ISSN : 2583-4436

KERALA ECONOMY
2021, VOL. 2, NO.10-11-12. pp 33-39.

Kerala's GST revenue performance in a comparative perspective

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1. Introduction

After a decade long deliberations, India adopted one of the most significant tax reforms after independence by transitioning from Value Added Tax (VAT) system to Goods and Services Taxation (GST) from July 1, 2017. The new tax system subsumed various taxes from the union and state indirect tax bases to create a simpler national tax. This one-nation-one-market-one-tax regime was considered a great success story of India's fiscal federalism and cooperative federalism. Since GST is an improvement over the erstwhile VAT, it was expected that the GST implementation would benefit the states in terms of higher revenue collection, enhanced tax compliance, enhanced export competitiveness, bringing down prices, higher interstate trade, and economic activities among others. Further, it was envisaged that by eliminating the differences in tax rates across states and improving the inter-state trade, the GST would reduce horizontal fiscal imbalance among Indian states. Scholar and public finance experts, though expressed optimism in the new tax regime, had warned the ensuing challenges before the transition. The shift from an origin-based VAT system to destination-based GST is not likely to benefit all the states uniformly. At the time of GST implementation, stark differences between the rates for the producing states and the consumption-oriented states existed. Morris, S., Pandey, A., Agarwalla, S. K., & Agarwalla, A. (2019)) opined that this could de-incentivise the local incentives of new investments in producing states. Besides, the multi-tier rate structure coupled with the classification problem could deter the objective of increasing tax compliance and could increase tax evasion and corruption. Other challenges include the information technology architecture, classification of goods and services at various rates, and high cost of the GST implementation due to administrative bottlenecks could erode the expected benefits of GST (Banerjee & Prasad 2017, Kumar 2019, Rao 2019)

The empirical literature on the performance of states with respect to GST collection is limited. Comparing the revenue performance of states under VAT and GST, Anithakumary, L & Mathew, S (2019) showed that the ranking of the states under the two regimes is not uniform. Especially notable was Kerala, which was among the top during the VAT regime, have shown a decline in rank during the GST regime. Similarly, it was found that many states have not registered the projected growth target of SGST collection (Mukherjee, S. (2020). The GST regime has led to revenue loss, especially for mineral-rich states like Jharkhand, Odisha, Chhattisgarh, and Madhya Pradesh. In these states, value addition from manufacturing activities is not fully appropriated within the state's boundary. In this context, this study addresses two specific questions. One, trends in inter-state GST revenue collection. Two, the determinants of GST revenue collection.

2. Data and Approach

This analysis considers 21 major states[1] from 2017-18 to 2020-21. The data for the analysis was obtained from various sources. The GST revenue and filing rate data are collected from the GST portal. EPWRF India Time Series database provides information on State Domestic Product (SD), per-capita income, sectoral composition, and population. The population projections data released by the Census of India is utilised to collect rural and urban population data. The 68th round of NSS household consumption and expenditure survey unit-level data to construct share of food in total consumption expenditure. The Periodic Labor Force Surveys (PLFS) have been used to compute the share of informal sector employment as a proxy of informalization. Lastly, ease of doing business index data published by the Department of Industrial Promotion and Policy (DIPP) is used to proxy governance and other institutional factors.

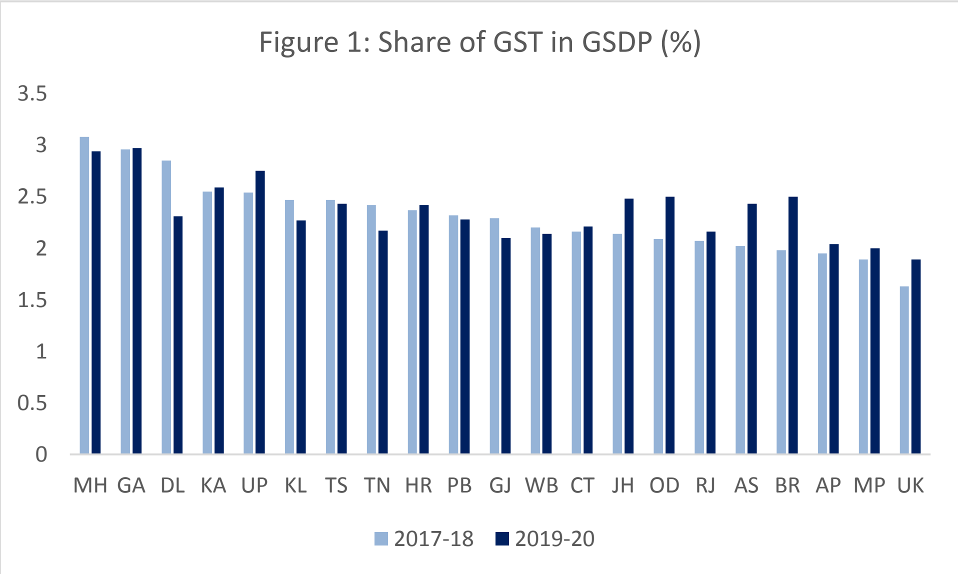
3. Trends GST Revenue Performance

There is considerable variation in GST revenue collection across the Indian states. The relatively developed states such as Maharastra, Goa, Delhi, Karnataka, Kerala, Tamil Nadu,

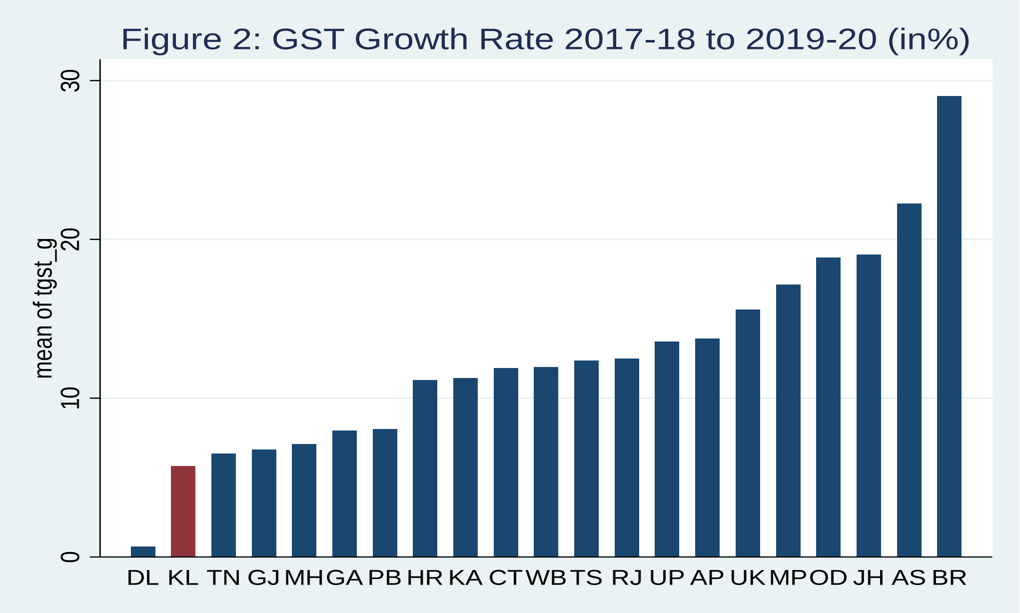
[1] These states contribute to more than 90% of the total GDP and population.

Haryana and Punjab indicate a higher share of GST in GSDP. In contrast, less developed states like Madhya Pradesh, Bihar, Odisha and Rajasthan show a low share (Figure 1). It appears that states that did well in revenue collection in the GST regime carried forward the good legacy from the VAT era. The only exception is Uttar Pradesh, with one of the highest GST to GSDP ratios.

Interestingly, except in Karnataka, Gujarat and Uttar Pradesh, all other states with relatively higher GST-GSDP ratios show a declining trend in 2019-20 compared to 2017-18. For instance, the GST-GSDP ratio in Kerala and Tamil Nadu declined from 2.4 per cent to 2.2 per cent and 2.1 per cent, respectively. On the contrary, low-income states showed an increase in GST-GSDP ratios during this period. Especially in Jharkhand, Odisha and Bihar (Figure 1).



This is further evident from the growth of GST revenue collection during 2017-18 to 2019-20. Delhi and Kerala registered the lowest growth among all the states, followed by Tamil Nadu, Gujarat, Maharastra and Punjab. Bihar showed the highest growth among the fastest-growing states, followed by Bihar, Jharkhand, Odisha and Madhya Pradesh (Figure 2). The GST revenue collection in these states is well above the revenue protection rate (14%). The slow-growing states thus depend heavily on GST compensation.

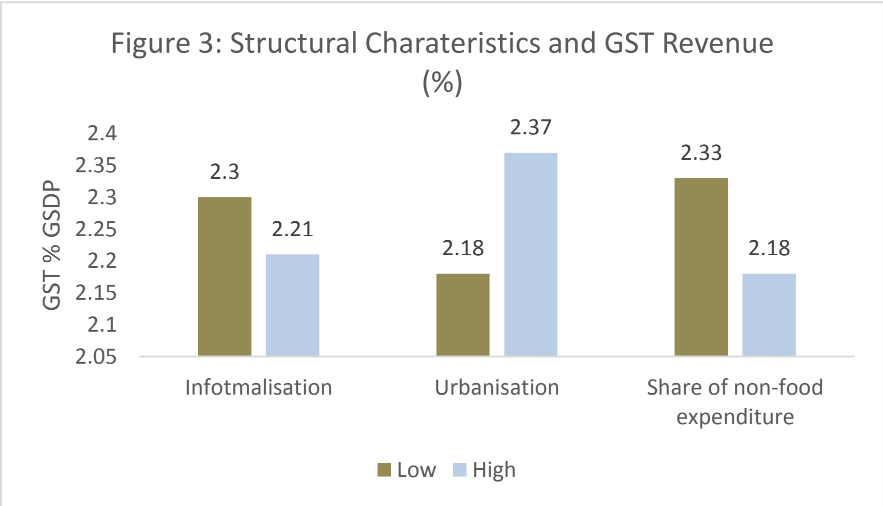


4. Determinants of GST Revenue Performance: Empirical Analysis

Although GST is envisaged to reduce the interstate variation in revenue collection, wide inter-state differences exist, as noted in Figure 1. Drawing from the widely popular literature on determinants of revenue collection, this study, therefore, analyses the key determinants of GST revenue collection using the panel data regression models. The existing cross-country empirical studies and sub-national studies identified structural factors such as level of economic development, sectoral composition, urbanisation, informalisation and institutional factors such as corruption administrative efficiency as key determinants of tax revenue. Considering the unique feature of GST and building on to the empirical literature, this study evolves an analytical frame based on three key pillars of the determinants of GST revenue collection. First, GST related factors are proxied by the compliance rate. This is defined as the number of dealers filing returns in time out of total registered dealers, called timely filers. The hypothesis is that a state with a higher compliance rate will likely collect more revenue than a low-compliance state.

Second, structural factors like the level of economic development of a state are measured in terms of per-capita income, sectoral composition, informalisation and urbanisation. In addition, since food items are exempted from GST, the share of food consumption is another structural feature that could affect GST revenue. Since many scholars argued that GST would improve the tax collections of consuming states, this analysis divides states into consuming states and producing states based on the difference in IGST revenue and IGST settlement rate. The states with IGST settlements greater than IGST collection are categorised as consumer states and others as producing states. Third, institutional factors like quality of governance and infrastructure are proxied through the ease of doing business index.

Using the national average as the threshold for informalisation, urbanisation and share of food in total consumption, states have been divided into two groups. Preliminary evidence shows that the GST as % GSDP is relatively high (2.3%) in states with low informalisation compared to states with high informalisation (2.21). Similarly, the GST-GSDP ratio is relatively high (2.37%) for states with high urbanisation compared to low urbanised states (2.18%). The composition of consumption expenditure plays a crucial role in GST revenue collection. The states with a high share of non-food in total consumption fare better in GST revenue collection.



The econometric analysis further corroborates the preliminary evidence. Compared to states with a lower informal sector, the share of GST in GSDP is 1.65 percentage points less for states with medium size of the informal sector and two percentage points less for states with a higher size of the informal sector. This is because dealers in the informal sector may not have a GSTN number and carry out their business transactions with similar dealers (Mohanty et al., 2017). Similarly, the lack of integration of activities in the informal sector poses the problem for tax administration to trace the activities and is often associated with high monitoring costs (Mukherjee & Rao 2019).

As already shown, states with both medium and high urban shares contribute approximately 0.65 percentage points revenue compared to states with low urban concentrations. This is because higher urbanisation is associated with a higher average consumption ratio. Second, the proportion of commercial transactions carried out against the tax invoice is high (Mohanty et al., 2017). A state with a higher share of food consumption is expected to collect less revenue since most of these goods are either exempted or taxed at 5%.

Among other factors, filing (a measure of compliance) and share of the service sector positively affect the share of GST in GSDP. The interpretation is that it returns filings rises, GST revenue collection also rises. Similarly, the higher the share of the service sector in the economy, the higher is the revenue collection. This implies that the economy's composition does matter for the collection of GST revenue. However, states' per capita income is negatively associated with the GST. Higher per capita income may be less correlated with consumption in the relatively richer states and, thus, less tax revenue. Since GST is a destination-based tax, poorer states (consuming states) are likely to benefit more than richer states. The econometric analysis suggests that the GST share in GSDP of consuming states is 0.76 percentage points higher than producing states.

Finally, institution quality, such as administrative efficiency and tax collection efficiency, better governance also plays an important role in collecting more revenue. The Department of Industrial Policy and Promotion (DIPP) prepares the ease of doing business index based on the World Bank's index. This is used as a proxy for better governance. It is found that states with low ease of doing business score 1.37 percentage point less revenue than better ranking states.

5. Conclusion

To sum up, by analysing the trends in GST revenue collection, this paper shows a considerable variation across the states. Though the share of GST-GSDP revenue is relatively high in developed states, the growth of GST revenue collection is higher in less developed states. It is found that Kerala recorded the lowest growth in GST revenue collection among all other states. The econometric analysis of determinants of GST revenue shows that GST revenue collection is positively associated with compliance, service sector share, urbanisation, ease of doing business, consuming state; and negatively related to the share of the informal sector, the share of food consumption, and per capita income.

These findings have relevance for the policymakers concerned with raising the GST revenue. The determinants can be categorised into short-term and long-term (structural factors) policy variables. While the former includes return filings and ease of doing business, the structural variables include urbanisation, informal sector size, service sector share, and consumption basket composition. Our paper suggests that policymakers focus on the short-term factors to mop up the GST revenue while long-term structural factors need to be considered for the Centre-state fiscal transfers.

References

Anithakumary, L & Mathew, S (2019) Revenue performance of Value Added Tax (VAT) and Goods and Services Tax (GST): An Interstate Comparison with Special Reference to Kerala, *mimeo*, Gulati Institute of Finance and Taxation.

Anithakumary, L & Mathew, S (2019) Revenue performance of Value Added Tax (VAT) and Goods and Services Tax (GST): An Interstate Comparison with Special Reference to Kerala, *mimeo*, Gulati Institute of Finance and Taxation.

Banerjee, S. & Prasad, S. (2017). Small Businesses in the GST Regime, *Economic & Political Weekly*, Vol (LII), No (38), 18-22.

Bhaskar, V. (2021). Sharing of Goods and Services Tax Revenues: A Case of Unequal Fiscal Federalism, *Economic & Political Weekly*, Vol (LVI), No (30), 52-58.

Kumar, A. (2019). The Structurally Flawed GST: Finding an Alternative, *Economic & Political Weekly*, Vol (LIV), No (9), 29-32.

Mohanty, A. R., Kumar, S., & Patra, S. K. (2017). Efficiency in value added tax in sub-national governments in India: An empirical analysis. *VISION: Journal of Indian Taxation*, *4*(2), 1-19.

Morris, S., Pandey, A., Agarwalla, S. K., & Agarwalla, A. (2019). Does GST in India hurt producing regions? A new estimate of the tax base under GST of select states.

Mukherjee, S. (2020). Performance Assessment of Indian GST: State-level Analysis of Compliance Gap and Revenue Growth, *Working Paper No. 301* (No. 20/301).

Mukherjee, S., & Rao, R. K. (2019). Value Added Tax and Informality: Determinants of Registration of Enterprises under State VAT in India. *Margin: The Journal of Applied Economic Research*, *13*(1), 21-48.

Rao, M. G. (2019). Goods and Services Tax in India: Progress, Performance & Prospects, Columbia University Working Paper No. 2019-02.