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Fiscal Restructuring Towards 'Sound Finance' in India

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Abstract

While the 16th Finance Commission's mandate does not explicitly prioritize fiscal sustainability or fiscal restructuring, these considerations remain integral to its constitutional duty under Article 280(4)(d) to uphold the "interests of sound finance." In the current fiscal context, marked by rising debt and persistent deficits at both the Union and State levels, this study analyses the sustainability and growth implications of India's public debt and proposes a restructuring of deficit targets. The central argument is that fiscal rules should be reframed around three pillars—fiscal sustainability, growth implications, and macroeconomic stability, rather than being anchored to exogenous or uniform targets. Employing a stochastic Intertemporal Budget Constraint (IBC) framework and a public debt–growth model using data from 1991–92 to 2022–23, the analysis reveals that the existing debt–deficit positions of both the Union and the States are unsustainable. The study estimates that achieving sustainability requires reducing the general government debt to 70.38% of GDP, comprising 46.65% for the Union and 23.74% for the States, assuming adherence to the 3% fiscal deficit ceiling and a 10-year average nominal GDP growth of 10.9%. State-level assessments show sustainable debt thresholds of 27.8% for Kerala, which can be achieved within a decade under existing fiscal rules and growth profiles. The study also proposes complementary fiscal indicators to safeguard fiscal space while ensuring discipline, namely, the Debt Service to Debt Receipts ratio and he Capital Expenditure to Fiscal Deficit ratio. Integrating these parameters would help prevent unsustainable borrowing, promote productive public investment, and allow flexibility where debt finances growth-enhancing expenditures.

The findings underscore the need for differentiated, sustainability-linked fiscal rules across states to achieve balanced fiscal consolidation and inclusive growth.

Key Words: Fiscal Sustainability, Fiscal Consolidation, Fiscal Federalism, Finance Commission, Debt Thresholds

JEL Classification: E62, H63, H68, H72, C32

1. Introduction

India, despite its federal structure, displays unitary characteristics in Centre-state relations, marked by vertical asymmetry in revenue-expenditure balances (Rao, 2000). The constitution grants higher revenue powers to the central government, shifting the burden of expenditure primarily onto state governments. States cover about 60% of general government expenditure but possess only about one-third of general government revenue powers (RBI, 2020). This fiscal disparity forces states into continuous borrowing choices, even after intergovernmental transfers, resulting in rising public debt levels for states (Renjith and Shanmugam, 2018).

Governments, whether at the national or subnational level, often employ fiscal stimuli, frequently financed through increased borrowing, for two primary reasons. Firstly, to act counter-cyclically and alleviate the adverse effects of economic fluctuations, aligning with the Keynesian approach, which asserts that governments must play an active role in stabilizing market economies. Secondly, for political reasons, driven by the government's aspiration to expand its activities. The former aims to address economic cycles, while the latter is influenced by political cycles, often linked to election timing (Srivastava, 2012). Trends in public debt relative to GDP since independence highlight the cyclical nature of the former and the sustained upward trend of the latter (Rangarajan and Srivastava, 2005).

In the late 1990s, budget deficits and public debt surged, exceeding GDP growth rates, both at the national and subnational levels. To address this, the central government introduced a rule-based fiscal framework, Fiscal responsibility and Budget Management Act in 2003, guided by a balance of saving and investment formula (Chapter 3 of the 12th Finance Commission

(FC) report). The 12th FC recommended that each state enact Fiscal Responsibility Legislations (FRLs) to eliminate revenue deficits by 2008-09 and reduce fiscal deficits to 3% of Gross State Domestic Product (GSDP), aiming to systematically reduce borrowings. Adoption of these FRLs was mandatory for states to access the Debt Consolidation and Relief Facility (DCRF), offering state-specific grants and debt relief measures as outlined by the 12th FC.

The implementation of Fiscal Responsibility Legislations (FRL) initially aimed to enforce fiscal discipline in states but had significant impacts on their public interventions. While the central government often exceeded FRL limits (except in 2007-08), some state governments followed suit and breached the limits as well. This led to expenditure cuts on productive investments, realignment of priorities, and increased borrowing to sustain operations within the deficit limit. Within the constrained budget environment, the latter set of states faced severe fiscal stress in expenditure management. However, their policy choices and actions played a pivotal role in supporting continued public interventions, holding the potential for long-term sustainability and economic growth (Steffy and Renjith, 2024).

Recognizing the debt-deficit situation of the central and state governments over time, as well as the fiscal choices made by the states and the necessity for fiscal discipline to ensure macroeconomic stability, successive finance commissions up to the 15th have offered their own suggestions and recommendations for maintaining sound finances at both the central and state levels. Notably, Clause 4 of Article 280 (specifically 280(d)) of the Indian Constitution mandates that the Finance Commission consider the "interests of sound finance." Realizing the debt-deficit situation of the centre and states over a period, fiscal choices of the states, and the need for fiscal

discipline for macroeconomic stability, the successive finance commissions till 15th provided their own suggestions and recommendations for sound finance of the Centre and states. Notably, the clause 4 of Article 280 (i.e., 280(d)) of the Indian Constitution specifically requires the Finance Commission to consider the 'interests of sound finance'.

Against this backdrop, it is now the 16th Finance Commission's responsibility to consider Clause 4, given the current debt-deficit situation of both the Government of India and the states, along with the other three clauses. However, the Terms of Reference (TOR) of the 16th Finance Commission do not specifically focus on fiscal sustainability or fiscal restructuring for sound finance. Nonetheless, these aspects cannot be overlooked when addressing vertical and horizontal imbalances. Therefore, this study attempts to workout strategy to restructure the deficit targets for the Union, all states collectively, and individual states, analysing the sustainability and growth implications of public debt. The primary contention of this study is that fiscal rules should be reframed based on fiscal sustainability, growth implications of public debt, and macroeconomic stability due to fiscal indicators. Fiscal targets should evolve primarily from sustainable debt targets and the growth profiles of both the Union and the states, rather than other exogenous factors, Also, within all states, flexible fiscal rules should be established based on the sustainability position and growth performance of each state.

By employing a stochastic Intertemporal Budget Constraint approach and a public debt-growth framework from 1991-92 to 2022-23, we assess whether the debt-deficit positions of both the Union and the states (collectively and individually for three specific states) are sustainable using Bohn's model-based framework (Bohn, 1998). We then determine the threshold level of debt beyond which it becomes detrimental to the economy

using a threshold regression model. Once this threshold is identified, we proceed with a simulation exercise, considering the threshold debt level, existing deficit targets, and average growth levels. We also conduct the same exercise with flexible target levels and higher growth to inform appropriate government policy actions for long-term sustainability.

Further, we examine three significant fiscal indicators that can affect the future fiscal trajectory without compromising the fiscal autonomy and fiscal space of both the Union and the states: the debt servicing to debt receipts ratio, the capital expenditure to fiscal deficit ratio, and the proportion of off-budget borrowing to total borrowing. The target for the debt servicing to debt receipts ratio is set to avoid a Ponzi scheme scenario, where continuous borrowing is required to service existing debt, leading to unsustainable debt positions. The target for the capital expenditure to fiscal deficit ratio aims to ensure increased gross investment, enhancing public investment and crowding in private investment, thereby fostering growth at both levels. Moreover, the merger of the budget and off-budget borrowing should apply to both the central government and the states. If off-budget borrowing is directed towards productive public sector investments, there should be a corresponding relaxation of the deficit targets for both the Union and the states.

The remainder of the study is organized as follows: Section 2 presents the debt-deficit positions of the Union, All States, Combined and the special case of Kerala. In Section 3, we conduct the sustainability analysis at three levels and identify the debt threshold for each level. While section 4 discusses the simulation exercises performed at different levels, Section 5 presents different strategies aimed at controlling debt and achieving sustainable level. Finaly, Section 5 concludes the study.

2. Fiscal Scenario: Union, All States, Combined and Kerala

The Indian Constitution (1950) originally established a two-tier federal system: the Union and the states, each with separate tax powers and expenditure functions. Most buoyant taxes are assigned to the Union, while states have more extensive expenditure responsibilities. However, states generate less than half of their financial needs from their own resources. To address this, the Constitution provides for tax devolution (Articles 270 and 272) and grants-in-aid (Article 275). When state expenditures exceed revenues, deficit financing through borrowing is permitted (Article 293), similar to the Union government.

Among the current 28 Indian states, the fiscal policy stance relies on factors such as revenue mobilization capacity, expenditure rationalization, discretionary transfer provisions, permissible deficit levels, borrowing options, and effective debt management strategies. Revenue mobilization is the starting point, with states generating their own revenues from restricted tax, non-tax, and non-debt capital receipts, unlike the Union. While revenue indicators may be consistent, the base, capacity, and efforts vary across states. The adoption of the Goods and Services Tax (GST) in 2017, the most significant indirect tax reform since independence, has sparked policy discussions about the states' revenue generation capabilities due to their further surrender of taxing powers (Renjith, 2023).

Both the Union and state governments borrow when expenses exceed revenues. They use three types of deficits: revenue deficit, fiscal deficit, and primary deficit. Fiscal deficit is the excess of total expenditures over total receipts (excluding debt receipts). Revenue deficit is the difference between revenue expenditures and revenue receipts, while primary deficit is the fiscal deficit minus interest payments. Fiscal Deficit deficits indicate the

financial health and borrowing needs of the governments, leading to public debt. The Indian Constitution assigns different borrowing powers to the central and state governments. Central government debt includes domestic and external debt, and public account liabilities such as NSSF and provident funds. State governments can only borrow from the domestic market and the central government, with no power to raise loans abroad except for externally aided projects through the central government. State public account debt includes small savings, provident funds, and various reserves and deposits. State debt is classified into internal debt, loans and advances from the central government, and public account liabilities, including market loans, loans from financial institutions, and Ways and Means Advances (WMA) from the RBI.

Governments expand their activities beyond trend levels for two main reasons: to minimize the impact or volatility of growth cycles and to finance political agendas (Srivastava, 2012). Trends in the primary deficit relative to GDP and public debt relative to GDP since Independence show the cyclical nature of the former and the secular upward trend of the latter (Rangarajan & Srivastava, 2005). Since the late 1990s, there has been a sharp deterioration in the debt-deficit situation for both the Union and the states. To reduce debt to sustainable levels, the Union adopted a rule-based fiscal framework (FRBM) in 2003, and most states enacted FRBM rules in 2005, alongside other fiscal consolidation measures, with some initial success. However, fiscal consolidation was reversed after the 2008-09 global financial crisis. The situation worsened with the COVID-19 pandemic. Currently, the fiscal deficits for the Union, states, and combined register at 6.44%, 3.39%, and 9.58%, respectively (Table 1).

The debt-GDP ratio (2011-12 series) for the Union and states in India deteriorated since the mid-1990s due to revenue losses from

customs and excise duty reforms, poor tax performance, low tax buoyancy, and increased government spending, particularly from the fifth pay commission's recommendations. Consequently, the Union's debt-GDP ratio peaked at 62.59% and the states' at 32.34% in 2003-04. Following the implementation of various fiscal measures, including the FRBM Act in 2003, the debt-GDP ratios began to decline. By 2014-15, the Union's debt-GDP ratio had fallen to 50.07%, and the states' to 21.69%. The Union's ratio continued to decline to 48.06% by 2018-19, while the states' ratio increased to 25.33%. The COVID-19 pandemic exacerbated the situation, pushing the Union's debt-GDP ratio to 61.00% and the states' to 29.5% by 2022-23. The combined debt-GDP ratio, closely following the Union's trend, reached 81.7% in 2022-23 (Table 1 - Panel 2).

Table 1: Union, All States, Combined and Kerala Fiscal Deficits and Debt Ratios during the FRBM Period (2003–04 to 2022-23)

Year	Fiscal Deficit to GDP/GSDP Ratio				Debt to GDP/GSDP Ratio			
	Union	All States	Combined	Kerala	Union	All States	Combined	Kerala
2003-04	-4.41	-4.32	-8.30	-4.6	66.0	31.8	85.9	32.2
2004-05	-3.95	-3.38	-7.20	-3.2	65.5	31.3	84.9	31.5
2005-06	-4.03	-2.48	-6.50	-2.6	63.9	31.1	82.4	30.0
2006-07	-3.35	-1.82	-5.10	-2.1	61.4	28.9	77.9	29.1
2007-08	-2.59	-1.54	-4.00	-3.0	58.9	26.6	75.5	28.5
2008-09	-6.11	-2.44	-8.30	-2.7	58.6	26.1	74.4	28.0
2009-10	-6.57	-2.97	-9.30	-2.9	56.3	25.5	72.8	27.5
2010-11	-4.89	-2.11	-6.90	-2.5	52.2	23.5	67.7	26.8
2011-12	-5.91	-1.93	-7.84	-3.5	53.5	22.8	68.6	25.6
2012-13	-4.93	-1.97	-6.88	-3.6	52.6	22.2	68.0	26.3
2013-14	-4.48	-2.21	-6.67	-3.6	52.2	22.0	67.7	26.7
2014-15	-4.10	-2.62	-6.71	-3.6	51.4	21.7	67.1	27.7
2015-16	-3.87	-3.05	-6.92	-3.2	51.5	23.4	69.0	28.6
2016-17	-3.48	-3.47	-6.93	-4.2	49.5	24.8	68.9	29.9
2017-18	-3.46	-2.40	-5.83	-3.8	49.5	25.1	69.7	30.6
2018-19	-3.44	-2.45	-5.80	-3.4	49.6	25.3	70.4	30.7
2019-20	-4.64	-2.61	-7.22	-2.9	52.7	26.7	75.0	32.6
2020-21	-9.17	-4.06	-13.10	-5.3	62.8	31.0	88.4	40.0
2021-22	-6.75	-3.76	-9.45	-4.9	60.2	29.0	83.5	38.3
2022-23	-6.44	-3.39	-9.58	-3.6	61.0	29.5	81.7	36.7

Source (Basic Data): GDP & GSDP-National Statistical Office, Ministry of Statistics and Programme Implementation , GOI; Fiscal Deficit and Debt (Union All States & Combined)-RBI; Combined data includes union and all states, adjusted by subtracting loans from union to the states.

Debt-Deficit Position at Individual State level: The case of Kerala

The individual state-level differences in the debt-deficit position are not solely due to common factors inducing trends but also stem from structural disparities, cost disabilities, revenue generation capacities, the level of productive spending, transfer

incentives, and political dimensions. Acknowledging these differences, we further examine the dynamics of debt-deficit. for Kerala as a case study, as the state's recent attention from national agencies like RBI, CAG regarding its fiscal situation.

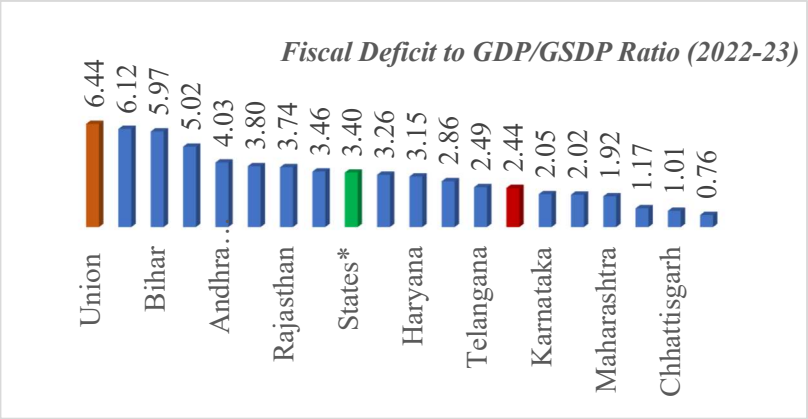
Kerala's fiscal choices and financial strategies have attracted significant attention due to its distinctive characteristics recognized by scholars. The state consistently ranks highly across 13 indicators evaluated by national and international bodies, boasting exemplary social infrastructure and outshining India in HDI rankings. Despite shouldering over 62% of the COVID burden at its peak, Kerala still leads in Sustainable Development Goals (SDGs), social protection, and the Happiness Index. Global acclaim has followed Kerala's success in safeguarding lives and livelihoods, even extending protection to migrant workers.

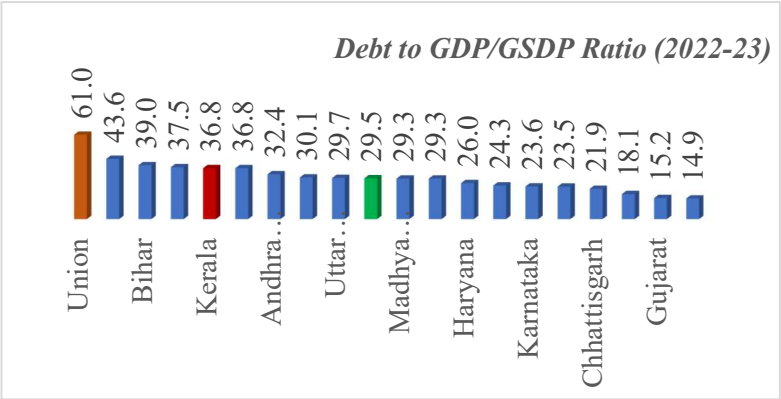
However, Kerala's impressive developmental achievements have been accompanied by fiscal challenges, leading to its classification as one of the three fiscally unsound states by the 13th Finance Commission in 2012 and one of the most fiscally stressed states by the Reserve Bank of India (RBI) in 2022. The state's current public debt stems from past interventions and is compounded by second-generational challenges like migration, sectoral imbalances, educated unemployment, labor underutilization, social inequality, and aging. Despite facing limited fiscal space, Kerala has actively intervened in human development and welfare, aiming for a long-term impact on sustainability and economic growth. Yet, as the central government imposes further restrictions and the state responds with a legal suit (The State of Kerala vs. Union of India: Original Suit No. 01/2024: IA No. 6149/2024), the sustainability of Kerala's development model remains under scrutiny.

The fiscal deficit position of the state was 4.1 percent in 2003-04, decreased to under the target of 3% in 2010-11 with the

introduction of the Fiscal Responsibility and Budget Management Act (FRBM), but persisted above 3% since then. As of March 2023, the deficit position is 3.6%. Notably, except for the pandemic-impacted period of 2021-22, Kerala consistently maintained a debt-to-GSDP ratio surpassing the 25% threshold due to its deliberate focus on directing investments towards social infrastructure. However, it's worth noting that the upsurge in the debt-GSDP ratio during the pandemic (Around 40%) primarily stems from the denominator effect – a decline in GSDP – rather than signifying inherent fiscal mismanagement (Table 1).

Figure 1: Fiscal Deficit and Public Debt to GDP/GSDP Position of the Union and States (Aggregate & Disaggregate) during the year 2022-23.





Source (Basic Data) : Fiscal Deficit and Debt - CAG & Budget documents (various years) of respective states

Figure 1 illustrates the fiscal deficit and debt positions have varied across states. In 2022-23, Assam (6.12%) registered the highest fiscal deficit to GSDP ratio, followed by Bihar (6.12%) and Punjab (5.97%), while Gujarat recorded the lowest at 0.76%. In terms of debt to GSDP position, Punjab registered the highest at 43.6%, followed by Bihar (39.0%) and West Bengal (37.5%), while Odisha registered the lowest at 14.9%. Notably, Kerala has shown a significant improvement in its debt-deficit, with a fiscal deficit of 2.44% and outstanding liabilities of 36.8%.

3. The Question of Sustainability & Threshold

Fiscal sustainability is a critical issue not only for national governments but also for sub-national governments. It involves ensuring that debt levels do not accumulate at a rate that exceeds the government's capacity to service it (Renjith & Shanmugam, 2018). Unsustainable debt can disrupt economic activity and necessitate a shift in economic priorities. Several studies have emerged in the literature to test sustainability. Earlier studies

predominantly applied the Domar (1944) condition, which derives three conditions from the basic debt accumulation equation:

$$d_t = p_t + d_{t-1}[(1 + i_t)/(1 + g_t)] \qquad (1)$$

where, d_t is the debt-GDP ratio in period t; *g* is the nominal economic growth rate; *i* is the nominal interest rate; *p* is the primary deficit relative to GDP in period t; and the conditions are $g_t=i_t$, $g_t<i_t$ and $g_t>i_t$. Fiscal policy is unsustainable when $g_t=i_t$ or $g_t<i_t$, because d_t grows linearly when $g_t=i_t$ and explosively when $g_t<i_t$. Debt is sustainable when $g_t>i_t$. This approach was extended later by considering the inter-temporal budget constraint (IBC) of the Government (i.e., outstanding debt today must be equal to the current value of future primary surpluses) and also additional indicators (growth, liquidity, creditworthiness, fiscal burden, fiscal space, etc.) and renamed as "Indicator approach" (Shanmugam and Renjith 2023). However, this approach was criticized as it applied the condition on a year-to-year basis and does not validate whether IBC of the Government is satisfied or not.

After the seminal contribution of Hamilton and Flavin (1986), a series of empirical studies emerged testing debt sustainability using time series approaches, such as unit root and cointegration methods. The unit root approach examines whether the public debt series (in the US) is stationary (i.e., whether the series of public debt contains a bubble term), a method later widely used to investigate the mean-reversal process of debt series (Uctum and Wickens, 2000). If the revenue and expenditure patterns, or the deficit and debt-to-GSDP ratio, are found to be cointegrated, then they are considered sustainable (Trehan and Walsh, 2002; Hakkio and Rush, 1992). [Refer to Afonso (2005) for a brief survey of studies employing these procedures]

Later, the statistical properties of these studies were criticized by subsequent studies (2007). Bohn (1998) proposed a model-based approach, from Barro (1976)'s tax smoothening hypothesis and stochastic framework, to test whether the primary surplus-GDP ratio (s_t) is positively and at least linearly related to the debt-GDP ratio (d_t):

$$s_t = \alpha + \psi\, d_t + \varepsilon_t \qquad (2)$$

if $\psi>0$ and statistically significant, debt is sustainable, which means that the initial stock of debt is equal to the sum of the present discounted values of the primary surpluses. The IBC is satisfied if the discounted sum of end-period debt converges to zero. The positive reaction coefficient, ψ ensures this convergence. The Bohn (1998) model, also called fiscal policy resonse model, has received increased attention among researchers due to its economic intuitiveness and robust statistical properties (Shanmugam and Renjith , 2023). Several studies have been conducted to test sustainability using Bohn model, also referred to us the fiscal policy response model (Abiad and Ostry (2005); Fincke and D'Erosmo et al., 2016).

Recent developments in this area focus on identifying the sustainability threshold. Fiscal fatigue occurs when public debt reaches a certain threshold, and if the primary balance does not adjust accordingly, the debt departs from this threshold value (Shanmugam and Renjith, 2023).The recent development in this regard is to identify the sustainability threshold. Fiscal fatigue happens when public debt achieves some threshold and departs from this threshold value when the primary balance does not adjust to debt (Shanmugam and Renjith, 2023).

Employing discrete Fiscal Policy Response Model and threshold regression model and, we established debt sustainability and debt

threshold for different levels of governments. Our findings indicate that current debt-deficit positions of both the Union and the states are unsustainable. To achieve sustainability, the general government debt levels need to be reduced to a threshold of 70.38% of which 46.65% for the Union and 23.74% for the states, maintaining the existing FRBM targets for fiscal deficit of 3% and an average (10 year) nominal GDP growth of 10.9%. At the state level, we calculated the sustainable debt thresholds for Kerala, as 27.8% (Table 2).

Table 2: Debt Sustainability and Debt Threshold at Different Levels

Government	ψ	Sustainable?	Threshold Value
General	0.194 (1.032)	No	70.38%
Union	0.0238 (1.535)	No	46.65%
All States	0.0217 (0.690)	No	23.74%
Kerala	0.0413 (0.828)	No	27.80%

4. Simulation Model Examining the Period of Attaining the Debt Threshold Target

The above analyses clearly indicate that the current levels debt of Centre and all States are unsustainable and they are significantly higher than the debt sustainability threshold level of 40 (≈39.4) percent and 22 percent respectively. These levels are growth reducing. There is a greater need to cut down its debt ratio by about one third in both cases. This section examines whether the Centre and all States will attain the sustainable level of debt or not and if when they will reach? For this purpose, it employs the following debt dynamic equation given in (1) above:

$$d_t = f_t + d_{t-1}\left[\frac{1}{(1+g)}\right]$$

In this equation, the debt-GDP ratio (d_t) at the end of a fiscal year depends on (i) fiscal deficit-GDP ratio (f_t), (ii) last year debt-GDP ratio (d_{t-1}) and (iii) nominal growth rate (g_t). Subtracting d_{t-1} on both sides, we get:

$$d_t - d_{t-1} = f_t + d_{t-1}\left[\frac{1}{(1+g)}\right] - d_{t-1} = f_t - d_{t-1}\left[\frac{g}{(1+g)}\right]$$

The left side is the change in debt-debt ratio between two successive years (i.e., between year t and previous year t-1). Using this standard debt dynamic formula, we simulate debt-GDP level in future period, given assumptions on f_t and g_t and previous year debt (d_{t-1}) with different assumptions on these three components to see when the Union, all States and Kerala, will achieve the sustainable level of debt? Table 3 demonstrates when different governments are projected to reach their respective sustainability threshold positions under the current fiscal deficit target of 3% and an average nominal growth of 12%.

On average, if governments at all levels maintain a 3% deficit and 12% nominal growth, they will be able to reach a sustainable position within a maximum of 10-year period. If a state requires a push through a 0.5% relaxation in the fiscal deficit, the Finance Commission may recommend this adjustment. This approach ensures that, in the future, the deficit target can be worked out to be below 3%, while maintaining an overall deficit target of 3% for the 10-year threshold attainment period.

Table 3: Simulation Results to achieve the Sustainable Debt-GSDP ratio

Government	Current Debt-GDP Ratio	Sustainability Threshold (%)	Fiscal Deficit	Current Nominal Growth	Required Growth	Estimated Year to reach the Threshold
General	81.7%	70.38%	3%	9.6%	12%	2032-33
Union	61.0%	46.65%	3%		12%	2031-32
All States	29.5%	23.74%	3%		12%	2034-35
Kerala	36.7%	27.80%	3%	11.95%	12%	2032-33

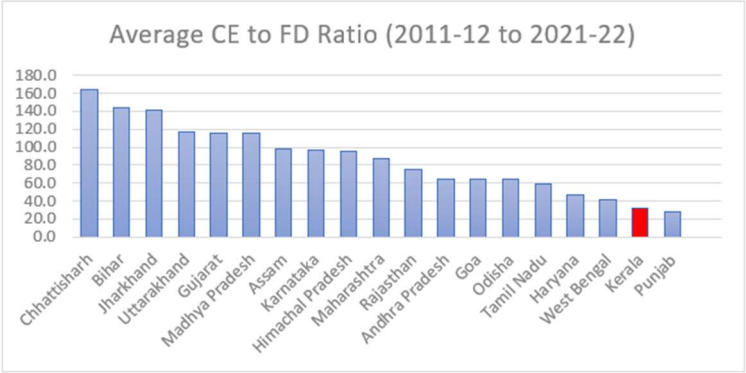
5. Strategies to Control Debt and Reach a Sustainable Level

This study examines three other significant fiscal indicators, without compromising the fiscal autonomy and fiscal space of both the Union and the states: the debt servicing to debt receipts ratio, the capital expenditure to fiscal deficit ratio, and the proportion of off-budget borrowing to total borrowing. The target for the Debt Service to Debt Receipts ratio is set to avoid a Ponzi scheme scenario, wherein borrowing is repeatedly done to service existing debt, leading to an unsustainable debt position. The target for the Capital Expenditure to Fiscal Deficit ratio aims to ensure increased gross investment, which directly enhances public investment and has a crowding-in effect on private investment, thereby fostering growth at both levels. Furthermore, the merger of the budget and off-budget borrowing should apply to both the central government and the states. If the off-budget borrowing is directed towards productive public sector investments, then there should be a corresponding relaxation for the deficit target of the union and states.

The Figure 2 illustrates the average capital expenditure to fiscal deficit (CE to FD) ratio for 20 major states from 2011-12 to

2021-22. This ratio indicates the proportion of capital expenditure financed by net borrowings. Kerala and Punjab are among the states with the lowest ratio, suggesting that a significant portion of its borrowings is allocated to unproductive expenditures. Allocating deficit funds to unproductive expenditures is costly due to higher servicing costs compared to returns. This low ratio may result from a reliance on off-budget borrowings to meet capital spending needs.

Figure 2: Capital Expenditure of Fiscal Deficit Ratio of Indian States

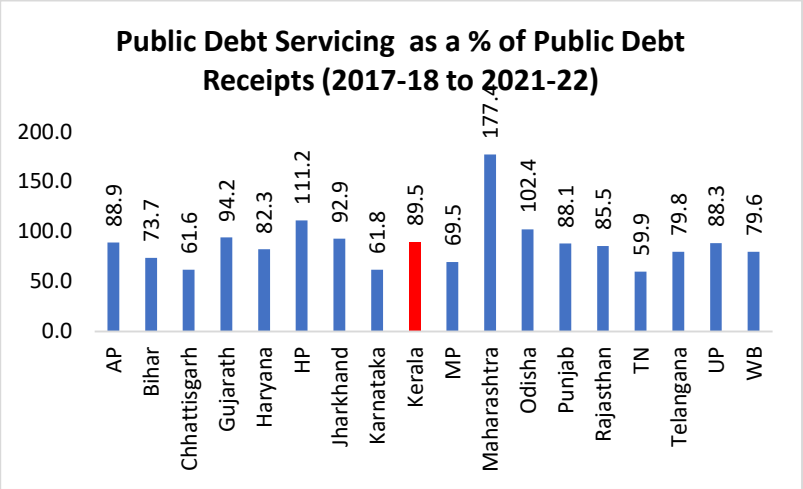


Source (Basic Data): CAG

Note: Unlike other states, the estimation of capital spending in Kerala requires further refinement. A substantial portion of the State's off-budget borrowing is directed towards capital projects, while a significant share of budgetary allocations to local governments also corresponds to capital expenditure.

Figure 3 shows the state wise share of debt servicing to debt receipts in India from 2017-18 to 2021-22 shows that Kerala's debt servicing ratios have been high, averaging 89.5% from 2017-18 to 2021-22, indicating significant fiscal pressure, in the case of Himachal Pradesh and Maharashtra exhibit notably high averages,

111.2% and 177.4% respectively, indicating that these states frequently use more than their total debt receipts for servicing existing debt. In contrast, Karnataka, Tamil Nadu, and Telangana maintain more sustainable debt servicing practices with averages of 61.8%, 59.9%, and 79.8%, respectively. These states demonstrate relatively better fiscal health and greater capacity to invest in developmental activities. Bihar shows an improvement trend, reducing its debt servicing ratio from 104.1% in 2017-18 to 55.8% in 2021-22, indicating better fiscal management over time.



6. Concluding Remarks

This study finds the current debt-deficit positions at all levels unsustainable. To achieve sustainability, general government debt should be reduced to 70.38%, with 46.65% for the Union and 23.74% for states (average) and for Kerala, the sustainable debt threshold is determined to be 27.8%. Our estimate suggests that,

on average, if governments at all levels maintain a 3% deficit and 12% nominal growth, they will be able to reach a sustainable position within a maximum of 10-year period. If a states like Kerala with liquidity crisis requires a push through a 0.5% to 1% relaxation in the fiscal deficit target, the Finance Commission may recommend this adjustment. This approach ensures that, some years in the future, the deficit target can be worked out to be below 3%, while maintaining an overall deficit target of 3% for the 10-year threshold attainment period. Further by examining, three crucial fiscal indicators -the debt servicing to debt receipts ratio and the capital expenditure to fiscal deficit ratio - we can avoid unsustainable borrowing and boost public investment and economic growth. If the latter two indicators ensure an optimal public investment and economic growth in the country, they justify a corresponding relaxation in deficit targets. Further, the 16th Finance Commission should consider revisiting fiscal targets flexibility along with others debt management strategies. It can introduce a swap scheme to convert high-interest loans to low-interest ones. Old loans can be reissued as new loans with longer maturity periods to reduce debt servicing and avoid a Ponzi scheme scenario.

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