An Index of Relative State-Specific Fiscal Sustainability

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Abstract: Existing literature on state specific sustainability analysis using econometric methods provide limited insights as to whether the fiscal deficit of a state is sustainable or not. It does not indicate how fiscally strong or weak is one state vis-à-vis. another from a sustainability perspective. We provide estimates for state specific sustainable levels of fiscal deficit relative to GSDP in relation to the all-state FRBM norm. We have developed indices for providing relative rankings to the states in terms of their relative magnitudes of sustainable fiscal deficit to GSDP levels, relativities of effective interest rate, revenue receipts to GSDP ratio, and nominal GSDP growth rates. Using these indices, we highlight the states that have shown a greater fiscal strength during the FC14 and FC15 (first three years) periods. We find that the small and hilly states have relatively higher state specific sustainable fiscal deficit to GSDP ratios primarily because of their higher revenue receipts to GSDP ratios which in turn depend on their relatively higher share in fiscal transfers. In the FC15 period, we have noted that the states showing relatively low sustainable levels of fiscal deficit to GSDP include Haryana, Punjab, Gujarat, Maharashtra, Kerala, Tamil Nadu and West Bengal.

Keywords: fiscal vulnerability, state-specific sustainable fiscal deficit, relativities, effective interest rate, revenue receipts to GSDP ratio, nominal GSDP growth

1. Introduction

For states considered as a whole, the sustainable level of fiscal deficit and debt can be linked to the overall fiscal framework in which the combined fiscal deficit of central and state governments and the separate sustainable levels of fiscal deficit and debt relative to GDP are defined. Two examples of such frameworks are the ones given by the Twelfth Finance Commission (FC12) and that given by the 2018 amendment of Centre's FRBMA. In the case of FC12, the fiscal deficit to GDP limits for the centre and the states

considered together were 3% each while the sustainable debt-GDP level was derived at 28% each with an underlying nominal GDP growth of 12%. In the case of the 2018 amendment of the Centre's FRBM based on 2017 FRBM Review Committee report, the fiscal deficit to GDP limit for the Centre and the states was kept at 3% each but the sustainable debt-GDP levels were defined at 40% and 20% of GDP respectively with an underlying nominal GDP growth of 11.1%. These targets make reference to broad macroeconomic conditions relating to sectoral saving and investment profiles, and prevailing interest and growth rates. However, the fiscal situation of each state and sustainable debt and deficit levels relative to its own GSDP differ across states. Saving and investment profiles however are not available for individual state. Thus, for states considered as a group, the sustainable benchmarks for overall fiscal deficit and debt-GDP ratios can be fixed but it cannot be done individually for states. The Fiscal Responsibility Legislations (FRLs) of states also provide for similar benchmark targets.

The existing literature on sustainability analysis for individual states relies heavily on econometric estimation (Kaur, Mukherjee and Ekka (2018), Akram and Rath (2020,2021), Renjith and Shanmugam (2020, 2021), Dholakia, Mohan, and Karan (2004), Misra, Gupta, and Trivedi (2023), Shanmugam and Renjith (2023)). Most of the answers given however, provide only a qualitative guidance as to whether a state's fiscal deficit is sustainable or not. These frameworks do not compare the relative strength or weakness of a state in the context of fiscal sustainability. In the present paper, we have provided a quantitative framework within which an assessment can be made as to whether the state specific sustainable level of fiscal deficit is higher or lower than the all-state sustainable level of fiscal deficit relative to GDP. It is also possible to look at the relative role of three individual factors which contribute to the fiscal strength or weakness of a state.

In a recent contribution Srivastava et al. (2025), develop a methodology for calibrating state-wise sustainable fiscal deficit to GSDP levels linked to the all-state benchmark sustainable fiscal deficit to GDP level has been suggested. It is shown that the determination of state-specific sustainable level of fiscal deficit relative to GSDP is dependent on three relativity parameters namely, effective interest rate, revenue receipts to GSDP ratio, and nominal GSDP growth rates. In the present paper, we show that using these three relativities and their product, we can construct an 'Index of relative state-specific fiscal sustainability' from the viewpoint of sustainability of their borrowing.

This paper has six sections. Apart from the introductory section, section 2 provides a brief review of literature on debt sustainability analysis. Section 3 highlights the methodology for determining the state specific sustainable levels of fiscal deficit relative to GSDP and for developing an index for providing relative ranking to the states. Similar indices are also developed for three determining factors that enable us to distinguish the state specific sustainable fiscal deficit to GSDP levels. Section 4 applies this methodology for the FC14 period and Section 5 provides a similar analysis for the first three years of the FC15 period. Section 6 provides concluding observations.

2. Review of Literature

Existing studies on the subject of debt sustainability have broadly utilized four approaches. The **first** one is based on the Domar (1944) stability condition that states that the primary deficit path can be sustained as long as the real growth of the economy remains higher than the real interest rate. This approach is also called the 'indicator-based approach' (Blanchard et al., 1991). Kaur et al., (2014) used the indicator approach to verify the debt sustainability of Indian states. The **second** one utilizes statistical or econometric tests such as the use of unit root tests to check whether public debt is stationary or not (Hamilton and Flavin 1986), and co-integration tests between government expenditures and government revenues (Trehan and Walsh, 1991). Hakkio and Rush (1991) and Jha and Sharma (2004) used the cointegrating relationship between public revenue and expenditure to assess the sustainability of debt. The **third** one is Bohn's model-based approach (Bohn 1995) to test whether the primary surplus-GDP ratio is positive and, at least, a linearly rising function of the debt-GDP ratio. Abiad and Ostry (2005) used the extended version of the Bohn model to test the debt sustainability of 31 emerging market countries from 1990 to 2002. In the Indian context, Shanmugam and Renjith (2021) used panel version of Bohn framework and p-spline technique to test the debt sustainability of 20 Indian states. The **fourth** one relates to debt sustainability threshold models utilizing the concept of 'fiscal fatigue' (Ghosh et al. 2013). This happens when public debt achieves some threshold and departs from this threshold value when the primary balance does not adjust to debt. Thus, it is critical to test for the responsiveness of primary balance to lagged levels of debt relative to GDP in different regimes, using the threshold regression method. Lixin (2019) employed the threshold estimation to examine the sustainability of China's public and external debt for the period 1985 to 2015. In the Indian context, Srivastava et al., (2021) estimate the sustainability threshold for the general government debt-GDP ratio for India using a threshold regression, in which the primary balance-GDP ratio is the dependent variable and is related to the lagged debt-GDP ratio and other determinants of primary balance-GDP ratio.

More recently, moving beyond conventional debt sustainability analysis, Kumar et al. (2024) have used a composite debt sustainability index in order to evaluate debt sustainability of state governments in India for the period 2003-04 to 2019-20. They have mainly utilized the Principal Component Analysis (PCA) along with other statistical methods. Ten significantly correlated debt indicators, measuring the multiple aspects of fiscal or debt position of state governments in India were used to construct the composite indicator. Further, the first three principal components explain a large proportion of variance in indicators that were used for analysis. Each factor has been weighted according to its contribution to the portion of the explained variance in the dataset and the additive aggregation method was adopted to construct the debt sustainability index. The findings of this study are in accordance with those of previous studies on the debt sustainability of sub-national governments in India. The study identifies some of the small and hilly states such as Sikkim, Arunachal Pradesh,

Manipur, Meghalaya, Assam and Tripura as the top performers with respect to debt sustainability. Selected medium and large states such as Odisha and Chhattisgarh also show a decent performance. The worst performers include West Bengal, Punjab, Kerala, and Himachal Pradesh.

3. Developing an index of state-wise fiscal sustainability: methodological framework

It is shown in Srivastava et al. (2025), that sustainable fiscal deficit to GSDP levels of individual states can be derived as given below.

The symbols used subsequently are defined as follows.

I: Interest payment on outstanding government debt

R: Revenue receipts

i: effective interest rate on outstanding government debt

r: Revenue receipts relative to GSDP

g: Nominal GSDP growth

b^*: Sustainable level of debt-GSDP ratio

f^*: Sustainable level of fiscal deficit to GSDP ratio as per the FRBM norm

Assuming that the sustainable level of debt-GSDP ratio, which is repeated year after year is b^* which is common across all states, we can write

$$\frac{I}{R} = \frac{i}{r} \cdot \frac{b^*}{(1+g)} \qquad (1)$$

This implies that

$$\frac{i_j}{r_j} \cdot \frac{b_j^*}{(1+g_j)} = \frac{i_a}{r_a} \cdot \frac{b_a^*}{(1+g_a)} \qquad (2) \qquad \text{assuming } \frac{Ij}{Rj} = \frac{Ia}{Ra}$$

where subscript 'j' refers to the jthstate's parameters and subscript 'a' refers to the all-state values of each parameter (see, Srivastava et al. (2025) for detailed derivation)

Rearranging the terms in equation (2), we have

$$b_j^* = b_a^* \left[\left({i_a}/{i_j} \right) \left({r_j}/{r_a} \right) \right] \left[{(1+g_j)}/{(1+g_a)} \right] \qquad (3)$$

$$b_j^* = b_a^* \left[\frac{i_a . r_j . (1+g_j)}{i_j . r_a . (1+g_a)} \right] \qquad (4)$$

For sustainable combinations of b^* and f^*, we can write

$$b^* = f^* \left(\frac{1+g^n}{g^n} \right) \qquad (4)$$

Using the above relationship, we can thus write

$$f_j^* = f_a^* \left[\frac{i_a . r_j . g_j}{i_j . r_a . g_a} \right] \qquad (5) \qquad \text{or } f_j^* = f^* . \left[\frac{f_a^*}{f^*} \right] . \left[\frac{i_a . r_j . g_j}{i_j . r_a . g_a} \right] \qquad (5a)$$

Where,

f^* is the all-state fiscal deficit to GDP ratio norm

$$\frac{f_j^*}{f_a^*} = \left[\frac{i_a}{i_j} \right] . \left[\frac{r_j}{r_a} \right] . \left[\frac{g_j}{g_a} \right] \qquad (6) \quad \text{or} \quad \frac{f_j^*}{f^*} = \left[\frac{f_a^*}{f^*} \right] . \left[\frac{i_a . r_j . g_j}{i_j . r_a . g_a} \right] \qquad (6a)$$

Defining the interest rate, revenue receipts to GSDP ratio, and nominal growth relativities as I_j, R_j and G_j, we can write

$$\frac{f_j^*}{f_a^*} = I_j . R_j . G_j \qquad (7)$$

Equation (7) can also be written as:

$f_j^* = f_a^* . I_j . R_j . G_j$ (8) or $\frac{f_j^*}{f^*} = \left[\frac{f_a^*}{f^*}\right] . I_j . R_j . G_j$ (8a)

The overall index of fiscal vulnerability can be defined in terms of values of f_j^*. The highest value for f_j^* among all j can be written as f_{max}^*. The lowest value of f_j^* indicating the fiscally weakest state can be written as f_{min}^*. Accordingly, states can be ranked individually as follows.

$X_j^f = \frac{f_j^* - f_{min}^*}{f_{max}^* - f_{min}^*}$ (9)

The value of this index would be zero when $f_j^* = f_{min}^*$ and 1 when $f_j^* = f_{max}^*$.

This Index broadly depends on comparing three relativities. For each of those, an individual index can be developed as described below.

1. **Effective interest rate relativity:** the lower the effective interest rate on state government debt compared to the all-state effective interest rate, the better the fiscal situation of the state.

2. **Revenue receipts to GSDP ratio relativity:** The higher the revenue receipts to GSDP ratio of a state relative to that for all states, the better the fiscal situation of the state.

3. **Nominal GSDP growth relativity:** The higher the nominal GSDP growth of a state relative to that for all states, the better the fiscal situation of the state.

Let I_j indicate the effective interest rate relativity, that is, $I_j = \frac{i_a}{i_j}$. In this case, the relative position of state j can be indexed by:

$X_j^I = \frac{I_j - I_{j,min}}{I_{j,max} - I_{j,min}}$ (10)

Similarly, R_j can indicate the revenue receipts to GSDP relativity, that is, $R_j = \frac{r_j}{r_a}$. In this case, the relative position of state j can be indexed by:

$X_j^R = \frac{R_j - R_{j,min}}{R_{j,max} - R_{j,min}}$ (11)

Let G_j indicate the nominal GSDP growth relativity, that is $G_j = \frac{g_j}{g_a}$. In this case, the relative position of state j can be indexed by:

$X_j^G = \frac{G_j - G_{j,min}}{G_{j,max} - G_{j,min}}$ (12)

4. Results and Discussion: FC14 period

The FC14 recommendation period runs from 2015-16 to 2019-20. During this period, as a first step, we have estimated state specific sustainable levels of fiscal deficit relative to GSDP and accordingly ranked the states. In our analysis, states have been categorized into two groups namely medium and large states and small and hilly states, based on area, nature of terrain and fiscal capacity[i].The highest level of state specific fiscal deficit indicates the strongest fiscal position of a state with respect to fiscal sustainability. Chart 1 shows that the highest level of sustainable fiscal deficit is for Mizoram at 19.2% of GSDP. The first seven states are all small and hilly states. This is primarily because of their relatively higher revenue receipts to GSDP ratios which in turn are strong because of a large contribution of fiscal transfers. The all-state average level of fiscal deficit to GSDP ratio is estimated at 3.3% (f_a^*). This may be compared with the FRBM norm of 3% of GSDP (f^*). There are 20 states whose state specific sustainable fiscal deficit to GSDP levels are above the FRBM norm of 3% of GSDP. This list includes all the small and hilly states except Uttarakhand. The remaining nine states are below the FRBM norm of 3% of GSDP in terms of their sustainable level of fiscal deficit to GSDP ratios. These states include Telangana, West Bengal, Kerala, Gujarat, Haryana, Tamil Nadu, Uttarakhand, Punjab and Maharashtra. Maharashtra appears to be having the lowest level of state specific sustainable fiscal deficit to GSDP ratio at 1.7%.

Chart 1: State-specific levels of sustainable fiscal deficit to GSDP ratio (%): FC14 period

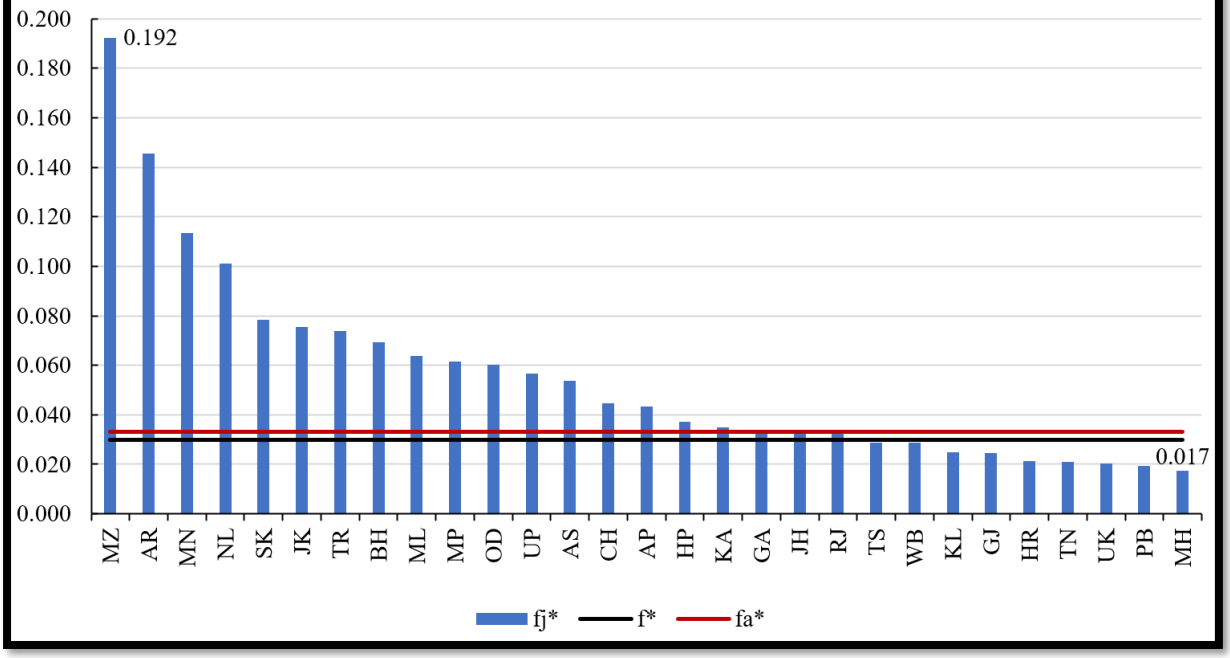
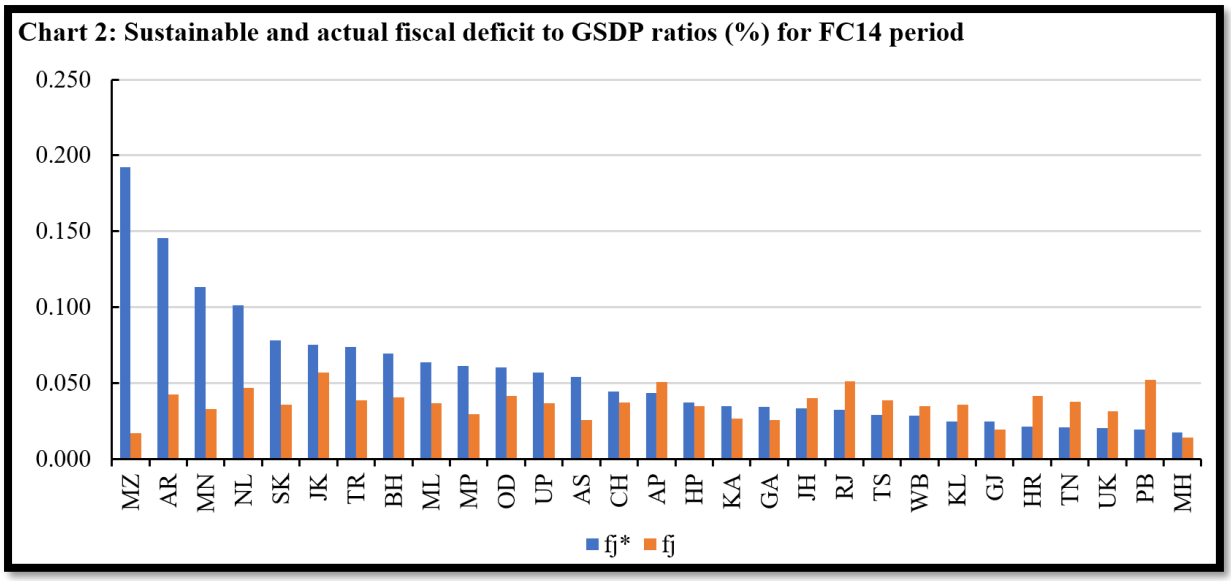


Chart 2 shows that during the FC14 period, the average actual fiscal deficit levels of ten states exceeded their corresponding sustainable levels during this period. These states are AP, JH, RJ, TS, WB, KL, HR, TN, UK and PB.



These inter-state variations can be analysed in terms of the roles that different relativities play in determining the overall level. Column (2) of Table 1 indicates the index value of the sustainable fiscal deficit to GSDP levels of individual states. The highest value of 1 is accorded to Mizoram and the lowest value of zerois accorded to Maharashtra. The three relativities that determine the fiscal deficit index value do not necessarily indicate similar values for all the three indicators.

It can be seen that most of SH states have a high value of $\mathbf{X_j^F}$. MZ has the highest value of 1. This does not imply the highest value with respect to all the three constituent indices. Among other SH states, high values of $\mathbf{X_j^F}$ pertain to AR, MN, NL, SK, JK, and TR. Among ML states, BH has the highest value of $\mathbf{X_j^F}$.

With respect to relativity index of effective interest rate, MZ has the highest value at 1. This is the driving factor for MZ to have the highest value of $\mathbf{X_j^F}$.Other states which have a high value of $\mathbf{X_j^I}$include OD, UP, MN, and KA. In the case of BH, the high value of relativity index of effective interest rates contributes strongly to a high level of $\mathbf{X_j^F}$.

With respect to $\mathbf{X_j^R}$, the highest value of 1 pertains to AR followed by NL at 0.683, MZ at 0.679 and MN at 0.658. Thus, the high revenue receipts relativity index contributes significantly to higher magnitudes of the sustainable fiscal deficit to GSDP relativity index for these SH states.

With respect to $\mathbf{X_j^G}$, the highest value of 1 pertains to SK. This is followed by MP, TS, MZ and TR.

As far as the states in the ML group are concerned, with respect to the fiscal deficit relativity, BH has an index value of 0.297 which is the highest for states within this group. BH has a relatively higher value as far as the effective interest rate and growth relativities are concerned but not in terms of revenue receipts relativity. At the lower end, Maharashtra has weak index values for the revenue receipts relativity, followed by growth rate relativity and the effective interest rate relativity.

Table 1: Aggregate and component-wise index values for FC14 period

State	X_j^F	X_j^I	X_j^R	X_j^G
(1)	(2)	(3)	(4)	(5)
MZ	1.000	1.000	0.679	0.722
AR	0.734	0.307	1.000	0.441
MN	0.549	0.490	0.658	0.396
NL	0.479	0.330	0.683	0.346
SK	0.348	0.274	0.270	1.000
JK	0.332	0.232	0.462	0.435
TR	0.323	0.253	0.335	0.697
BH	0.297	0.434	0.313	0.482
ML	0.266	0.450	0.419	0.140
MP	0.252	0.321	0.189	0.846
OD	0.244	0.565	0.204	0.504
UP	0.225	0.496	0.212	0.455
AS	0.208	0.295	0.204	0.602
CH	0.156	0.383	0.211	0.250
AP	0.148	0.407	0.105	0.589
HP	0.113	0.183	0.212	0.207
KA	0.100	0.479	0.036	0.596
GA	0.095	0.303	0.128	0.268
JH	0.090	0.417	0.182	0.000
RJ	0.085	0.203	0.110	0.362
TS	0.065	0.000	0.050	0.765
WB	0.065	0.173	0.076	0.392
KL	0.043	0.231	0.048	0.297
GJ	0.041	0.235	0.000	0.574
HR	0.021	0.130	0.001	0.468
TN	0.020	0.064	0.027	0.363
UK	0.017	0.102	0.065	0.114
PB	0.011	0.113	0.037	0.169
MH	0.000	0.188	0.009	0.135
Max	**0.192**	**1.550**	**4.180**	**1.438**
Min	**0.017**	**0.812**	**0.677**	**0.681**

Source (basic data): RBI and MoSPI

Table 2 paints a similar picture in terms of ranks according to the index values. The expectation is that a relatively higher rank on the fiscal deficit index would be accompanied by a relatively higher index value for the indices with respect to the three determining relativities although rank 1 in the fiscal deficit column is not necessarily

matched by a similar rank in the other three columns. The second ranked state in terms of fiscal deficit sustainability namely Arunachal Pradesh has the highest rank for the revenue relativity but relatively lower ranks at 13 and 14 for the effective interest rate and growth rate relativities respectively. At the lower end, Punjab and Maharashtra have relatively low values of the indices (and correspondingly, higher ranks) indicating a weak fiscal position in terms of the concerned parameters. The weakest position in terms of interest rate relativity is for Telangana, in terms of the revenue relativity, Gujarat, and in terms of the growth rate relativity, Jharkhand.

Table 2: State-wise ranks based on sustainable level of fiscal deficit and individual components for FC14 period

Rank	X_j^f	X_j^i	X_j^r	X_j^g
(1)	(2)	(3)	(4)	(5)
1	MZ	1	3	4
2	AR	13	1	14
3	MN	4	4	16
4	NL	11	2	20
5	SK	16	9	1
6	JK	19	5	15
7	TR	17	7	5
8	BH	7	8	11
9	ML	6	6	26
10	MP	12	15	2
11	OD	2	13	10
12	UP	3	10	13
13	AS	15	14	6
14	CH	10	12	23
15	AP	9	19	8
16	HP	23	11	24
17	KA	5	25	7
18	GA	14	17	22
19	JH	8	16	29
20	RJ	21	18	19
21	TS	29	22	3
22	WB	24	20	17
23	KL	20	23	21
24	GJ	18	29	9
25	HR	25	28	12
26	TN	28	26	18
27	UK	27	21	28

28	PB	26	24	25
29	MH	22	27	27

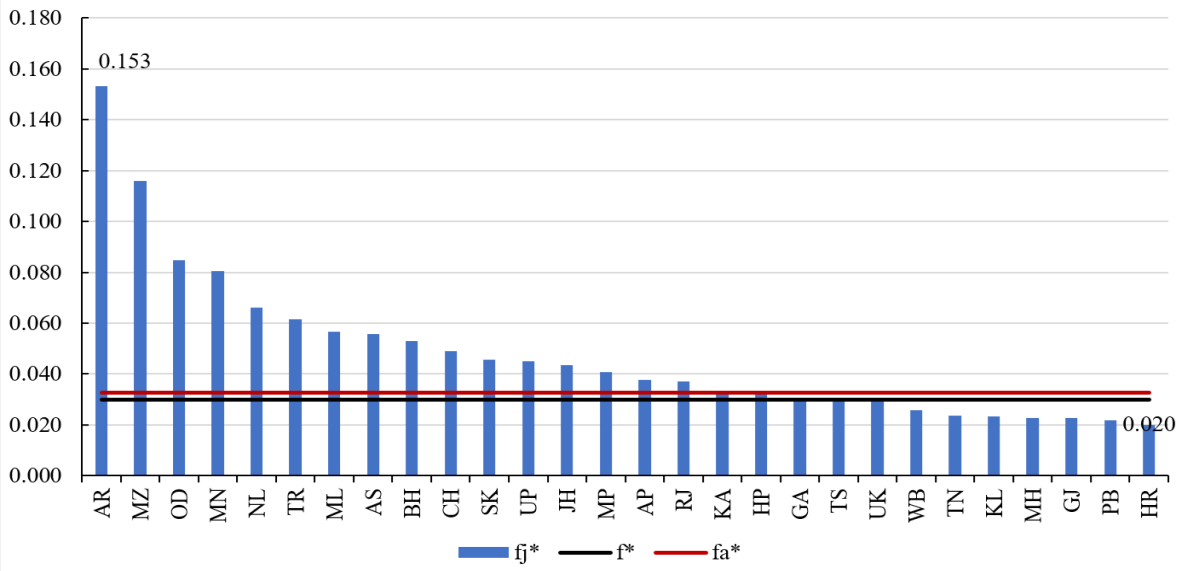
Source (basic data): RBI and MoSPI

Note: In Column (1) and (2), states have been arranged in the ascending order of rank, that is, the best performing state in terms of the sustainable level of state's fiscal deficit is ranked 1 and the worst performing state is ranked 29. In columns (3), (4) and (5), states are given ranks according to their index values in the three relativities.

5. Results and Discussion: FC15 period

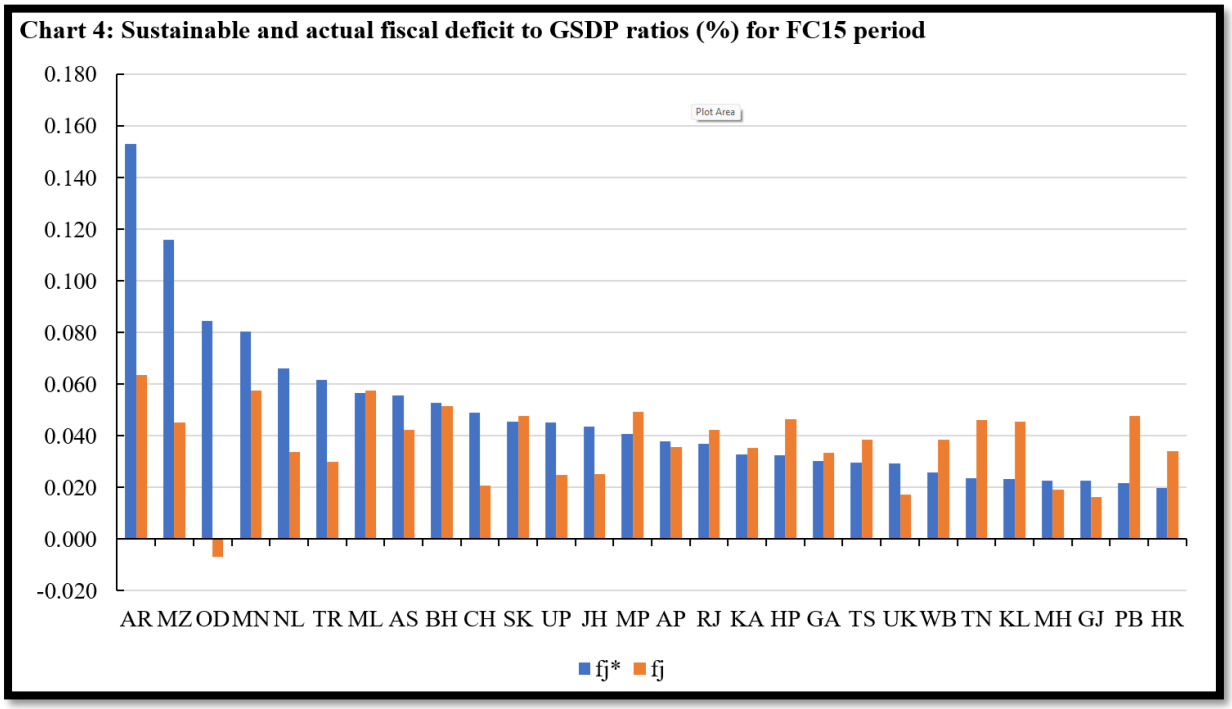
We have carried out a similar analysis for the first three years of the FC15 period from 2020-21 to 2022-23. The average value of all state fiscal deficit to GSDP ratio has remained at 3.3% indicating that as far as the states are concerned, there has not been any deterioration at the average level in spite of the fact that this period contains the COVID year. There was a sharp deterioration in the first year namely, 2020-21. However, there was considerable improvement in 2022-23 based on revised estimates. Ranking of individual states however has changed. The sustainable levels of fiscal deficit to GSDP ratios for the individual states are shown in Chart 3. The highest value is now for Arunachal Pradesh at 15.3%. The lowest value is for Haryana at 2%. Maharashtra's situation has improved although it has remained only marginally above 2%. There are 19 states that have sustainable state specific fiscal deficit to GSDP levels that are higher than the benchmark of 3%. This group includes all SH states except Uttarakhand. There are 9 states that have individual sustainable levels of fiscal deficit relative to GSDP that is lower than 3%. This group includes Haryana, Punjab, Gujarat, Maharashtra, Kerala, Tamil Nadu, West Bengal, Uttarakhand and Telangana.

Chart 3: State-specific levels of sustainable fiscal deficit to GSDP ratio (%): FC15 period



Source (basic data): RBI and MoSPI

Chart 4 shows that during the FC15 period, the number of states with their average actual fiscal deficit exceeding their corresponding sustainable levels increased to 13 from 10 during the FC14 period. The states which have been added to theFC14 list of states are GA, HP, KA, MP, SK and ML.States showing an improvement in their fiscal balances relative to their sustainable levels are AP, JH, and UK. These states are no longer part of the FC15 list of states.



Source (basic data): RBI and MoSPI

Table 3 shows the relative index values of the states with respect to the sustainable fiscal deficit level as also with respect to the individual determining relativities. The highest ranked state in terms of fiscal deficit is Arunachal Pradesh which also has the highest index value for the index based on revenue receipts relativities. Its effective interest rate relativity is also strong with a rank of 3. But its growth rate relativity carries a rank of 16.

Table 3: Aggregate and component-wise index values for FC15 period

State	X_j^f	X_j^i	X_j^r	X_j^g
(1)	(2)	(3)	(4)	(5)
AR	1.000	0.506	1.000	0.556
MZ	0.721	1.000	0.556	0.528
OD	0.486	0.978	0.254	0.912
MN	0.455	0.417	0.656	0.203
NL	0.346	0.356	0.670	0.000
TR	0.313	0.217	0.339	0.651
ML	0.275	0.261	0.495	0.135
AS	0.269	0.122	0.230	1.000
BH	0.247	0.331	0.304	0.427
CH	0.218	0.264	0.215	0.678
SK	0.193	0.235	0.183	0.733
UP	0.189	0.133	0.233	0.593
JH	0.178	0.451	0.225	0.324
MP	0.156	0.209	0.162	0.660
AP	0.134	0.275	0.082	0.941
RJ	0.129	0.168	0.122	0.758
KA	0.096	0.398	0.035	0.927
HP	0.094	0.184	0.267	0.024
GA	0.077	0.239	0.156	0.230
TS	0.073	0.185	0.053	0.806
UK	0.072	0.121	0.145	0.328
WB	0.045	0.040	0.093	0.462
TN	0.027	0.041	0.031	0.718
KL	0.027	0.039	0.077	0.407
MH	0.021	0.014	0.044	0.589
GJ	0.020	0.145	0.000	0.817
PB	0.013	0.035	0.081	0.279
HR	0.000	0.000	0.015	0.615
Max	**0.153**	**1.487**	**4.166**	**1.200**
Min	**0.020**	**0.913**	**0.635**	**0.603**

Source (basic data): RBI and MoSPI

At the lower end of the Table, Punjab and Haryana are seen to be the fiscally weakest states in the context of sustainability analyses. Haryana is the weakest in terms of the effective interest rate relativity. Punjab is relatively weak in terms of effective interest rate as well as revenue receipts relativities.

In terms of ranks, the general expectation is that states with higher ranks for sustainable fiscal deficit will also have higher ranks in terms of its three determinants. However, several exceptions may be noted. For Arunachal Pradesh and Mizoram, the growth rate relativity is ranked only at 16 and 17 respectively. In fact, in terms of the growth rate relativity, the states in the SH group appear to have, by and large, relatively poor growth rate relativity reflecting possibly the adverse impact of COVID. At the end of fiscally weaker states from the viewpoint of fiscal sustainability, for states like Gujarat, Punjab, and Haryana, their handicaps relate to all the three parameters. However, Gujarat is somewhat better placed in terms of the growth relativity.

Table 4: State-wise ranks based on sustainable level of fiscal deficit and individual components for FC15 period

Rank	X_j^f	X_j^i	X_j^r	X_j^g
(1)	(2)	(3)	(4)	(5)
1	AR	3	1	16
2	MZ	1	4	17
3	OD	2	9	4
4	MN	5	3	25
5	NL	7	2	28
6	TR	14	6	12
7	ML	11	5	26
8	AS	21	11	1
9	BH	8	7	19
10	CH	10	13	10
11	SK	13	14	8
12	UP	20	10	14
13	JH	4	12	22
14	MP	15	15	11
15	AP	9	20	2
16	RJ	18	18	7
17	KA	6	25	3
18	HP	17	8	27
19	GA	12	16	24
20	TS	16	23	6
21	UK	22	17	21
22	WB	24	19	18
23	TN	23	26	9
24	KL	25	22	20
25	MH	27	24	15
26	GJ	19	28	5

27	PB	26	21	23
28	HR	28	27	13

Source (basic data): RBI and MoSPI

Note: In Column (1) and (2), states have been arranged in the ascending order of rank, that is, the best performing state in terms of the sustainable level of state's fiscal deficit is ranked 1 and the worst performing state is ranked 29. In columns (3), (4) and (5), states are given ranks according to their index values in the three relativities.

6. Conclusions

In this paper, a framework has been suggested for analysing the reasons as to why state specific fiscal deficit to GSDP levels show considerable variations across the all-state FRBM norm of 3% of GSDP. Before undertaking this analysis, we have estimated state specific sustainable levels of fiscal deficit to GSDP using the methodology suggested in Srivastava et al. (2025). This analysis has been done for two Finance Commission periods namely, FC14 (2015-16 to 2019-20) and FC15 (2020-21 to 2022-23). It has been shown that the average level of sustainable fiscal deficit relative to GSDP can be related to three relativity parameters pertaining to effective interest rate, revenue receipts to GSDP ratio, and nominal GSDP growth. It has been shown that a state that borrows at an effective interest cost that is higher than the average or has a revenue receipt to GSDP ratio which is lower than average or shows a nominal GSDP growth performance that is lower than the average, will be able to sustain a fiscal deficit to GSDP ratio that is lower than the average level. We have suggested amethodology for constructing indices in order to provide relative rankings for individual states covered by FC14 (29 states) and FC15 (28 states) recommendations. Our findings indicate that in both the FC periods, the state belonging to the SH group, that is, small and hilly states, have a much higher level of sustainable fiscal deficit relative to GSDP as compared to the larger states in the ML category of states. One common reason for this is the better rank obtained by the SH group pf states in the revenue receipts relativity which has been dependent on their receiving a relatively higher share in fiscal transfers. In this sense, fiscal transfers have a bearing on the horizontal dimension of the fiscal imbalance particularly as measured by the capacity to sustain higher fiscal deficit relative to respective GSDPs.

7. References

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