# Does increased borrowing lead to higher development spending in Kerala?

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### 1. Introduction

India, despite its federal structure, exhibits unitary characteristics, particularly in its Centrestate relations (Rao, 2000). This is apparent from the vertical asymmetry of revenueexpenditure balances between the union and states. Constitutionally, the Union government holds higher revenue powers, placing the responsibility for meeting expenditure needs primarily on state governments. Notably, states shoulder about 60 percent of the general government expenditure is shouldered by states (RBI, 2020), leaving approximately one-third of the general government revenue power. The ensuing fiscal disparity compels states to resort to continuous borrowing, even after the intergovernmental transfer mechanism, leading to the accumulation of states' public debt (Renjith and Shanmugam, 2018).

Recognizing the increasing trend of borrowing and its accumulation, discussions commenced at the union and state levels to enact Fiscal Responsibility Legislations (FRLs). Consequently, the union government introduced the Fiscal Responsibility and Budget Management (FRBM) Act in 2003. This act, guided by the balance of saving investment formula (outlined in Chapter 4 of the 12th Finance Commission Report), imposed limits on key deficit indicators, specifically fiscal deficit and revenue deficit. The act set the fiscal deficit of state governments at 3 percent of GDP and mandated a zero percent revenue deficit. Consequently, the act encouraged State governments to adopt their own FRLs, outlining annual targets to eliminate revenue deficit by 2008-09 and reduce fiscal deficit by 3 percent of GDP, following a systematic path of reducing borrowing. Adoption of FRLs was a

prerequisite for states to access the Debt Consolidation and Relief Facility (DCRF), which included state grants and debt relief measures outlined by the 12th FC.

Despite growing expenditure responsibilities, all states were required to enact FRLs to avail of the DCRF<sup>1</sup>. Karnataka became the first state to enact FRL, followed by Kerala and Tamil Nadu. Almost all states enacted FRLs during 2005-06, with the exceptions of Sikkim and West Bengal<sup>2</sup>.

While acknowledging its sudden positive impact in curbing burgeoning debt and deficits, FRL failed to align with current economic realities and exerted pressure on expenditure commitments. As a result, both union and a few state governments couldn't maintain the target even after 20 years. Furthermore, the FRBM review committee proposed more stringent deficit and debt targets in 2017. However, the recommendations, including the debt targets of 40 percent and 20 percent were deemed unfeasible by both the union and states. In this context, the question of whether states should continue, amend, or re-orient the rule-based framework remains an empirical matter concerning its actual effect on the economy.

Theoretically, based on the Keynesian perspective, an increase in expenditure financed through deficits is expected to have a positive influence on economic growth, primarily due to the multiplier effect (Rangarajan and Srivastava, 2005). Moreover, various spending patterns can generate different outcomes. Development expenditure, in particular, can serve as an indicator variable that influences growth (Chakraborty and Dash, 2013). Further scholars with different schools of thought highlight India's developmental aspirations, emphasizing the pivotal role based on the subsidiarity principle. The principle suggested that states are more aware of their financial condition and requirements than the union government (DeMello, 2000). In many developing nations subnational governments are entrusted with providing various public services as they hold better information on the preferences and needs of local jurisdictions (Oates 1972, 2005). Each state is uniquely positioned to comprehend and address its developmental needs. However, the existing fiscal constraints impede the states to manage their finances independently. Pathak (2023) rightly notes that fiscal targets can have distortionary impacts on the composition of sub-national spending affecting its fiscal sustainability in the long run.

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See the 12th FC Report for the details

<sup>&</sup>lt;sup>2</sup> Both Sikkim and West Bengal adopted state-level FRLs in 2010.

State-level FRLs exerted significant pressure on the spending policies and patterns of states. Some had to curtail their priorities, others had to alter their spending patterns, and certain states had to compromise on their development spending on (spending on social-economic services) policies. States like Kerala aimed for a fiscal deficit target without compromising their longstanding development spending. Scholars have varied opinions on the adoption of FRLs in the latter set of states. While RBI (2022) acknowledges its sudden positive impact in curbing burgeoning debt and deficits of these states, critics such as Joseph and Anitha Kumary (2022) argue that the FRBM Act is outdated and fails to align with current economic realities and past public interventions.

In this context, this paper empirically examines the impact of increased net borrowings on the development spending of states by employing expenditure response models and time-varying techniques spanning from 1990-91 to 2021-22. The analysis aims to explore the efficacy of increased borrowings in driving state development and advocates against the retention of outdated fiscal limits.

The paper is organized as follows: Section 2 examines the fiscal trajectory of Kerala from 1980 to 2022, Section 3 presents the analysis, and Section 4 concludes the paper.

# 2. Kerala: Fiscal Trajectory

Kerala stands out among states for its noteworthy progress in various social and development indicators. The Kerala Model of Development, observed in the 1980s, highlighted a unique situation where despite low per capita income, the state achieved a high standard of living and growth rate. This success was attributed to government interventions. With low revenue-raising powers and high expenditure responsibilities the state had to depend on borrowing, leading to elevated deficits and debt. The implementation of pay commission revisions and an economic slowdown further exacerbated the situation, resulting in high fiscal stress in the late 1990s and early 2000s. In response, the state adopted a state-level Fiscal Responsibility Legislation (FRL) in 2003, which helped reduce the fiscal deficit until 2010-11, though it did not eliminate the revenue deficit.

The 15th Finance Commission (FC) labelled Kerala as a 'highly debt-stressed' state. The commission emphasized that the Fiscal Deficit (FD) consistently exceeded the prescribed limit of 3 percent of Gross State Domestic Product (GSDP) over the past decade. Adding to

this, the Reserve Bank of India (RBI) in its 2022 report highlighted the state's risky financial situation, questioning the sustainability of its debt. As per 2021-22 data Kerala stands first among the major states with a high FD to GSDP ratio of around 4 percent and debt ratio near to 40 percent of GSDP.

A critical aspect of Kerala's fiscal stress lies in the high ratio of Revenue deficit to fiscal deficit. This indicates that the state's borrowings are predominantly allocated to meeting recurring expenditures such as salaries and pensions, signalling that a significant portion of the state's budget is allocated to salaries, leaving limited resources for productive investments or capital spending. This structural imbalance has raised concerns about the state's ability to channel funds effectively into developmental initiatives.

12.00 45.00 40.00 10.00 35.00 8.00 30.00 25.00 6.00 20.00 15.00 4.00 10.00 2.00 5.00 0.00 0.00 ■ Debt/GSDP FD/GSDP DE/GSDP

Figure 1: Fiscal Indicators of Kerala

Source: Based on data compiled from CAG

Figure 1 illustrates a consistent presence of fiscal deficit above the prescribed limit during the last decade except for 2019-20. These consistent deficits have resulted in high debt-to-GDP ratio of the state. The important sources of net borrowings of the state include market borrowings, loans from the Centre, loans from financial institutions, loans from RBI, NSSF, etc. Revenue expenditure forms a major part of these borrowings. In the context of developing nations, subnational entities cannot afford to neglect revenue expenditure, as it often stems from past public interventions (Renjith and Joseph, 2023). Imposing a strict limit on revenue deficit, or further reducing it to zero, would compel states to allocate a significant portion of their limited borrowing space of 3 percent to cover revenue expenses, potentially

constraining capital spending. This would also curtail the revenue portion of their development spending.

However, the figure demonstrates that Kerala has not compromised on development expenditure, reflecting the state's commitment to both development and welfare. The trend of both fiscal deficit and development expenditure shows a similar trend, suggesting that any uptick or downturn in fiscal deficit is consistently accompanied by a corresponding rise or fall in development expenditure. Notably, the state heavily relies on off-budget borrowings through Special Purpose Vehicles (SPVs) to fund its developmental initiatives. Development expenditures, especially at the state level, hold substantial multiplier effects, as highlighted by the RBI (2019), which states that capital expenditure at the state level has a multiplier effect of 2. In contrast, revenue expenditure carries a lower multiplier effect of 0.82. This underscores the critical importance of sustaining development spending for long-term economic impact.

# 3. Do Net Borrowings Induce Development Spending of the State?

In this section, we try to empirically evaluate the response of the state's development expenditure to an increase in net borrowings. To understand this, we have employed an expenditure response model with time-varying techniques. The basic empiric specification is:

$$e_t^d = \alpha + \beta_1 f g_t + \beta_2 e r_t + \beta_3 i d_t + \beta_4 p c_t + \beta_5 t r_t + u_t$$

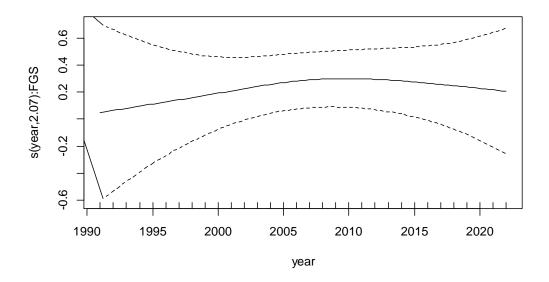
Where  $e_t^d$  is the dependent variable, representing the development expenditure.  $fg_t$  represents the fiscal gap score calculated as the difference between the actual fiscal deficit and the stipulated limit set by the Fiscal Responsibility and Budget Management (FRBM) Act, which stands at 3 percent.  $er_t$  represents the effective interest rate,  $id_t$  represents internal debt to GSDP ratio,  $pc_t$  is the per capita income growth rate and  $tr_t$  shows transfers to GSDP ratio. And subscript t stands for the time period. The analysis incorporates fiscal data compiled from the Comptroller and Auditor General (CAG) for the period 1990-91 to 2021-22. Development expenditure, internal debt, and transfers are considered as percentages to GSDP.

Table 1: Spline estimation results for Kerala		
Variables	Mean	Co-efficient
	(standard deviation)	(t-value)
$e_t^d$	7.474	_
	(0.941)	
$fg_t$	0.293	0.334**
	(0.836)	(2.818)
$er_t$	8.898	-0.333**
	(1.173)	(-3.498)
$id_t$	12.013	-0.086***
	(6.545)	(-8.008)
$pc_t$	5.372	0.022
	(3.666)	(1.280)
$tr_t$	3.176	1.145***
	(0.799)	(8.860)
_c	-	8.374
		(6.069)
edf	-	2.066
<i>P</i> -value	-	0.070
F Statistics	-	2.498
Adj R <sup>2</sup>	-	0.93
Durbin Watson	-	1.83
Source: Authors' calcu	lation	

The findings indicate that an escalation in the fiscal gap score, signifying a breach beyond the 3 percent limit in fiscal deficit, corresponds to an increase in the development expenditure of the state. That is, when the fiscal deficit increases by one percent above the limit of 3 percent there will be a 0.33 percent increase in the development spending of the state. Development spending holds pivotal significance for the state's progress and welfare. The positive and

statistically significant relationship observed underscores the state's commitment to addressing both developmental and welfare aspects. Moreover, beyond the impact of the state's net borrowings on development expenditure, transfers also play a supportive role. Chakraborty and Dash (2013) also assert that transfers have aided the development spending of the states, in the absence of which, states might have resorted to greater reductions in development expenditure to meet fiscal deficit targets. In the past, states constrained their spending to achieve these targets, leading to the challenge of accumulating cash surpluses (Isaac and Ramakumar, 2006).

Figure 2: Deviation from Average Coefficient (Spline) for Kerala



Source: Authors' Construction (The two dashed lines show the 95% confidence interval; the solid line shows the point estimates of the smooth term)

Figure 2 shows the path of the smooth term; the curve indicates that values greater than 0 indicate that the co-efficient was above and values less than zero indicate that the co-efficient was below its average value shown in Table 1.

### 4. Conclusion

Unlike many other states, Kerala has always prioritised its development spending. Here we have tried to empirically analyse if net borrowings have aided this expenditure. Results suggest that increased borrowings have induced the development expenditure of the state. It

may be plausible that similar patterns exist in other states. States may tend to show either positive, negative, or mixed responses to changes in net borrowings. In this context, it becomes imperative to reconsider existing rules and establish a fiscal deficit threshold that ensures state development spending is not impeded. The current growth rate of approximately 12 percent in Kerala may indicate that the upsurge in development expenditure could be a contributing factor to this growth. States indeed bear heavier expenditure burdens compared to the central government, and their ability to borrow has become increasingly constrained. This constraint is poised to curtail both capital and social spending at the state level, which contributes significantly to the economy through its multiplier effect. Attempting to impose uniform and rigid rules on states, without adequate consideration or evidence of their rationality, would only aggravate the situation. States would then be forced to shoulder the burden of diminished development expenditures. Therefore, it is important to reconsider the limits imposed on states, recognizing that augmented net borrowings have played a pivotal role in supporting development expenditure which in turn will contribute to fostering the growth and development of states.

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