Public Finance Management in India in the time of COVID-19 Pandemic

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Abstract

Due to the COVID-19 pandemic, public financial management in the FY 2020-21 and 2021-22 have become extremely challenging. The economic contraction has created pressures on PFM in India in terms of lower revenue mobilisation and higher expenditure needs. Both the Union and state governments are facing dual problem of arresting economic contraction and managing public finance with limited resources. The present paper analyses public finance management of the Union as well as 16 major Indian states during the time of COVID-19 pandemic. For comparison, we have also analysed pre-COVID public finance monthly data of state governments. The shock to PFM came from both the revenue as well as expenditure side. Apart from aggregate analysis of state finances of 16 major states, we present state-wise analysis to highlight measures adopted by states to deal with the unprecedented fiscal crisis.

Key Words: COVID-19 pandemic, Indian Public Finance, Fiscal Managements, Revenue Mobilisation, Fiscal Deficit, Revenue Deficit.

JEL Classification codes: H20, H61, H62, H63

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1. Introduction

The impact of the Covid-19 crisis can be observed in three different spheres i.e. health, economic and finance (IMF 2020). It negatively impacted the economic growth in the first quarter of 2020-21. It started recovering after phase-wise relaxation of lockdown restrictions (figure 1). The shock to the economy have implications on revenue mobilisation of both the Union and state governments and hence on public finance management (PFM). A considerable shortfall in revenue on the one hand and increasing demand for public expenditures to provide emergency healthcare and livelihood supports on the other have created serious strain on public finances of both the Union and state governments.

The revenue impact of COVID-19 pandemic would be different across different economies depending on duration and severity of the pandemic in terms of mortality and morbidity, duration; stringency and spatial spread of containment measures adopted, structure of the economy, exposure to international flows including trade and tourism, structure and composition of government revenues, and measures taken to cushion firms and households from the impact of the pandemic (OECD 2020). Moreover, realisation of the benefits of fiscal measures adopted by different economies to stimulate the economy may differ depending on speed of the transmission of fiscal multiplier to boost economic activities. In addition, measures adopted by tax administrations to facilitate ease-of-tax compliance by allowing deferment of tax payments, extending deadlines of filing tax returns, tax holidays etc. may delay in realisation of revenue. Being most responsive to economic cycles, revenue from Corporate Income Tax (CIT) is likely to decrease more than the fall in economic activity (OECD 2020). Any fall in employment and /or wages and salaries is likely to impact Personal Income Tax (PIT) collections. Tax from consumption like VAT/ GST is also likely to fall due to the impact of lockdown and lower consumer confidence, as well as a potential shift towards the consumption of staple goods and basic necessities, which are either exempted or taxed at lower rates (OECD 2020).

Indian states have faced revenue shortfall in 2020-21 not only on account of their own tax revenue (OTR) collection but also on account of the decline in devolution of states' share in Central taxes, owing to falling revenue collection in the Union taxes. State's tax base depends on level of expenditures on goods and services (State GST as well as Integrated GST settlement), consumptions of alcoholic beverages (State Excise Duties and State Sales Tax) and petrol, diesel, Aviation Turbine Fuel (ATF), natural gas and electricity (State Sales Tax), registration of immovable properties and agreements/ contracts (Stamp Duty and Registration Fees) and land revenue. It is expected that except agricultural activities, all other activities (including transportation of goods and passengers) are affected due to the ongoing COVID-19 pandemic. A fall in the growth rate of GDP implies that there is a fall in incomes (wages and salaries, rents, interests and profits) and therefore corresponding impacts on expenditures. Revenue impacts of the pandemic are different for different states depending on the severity of the COVID-19 pandemic. On the expenditure side of the state budgets, interest payments, salaries/wages, pensions and subsidies constitute a major share of total revenue expenditure and there is hardly any scope for cutting expenditures on these heads. Therefore, it is obvious that mantaining the level of capital expenditures will be a challenge in the face of the revenue shortfall. There is also a possibility of expenditure switching from other social and economic services to provide livelihood supports and emergency health care services, e.g., in providing free foods through Public Distribution System (PDS), income support, etc. Both rural and



urban local governments may face revenue constraints due to less transfer of resources from the state governments. Shrinking fiscal space due to fall in the growth rate of the economy and high fiscal deficits are the two major constraints for the governments to expand some of the public expenditure programmes. According to the Union Budget 2021-22, the revised estimate of fiscal deficit of the Union government is Rs. 18.5 lakh crore (or 9.5% of GDP) in 2020-21. In addition, states have incurred an additional deficit. Together, this is likely to be Rs. 25.5 lakh crore (or 13.5% of GDP) (Rao 2021a). Total outstanding liabilities is expected to be close to 90 per cent of GDP in 2020-21 (Rao 2021a). In fact, according to Rao (2021b), the pandemic has made the Fiscal Responsibility and Budget Management (FRBM) act completely irrelevant and hence there is a need for a new fiscal consolidation roadmap amidst the COVID-19 pandemic. Keeping in mind fiscal stress faced by the Union as well as state governments, the Fifteenth Finance Commission has prescribed paths of fiscal consolidation by setting targets for fiscal deficits as well as debt-GDP ratio for the Union and state governments (please refer Figures A1 and A2 in Appendix).

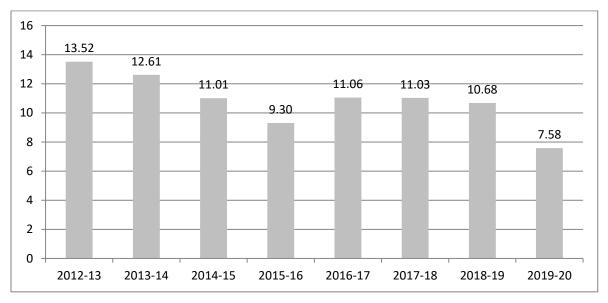
20 15 10 5 0 -5 -10 -15 -20 -25 21:2015-16 22:2015-16 23:2015-16 21:2017-18 23:2012-13 24:2012-13 22:2013-14 23:2013-14 24:2013-14 21:2014-15 22:2014-15 23:2014-15 24:2014-15 24:2015-16 21:2016-17 22:2016-17 23:2016-17 24:2016-17 22:2017-18 23:2017-18 24:2017-18 22:2018-19 23:2018-19 24:2018-19 21:2019-20 22:2019-20 33:2019-20 24:2019-20 22:2020-21 21:2020-21

Figure 1: Quarter-on-Quarter Growth Rate in Gross Value Added at Basic Prices (current prices, 2011-12 Series)

Source: Computed based on Data of Ministry of Statistics and Programme Implementation



Figure 2: Annual Growth Rate (Year-On-Year) in Gross Value Added at Basic Prices (current prices, 2011-12 Series)



Source: Computed based on Data of Ministry of Statistics and Programme Implementation

Given this background of uncertainties and shocks on the fiscal front, the present paper analyses public finance management of the Union as well as 16 major Indian states during 2020-21. The present paper throws some light on how governments - both the Union and states – have managed the fiscal situation in the time of the pandemic. Also, different states have a different experience in managing the fiscal situation during the pandemic; therefore it would be important to highlight the strategies adopted by different states to manage public finances during the time of the pandemic.

In section 2 we discuss public finance management of the Union government. In section 3, we discuss public finance management of 16 major states. This is followed by a discussion on fiscal shocks (revenue and expenditure) during the time of COVID-19 pandemic. In section 4, we provide a spatial (state-wise) analysis of public finance management strategies adopted by states. The section 5 draws conclusions.



2. Public Finance Management of the Union Government

The Union Budget for the year 2020-21 projected growth in tax (gross tax revenue) and non-tax revenues by 12 per cent and 11.4 per cent respectively with reference to the revised estimates of 2019-20 (Table 1). However, the unprecedented economic impact of the COVID-19 pandemic caused significant revenue loss for the Union government. Revised estimates of 2020-21 showed a significant fall in all sources of revenues, except for the Union Excise Duties (UED), vis-à-vis budget estimates of 2020-21 as well as actuals of 2019-20.

The highest shortfall in revenue mobilisation was observed for Corporate Income Tax (CIT), followed by Personal Income Tax (PIT) and Goods and Services Tax (GST). The net taxes of the Union government declined by 17.8 per cent. The fall in Union taxes had also resulted in lower tax devolution to states by 30 per cent (Table 1). With reference to 2019-20, the decline in states' share in Central taxes is 15.5 per cent. The lower international prices of crude petroleum paved the way for the Union government to raise UED on those refined petroleum products which are not attracting GST, viz., petrol (motor spirit/ gasoline), diesel, Aviation Turbine Fuel (ATF).¹ Annual growth in UED collection in 2020-21 vis-à-vis 2019-20 by 50 per cent though provided a cushion, the benefit of higher UED collection did not benefit the States, since the Union government increased cesses and surcharges on UED instead of basic UED rate.² Growth in UED collection excluding cesses and surcharges was -19.53 per cent in 2020-21RE vis-à-vis actual of 2019-20 whereas cesses and surcharges on UED showed a growth of 187 per cent during 2020-21RE (please refer Table A1 in Appendix).

Table 1: Growth in Revenues an	ıd Expenditures o	of the Union (Government ([%]
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	2017-18 to 2018- 19	2018-19 to 2019- 20RE	2019-20RE to 2020- 21BE	2020- 21BE to 2020- 21RE	2019- 20 to 2020- 21RE	2020- 21RE to 2021- 22BE
Gross Tax Revenue	8.4	4.0	12.0	-21.6	-5.5	16.7
of which						
Corporation Tax (CIT)	16.2	-8.0	11.5	-34.5	-19.9	22.6
Taxes on Income (PIT)	9.8	18.3	14.0	-28.1	-6.8	22.2
Customs	-8.7	6.1	10.4	-18.8	2.5	21.4
Union Excise Duties (UED)	-10.6	6.9	7.7	35.2	50.0	-7.2
Goods and Services Tax (GST)	31.4	5.3	12.8	-25.4	-14.0	22.3
-Central GST (CGST)	125.1	12.3	12.8	-25.7	-12.8	23.0
States' share in Central Taxes	13.1	-13.8	19.5	-29.9	-15.5	21.0
Centre's Net Tax Revenue (1)	6.0	14.2	8.7	-17.8	-0.9	14.9
Non-Tax Revenue (2)	22.3	46.6	11.4	-45.3	-35.6	15.4
Total Revenue Receipts (1 + 2)	8.2	19.1	9.2	-23.0	-7.7	15.0
Non-debt Capital Receipts (3)	-2.5	-27.6	175.7	-79.3	-32.2	304.3
Total Receipts (1+2+3)	8.4	16.5	14.7	12.0	29.3	-1.6
Revenue Expenditure (4)	6.8	17.0	11.9	14.5	28.1	-2.7

¹ Though these items are kept under the Goods and Services Tax (GST), actual implementation of GST on these items is yet to be decided by the GST Council.

² The proceeds of cesses and surcharges are not shareable with state governments.



Capital Expenditure (5)	16.9	13.4	18.1	6.6	30.8	26.2
Total Expenditure (4+5)	8.1	16.6	12.7	13.4	28.4	1.0
Revenue Deficit	2.5	9.9	22.0	139.0	118.4	-21.7
Fiscal Deficit	9.9	18.1	3.8	132.1	98.0	-18.5
GDP at Market Price (Cr Prices) (Rs. Crore)	11.0	7.2	-4.2	0.0	-4.2	14.4

Source: Compiled from the Union Budget Documents (various years)

On the expenditure side of the Union Budget, revenue expenditure showed 28.1 per cent growth in 2020-21RE vis-à-vis 2019-20 whereas capital expenditure grew by 30.8 per cent. In the Union Budget 2020-21, the Union government assumed 11.9 per cent growth in revenue expenditure for 2020-21 vis-à-vis 2019-20RE. However, due to COVID-19 pandemic, the revenue expenditure of the Union government exceeded the budget estimates for the year 2020-21. Like revenue expenditure, capital expenditure has also exceeded the budget estimate of 2020-21.

In one side there was revenue shock in terms of contraction of tax and non-tax revenue mobilisation of the government and on the other side overshooting of expenditures on both revenue as well as capital accounts resulted in an increase in revenue as well as fiscal deficits of the Union government.

In the revised estimate of 2020-21, fiscal deficit exceeds the budget estimate of 2020-21 by Rs. 10.52 lakh crore. This is due to fall in revenue receipts as well as increase in expenditures. With respect to budget estimate of 2020-21, Centre's net tax revenue falls by Rs. 2.91 lakh crore in the revised estimate of 2020-21, non-tax revenue falls by Rs. 1.74 lakh crore and non-debt capital receipts by Rs. 1.79 lakh crore. Together revenue side (Total Revenue Receipts + Non-Debt Capital Receipts) of the Union budget shows a fall by Rs. 6.44 lakh crore in the 2020-21RE with respect to 2020-21BE. In the revised estimate of 2020-21, revenue expenditures exceeds the budget estimate of 2020-21 by Rs. 3.81 lakh crore and capital expenditure by Rs. 0.27 lakh crore. Therefore in the RE of 2020-21, expenditure side (revenue and capital) of the Union budget exceeds the budget estimate of 2020-21 by Rs. 4.08 lakh crore. Therefore, a part of rise in fiscal deficit (FD) in 2020-21RE by Rs. 10.52 lakh crore is due to fall in revenue mobilisation by Rs. 6.44 lakh crore (or 61.2% of rise in FD) and the other part is due to rise in expenditures by Rs.4.08 lakh crore (or 38.8% of rise in FD). The rise in revenue deficit by Rs. 8.5 lakh crore in 2020-21RE vis-a-vis 2020-21BE has contributed 80.5 per cent in the rise of fiscal deficit in 2020-21RE vis-à-vis 2020-21BE.

With respect to actuals of 2019-20, Centre's net tax revenue falls by Rs. 0.12 lakh crore in the RE of 2020-21, non-tax revenue falls by Rs. 1.17 lakh crore and non-debt capital receipts falls by 0.22 lakh crore. Together revenue side (Total Revenue Receipts + Non-Debt Capital Receipts) of the Union budget shows a fall by Rs. 1.51 lakh crore in the 2020-21RE with respect to 2019-20. In the RE of 2020-21, revenue expenditures rise by Rs. 6.61 lakh crore and capital expenditure by Rs. 1.03 lakh crore with respect to 2019-20. Expenditure side (revenue and capital) of the Union budget rises by Rs. 7.64 lakh crore during 2020-21RE with respect to 2019-20. Therefore, a part of rise in fiscal deficit (FD) in 2020-21RE with respect to 2019-20 by Rs. 9.15 lakh crore is due to fall in revenue mobilisation by Rs. 1.51 lakh crore (or 16.5% of rise in FD) and the other part is due to rise in expenditures by Rs.7.64 lakh crore (or 83.5% of rise in FD). The rise in revenue deficit by Rs. 7.89 lakh crore in 2020-21RE vis-a-vis 2019-20 has contributed 86.3 per cent in the rise of fiscal deficit in 2020-21RE vis-à-vis 2019-20.



On indirect taxes, if we club the taxes to bring parity with pre and post-GST regime, we will see that there was a fall in growth rate in indirect taxes also during 2019-20 to 2020-21RE as compared to 2017-18 to 2018-19. Therefore comparing revenue performance of the Union government in 2020-21 with reference to 2019-20 may not reflect the true picture of revenue shock that the Union government has experienced during 2020-21 (Table 2).

Table 2: Annual Growth in Revenues and Expenditures of the Union Government (%)

	2017-18 to	2018-19 to	2019-20 to
	2018-19	2019-20	2020-21RE
Gross Tax Revenue	8.4	-3.4	-5.5
of which			
Corporation Tax (CIT)	16.2	-16.1	-19.9
Taxes on Income (PIT)	9.8	4.2	-6.8
Customs	-8.7	-7.2	2.5
Union Excise Duties (UED)	-10.6	3.7	50.0
GST	31.4	3.0	-14.0
-CGST	125.1	8.0	-12.8
States' share in Central Taxes	13.1	-14.5	-15.5
Centre's Net Tax Revenue (1)	6.0	3.0	-0.9
Non-Tax Revenue (2)	22.3	38.8	-35.6
Total Revenue Receipts (1 + 2)	8.2	8.4	-7.7
Non-debt Capital Receipts (3)	-2.5	-39.2	-32.2
Total Receipts (1+2+3)	8.4	15.8	29.3
Customs + UED + Services Tax (ST)+ CGST	21.0	4.4	6.5
CIT+PIT	13.4	-7.7	-13.8
Expenditure on Revenue Account	6.8	17.1	28.1
Expenditure on Capital Account	16.9	9.1	30.8
Total Expenditure	8.1	16.0	28.4
Revenue Deficit	2.5	46.7	118.4
Fiscal Deficit	9.9	43.8	98.0
GDP at Market Price (Cr Prices) (Rs. Crore)	11.0	7.2	-4.2

Source: Compiled from the Union Budget Documents (various years)

3. Public Finance Management of State Governments

In this section, we present an analysis of state finances based on monthly statements of accounts (Monthly Key Indicators of CAG) of 16 major Indian states (excluding Goa and Bihar)³ till December 2020, i.e., up to third Quarter (Q3) of 2020-21. We have compiled state-wise monthly data provided by the Comptroller and Auditor General (CAG) of India. To compare the performance of states in managing public finance during the pre-COVID period and after the COVID, we have also compiled the data up to Q3 of 2019-20. It is expected that with availability of revised estimates of state finances for 2020-21 for all states along with budget estimates of 2021-22, an in-depth analysis of state finances would be possible. Since, revised estimates take into account actual figures of upto Q3 and

³ The data for Bihar and Goa not available.



project revenues and expenditures for the last quarter, we expect that the broad analysis presented in this paper will not be very different even when we have the data for the entire fiscal year 2020-21.

Aggregate picture of state finances of 16 states is presented in Table 3. It shows that states were conservative in projecting 2020-21 Budget Estimates as compared to the same for 2019-20. For example, states projected (or budgeted) a growth of 4.93 per cent in Total Revenue Receipts (TRR) in 2020-21BE as compared to 2019-20BE. However, the projected growth rate in TRR was 9.73 per cent in 2019-20BE as compared to 2018-19BE. States projected lower growth in own tax and non-tax revenues as well as states' share in Central taxes and grants-in-aid from the Centre for 2020-21. States projected a 3.53 per cent contraction in states' share in Central taxes in the budget estimates of 2020-21. However, this is aggregate picture of 16 states; state specific experience may differ. Though states were cautious in projecting growth in Own Tax Revenue mobilization for 2020-21BE, they were ambitious on non-tax revenue mobilization. Since states' OTR holds the largest share in TRR, contraction of OTR collection by 12.71 per cent till Q3 of 2020-21 vis-à-vis Q3 of 2019-20 resulted in revenue crunch to state finances. Except grants-in-aid (including GST compensation payment) from the Centre, overall TRR of states contracted by 11.34 per cent till Quarter 3 of 2020-21 vis-à-vis Q3 of 2019-20 (Table 3).

Table 3: Growth in Key Indicators of State Finances (%)

Sl. No.	Description	2019- 20BE to 2020- 21BE	2019- 20Q3 to 2020- 21Q3	2018- 19BE to 2019- 20BE	2018-19Q3 to 2019- 20Q3
1	States' Own Tax Resources (OTR)	5.18	-12.71	9.19	-1.30
2	States' Share in Union Taxes	-3.53	-22.90	11.08	7.40
3	Grants-in-Aid from the Centre	10.33	6.07	10.43	38.19
4	States' Non- Tax Revenue (NTR)	14.09	-12.40	8.16	-1.61
5	Total Revenue Receipts (TRR) (1+2+3+4)	4.93	-11.34	9.73	6.31
6	Capital Receipts (Non-Debt)	-68.19	-36.37	7.78	-11.01
6а	Of Which - Recovery of Loans and Advances	-74.24	-36.18	6.52	-7.07
7	Total Receipts (5+6)	3.44	-11.55	9.69	6.13
8	Revenue Expenditure	3.97	-0.01	12.25	11.01
9	Capital Expenditure	-9.30	-22.63	5.43	-2.01
10	Disbursement of Loans and Advances	20.85	-29.28	-6.68	1.13
11	Total Expenditure (8+9)	1.95	-2.64	11.16	9.32
12	Revenue Deficit (RD) (8-5)	-14.1	237.9	97.2	1462.0
13	Fiscal Deficit (FD) (11-7+10)	-3.3	41.1	16.5	28.4

Source: Monthly Key Indicator (MKI) Report of States, Comptroller and Auditor General (CAG)

States also expected contraction in non-debt capital receipts during 2020-21, as budget estimate of 2020-21 is 68.19 per cent lower than budget estimate of 2019-20. In aggregate, states are trying to augment non-debt capital receipts through recovery of loans and advances. Upto Q3 of 2020-21, states have contained their shortfall in receipts to an extent by recovering loans and advances. At the same time, some states have also contained disbursement of fresh loans and advances.



On expenditure side, states have contained their revenue as well as capital expenditures to cope up with the revenue shock. However, the containment of expenditures was not sufficient to compensate for 12 per cent contraction in total receipts. This has resulted in increasing public liabilities of state governments till Q3 of 2020-21. States have contained their capital expenditures by projecting a 9.3 per cent lower growth in 2020-21BE vis-à-vis 2019-20BE, as well as cutting capital expenditures substantially till third quarter of 2020-21 vis-à-vis the same period of 2019-20. States were hopeful to contain revenue deficit during 2020-21 by projecting lower growth in 2020-21BE vis-à-vis 2019-20BE. However, revenue deficit of states has gone up by 238 per cent till third quarter of 2020-21 vis-à-vis the same period of 2019-20. States already faced high revenue deficits during 2019-20 and COVID-19 pandemic till Q3 of 2020-21 has further aggravated the fiscal stress of states. The fiscal shocks of two consecutive years (2019-20 and 2020-21) have resulted in deviation from the path of fiscal consolidation.

In this context, the following observation of Reserve Bank of India (RBI) is worthy to present here:

"States have budgeted their consolidated gross fiscal deficit (GFD) at 2.8 per cent of GDP in 2020-21; however, the COVID-19 pandemic may alter budget estimates significantly, eroding the gains of consolidation secured in the preceding three years - the average GFD for states that presented their budgets before the outbreak of COVID-19 is 2.4 per cent of GSDP, while the average for budgets presented post-lockdown is 4.6 per cent." (RBI 2020)

2019-20BE 2019-2003 2018-19BE 2018-1903 to 2020to 2019to 2019to 2020-**21BE** 21Q3 **20BE** 20Q3 States' Own Tax Revenue (OTR) -12.71 9.19 5.18 -1.30Goods and Services Tax (GST) 3.02 -16.06 16.14 -3.19State Sales Tax 6.23 -7.94 3.64 -0.96 State Excise Duties 10.07 0.71 17.34 10.96 Stamps and Registration Fees 12.92 -16.36 7.14 15.63 Land Revenue -0.5019.32 -6.72 8.68 Other Taxes and Duties 0.68 -23.38 -14.51-15.66

Table 4: Growth in Components of States' Own Tax Revenue (%)

Source: Computed by authors using MKI Report, CAG

States have mobilised 51 per cent of budgeted Total Revenue Receipts (TRR) till Q3 of 2020-21. This is 9.37 per cent lower than what was achieved till Q3 of 2019-20 and 11.31 per cent lower than what was achieved till the third quarter of 2018-19. Since Own Tax Revenue (OTR) of states hold the largest share in TRR (52% as per BE of 2020-21), shortfall in budgeted OTR collection by 10.4 per cent till Q3 of 2020-21 as compared to the same period of 2019-20, has impacted state finances the most. Since the Union taxes also declined due to the pandemic, states received 12 per cent lower receipts in budget estimate of states' share in Central taxes till Q3 of 2020-21 as compared to the similar period of 2019-20. Since the shortfall in the budgeted grants-in-aid transfers (including GST compensation payments) from the Centre was minimum (only 0.5%) till Q3 of 2020-21 as compared to Q3 of 2019-20. It helped states to contain deficits. Like OTR, the non-tax revenue of states also fell short of what was achieved during the same period in 2019-20.



On expenditure side of state finances, states have contained both revenue as well as capital expenditures during 2020-21. Revenue expenditure constitutes the largest share in total expenditure and states have incurred revenue expenditure of 58 per cent of the budget estimate till Q3 of 2020-21. For the same period of the previous year (i.e., 2019-20), revenue expenditure reached to 60.1 per cent of the budget estimate

On capital account, states have incurred expenditure of 37.55 per cent of the budget estimate till Q3 of 2020-21. For the same period of the previous year (i.e., 2019-20), capital expenditure reached to 44.02 per cent of the budget estimate. Cutting revenue as well as capital expenditures helped states to mitigate the revenue shock to some extent. States have also reduced disbursement of fresh loans and advances during 2020-21. However, expenditure compression of states was not sufficient to compensate the entire revenue shortfall, which resulted in surpassing the budgeted revenue deficit by 212 per cent till Q3 of 2020-21. During the same period of the previous year, states reached only 54 per cent of budgeted revenue deficit. States have also reached 72.5 per cent of fiscal deficit target set in 2020-21BE by Q3 of 2020-21. During the same period of the last year, states reached 50 per cent of the fiscal deficit target sets in the 2019-20BE. Therefore, states have exceeded the fiscal deficit target by additional 23 per cent what they experienced till the same period last year.

The fiscal stress experienced by states in 2020-21 is expected to perpetuate in the coming years in terms of higher outgo of interest payments as well as principal payments on account of rise in debt liabilities of state governments.



Table 5: Management of State Finances (Aggregate of 16 Major States) upto Quarter 3 of 2020-21

		2020-21 (BE)	Actuals upto December, 2020	% Actual to Budget (A)	2019-20 (BE)	Actuals upto December, 2019	% Actual to Budget (B)	2018-19 (BE)	Actuals upto December, 2018	% Actual to Budget (C)	А-В	A-C	В-С
1	States' Own Tax Revenue (OTR)	1,472,001	746,197	50.69	1,399,563	854,842	61.08	1,281,774	866,135	67.57	-10.39	-16.88	-6.49
2	States' Share in Union Taxes	567,938	272,345	47.95	588,734	353,220	60.00	529,992	328,876	62.05	-12.04	-14.10	-2.06
3	Grants-in-Aid from the Centre	531,045	326,907	61.56	481,317	308,203	64.03	435,860	223,023	51.17	-2.47	10.39	12.86
4	States' Non- Tax Revenue (NTR)	253,536	95,887	37.82	222,227	109,458	49.26	205,463	111,246	54.14	-11.44	-16.32	-4.89
5	Total Revenue Receipts (TRR) (1+2+3+4)	2,824,521	1,441,335	51.03	2,691,841	1,625,723	60.39	2,453,090	1,529,280	62.34	-9.37	-11.31	-1.95
6	Capital Receipts (Non-Debt)	17,742	8,758	49.36	55,770	13,763	24.68	51,742	15,465	29.89	24.68	19.47	-5.21
6a	Of Which - Recovery of Loans and Advances	13,872	8,692	62.66	53,844	13,619	25.29	50,549	14,655	28.99	37.36	33.66	-3.70
7	Total Receipts (5+6)	2,842,263	1,450,092	51.02	2,747,611	1,639,486	59.67	2,504,832	1,544,745	61.67	-8.65	-10.65	-2.00
8	Revenue Expenditure	2,947,731	1,702,898	57.77	2,835,299	1,703,132	60.07	2,525,828	1,534,236	60.74	-2.30	-2.97	-0.67
9	Capital Expenditure	461,856	173,437	37.55	509,237	224,161	44.02	483,026	228,748	47.36	-6.47	-9.81	-3.34
10	Disbursement of Loans and Advances	48,468	20,175	41.63	40,107	28,528	71.13	42,976	28,209	65.64	-29.50	-24.01	5.49
11	Total Expenditure (8+9)	3,409,587	1,876,335	55.03	3,344,535	1,927,293	57.63	3,008,854	1,762,984	58.59	-2.59	-3.56	-0.97
12	Revenue Deficit (RD) (8-5)	123,210	261,563	212.29	143,457	77,409	53.96	72,738	4,956	6.81	158.33	205.48	47.15
13	Fiscal Deficit (FD) (11-7+10)	615,792	446,418	72.49	637,031	316,335	49.66	546,998	246,448	45.05	22.84	27.44	4.60

Source: Compiled by authors using Monthly Key Indicator Database of the Comptroller and Auditor General (CAG)



State governments have presented budget of 2021-22 during the month of February-March of 2021. To compare state finances as presented above based on CAG's Monthly Key Indicators (MKI) database with the revised estimates of 2020-21, we present compilation of budget data of 13 major states for 2021-22 in Table 6.4 The other states are either not presented their budgets yet or budget documents are not yet available at their website. Moreover, for comparison with MKI (Monthly Key Indicator) database, we have not taken into account the budget data of Bihar and Goa, as the MKI data is not available for these states upto Q3 of 2020-21. Though the states have contained the revenue as well as capital expenditures to deal with revenue shock, the expenditure contraction was not sufficient to fully compensate for revenue contraction which resulted in exceeding revenue deficit targets (Table 6). The states have also mobilized resources by recovering loans and advances and reducing disbursement of fresh loans and advances which helped states to rein in deficits to some extent. Except grants-in-aid from the Centre (including GST compensation payment) all other sources of revenue fall short of budget estimate of 2020-21. Some states have also received revenue deficit grant during 2020-21 as recommended by the Fifteenth Finance Commission in the *Report of Fifteenth Finance Commission for 2020-21* and accepted by the Union government.⁵

⁴ States are Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

 $https://fincomindia.nic.in/writereaddata/html_en_files/fincom15/Reports/XVFC_202021\%20Report_English_Web.pdf$



Table 6: Public Finance Managements of States (including 2020-21RE for 13 major states)

							Annu	al Growth	(%)	
(Rs. Crore)	2017-18	2018-19	2019-20	2020-21BE	2020-21RE	2017- 18 to 2018- 19	2018- 19 to 2019- 20	2019- 20 to 2020- 21BE	2020- 21BE to 2020- 21RE	2019- 20 to 2020- 21RE
1. Total Revenue Receipts	1,675,775	1,747,076	1,955,003	2,309,206	1,910,840	4.25	11.90	18.12	-17.25	-2.26
2. Tax Revenue (3+4)	1,285,895	1,344,344	1,400,658	1,710,357	1,339,773	4.55	4.19	22.11	-21.67	-4.35
3. States Own Tax Revenue	813,599	867,991	940,767	1,143,966	945,577	6.69	8.38	21.60	-17.34	0.51
4. Share in Central Taxes	472,296	476,352	459,891	566,391	394,196	0.86	-3.46	23.16	-30.40	-14.28
5. Non-Tax Revenue (6+7)	389,880	402,732	554,345	598,849	571,067	3.30	37.65	8.03	-4.64	3.02
6 State Own Non-Tax Revenue	139,599	152,591	214,948	191,374	145,877	9.31	40.87	-10.97	-23.77	-32.13
7. Grants from Centre	250,281	250,141	339,397	407,476	425,191	-0.06	35.68	20.06	4.35	25.28
8. Recovery of Loans and Advances	38,516	35,270	35,235	12,946	12,693	-8.43	-0.10	-63.26	-1.96	-63.98
9. Revenue Expenditure	1,705,598	1,576,481	2,032,873	2,358,452	2,230,952	-7.57	28.95	16.02	-5.41	9.74
10. Capital Expenditure	279,367	293,733	307,998	395,243	326,356	5.14	4.86	28.33	-17.43	5.96
11. Disbursement of Loans and Advances	24,614	28,498	22,002	24,476	24,616	15.78	-22.80	11.25	0.57	11.88
12. Miscellaneous Receipts	139	872	272	3,870	1,710	525.23	-68.84	1324.37	-55.81	529.41
13. Revenue Deficit (9-1)	29,823	-170,595	77,870	49,246	320,111	-672.02	-145.65	-36.76	550.02	311.09
14. Fiscal Deficit [(9+10+11)-(1+8+12)]	295,148	115,495	372,363	452,149	656,681	-60.87	222.41	21.43	45.24	76.35

Source: NIPFP Data Bank - State Budget Database



4. Experience of States

The experience of individual state may give some insights into PFM of state finances in India. It is likely that different states have experienced different level of fiscal shock due to the pandemic. The abilities of states to cope up with the fiscal shock also vary depending on capacity to contain expenditures as well as augment revenues. The data upto Q3 of 2020-21 validates that all states have experienced a decline in tax devolution. The major decline of more than 20 per cent with respect to the same period of the last year is observed for 9 major states (Table 7), whereas remaining 7 states have experienced a decline between 10 to 20 per cent.

Receipts side

Except Andhra Pradesh (AP) and Punjab (PB), all other states have experienced fall in total receipts upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. AP and PB have maintained their receipts by augmenting revenues from alternative sources. Punjab experienced growth of 105 per cent in the revenues from grants-in-aid transfers from the Centre upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20 and have also maintained growth in revenue collections from state sales tax and state excise duties. In Andhra Pradesh, capital receipts show impressive growth of 2132.4 per cent upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. Similarly growth in land revenue collections was 690 per cent in AP during the same period. Moreover, AP has also received 77.7 per cent more grants-in-aid transfers from the Centre till Q3 of 2020-21 vis-à-vis the same period of 2019-20. The increase in grants-in-aid transfers to Punjab and Andhra Pradesh may be on account of interim award of Revenue Deficit Grants as recommended by the Fifteenth Finance Commission as well as GST compensation payments.

Maharashtra (MH), Odisha (OD), Uttar Pradesh (UP) and Madhya Pradesh (MP) witnessed positive growth in the non-tax revenue collections upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. Also MH, MP and UP shows growth in the non-debt capital receipts during the same period. Except Chhattisgarh (CG), all other states have observed fall in OTR collections upto Q3 of 2020-21. CG has witnessed positive growth of 78 per cent and 68.6 per cent in land revenue collections and other taxes and duties in Q3 of 2020-21 vis-à-vis Q3 of 2019-20 respectively. Also fall in revenues from sales tax and stamp and registration fees was less than 3 per cent and it helped the state to maintain positive growth in OTR collections.

OTR of most of the states deteriorated mainly due to fall in revenue on account of GST collections. Most of the states have witnessed positive growth in land revenue collection, though it contributes very less in overall own-tax revenue. However, it helped states to some extent to rein in deficits. For example, AP, West Bengal (WB), OD, Karnataka (KR), Jharkhand (JH) and CG have witnessed growth in land revenue collection upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. The growth was comparatively high for CG, JH and AP as compared to other states. Similarly KR, PB, UP, Rajasthan (RJ), and Telangana (TL) experienced an increase in state excise collections upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. Moreover, PB, RJ, MP, TL, WB show a rise in their sales tax collections despite of falling revenues from other sources.

Major shocks in total revenue receipts upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20 are observed for five states, viz., Haryana (HR), Gujarat (GJ), KR, MH and WB, and it was -21.2 per cent, -18.5 per cent, -18.1 per cent, -17.6 per cent and -17.3 per cent respectively. Karnataka and West Bengal show growth in OTR collections and non-debt capital receipts whereas Maharashtra shows growth in non-tax revenue collection and non-debt capital receipts. Gujarat has not experienced any growth in tax and non-tax revenue collections as well as in non-debt capital receipts till Q3 of 2020-21 vis-à-vis



2019-20. Haryana (HR) experienced shocks from both the sources of revenue (tax as well as non-tax) and also in non-debt capital receipts. The state somehow tried to maintain the revenue collection from state excise and sales tax collections, as the fall was around 0.5 per cent and 4 per cent respectively till Q3 of 2020-21 vis-à-vis the same period of 2019-20. Also grants-in-aid transfers from the Centre turn out to be the shock absorber for Haryana as growth was positive (1.7%) in Q3 of 2020-21 as compared to Q3 of 2019-20.

This shows that different states have different strengths and weaknesses in managing revenue shock. Inter-governmental fiscal transfer system has played an important role in easing out fiscal stress for some states as grants-in-aid transfers (including GST compensation payments) show growth upto Q3 of 2020-21 over the same period of 2019-20 for MH, CG, HR, KL, AP, PB, TL and TN (Table 7). Since a substantial source of own tax revenue of states is subsumed into GST and individual state cannot deviate from the harmonized structure of GST, the option of augmenting revenue by changing GST rates on goods and services is closed. In this context, the GST compensation payment helped states to face the revenue challenges. It is interesting to note that, in the face of revenue shock states have explored alternative revenue sources. Given their tax base and capacity to mobilize additional revenue, different states experienced different level of success in mobilizing additional revenue. For example, Andhra Pradesh shows 10.7 per cent growth in TTR despite the COVID-19 pandemic. Similarly, Maharashtra has tried to augment resources from non-tax revenue collections and nondebt capital receipts along with the grants-in-aids transfers from the Centre. Kerala shows only 1 per cent contraction in TRR, as grants-in-aid transfers show 289 per cent growth during the time of pandemic vis-à-vis the corresponding period of the previous year. Uttar Pradesh has also tried to mobilise own revenues from sales tax, state excise duties, non-tax revenue as well as non-debt capital receipts. Moreover Madhya Pradesh, Rajasthan and Odisha show positive growth in stamps and registration fees collections. Overall, for some states grants-in-aid turns out to be the major revenue shock absorber, however some states tried to absorb the shock by exploring own resources, OTR collections, non-tax revenue and non-debt capital receipts collections.

Expenditure side

States with severe revenue shocks tried to contain revenue as well as capital expenditures, whereas states with better revenue collections expanded expenditures to boost the economic growth. Also some states did not contain expenditures despite facing severe revenue shocks. Revenue shocks were not severe for Andhra Pradesh, Punjab and Kerala and there was stability in revenue collections upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. Since revenue collections were stable, these states did not curtailed their total expenditure in the time of pandemic. The total expenditure of AP, PB and KL shows growth of 37 per cent, 18 per cent and 13 per cent respectively upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. In revenue expenditure, AP shows impressive growth of 26.7 per cent whereas for PB and KL the growth was 18 per cent and 12.5 per cent respectively. In capital expenditure, AP shows growth of 216 per cent whereas PB and KL show growth of 13 per cent and 18 per cent respectively. This shows that states were responsive in providing fiscal stimulus to revive economic growth, given the revenue constraints they faced during the time of pandemic. To support livelihoods and boost demands for goods and services, expenditures on revenue account play a key role. To increase capacity of states in providing medical services, expenditures on capital account are also important. Therefore, expansionary fiscal policy adopted by some states in the time of pandemic may help to boost the economy as well as providing better public services to people. Impressive growth in capital



expenditure is observed for AP and this was possible due to curtailment of disbursement of fresh loans and advances by 73 per cent and augmenting revenues from alternative sources.

Gujarat experienced severe revenue shock as revenue constraced by 18.5 per cent which led the state to curtail capital expenditure by 19 per cent till Q3 of 2020-21 vis-à-vis Q3 of 2019-20. On revenue expenditure a positive growth of 0.5 per cent upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20 is observed. Gujarat has also curtailed disbursement of fresh loans and advances by 27 per cent (approx.) during the same period. This shows that expenditure management on capital account was the strategy to cope up with revenue shock. Similarly, West Bengal experienced revenue shortfall of 17 per cent, but expanded revenue expenditures by 7 per cent and curtailed capital expenditures by 50 per cent. On the other side, Karnataka has experienced revenue shortfall of 18 per cent, and to cope with the situation, curtailed revenue expenditures by 8 per cent (approx.) whereas increased capital expenditures by 3 per cent upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. This shows that states are innovative in managing their public finances, given their expenditure commitments and revenue constraints. Different states have faced different fiscal situations where some states have expanded either revenue or capital expenditures whereas some states have expanded both.

On total expenditure, Tamil Nadu, Rajasthan, West Bengal, Kerala, Telangana and Punjab have maintained growth despite of falling revenues. Whereas, states such as Chhattisgarh, Haryana, Jharkhand, Uttar Pradesh, Madhya Pradesh and Odisha have reduced total expenditure between 10 to 20 per cent (Table 8).

Maharashtra, Gujarat, Haryana, Andhra Pradesh, Tamil Nadu, Uttar Pradesh, Rajasthan and Madhya Pradesh have reduced disbursement of fresh loans by more than 20 per cent. Perhaps availability of more granular data from the budget documents could help to explore the reasons for such reductions. However, 10 states have experienced rise in fiscal deficit upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. For example, MH experienced growth in fiscal deficit by 319 per cent, GJ 137 per cent, WB 136 per cent, KR 133 per cent, TL 70 per cent, AP 70 per cent, KL 56 per cent, RJ 50 per cent, TN 26 per cent and PB 17 per cent. Among all states, AP, PB and KL were the states where revenues shocks were not severe, but still they experienced rise in the fiscal deficit. Though Maharashtra experienced fall in total revenue by 17.6 per cent, the increased expenditures has spurred the growth in fiscal deficit by 319 per cent during the time of pandemic. Gujarat has reduced total expenditure by only 2 per cent though the state experienced revenue shocks from almost all sources. As a consequence, fiscal deficit of Gujarat has increased by 137 per cent. UP has experienced revenue shortfall of 14.9 per cent and curtailed expenditure by 13.7 per cent, as a result experienced a fall in fiscal deficit upto Q3 of 2020-21 vis-à-vis Q3 of 2019-20. Similarly, 11 per cent fall in revenue is observed for Chhattisgarh and the state reduced expenditures by 13 per cent which helped the state to reduce fiscal deficit. Rajasthan has also curtailed expenditures in the face of revenue shortfall of 13 per cent which helped the state to contain fiscal deficit. However, this is the temporary fix by the respective states; curtailing expenditures when the economy is suffering from demand crunch may delay the economic recovery.



Table 7: Receipts side- Annual Growth (%) in 2020 vis-à-vis 2019 (up to Quarter 3)

Description	Change	0-5%	5%-10%	10%-20%	More than 20%
	Increase	CG			
(i) Own Tax Revenue	Decrease	AP, RJ, MP, OD	PB, TL, JH	GJ, HR, KR, KL, TN, UP, WB	МН
of which a. GST	Decrease		HR, AP, OD	CG, GJ, JH, KR, PB, TN, UP, RJ, MP, TL	MH, KL, WB
	Increase	TL, UP	PB, RJ	MP	WB
b. Sales Tax	Decrease	CG, HR, JH	TN, OD,	GJ, KR, AP	MH, KL
c. State Excise	Increase	UP, TN, KR		TL, RJ, PB	AP (123%)
	Decrease	HR,	KL, GJ	MP, CG, MH	WB, OD, JH
d. Stamps and	Increase	JH	MP	RJ	OD
Registration Fees	Decrease	CG, PB	AP	KR, KL, TN, UP	MH, GJ, HR, TL, WB
e. Land Revenues	Increase	WB	OD	KL	CG (78%), JH (352%), AP (690%)
e. Lanu Revenues	Decrease			KR, PB, RJ	MH, GJ, HR, TN, UP,MP, TL
f. Other Taxes and	Increase	OD,WB			CG
Duties	Decrease		MP	KL, AP, KR,	MH, GJ, HR, JH, PB, TN , UP, RJ, TL
(ii) States' Share in the Union Taxes	Decrease			TN, PB, GJ, MH, MP, RJ, WB	OD, TL, UP, AP, KR, CG, HR, MP, KL (289%)
(iii) Grants-in- aid transfers	Increase	MH,CG, HR			KL, AP,PB, TL, TN
ti diloiti o	Decrease	GJ	UP	MP, OD, WB, JH	KR, RJ
(iv) Non-Tax Revenues	Increase		MH, AP, UP	MP	OD
(11) Non-1 ax nevenues	Decrease	KR		TL	CG, GJ, HR, JH, KL, PB, TN, RJ, WB



(v) Capital Receipts (Non-Debt)	Increase			МН, МР	KR, UP, WB (101%), AP (2132.4%),
	Decrease	JH, TN, TL,		OD	CG,GJ, HR, KL, PB, RJ,
	Increase			AP (10.1%)	PB (18%)
Total Receipts (i+ii+iii+iv+v)	Decrease	KL (1.6%),	TL (5.7%) TN (7.2%), OD (8.4%) MP (10%),	CG (11.1%), UP (14.9%), RJ (13.1%), JH (16.4%), MH (17.6%), WB (17.2%), GJ (18.5%), KR (18.4%),	HR (21.2%)

Source: Compiled by authors using MKI Databse of CAG

Note: Figures in the parenthesis shows the per centage increase or decrease till Q3 of 2020-21 vis-à-vis Q3 of 2019-20. AP- Andhra Pradesh, CG- Chhattisgarh, GJ- Gujarat, HR- Haryana, JH- Jharkhand, KR- Karnataka, MH- Maharashtra, MP- Madhya Pradesh, OD- Odisha, PB- Punjab, RJ- Rajasthan, TN – Tamil Nadu, TL- Telangana, UP- Uttar Pradesh, WB- West Bengal

Table 8: Expenditure Side- Annual Growth (%) in 2020 vis-à-vis 2019 (up to Quarter 3)

Description	Change	0-5%	5%-10%	10%-20%	More than 20%
Revenue	Increase	GJ, TN, RJ	WB	KL, TL, PB	AP
Expenditure	Decrease	MH, HR	JH, KR, UP, MP	CG, OD	
Capital	Increase	KR	TN	KL, PB	AP (216.8%)
Expenditure	Decrease		CG	GJ, TL	MH, HR, JH, UP, RJ, MP, OD, WB
Total	Increase	TN, RJ, WB		KL, TL, PB	AP
Expenditure	Decrease	GJ	MH, KR	CG, HR, JH, UP, MP, OD	
Disbursement of Loans and Advances	Increase	TL		РВ	CG, JH, KR, WB
	Decrease		OD	KR	MH, GJ, HR, AP, TN, UP, RJ, MP

Source: Compiled by authors using MKI, CAG.

Note: Figures in the parenthesis shows the per centage increase or decrease till Q3 of 2020-21 vis \dot{a} -vis Q3 of 2019-20.

5. Conclusions



The study highlights the major challenges faced by both the Union and state governments in managing public finance during the time of COVID-19 pandemic. The analysis shows that public finance of the Union government is going through stress. Except Union Excise Duties, the revised estimates of 2020-21 show fall in revenue collections from all sources of tax and non-tax revenues. The lower international crude petroleum prices during 2020-21 helped the Union government to increase Union excise duties on petroleum products. However, the rise in UED collection was certainly not enough to compensate the shortfall in revenue from other sources. Despite revenue shortfalls, the Union government has increased expenditures on both revenue and capital accounts to respond to the pandemic. This led to high revenue and fiscal deficit during 2020-21.

The revenue shock faced by the Union government resulted in lower tax devolution to states in nominal terms over the last two years. The paper presented the aggregate picture of state finances of 16 major states based on Monthly Key Indicator database of the CAG upto Q3 of 2020-21 and also state specific analysis of these states. In addition, the paper also presented revised estimates of 2020-21 for 13 states (based on budget documents of 2021-22) to confirm the trends presented using the MKI database of CAG. The analysis using two databases confirms that except for grants-in-aid from the Centre (including GST compensation payment), states have experienced revenue shocks from all sources of revenue. The total revenue receipt of the states contracted by 11.34 per cent till Quarter 3 of 2020-21 vis-à-vis Q3 of 2019-20. Own tax revenue collection showed a contraction of 12.7 per cent till Q3 of 2020-21 vis-à-vis the same period of 2019-20. This was mainly due to fall in revenue collections from major sources of OTR such as GST, state sales tax, stamps and registration fees and other taxes and duties. Collection from state excise duties showed a positive growth but that was mainly in states where the impact of COVID-19 pandemic was not severe. Revenue from stamps and registration fee showed the highest contraction. On the expenditure side of state finances, states have responsed by augmenting and reprioritisation of expenditure. However, expenditure reprioritisation was not enough to absorb the revenue shock which resulted in running high deficits.



References

- International Monetary Fund (IMF) (2020), "World Economic Outlook, April 2020: The Great Lockdown", Available at
- https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020 (last accessed on 31 December 2020).
- Mukherjee, S. (2020), "Estimation and Projection of Petroleum Demand and Tax Collection from Petroleum Sector in India", *Journal of Infrastructure Development*, 12(1):39-68.
- OECD (2020), "Tax policy and administration responses to COVID-19" Chapter 2 in Revenue Statistics in Asian and Pacific Economies 2020, OECD Publishing, Paris, https://doi.org/10.1787/d47d0ae3-en
- Rao, M. Govinda (2021a), "Deficit Targets: A 21st century fiscal architecture for India", *Financial Express*, 6 April 2021.
- Rao, M. Govinda (2021b), "Budget 2021-22 A Budget for Pandemic Times Implementation Questions", *Economic & Political Weekly*, 56(9), 16-20.
- Reserve Bank of India (2020), "State Finances: A Study of Budgets of 2020-21", The Rserve Bank of India, Mumbai, October 2020.
- XV Finance Commission (2020), "Finance Commission in COVID Times: Report for 2021-26", The Fifteenth Finance Commission, October 2020.



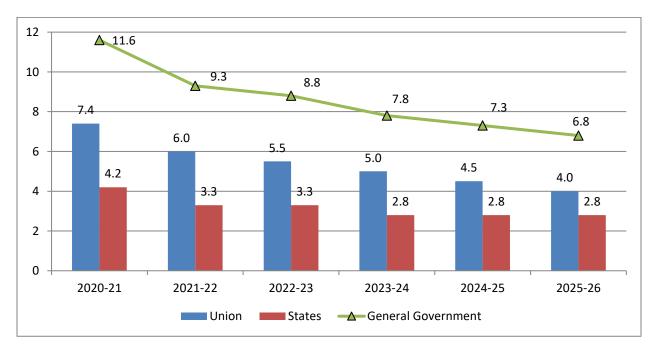
Appendix

Table A1: Collection of Union Excise Duties and Annual Growth

	Gross	Collection (Rs. (Annual Growth (%)			
Year	Union Excise Duties (UED) (A)	Cesses under UED (B)	UED - without Cesses (A-B)	Union Excise Duties (UED) (A)	Cesses under UED (B)	UED - without Cesses (A- B)
2018-19	231,044.93	69,137.03	161,907.90			
2019-20	239,452.43	81,505.77	157,946.66	3.64	17.89	-2.45
2020-21RE	361,000.00	233,900.00	127,100.00	50.76	186.97	-19.53

Source: Compiled by authors based on Union Budget Documents (various years)

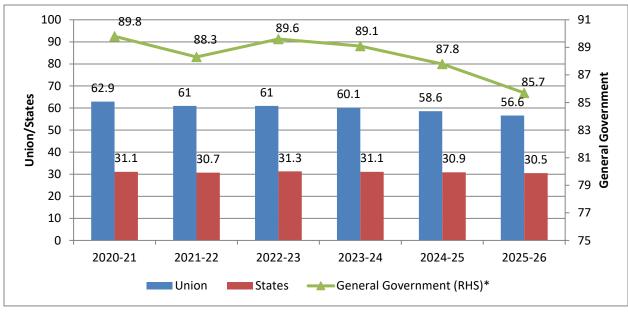
Figure A1: Fifteenth Finance Comission's Prescribed Glid Path of Fiscal Deficits (% of Nominal GDP)



Source: Figure 1.1, Page No. 10 of XV Finance Commission (2020)



Figure A2: Fifteenth Finance Comission's Prescribed Debt Trajecory during 2020-26 (% of Nominal GDP)



Source: Figure 1.2, Page No. 11 of XV Finance Commission (2020)

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