2.40	6.02
Goa	2.08	3.01	3.77	1.99	2.69	1.47	2.28	5.33
Gujarat	1.79	2.28	2.28	1.99	2.24	1.43	1.62	NA
Haryana	2.40	2.99	2.08	2.88	6.36	4.72	3.05	2.90
Himachal Pradesh	2.25	3.60	3.86	4.05	1.89	4.65	2.75	5.08
Jammu and Kashmir	4.72	4.84	4.76	5.70	6.88	4.93	2.01	NA
Jharkhand	1.28	1.95	1.18	3.00	5.58	4.28	4.32	2.44
Karnataka	2.03	2.09	2.09	2.14	1.83	2.37	2.30	2.62
Kerala	3.52	3.64	3.64	3.64	3.17	4.17	3.83	NA
Madhya Pradesh	1.83	2.47	2.25	2.37	2.60	4.26	3.12	3.54
Maharashtra	1.56	0.94	1.58	1.79	1.44	1.76	0.99	NA
Manipur	8.11	0.01	(1.69)	3.31	1.75	2.57	1.42	NA
Meghalaya	5.35	1.81	1.67	4.21	2.21	2.55	0.45	NA
Mizoram	2.93	6.94	7.28	7.70	(2.73)	(1.47)	1.65	NA
Nagaland	4.43	4.63	2.77	0.73	3.06	1.36	1.84	NA
NCT Delhi	0.74	0.58	0.89	(0.04)	(0.24)	0.17	(0.02)	0.08
Odisha	(0.27)	(0.00)	1.56	1.74	2.15	2.38	2.14	2.87
Puducherry	4.90	1.16	2.45	2.90	2.39	1.76	0.60	1.12
Punjab	3.18	3.33	2.94	3.47	5.26	14.97	3.33	4.44
Rajasthan	0.83	1.73	2.76	3.09	9.25	6.10	3.03	3.39
Sikkim	1.61	0.53	0.38	1.79	2.88	(0.42)	1.97	3.39
Tamil Nadu	2.30	1.93	2.13	2.53	2.77	4.31	2.73	2.74
Tripura	(1.35)	(1.55)	(0.18)	3.55	4.59	6.11	4.49	NA
Uttar Pradesh	2.13	2.34	2.52	3.21	5.14	4.48	2.02	2.84
Uttarakhand	1.52	1.18	1.78	3.61	3.46	2.80	3.56	2.23
West Bengal	3.40	3.24	3.74	3.81	2.62	2.91	2.97	2.76

Source: RBI State Finances, NSE Note : Andhra Pradesh\* includes Telangana. NA-Not available.

To get an overview of fiscal performance across states, we have constituted a fiscal health index to capture how several states have performed thus far. The fiscal health score includes states' revenue pattern, dependency on central transfers, their expenditure on capex, fiscal deficit and outstanding liabilities. Their revenue pattern and dependency on the Center is measured as a share of own revenue to total revenue, while expenditure pattern is captured as the share of capex in total expenditure. Besides, we have taken fiscal surplus as percentage of GSDP and outstanding debt (as % of GSDP) to capture their overall liability.

Delhi has been the top performer with a large share of own revenue receipts, low fiscal deficit and relatively small outstanding debt as a share of GSDP. Among others, Goa and Gujrat scored equally well with similar revenue and expenditure patterns, even as their outstanding debt is quite high. Few poor states including Orissa and Uttar Pradesh performed relatively well as they spent around 20% of their total expenditure on capital expansion. In contrast, Punjab, Nagaland and Rajasthan have been placed at the bottom as they had done extremely poor in almost all parameters. Their situation deteriorated with a high debt to GSDP ratio and high fiscal deficit over the last five years on average.

**Figure 40: State-wise Fiscal health scores**


States	Own revenue income (% of total revenue)	Capex (% total expenditure)	Fiscal Surplus (% GSDP)	Outstanding debt (% GSDP)	Fiscal Health Score
NCT Delhi	89.5	12.5	0.0	2.7	0.77
Goa	71.3	20.3	-2.1	26.8	0.53
Gujarat	70.8	18.5	-1.8	20.6	0.52
Arunachal Pradesh	11.4	25.7	1.3	32.1	0.51
Telangana	70.5	19.6	-4.0	16.6	0.48
Karnataka	64.7	17.2	-2.2	18.4	0.48
Odisha	42.6	21.3	-2.2	21.9	0.46
Maharashtra	74.0	10.9	-1.4	17.5	0.44
Sikkim	24.5	18.8	-1.5	24.5	0.38
Uttar Pradesh	45.1	19.5	-3.9	37.1	0.38
Tamil Nadu	70.0	11.8	-3.3	21.4	0.38
Chhattisgarh	44.9	14.7	-2.1	19.9	0.38
Haryana	77.2	13.1	-4.7	26.2	0.37
Mizoram	11.0	17.3	0.8	38.9	0.37
Uttarakhand	49.6	15.3	-3.3	23.8	0.36
Madhya Pradesh	43.7	16.7	-3.3	24.3	0.36
Bihar	25.7	20.8	-3.4	32.0	0.36
Jharkhand	43.1	18.2	-4.7	27.5	0.34
Assam	33.4	12.9	-1.4	17.9	0.34
Kerala	69.5	9.3	-3.7	30.3	0.32
Tripura	19.1	21.4	-5.1	27.7	0.30
Andhra Pradesh	51.1	12.7	-4.0	30.7	0.30
West Bengal	42.9	11.3	-2.8	36.4	0.28
Manipur	10.2	15.7	-1.9	40.2	0.27
Meghalaya	20.4	12.3	-1.7	32.7	0.26
Himachal Pradesh	33.2	11.9	-3.1	36.0	0.26
Rajasthan	54.4	12.3	-6.1	33.0	0.25
Nagaland	9.4	11.6	-2.1	42.2	0.20
Punjab	65.9	8.5	-7.9	39.7	0.18

Source: RBI, State finances, National Commission on Population, NSE.

## Infrastructure: Essential to achieve long-term growth

Infrastructure is an additional dimension that would reveal the long-term perspectives of each state. There are multiple indicators that can capture overall infrastructure development viz., road density, power availability, total capex by govt and private entities on roads, power generation, rural development, etc.

Being the national capital, Delhi has a clear advantage across all states with a road density of 1,208 km per 100 sq. km in FY17 followed by Kerala and Goa with a density of 619 km and 450 km, respectively, whereas Arunachal Pradesh, Nagaland and Chhattisgarh have least road density of 44, 52 and 72 respectively. This can be attributed to the fact that these states have a high density of forest cover among other factors. On the positive side, most states have already achieved around 100% power availability, thanks to several rural electrification schemes viz., Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA)<sup>8</sup>. While Coal is still the King with respect to power generation, India has started making strides towards clean energy.

**Delhi has been the top performer:** Delhi's per area capital expenditure is far more than any other states in India. Govt. spent around Rs771m per sq.km in FY20, which is almost 23x of govt. capex per area done by the second highest state-Goa. Similar trend was seen for private capex as well, private capex done in Delhi is ~8x of the second highest state-Haryana in the same fiscal year. As a result, Delhi has done remarkably well in terms of road connectivity and power availability compared to other states.

**Many North-eastern states along with Uttar Pradesh, Jharkhand and Uttarakhand remain in the bottom** with low infrastructure scores due to low roads connectivity, insufficient power supply and low capex per area by both govt. and private sectors. Given infrastructural development is essential for boosting economic growth and productivity, these states should emphasize more on developing in lines of infrastructure.


**Figure 41: Sub-indicators for estimating Infrastructure Development Score**

Sub-Indicators	Meaning	Significance
Road density per 100 Sq. km	Road density is the ratio of the length of the country's total road network to the country's land area. The road network includes all roads in the country: motorways, highways, main or national roads, secondary or regional roads, and other urban and rural roads	Connectivity is an essential factor in determining liveability, employment and growth in a country. A well-connected road infrastructure provides the prospect of a better India
Power availability/Power requirement	This is defined as the power availability (in Mw) divided by the power requirement (in Mw) across States.	Access to affordable and reliable electricity is critical to a country's growth and prosperity. The country has made significant progress towards the augmentation of its power infrastructure
Total capex by govt per area	Govt (state plus Centre) project cost (Rs m) for all projects under implementation from capex per area.	Government capex is imperative in shaping business cycle condition of states and are vital drivers of economic progress and growth
Total capex in Road, Power generation, rural development, etc. per area	Total private project cost (Rs m) for all projects Under Implementation from capex per area.	Private capex boosts economic development and growth particularly in those sectors where govt. expenditure remains low.

Source: NSE.

<sup>8</sup> Rural Electrification overview, <https://powermin.nic.in/en/content/overview-1>



**Figure 42: State-wise infrastructure development score**


States	Road density per 100 sq. km	Power availability/Power requirement	Govt. capex per area (Rs m/sq. km)	Private capex in Road, Power generation, rural dev, etc. per area (Rs m / sq. km)	Infrastructure score
NCT Delhi	1,208	1.00	771	401	1.00
Kerala	619	1.00	28	8	0.38
Goa	450	1.00	34	24	0.36
Haryana	184	1.00	26	52	0.32
West Bengal	363	1.00	14	11	0.32
Punjab	277	1.00	12	9	0.31
Odisha	195	1.00	20	22	0.30
Maharashtra	203	1.00	27	16	0.30
Tamil Nadu	201	1.00	31	13	0.30
Karnataka	188	1.00	20	14	0.29
Tripura	409	0.99	12	1	0.29
Sikkim	160	1.00	18	10	0.29
Bihar	223	1.00	18	4	0.28
Andhra Pradesh	110	1.00	32	13	0.28
Gujarat	92	1.00	16	21	0.28
Telangana	110	1.00	26	9	0.28
Madhya Pradesh	111	1.00	7	3	0.27
Nagaland	219	1.00	8	0	0.26
Chhattisgarh	72	1.00	11	4	0.26
Rajasthan	78	1.00	6	2	0.26
Uttarakhand	131	0.99	22	1	0.24
Himachal Pradesh	113	0.99	16	3	0.24
Jharkhand	88	0.99	19	13	0.24
Manipur	124	0.99	18	0	0.24
Uttar Pradesh	178	0.99	17	16	0.23
Arunachal Pradesh	44	0.99	8	11	0.23
Mizoram	52	0.99	8	0	0.22
Meghalaya	102	0.98	9	3	0.16
Assam	431	0.95	25	1	0.09

Source: NSE, CMIE Capex, MOSPI.

## Financial inclusion: A long way to go

Financial inclusion is a process of ensuring easy access to financial services to all parts of the society at affordable cost and timely manner. Even though India's position in financial inclusion improved globally,<sup>9</sup> it has not been uniformed across states.

**North-eastern states are far behind in the race:** Generally, higher number of banking offices per sq. km. indicates a better financial reach to the public. While Delhi and Goa have significantly large number of banking offices per sq. km., several North-eastern states like Arunachal Pradesh, Mizoram and Manipur have suffered with an acute shortage of financial services.

**Figure 43: Sub-indicators for calculating Financial Inclusion Score**

Sub-Indicators	Meaning	Significance
Balance in accounts per PMJDY acct	PMJDY is a national mission towards financial inclusion with an aim to provide financial services at an affordable rate. For this indicator, we have taken balance in beneficiaries account divided by the number of beneficiaries.	Focuses on financial stability aspect and aims to empower citizens financially to reap perks of developmental prospects
Households with bank account under PMJDY (%)	This sub-indicator is a measure of percentage of households having bank account under PMJDY scheme.	The indicator used envisages banking facilities to a much wider audience. A vision towards banked households to provide accessibility of affordable services places the states in the front row
Investors' reach	Investor registrations on National stock exchange divided by population gives us the sub-indicator	Investor registrations are a good sign indicating growing interest in equity market participation
Bank branch penetration	This component takes into account the number of bank branches per 100 square km.	It serves an essential indicator in determining the ease with which people have access to cheap credit and other financial services
MF AAUM % of GDP	Asset under management is the total investment sum of Mutual Fund. Mutual Fund industry's average asset under management is taken as a percentage of GDP	This indicates better investment inflow, quality and management experience on behalf of a fund house.
State-wise mutual fund penetration (Rs per capita)	Mutual funds divided by total population of the state	Focuses on the extent to which states population invest in this popular tool and where these states stand in their financial inclusion ranking
Number of E-transactions per '000 population	E-transactions refers to financial process of transferring money electronically from one place to another. Number of electronic based transactions are divided by population	This indicator entails faster financial transactions at reduced costs which points towards advancement in electronic and payments systems.
Number of digital payment transactions through BHIM app, Rupay debit card and USSD per capita	Digital payments emphasize payments through digital apps without using of cash. Number of digi pays through BHIM app, Rupay debit card and USSD are summed up and divided by total population	This indicator focuses on enabling larger population of a state to make cashless purchases and serves as an important tool for advancing financial inclusion. High value views sustainable and lucrative business opportunities for the state.

Source: PMJDY, AMFI, NSE.

**Jan Dhan Yojana helped to reduce the disparity marginally:** Pradhan Mantri Jan Dhan Yojana (PMJDY) is National Mission for Financial Inclusion to ensure access to financial services in an affordable manner. With the benefits of a like absence of minimum balance, interest on deposit, easy transfer of money across India, etc. has been a benevolent effort from the Prime Minister to end the financial disability existing in the economy. Total number of households with bank accounts under the PMJDY scheme helps us to measure the reach and success of the scheme. The states with the highest percentage of

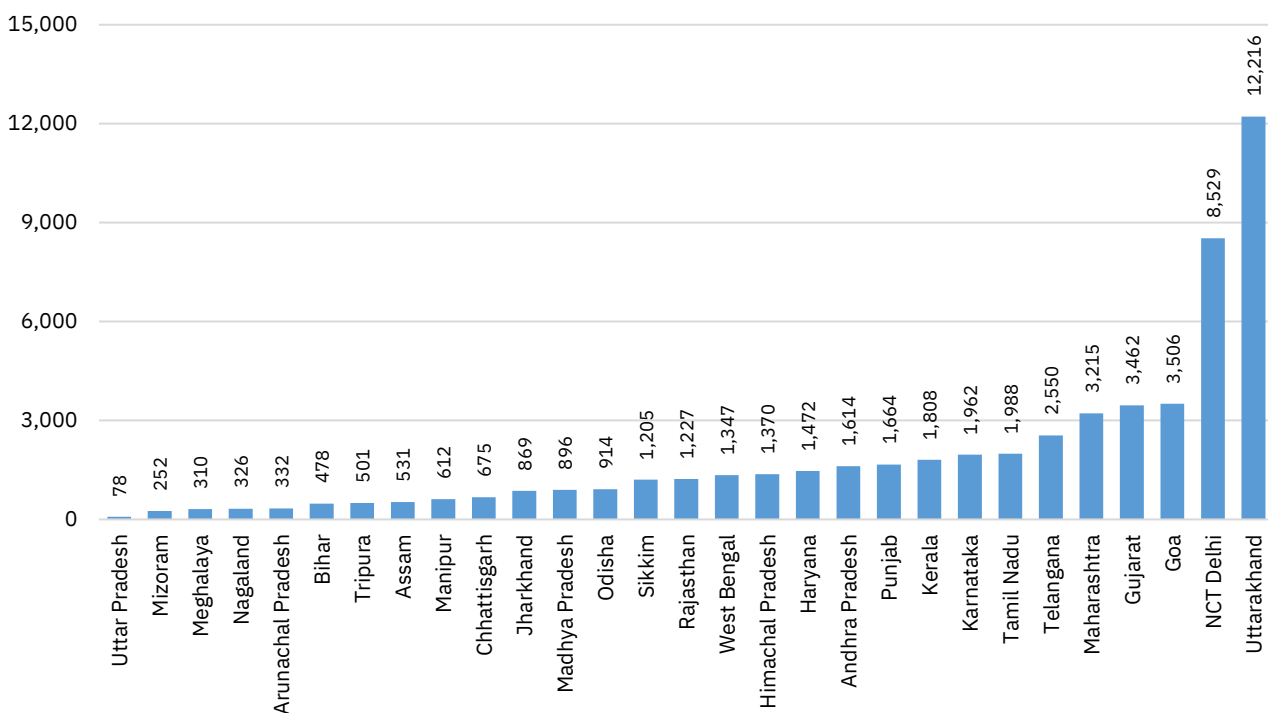
<sup>9</sup> India among top nations with conducive environment for financial Inclusion: Report, The economic Times, 2019, <https://economictimes.indiatimes.com/news/economy/finance/india-among-top-nations-with-most-conducive-environment-for-financial-inclusion-report/articleshow/71833927.cms>

households covered under this scheme are Chhattisgarh, Arunachal Pradesh and Madhya Pradesh with a percentage of 51.28, 47.47 and 39.60, while the states where the reach of the scheme has been lower are Goa, Kerala and Sikkim with 10.9%, 14.1% and 14.1%.

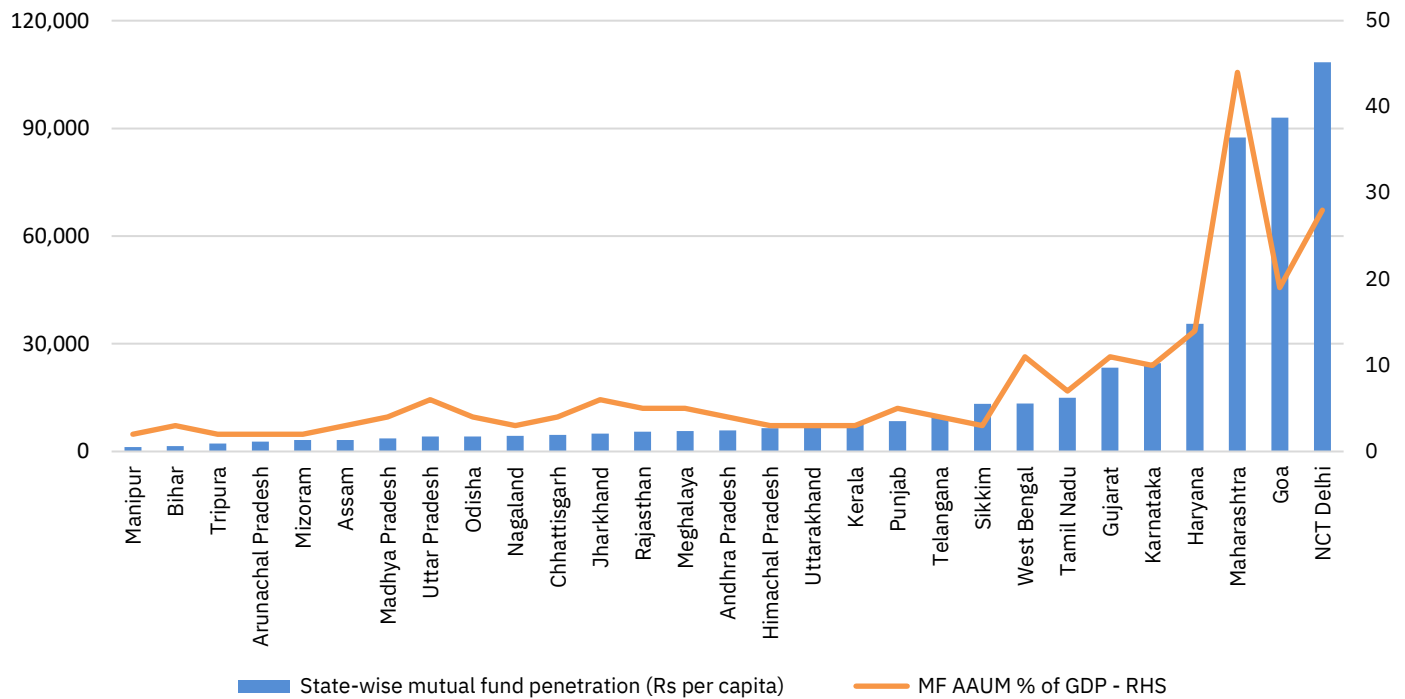
**Total investor registration at NSE and mutual fund penetration measures inclusion in the capital market:** Capital market gained momentum in India and became an important driving factor for economic growth. Total number of investors registered over the previous 10 years per lakh population and mutual fund penetration are taken to measure state-wise inclusion in the capital market. Uttarakhand has been placed at the top with the highest registrations of 12,216 per lakh population over the last 10 years, followed by Delhi and Goa. States like Uttar Pradesh, Mizoram, Meghalaya, Nagaland, Arunachal Pradesh, Bihar have recorded lowest investor registrations on NSE.

Maharashtra, on the other hand, has been one of the leading performer in terms of total Mutual funds AAUM as a share of GSDP, followed by Delhi and Goa. The North-Eastern states have a rather low percentage of mutual funds AAUM contribution to their GSDP and have been placed at the bottom.

**Figure 44: Number of NSE investor registrations per lakh population over the last decade**




Source: NSE

**Figure 45: State-wise mutual fund penetration and its percentage share in GDP as of May, 2020**


Source: Association of Mutual Funds in India data, NSE

**Southern states are well ahead in E-transactions and digital payment:** The Southern states have done highest number of e-transactions. Notably, Telangana, Andhra Pradesh and Kerala recorded 36,438, 28,805 and 14,618 transactions per thousand population. While the North-Eastern states of Manipur, Arunachal Pradesh and Tripura have seen the lowest number of transactions of 727, 751 and 855 per thousand population. Similar trend observed for digital payment as well.

**On average, however, NCT Delhi have been the top performer in financial Inclusion race; while Nagaland placed at the bottom:** Using above mentioned parameters, we found that NCT Delhi has been topped among all states, thanks to better implementation of financial inclusion programmes, large number of digital payments, and greater penetration in the capital market. Maharashtra, Goa and Haryana have also done extremely well with a greater penetration in the capital market and higher e-transactions with large number of digital payments. Several north-eastern states have been placed at the bottom as they were laggards across all parameters.

**Figure 46: State-wise financial inclusion score**


States	Beneficiary balance per PMJDY account (in Rs)	% HHs with bank account under PMJDY	Number of Investor registrations per lakh population (in Lakh)	No. of banking offices per sq km	MF AAUM % of GDP	State-wise mutual fund penetration (Rs per capita)	Number of E-transactions per '000 population	Number of digital payment transactions through BHIM app, Rupay debit card and USSD per capita	Financial Inclusion Score
NCT Delhi	4,275	23.09	8,529	2.51	28.00	1,08,410	3,131	8.39	0.57
Maharashtra	2,763	22.05	3,215	0.04	44.00	87,440	1,209	6.34	0.36
Goa	6,090	10.87	3,506	0.19	19.00	93,000	2,586	5.52	0.34
Haryana	4,881	25.97	1,472	0.11	14.00	35,530	2,944	13.52	0.31
Andhra Pradesh	2,157	19.99	1,614	0.04	4.00	5,900	28,805	18.54	0.29
Uttarakhand	4,928	22.99	12,216	0.04	3.00	7,260	1,945	3.79	0.27
Telangana	1,964	26.04	2,550	0.05	4.00	9,560	36,438	2.16	0.23
West Bengal	3,677	37.51	1,347	0.09	11.00	13,360	2,785	2.76	0.20
Gujarat	3,518	22.49	3,462	0.04	11.00	23,380	6,915	2.27	0.20
Karnataka	2,969	22.58	1,962	0.05	10.00	24,600	1,870	7.08	0.18
Tripura	7,609	22.17	501	0.04	2.00	2,230	855	1.20	0.17
Odisha	3,529	35.86	914	0.03	4.00	4,210	1,576	4.92	0.17
Chhattisgarh	2,392	51.28	675	0.02	4.00	4,650	4,435	0.30	0.17
Himachal Pradesh	5,469	17.78	1,370	0.03	3.00	6,460	7,244	2.86	0.16
Uttar Pradesh	3,685	27.14	78	0.07	6.00	4,150	1,534	7.25	0.16
Rajasthan	3,322	34.69	1,227	0.02	5.00	5,540	3,267	2.56	0.16
Assam	2,378	47.47	531	0.03	3.00	3,230	1,013	1.52	0.15
Punjab	3,992	23.26	1,664	0.13	5.00	8,490	1,854	1.94	0.14
Kerala	3,319	12.27	1,808	0.17	3.00	7,530	14,618	2.99	0.14
Jharkhand	2,988	35.63	869	0.04	6.00	4,970	952	1.80	0.14
Madhya Pradesh	1,839	39.60	896	0.02	4.00	3,610	2,189	2.17	0.12
Bihar	2,770	36.58	478	0.07	3.00	1,470	1,143	1.34	0.12
Tamil Nadu	2,038	14.10	1,988	0.09	7.00	14,930	4,914	3.48	0.11
Sikkim	4,151	14.08	1,205	0.02	3.00	13,270	1,375	2.14	0.10
Mizoram	3,633	26.08	252	0.01	2.00	3,160	1,718	0.60	0.10
Arunachal Pradesh	3,770	22.31	332	0.00	2.00	2,750	751	1.18	0.09
Manipur	2,211	30.85	612	0.01	2.00	1,270	727	0.83	0.08
Meghalaya	3,736	14.75	310	0.02	5.00	5,710	1,218	0.72	0.07
Nagaland	2,260	14.22	326	0.01	3.00	4,340	1,052	0.69	0.03

Source: NSE, AMFI, IndiaStat,

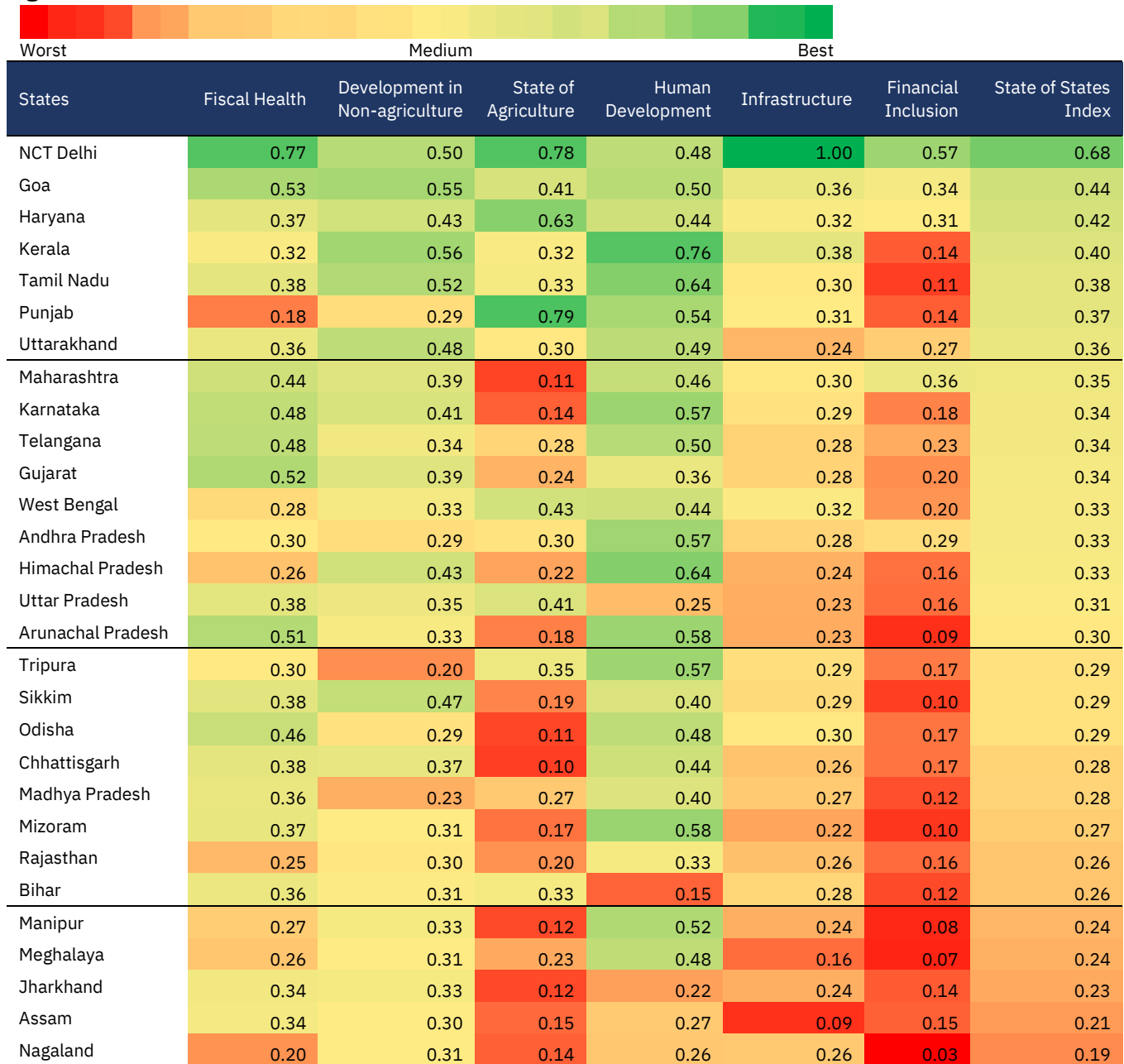
## The State of States Index: Significant interlinkages across categories

We are now in position to calculate the SSI index as an average of scores across six dimensions viz., Fiscal health, State of agriculture, Development of non-agricultural sectors, Infrastructure, Human development and Financial inclusion. Even as there is a wide disparity across states in each of these dimensions, the overall pattern is somewhat similar given the interlinkages present across parameters. For instance, states which are economically developed have better infrastructure and performed well in financial inclusion, and vice versa. However, states performance varies widely in human development indicators and fiscal health. To understand it in greater details we have categories all states based on their SSI values.

**Top performers in the State of States Index:** Delhi has been the top performer, as it performed significantly well across all dimensions except human development indicators. Goa and Haryana, on the other hand, performed well in economic development and financial inclusion. Among them, Goa has done marginally better than Haryana in fiscal health, infrastructure and human development. Among others, Kerala and Tamil Nadu have performed remarkably well in economic and human development indicators, even as they were laggards in Fiscal health, Infrastructure and Financial inclusion. Besides, Punjab scored well as it has done well in Agriculture and has relatively high human development score.

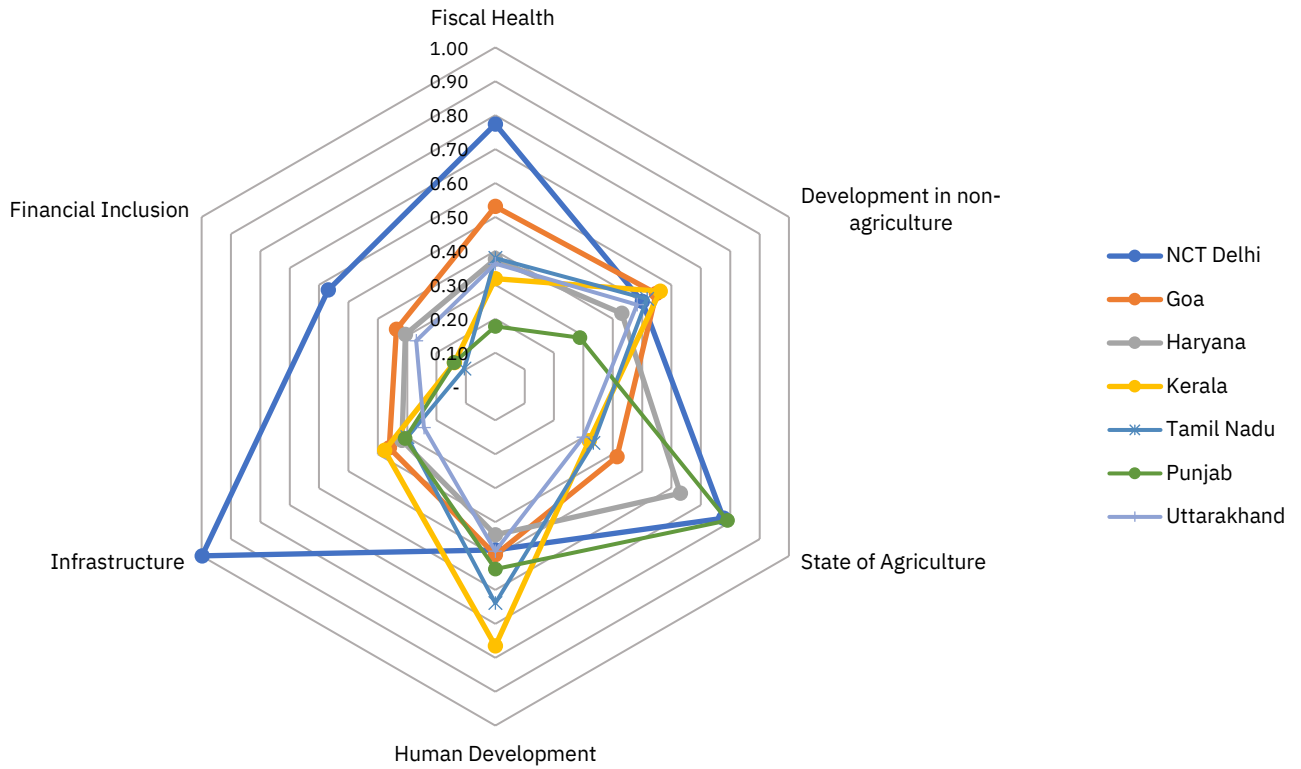
**Maharashtra, Karnataka and Tamil Nadu are in the second category:** Maharashtra has performed well in Fiscal health, Non-farm sectors and Financial inclusion, despite of lagging in Agriculture and Human development. Karnataka and Gujarat have also performed similarly across all categories. Among others, West Bengal and Andhra Pradesh have done somewhat similar with the help of agricultural development and financial inclusion.

**...while Nagaland, Assam, Jharkhand have been placed at the bottom:** Nagaland performed extremely poor with lowest financial inclusion, poor state in Agriculture, Fiscal health and Human development indicators. Among other poor performers, Rajasthan, Manipur, Jharkhand and Assam were laggards in multiple dimensions. Rajasthan scored lowest in Fiscal health amid rise in outstanding debt and high fiscal deficits, while Manipur performed poorly in agricultural sector, financial inclusion as well as on fiscal health. Assam ranked lowest in Infrastructure development and its performance was poor in Agriculture and Human development.

**Figure 47: State of States Index**


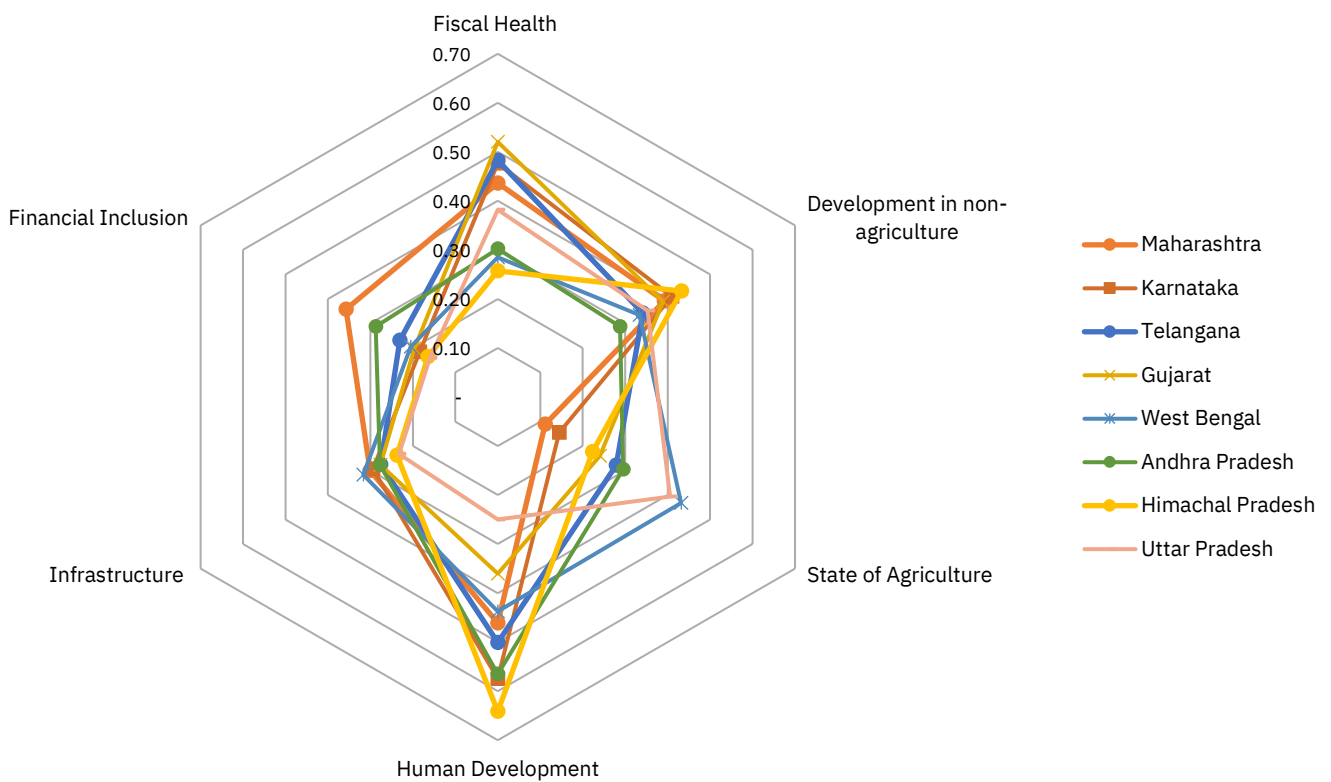
Source: NSE.

**Figure 48: Performance across different dimensions for best performing states**



Source: NSE

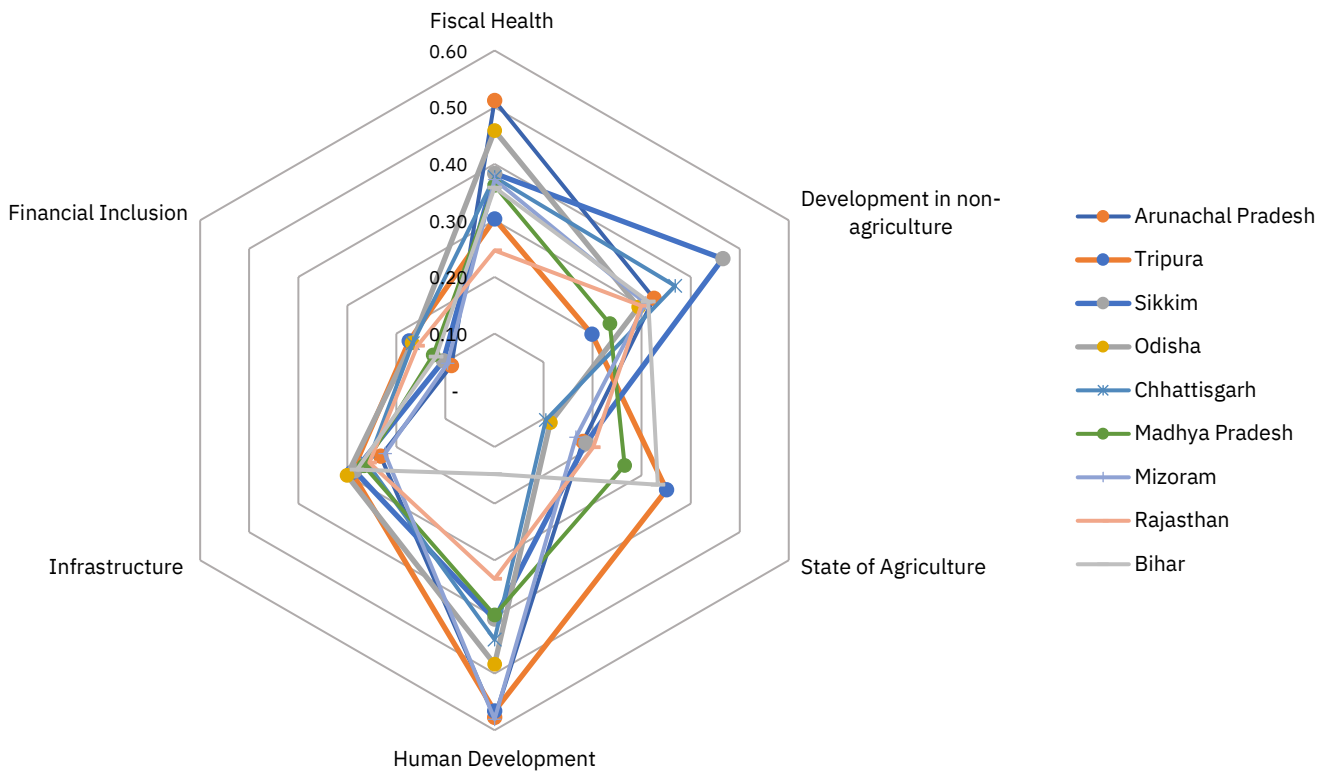
**Figure 49: Performance across different dimensions for good performing states**



Source: NSE

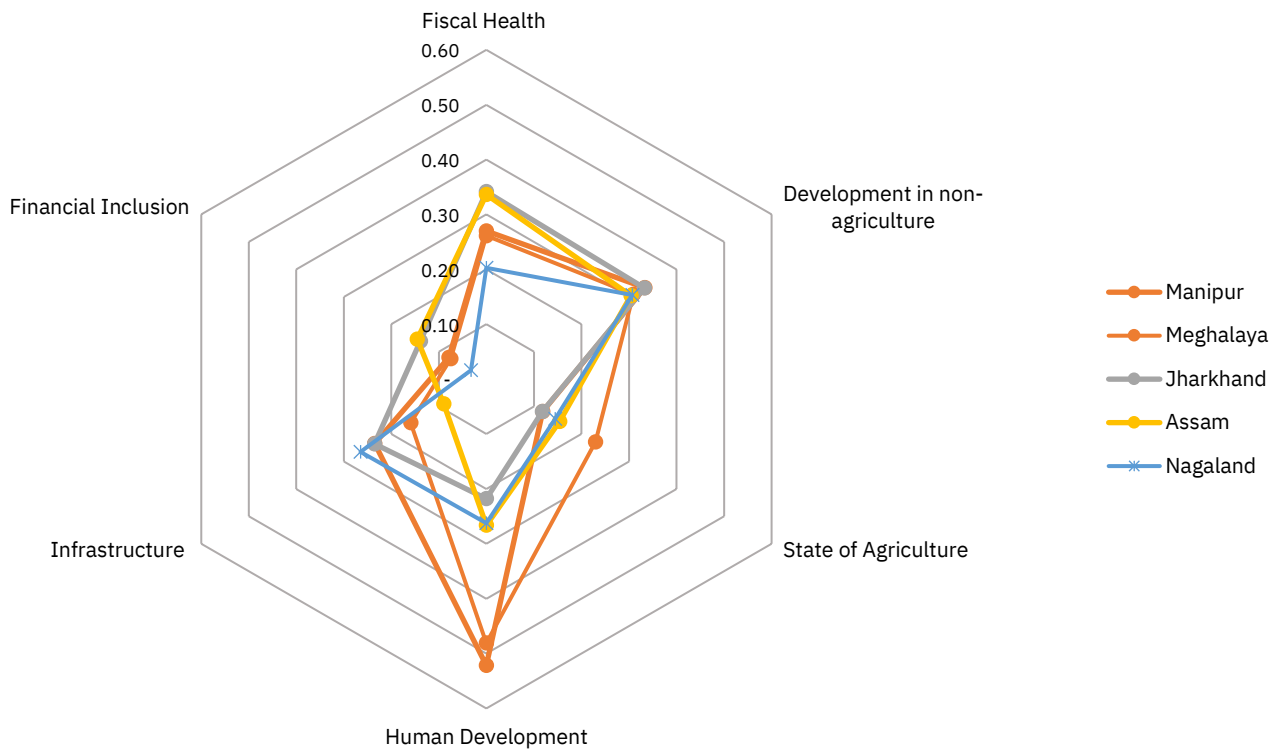


**Figure 50: Performance across different dimensions for average performing states**



Source: NSE

**Figure 51: Performance across different dimensions for poor performing states**



Source: NSE

**Covid-19 may deteriorate states' overall performance:** The coronavirus outbreak has led to an unprecedented fall in tax collections, among other facets of the economy. Post GST implementation, states are having to look up to the Center to meet their finances. Recent data, comprising 17 states, reveals that the pandemic and continuous surge in Covid-19 cases in India has led to a sudden rise in fiscal deficit over the first quarter in FY21. Over the period, gross fiscal deficit (GFD) for these 17 states has increased by almost 120% in FY21 to Rs1.2trn by the end of June, as compared to Rs546bn in FY20. This was largely led by 34% decline in tax revenue and 4% rise in unavoidable revenue expenditure, even as states managed to increase total non-tax revenue by almost 21%. As a result, states had to reduce total capital expenditure by almost 50% over the period to restrict total increase in GFD over the period. The pandemic would have adverse impact on economic growth as well. However, the impact will not be uniform across states. This would largely depend on the number of cases, positivity rates and case fatality rates across states, and their share of GSDP in non-essential activities as they continue to take several stringent measures on phased manner to contain its spread.

## References

- Ahluwalia, M. S. (May 2000). Economic Performance of States in Post-Reforms Period. *Economic and Political Weekly*, 1637-48.
- Bhide, S. and Panda. M. (2002). Evaluating Quality of Budgets with a Composite Index. *Economic and Political Weekly* 37, no. 13 (2002): 1177-180. Accessed August 10, 2020. [www.jstor.org/stable/4411914](http://www.jstor.org/stable/4411914).
- Chakraborty, P. (1999). Recent Trends in State Government Finances: A Comment. *Economic and Political Weekly*, 34(44), 3146-3148. Retrieved August 10, 2020, from [www.jstor.org/stable/4408575](http://www.jstor.org/stable/4408575).
- CRISIL Ltd. (January 2018) States of Growth. CRISIL Ltd.
- CRISIL Ltd. (April 30, 2020) Viral Fever: Covid-19 impact on economy, corporate revenue and profitability.
- Dholakia, A. (2005). Measuring Fiscal Performance of States: An Alternative Approach. , *Economic and Political Weekly*, 40(31), 3421-3428. Retrieved August 10, 2020, from [www.jstor.org/stable/4416963](http://www.jstor.org/stable/4416963).
- Dholakia, R. H. (2015). State Finances in the Context of the Emerging Fiscal Federalism in India: Analysis of Past Experience in Fiscal Discipline and Consolidation. International Management Institute SAGE Publications, <http://emi.sagepub.com>.
- Mathew, C. K., Dutta, U., Narayanan, A. and Jalodia, S. (2017). Public Affairs Index: Governance in the states of India. Public Affairs Centre.
- Finances, S. O. (November, 2018). Roopal Suhag, Suyash Tiwari. PRS Legislative Research.
- Kurian, N. J. (1999). State Government Finances: A Survey of Recent Trends. *Economic and Political Weekly*, 34(19), 1115-1125. Retrieved August 10, 2020, from [www.jstor.org/stable/4407932](http://www.jstor.org/stable/4407932).
- NCAER. (August 2018) State Investment Potential Index. New Delhi: National Council of Applied Economic Research. Third edition.
- Mishra, N. and Singh, P. (2017). A Deep Dive into State Budgets in India. New Delhi: India Policy Forum, NCAER.
- Rao, M. (2002). State Finances in India: Issues and Challenges. *Economic and Political Weekly*, 37(31), 3261-3271, Retrieved August 5, 2020, [www.jstor.org/stable/4412444](http://www.jstor.org/stable/4412444).
- Santosh Nandal, A. (2013). Emerging Trends in State Finances in India: 1995-96 to 2011-12. *International Journal of Economics, Finance and Management Sciences*. 1. 258. 10.11648/j.ijefm.20130106.11.
- Niti Aayog. (December 2018). SDG India Index, Baseline report 2018. New Delhi: Niti Aayog.
- Niti Aayog. (November 2019). SDG India: Index and Dashboard 2019-20. New Delhi: Niti Aayog.
- Reserve Bank of India. (2002). State Finances: A study of Budgets of 2001-02.
- Reserve Bank of India. (May 2017). State Finances: A study of Budgets of 2016-17.
- Reserve Bank of India. (July 2018). State Finances: A study of Budgets of 2017-18 and 2018-19.
- Reserve Bank of India. (September 2019). State Finances: A study of Budgets of 2019-20.
- Tiwari, S. and Surya, S. (2019) State of State Finances: 2019-20. PRS Legislative Research. December 2019.

## Economic Policy & Research

Tirthankar Patnaik, PhD	tpatnaik@nse.co.in	+91-22-26598149
Runu Bhakta, PhD	rbhakta@nse.co.in	+91-22-26598163
Prerna Singhvi, CFA	psinghvi@nse.co.in	+91-22-26598316
Ashiana Salian	asalian@nse.co.in	+91-22-26598163

We gratefully acknowledge the support of Sayonee Baliarsingh ([sayonee98@gmail.com](mailto:sayonee98@gmail.com)) of Symbiosis School of Economics in this report, which is part of her internship project at NSE.

### Disclaimer

*This report is intended solely for information purposes. This report is under no circumstances intended to be used or considered as financial or investment advice, a recommendation or an offer to sell, or a solicitation of any offer to buy any securities or other form of financial asset. The Report has been prepared on best effort basis, relying upon information obtained from various sources, but we do not guarantee the completeness, accuracy, timeliness or projections of future conditions provided herein from the use of the said information. In no event, NSE, or any of its officers, directors, employees, affiliates or other agents are responsible for any loss or damage arising out of this report. All investments are subject to risk, which should be considered prior to making any investment decisions. Consult your personal investment advisers before making an investment decision.*