India’s GST Paradigm and the Trajectory of Fiscal Federalism: An Analysis with Special Reference to Kerala

K J Joseph, Director, Gulati Institute of Finance and Taxation

Anitha Kumary L. Associate Professor, Gulati Institute of Finance and Taxation

Abstract

Since the design and implementation of GST is often perceived as a difficult task, especially in developing countries with federal constitutional structures, the introduction of GST in India in 2017 has been considered as a great achievement. Against this background this paper explored the characteristics of India’s GST paradigm from a fiscal federal perspective, its implementation and the tax performance of states under GST. The Indianized GST paradigm, built on the edifice of GST Council and three key pillars of revenue neutrality, tax sharing between the centre and the states and the provision for GST compensation, has been designed towards fostering cooperative federalism. Our analysis revealed that the revenue neutrality has not been ensured and there were also issues with tax sharing and GST compensation. Both the edifice and the pillars of GST therefore were fraught with fault lines in both the design and implementation. Tax effort of the states did not increase indicating that GST has not been helpful in improving the revenue position of the states. Although the India’s GST paradigm was destined to foster cooperative federalism the outcomes appear to lead us towards coercive federalism.

Key words: Indianized GST paradigm, Revenue neutral rate, Revenue neutrality, Fiscal autonomy, Tax sharing, Cooperative federalism

1. Introduction

It is generally perceived that there is no unique Goods and Services Tax (GST), and there are different models covering a variety of activities in different countries depending on what is politically acceptable (Rao M G 2011). Therefore GST adopted by over 160 countries, given its inbuilt scope for flexibility (Bird and Gendron 2007), vary from one country to another. It has also been argued that the design and implementation of GST in countries with federal constitutional structures is a rather challenging task (Tait, 1988). The problems get compounded in developing country federations *inter alia* on account of intergovernmental political differences and federal constitutional structures coupled with problems of low per capita income, high-income inequalities, regional disparities in development, fiscal imbalances, poor accounting practices and weak tax administration (Bird and Gendron, 2007; Gillis et al., 1990).

In the Indian context GST was viewed by the states with considerable apprehension as it was perceived to be instrumental in depriving them of their autonomy, which was considered a prerequisite for India to remain united as a federal democracy. Scholars of eminence, Bagchi (2006; 2007), Patnaik (2016) Rao (2016), among others, shared the same view. Quoting the experience of the United States (US), European Union (EU), New Zealand and others, these scholars argued that the essence of taxing power lies in the power to fix the tax rates, and thus subnational governments must have the autonomy in matters of fixing the rates, subject only to a floor. If the SGST rates are not allowed to vary from state to state with some provision for entry tax, the fiscal autonomy of the states might be compromised forever. The task force on GST of the Thirteenth Finance Commission noted that a conventional GST could not be implemented without the states losing their fiscal autonomy (Government of India 2009). Such fears have been justified in a context of growing vertical inequality wherein the states spend around 60% of the combined government expenditure while collecting only around 40% of the combined revenue (Isaac et al., 2019). More importantly, as per GST design, the sales tax was to be subsumed in GST, and it has been contributing around 60-65% of the states' own tax revenue over the years (Kishore 2012). Hence it is a matter of great achievement for India that it managed to come up with the new tax regime on 1 July 2017, learning from the long drawn out deliberations for over 17 years, that changed the landscape of central and state taxes in the country.

At this juncture when India completed five years of her journey with GST, this article seeks answers to three specific issues of analytical and policy significance. First, what are the unique characteristics of the GST paradigm evolved in India to address the apprehensions of states regarding the loss of their autonomy? Secondly, how has the GST implementation impacted the trajectory of India's fiscal federalism and finally how has impacted the tax revenue of states?

The remainder of the article is organised as follows. Section two articulates the key attributes of the Indianized GST paradigm that are primarily in the domain of centre-state fiscal relations; revenue neutrality, tax sharing between the centre and states and the GST compensation. The second section analyses the extent to which the key attributes of India's GST paradigm have been helpful in ensuring revenue productivity of states, a *sine qua non* for building cooperative federalism in the country, Third section present evidence on the state level tax effort under GST

followed by the last section wherein the concluding observations are presented.

2. Indianized GST paradigm

The introduction of the Goods and Services Tax (GST) in India has often been considered a landmark reform in India's tax system since its independence. GST, already functional in over 160 countries across the world, has been perceived as a win-win for India given its potential to;

a) make India a common market and draw in more foreign investment by removing barriers to factor and product mobility;
b) reduce complexity and hence compliance cost and litigation through a simplified GST structure with an [1]uninterrupted chain of input tax credit transfers from one stage to another in the chain of value addition;
c) make the Indian industry more export-competitive by removing the cascading effect of taxes and hereby reducing the overall cost of indigenous products and services; and
d) accelerate economic growth by facilitating the more efficient allocation of resources and promoting trade, business and investment (Rao, R K, Mukherjee & Bagchi, 2019)

Other expected benefits included, but not limited to, reduced inflation, shifting the tax burden from producers and suppliers to the final consumers, and improved tax compliance and transparency (Kumar 2015); Das 2017). All these positive outcomes are expected to contribute to augmenting GDP growth by at least 1% to 2%, tax effort (tax–GDP ratio) by 2%, and reducing the cost of indigenous goods by around 10%.

These perceived advantages notwithstanding, Rao M G (2011) argued that the introduction of GST reform in India requires greater recognition of and sensitivity to the views of the states, and IMF-type "one size fits all" could simply stall the process. Hence, it is imperative that while embarking on the GST reform agenda and achieving higher revenue productivity and minimizing distortions, there is also the need to safeguard fiscal autonomy and ensure that the reform shall not deprive states of their fiscal autonomy. The call for the need to ensuring fiscal autonomy of states needs to be viewed in the context wherein the disagreement between the centre and states in the design of GST in India centred around the issue of subsuming the sales tax in GST, the only significant revenue source for the States in India (Bagchi, 2005; Mukhopadhyay, 2003). Thus viewed, since

[1] See Joseph (1992) for a discussion on how market segmentation affected the performance of India's industrial sector by taking the case of television industry

GST demands the states to forgo their taxing rights over their crucial source of revenue, the trajectory of fiscal federalism and the fiscal health of the states therein is bound to be conditioned by the GST paradigm adopted by the country. This takes us to an examination of the key attributes of the "Indianized" GST paradigm, which was destined to be cognizant of the imperative of addressing various complexities involved in introducing GST in a country, which is more diverse than most continents.

Perhaps the most important attribute of India's GST paradigm, viewed from the perspective of fiscal federalism, is its explicit commitment to revenue neutrality. Since the effectiveness of any tax reform quintessentially hinges on ensuring revenue neutrality, much scholarly effort has been invested in articulating the Revenue Neutral Rate (RNR) before the implementation of GST (Rao R K and Chakraborty 2009). The RNR estimated was 13.3 per cent for the Centre and 14.8 per cent for states (NIPFP 2014). The GST task force appointed by the 13th FC suggested a 12 per cent GST rate (7% as state GST and 5% as central GST). However, the report on RNR by Aravind Subramanian recommended an RNR of 15-15.5%. The Committee also observed that there should not be large shifts in the tax base in moving to the GST, implying that overall compensation may not be large. The rate Fitment Committee appointed by GST Council recommended the rates under GST after taking into account the pre -GST period tax incidence (on account of Central Excise, Services tax and VAT (including cascading on account of these taxes) as well as the embedded taxes and the incidence of GST, Octroi, Entry tax etc. (Minutes of 14th GST Council, 18 -19 May 2017). Hence, to protect revenue neutrality, the fitment committee considered pre - GST tax incidence.

Although the experts believe that there should be only a single and uniform rate (Rao M G 2011), based on the neutrality principle, a system of multiple rates; namely 5%, 12%, 18% and 28%, has been put in place.[2] With the rate for precious metals being 3% and unworked diamonds, precious stones, attracting 0.25%, essential goods and services are exempted. While there is no standard rate for services, most services are taxed at 18 per cent. While GST applies to all goods and services, to offset, at least partly, the revenue loss of states, certain goods with considerable revenue potential like alcohol for human consumption and five specified petroleum products

[2] On the equity implications of the GST rates, please refer Chakravartti and Siddiqui (2022)

(crude, petrol, diesel, ATF& natural gas) were excluded from GST. The Centre and the States mutually agreed upon the rates on each of these components under the aegis of the GST Council.

Another important characteristic of India's GST paradigm, apart from ensuring revenue neutrality, is a system of tax revenue sharing between the centre and the states. By subsuming VAT, central excise and various other indirect taxes of the Centre[3] and States[4], GST has been designed on the principle of destination-based consumption taxation, with seamless provision for the input tax credit. GST in India is a tax on the "supply" of goods or services as against the concept of tax on the manufacture of goods or sale of goods, or on the provision of services. Cognizant of the revenue forgone by both the centre and the states, it is a dual GST with the Centre and the States simultaneously levying it on a common base and shared equally between them. By design, GST revenue has three components to be shared between the Centre and the states. The GST levied by the Centre is called Central Good Services Tax (CGST), and that levied by the State is called State Goods and Services Tax (SGST). Union territories without legislature levy Union territory Goods and Services Tax (UTGST). An Integrated Goods Services Tax (IGST) is levied on the inter-State supply (including stock transfers) of goods or services. Import of goods is treated as inter-State supplies and is subject to IGST in addition to the applicable customs duties. Import of services is also treated as inter-State supplies and is subject to IGST. The revenue from Interstate GST (IGST) goes to a separate account, adjusted against the input tax credit for final settlement and based on final consumption shared between the state concerned and the Centre through a clearing house mechanism.

The assurance of revenue neutrality notwithstanding, considering the eventuality of GST revenue not keeping on par with the pre-GST tax revenue, the GST paradigm provided for GST

---

[3] GST replaced the following taxes which were levied and collected by the Centre: a) Central Excise Duty, b) Duties of Excise (Medicinal and Toilet Preparations), c) Additional Duties of Excise (Goods of Special Importance), d) Additional Duties of Excise (Textiles and Textile Products), e) Additional Duties of Customs (commonly known as CVD), f) Special Additional Duty of Customs (SAD), g) Service Tax and h) Cesses and surcharges insofar as they relate to supply of goods or services.

[4] State taxes which were subsumed within the GST are: a) State VAT, b) Central Sales Tax, c) Purchase Tax, d) Luxury Tax, e) Entry Tax (All forms); f) Entertainment Tax (except those levied by the local bodies), g) Taxes on advertisements, h) Taxes on lotteries, betting and gambling and i) State cesses and surcharges insofar as they relate to supply of goods.

compensation for the states. This is yet another unique characteristic inherent in the Indianized GST paradigm brought out by the institutional innovation. Accordingly, in addition to the basic rate, most items under the 28% category are subjected to a cess, the proceeds used to pay GST compensation to the States. Backed by the GST (Compensation to States) Act 2017, the States are eligible to get 100 per cent compensation for the revenue loss for five years since the implementation of GST. There have been instances of union government not living up to its commitments to provide compensation to state governments for the revenue loss they had incurred on account of the phasing out of the central sales tax, which gave rise to trust deficit between the union the states. This presumably has given rise to the enactment of the legislation guaranteeing the payment to the states of the deemed revenue loss on GST implementation (Bhaskar 2021). The loss of revenue to a state is computed as the difference between the actual realisation to a State under the GST regime and the tax revenue it would have received under the old indirect tax regime after considering a 14% increase over the base year of 2015-16.

While a range of state taxes was replaced with GST, its potentially centralizing implications for fiscal federalism are sought to be offset by mechanisms of intergovernmental coordination and dispute settlement at the instance of Goods and Service Tax Council (GSTC). GSTC, an apex committee, chaired by the Union Finance Minister and state finance ministers as its members, is expected to ensure that decisions about the structure, design and operation of GST are taken jointly by the Centre and the states. It also holds the responsibility of modifying, reconciling or procuring any laws or regulations related to goods and services tax in India. The GST Council can make any recommendation to the Union and State Governments on all aspects relating to GST that include, but are not limited to, inclusion and exclusion of products or services under GST and revising rates. It also has the responsibility to ensure that the laws and regulations related to GST are properly implemented. The main purpose of the GST council is to ensure that the laws and regulations related to GST are properly implemented and thus acting as the guardian of cooperative federalism under GST. Nonetheless, the Central Government holds one-third of the total votes in the council, while the State Governments put together account for the remaining two-thirds of the total votes. This tends to suggest that, in effect the Centre enjoys an effective veto power in the Council and relative bargaining power of states in the GST Council is much less as compared to the Central government (Reddy 2019).

Therefore, the Indianized GST paradigm, built on the three pillars of revenue neutrality, tax sharing between the two and GST compensation with GST council as its edifice, appears unique in itself for help evolving a cooperative fiscal federalism by addressing India-specific issues, especially the concerns of the States. Hence, it has been seen as a successful experiment by the Centre and the States envisaging cooperative federalism (Rao 2011). At the same time, the equal sharing of GST revenue and preponderance of the centre are indicators of the fault lines in its design that augur well in fostering cooperative fiscal federalism. Nonetheless, the issue of concern is also with respect to the implementation of the paradigm and its effectiveness in ensuring revenue productivity for the states, which could be considered the primary indicator of the success of any tax reform on the one hand and cooperative fiscal federalism on the other. Exploration of these issues assumes importance not only for articulating the needed changes in the system but also in understanding the states' fiscal health, especially that of fiscally stressed ones, under the new tax regime. Before proceeding further, we hasten to add that since almost all the countries adopted GST have taken considerable time to settle down. For example, even after 30 years GST is still evolving in Canada (Bird 2012). Hence, it may be rather heroic to undertake such an exercise for India on its 5th Anniversary. Further, the introduction of GST was preceded by unexpected shocks, including demonetisation and COVID -19, that succeeded and still persists.

3. The paradigm and performance in cooperative federalism

Although fiscal federalism does not formally appear in any constitutional document (Sharma, 2021, Oates 1999) postulated that fiscal federalism is concerned with understanding which functions and instruments are best centralised and which are best placed in the sphere of decentralised levels of government. This concept applies to all forms of government: unitary, federal and confederal. Bhasker (2021) articulated that fiscal federalism envisages the empowerment of revenue capacities and the allocation of expenditure responsibilities amongst the different layers of a federation and their fulfillment efficiently and effectively. Thus, in the real world, fiscal federalism goes beyond the mere allocation of fiscal powers and considers how the system functions through real-world inter-governmental relations. The performance of both the Centre and States concerning GDP growth, efficient provisioning of public services to people and

tax collection on the one hand and its distribution between the Centre and the States on the other are also at the core of the debate on federal fiscal relations in India.

Revenue neutrality

The commitment to building a cooperative fiscal federalism has been evident from the explicit recognition of the states' need to ensure revenue neutrality. Revenue Neutral Rate (RNR) under GST means the tax rates that protect the desired revenue after subsuming the existing taxes. While computing the RNR for the Centre is relatively simple, computing the RNR for states individually is a difficult task at best and impossible at worst, given difficulties in estimating the projected share of service tax state-wise after allowing for input tax credit (Bhaskar and Kailash Nath 2015).

The rate Fitment Committee appointed by GST Council recommended the rates under GST after taking into account the pre -GST period tax incidence (on account of Central Excise, Services tax and VAT (including cascading on account of these taxes) as well as the embedded taxes and the incidence of GST, Octroi, Entry tax etc. (Minutes of 14th GST Council, 18and 19, May 2017). Accordingly, based on the revenue neutrality principle, four tax rates, namely 5%, 12%, 18% and 28%, were put in place. It needs to be noted that during the pre-GST period, most of the goods attracted a tax rate of 14.5 percent by the States. With the introduction of GST, 14.5 percent category good has been brought under 12 percent or 18 percent category, wherein the States' share is only 6 percent or 9 percent, respectively. Only a few goods were brought under the category of 28 percent where the share of the States is 14 percent which is lower than the 14.5% that prevailed in most states. Further, the Tax Force headed by Arbind Modi appointed by Thirteenth Finance Commission. (2009) recommended that for ensuring revenue neutrality for the states, the CGST rate shall be at 5 percent and the SGST rate at 7 percent. The rate recommended by Arvind Subramanian Committee (2015) was still higher at 8 percent and 9 percent, respectively for the Centre and States. Thus viewed, although the revenue neutrality for the states necessitated SGST to be higher than CGST, this has not been adhered to while implementing GST in the country since GST was equally shared between the Centre and the states.

Surprisingly enough, hardly three months after the introduction of GST, the Central Government, based on the recommendation of the GST Council, in response to the demand from the business

community, notified (as per notification No.41/2017) a reduction in the tax rates of around 200 items of goods from 28% to 18%. This, in turn reduced the tax revenue of many states and turned out to be against the revenue neutrality concept that was adhered to in the initial rate fixation by considering the revenue protection from subsumed revenue of states. As a result, at present, 28 per cent of the GST schedule has only 32 commodities compared to 229 commodities when GST was initiated.

Since Kerala is a consumer state with around 70 per cent of the goods being taxed at 14.5 per cent during the VAT period, a decline in tax rate to 9 per cent (SGST) has affected the revenue collection under GST. This decline in tax rate has affected the overall GST collection of States. Table 3 presents our estimates on the impact of rate changes on GST collection compared to the VAT period. Before GST, the majority of commodities attracted a tax rate of 12 per cent excise duty and 14.5 per cent Value Added Tax including cascading of taxes. Under GST, for many commodities, the rates were fixed at 28 percent by considering revenue neutrality. An analysis of rate reduction under GST compared to VAT period found that there has been a 40 per cent reduction in tax rate and the corresponding reduction in tax revenue compared to VAT even without considering the plausible increase of sales in Kerala.

It is evident from Table 1 that out of 19 commodities, 13 of them had 14.5 percent tax during the pre-GST period ie, 2015-16. During the pre- GST period, the majority of the commodities were in the 14.5 per cent category of VAT. Then Finance Minister of Kerala argued that 70 per cent of the VAT revenue of Kerala emanated from goods that attracted the VAT rate of 14.5 per cent and made a case for 70% of the goods being in 28 per cent tax slab under GST. (Minutes of 14th GST Council, 18 and 19, May 2017). It is clear that though revenue neutrality is considered during the finalisation of GST rates, the concern of the states has not been addressed as only 21 per cent of the commodities came under the 28 per cent category. This 21 per cent initially consisted of 229 commodities, but the number of commodities under the 28 per cent category was later reduced to only 32 in number, with significant revenue implications for the states.

The point may be illustrated by taking the case of Kerala. It is observed that the tax collection from 19 commodities mostly coming under the 14.5% slab (28% under post-GST) during the pre-GST period was Rs 9282.96 crore in Kerala. Assuming that the turnover remained the same during the

GST period, the tax collection would have declined to Rs 7010.33 crores with the GST rates. This amounted to a loss of Rs.2034 crore (24.5%) from 19 commodities (Table 1). This decline has been beyond the control of the state of Kerala as the rate changes were based

Table 1: Comparison of VAT and GST rates and tax collection and the changes therein for selected commodities in Kerala (Rs crore)

Sl. No	**Item**	**VAT collection 2016-17**	**Rate of Tax under VAT (%)**	**SGST Rate of Tax as on 01/ 07/2017 (%)**	**New SGST Rate of Tax from 15/11/2017 (%)**	**Decline in tax collection as on 0/07/2017**	**Decline in tax collection as on 15/11/2017**
1	Motor vehicle	2638.33	14.5	14	14	91	91
2	Cement	1057.03	14.5	14	14	36	36
3	Tobacco products	879.13	14.5	14	14	30	30
4	Medicine	635.3	5	2.5	2.5	318	318
5	Gold*	629.65	5	1.5	1.5	101	101
6	White Goods	456.56	14.5	14	9	16	173
7	Iron & Steel	387.6	5	2.5	2.5	194	194
8	Electrical Goods	386.29	14.5	14	9	13	147
9	Paint	378.64	14.5	14	9	13	144
10	Tiles	337.43	14.5	14	9	12	128
11	Readymade garments	301.91	5	2.5/6	2.5/6	100	100
12	Electronic Goods	259.75	14.5	14	9	9	99
13	Rubber	202.02	5	2.5	2.5	101	101
14	Marble & Granites	159.62	14.5	14	9	6	61
15	Chicken	128.71	14.5	0	0	129	129
16	Hill Produce	124.78	5	2.5	2.5	62	62
17	Plywood	123.66	14.5	14	9	4	
18	Timber	123.27	14.5	14	9	4	47
19	Glass	73.28	14.5	14	9	3	28
	Total	9282.96				1242	2034

*compounding. Revenue loss for 40 per cent of turnover

Author's calculation based on the data of Commercial Taxes Dept/ SGST Dept, Govt of Kerala,

on the decision of the GST Council. This clearly indicates the loss of revenue neutrality due to high-pitched rate reduction. Hence any inquiry into the reasons for the less than expected performance of the GST revenue for the state will lead to the doorsteps of loss of revenue neutrality, a basic precondition for the acceptability of any tax reform. No wonder the state of Kerala turned out to be one of the states wherein fiscal health is contingent on the GST compensation.

Incidentally, although the tax rate was reduced to 18 per cent or 12 per cent from 28 per cent, there has been no corresponding reduction in the price of those commodities (Kumar and Dash 2022). The intention of rate reduction was in anticipation of a corresponding reduction in the price of those commodities and thereby benefiting the consumers. But it was found that while the prices are flexible upwards with an increase in taxes, it is rigid downwards with a reduction in prices. Thus, while the states, the Centre and the consumers lost, the gain has been limited to those businesses aiming at profiteering. Hence a case could be made for reinstating the rates of those commodities under 28 per cent at the initial period of GST implementation. This will improve the revenue collection of states and ensure revenue neutrality leading to a reduction in the demand for GST compensation by the states.

Tax sharing

While there has been substantial dilution in the commitment to revenue neutrality when GST was implemented, a relevant issue for fiscal federalism is the sharing of GST revenue between the centre and the states. Table 2 presents data on total GST collection, its three major components - CGST, SGST and IGST – and their sharing since the introduction of GST. Out of the four years for which data is presented, data for 2017-18 is only for eight months. The terminal year refers to the period of once in a century pandemic that caused unprecedented disruptions in the economy. Thus, there are only two years that could be considered a normal periods. During this period, the total GST collection increased from 10.8 lakh crores in 2018-19 to 11.2 lakh crores in 2019-20, recording a growth rate of 3.7%. During the subsequent year, the total collection declined to 10. 5 lakh crores, with the recorded growth rate being -6.3%. However, the revenue accrued to the states through GST (SGST and IGST share) increased by 19.8% during 2019-20 and that of the Centre recorded a much higher increase of 22.5%. As is evident from Table 2, while the share of the states in total GST increased only by 5.31% during the period under consideration (from 38.7%

in 2017-18 to 44.0% in 2021-22), that of the centre increased by 7.91% (30.7% in 2017-18 to 38.6% in 2021-22) indicating an unfavourable sharing of GST revenue for the states. Thus, the sates had to bear the double whammy – declined tax effort coupled with adverse sharing of the lower tax revenue.

Table 2: GST collection in India during 2017-18 to 2021-22: A disaggregated picture (Rs Crore)

Category	2017-18	2018-19	2019-20	2020-21	2021-22
CGST	118900.7	202418	227444.5	209659.4	269137.25
SGST	171850.2	278788	309233.1	272513.4	344215.86
IGST including imports	366450.3	598746	586698.8	565514.8	762270.35
Total	657201.2	1079953	1123376	1047688	1375623.5
State's share of GST	254453.2	418898	501742.7	452397.5	605713.67
Centre' s share of GST	201503.6	342528	419954.1	389543.5	530635.06
Unsettled amount in IGST Account	201244.4	318528.6	201679.2	205747.0	239274.7
Share of state's share of GST (%)	38.72	38.79	44.66	43.18	44.03
Share of Centre's share of GST (%)	30.66	31.72	37.38	37.18	38.57
Percentage of balance amount in IGST account (Unsettled portion of IGST) (%)	30.62	29.49	17.95	19.64	17.40

Note: states share of GST is the sum of SGST and states share in IGST settlement.
Source: Authors' calculation based on GSTN data

Enquiry into the less than expected performance of the states leads us to the sharing of IGST between the centre and the states. In the GST collection, the major share is accounted for by IGST. It constitutes around 55 per cent of collection except in 2019-20 (Table 2), of which about 50% comes from imports from other countries. While IGST is to be shared with the states through the

clearing house mechanism facilitated by the GSTN, as it operates, there is hardly any clarity concerning its sharing, especially the IGST on imports. Table 2 indicates that a substantial part of the IGST remains not shared, notwithstanding a decline in the share of unshared IGST revenue from over 30% in 2017-18 to 17.40% in 2021-22. During the introduction of GST, it is stated that whatever amount is available in the IGST account will be distributed as SGST and CGST. However, the evidence presented above for the period under consideration shows that the actual experience belied our expectations with Rs 2.4 Lakh crore remains undistributed in 2021-22, costing dearly to the fund starved states[5] as the clearing house remained as an unclearing house!

GST compensation

In the spirit of cooperative federalism, GST ensured revenue neutrality on the one hand and envisaged an equal sharing of GST revenue between the Centre and the States. Indicative of the firm commitment to cooperative federalism and ensuring the states' fiscal health, in addition to the above provisions, an additional provision for GST compensation was also constitutionally provided for the states. The GST (Compensation to States) Act, 2017 guaranteed that states would be provided full compensation for the estimated loss of their revenues based upon an assumed growth rate (14%) for five years, thus helped convince the hesitant states to join GST. The basis for such a commitment to the states calls for a more precise understanding of the states' sacrifice towards the establishment of GST in India. This is mainly related to the pre-GST revenue forgone by the States and the Centre.

The revenue forgone by the Centre and the states has been estimated at Rs. 3.28 lakh crore Rs. 3.69 lakh crore respectively (Thirteenth Finance Commission. (2009). This amounted to a surrender of 51.8 percent of the States' total tax revenue and 28.8 percent of the centre's gross tax revenue. Thus viewed, in relative terms, the States surrendered almost twice that of the Centre (Joseph and Ramalingam 2020a) in exchange for a constitutionally provided provision for compensation. Hence the various committees that dealt with the revenue-neutral rates recommended that for minimizing the revenue loss, the tax rate should be higher in the case of States (SGST) compared to the Centre (CGST). While Thirteenth Finance Commission. (2009 (2009) recommended a CGST rate of 5 percent and SGST rate at 7 percent, the rate proposed by

[5] On the implications of GST performance on debt sustainability, please refer Renjith (2022)

the Arvind Subramanian committee (2015) was 8 percent and 9 percent, respectively. Yet, the States agreed to reduce the tax rate such that SGST is imposed at the same rate as CGST.

Tax revenue is seen to be dependent on the tax base. During the pre-GST period, the tax revenue for the Centre from the industrial output (excise duty) has been limited only to the point of manufacturing, indicating a very narrow tax base. On the other hand, the States were entitled to a much wider tax base as they could levy tax on the entire supply chain up to the final consumption point (Joseph and Ramalingam (2020b). Further, while the cascading of tax is generally considered inimical to economic efficiency, it used to serve as an additional source of revenue mobilization by the States during the pre-GST period. Thus cascading, a bane to the economy, has been a boon to the States. While the Centre has also been able to mobilize additional resources on account of tax cascading, the benefits used to be proportionately higher for the States given their higher tax base. In general, with the introduction of GST, the Centre expanded the tax base at the cost of the States and States have forgone substantial revenue for building one country one tax system.

In the above context, the provision for GST compensation may be seen as *quid pro quo* for sacrificing the various tax privileges that the states enjoyed. Further it has been made in anticipation of a plausible shortfall in states' revenue. While these provisions are said to help strengthen cooperative federalism, the GST compensation has been limited to initial five years of GST for unknown reasons. To the extent that the provision for compensation has been built in over and above the provision for revenue neutrality towards ensuring the fiscal health of states, it questionable to limit it to the initial five years. As long as there is GST there shall be GST compensation.

The empirical evidence presented in Table 3 suggests that, as anticipated, the actual GST collection for most of the states fell short of the projected revenue making the case for an extended period of GST compensation in the true spirit of cooperative federalism. With an estimated shortfall of about Rs 2.35 lakh crore in GST Compensation Fund attributable to the COVID induced recession, the Centre reneged on its promise of compensation and held that, of the projected shortfall of about `2.35 lakh crore, only `97,000 crore was due to the implementation of GST. The remaining amount (Rs 2.35 lakh crore) was attributed to the COVID-19 pandemic, which according to the finance

minister and chairperson of the GST Council, was an "act of God," not related to the implementation of the GST. Hence it proposed two options for the consideration of the states. The first option was a special window to the states, with the approval of the Reserve Bank of India (RBI), to borrow the projected GST shortfall of 97,000 crore which, would not be accounted for as a part of the state's debt and the repayment of the principal and interest on these borrowings would be made from the compensation fund by extending the period of cess collections beyond 2022. As per the second option, the states could borrow the entire Rs 2.35 lakh crore shortfall from the market but the interest cost would have to be borne by states, and only the principal would be serviced by the compensation fund. Many states, including Kerala, have rejected both options and made the case for the Centre to borrow and provide compensation to states. Accordingly, as per the decision of the 43rd GST council meeting the Centre borrowed and released to the States and UTs with legislature on a back to back basis to meet the resource gap due to the short release of compensation on account of the inadequate amount in the compensation fund. Accordingly, the compensation Cess would continue till the borrowed amount is fully paid implying that there would not be any provision for GST compensation beyond the initially stipulated period of five years.

Table 3: Revenue shortfall under GST across Indian states (Rs. Crore)						
State	2017-18	2018-19	2019-20	2020-21	2021-22*	2021-22**
Jammu and Kashmir	-2494	-2698	-3485	-4739	-5659	-5043
Himachal Pradesh	-2135	-2541	-2655	-3695	-4314	-4203
Punjab	-6849	-10222	-11744	-16623	-20349	-20195
Uttarakhand	-2667	-3277	-3584	-5308	-5507	-5826
Haryana	-4519	-5998	-6869	-11256	-13361	-11962
Delhi	-4894	-8148	-9155	-17349	-22873	-23940
Rajasthan	-6332	-4869	-7361	-13027	-16475	-13697
Uttar Pradesh	-6925	-8282	-9984	-22994	-29777	-26040
Bihar	-7892	-5458	-6015	-9329	-9925	-6342
Sikkim	-78	4	57	-60	-49	38
Arunachal Pradesh	-13	179	360	347	642	964
Nagaland	-90	48	170	146	312	466
Manipur	-54	124	253	165	293	473
Mizoram	-29	144	205	162	284	502
Tripura	-446	-319	-338	-536	-606	-481
Meghalaya	-479	-241	-191	-454	-503	-360
Assam	-2002	-1440	-1588	-3486	-4058	-2707
West Bengal	-6169	-5671	-7060	-14438	-18704	-16838
Jharkhand	-2638	-2339	-2674	-4959	-5951	-4888
Odisha	-5247	-5782	-5654	-8507	-9918	-9483
Chhattisgarh	-2728	-3877	-4801	-6803	-8256	-7580
Madhya Pradesh	-6792	-5746	-7123	-12214	-14759	-12070
Gujarat	-7022	-10722	-14016	-24897	-32366	-30791
Maharashtra	-9721	-13636	-19224	-45627	-62023	-58358
Karnataka	-13227	-16533	-18871	-31388	-39403	-37760
Goa	-900	-1029	-1291	-2445	-3091	-2899
Kerala	-3789	-6536	-9021	-14719	-19073	-18189
Tamil Nadu	-7746	-7205	-10166	-22319	-30296	-28821
Puducherry	-641	-881	-1108	-1441	-1745	-1700
Telangana	-3168	-2453	-3796	-8716	-11549	-9622
Andhra Pradesh	-3338	-1994	-3651	-8865	-11542	-8854
Total	**-121024**	**-137398**	**-170380**	**-315374**	**-400601**	**-366206**

Source: GST Portal

Notes:

(1) Revenue shortfall is calculated as the difference between GST collected and projected revenue.

(2) indicates projected revenue shortfall. For this projection GST collection for 2021-22 is done using the annual average growth rate of the last four years. This represents the conservative scenario.*

*(3)** indicates that the growth rate of 2018-19 over 2017-18 is applied to project the GST revenue collection for 2021-22. This represents the realistic scenario*.

In this context an analysis (Rao R K 2022) of the inter-state variation in the role played by GST compensation in State finances by estimating the ratio of GST compensation received to fiscal deficit for 2020-21 is highly revealing.[6] It was observed that the size of the compensation is considerable and end of the compensation regime in the absence of any other measures could considerably affect the ability of states to maintain their spending programmes without taking recourse to expenditure compression in some way. The study further noted that the problem is more pronounced for states like Himachal Pradesh, Punjab, Karnataka and Odisha.

3. Tax performance of states

Experience across countries indicates a positive relationship between GDP growth and growth in tax collection. In sync with Wagner's law, the size of the government, viewed in terms of tax GDP ratio, rises with an increase in a country's GDP. In 1950-51 the tax GDP ratio in India remained at a low level of 6 percent, characteristic of a stagnating economy with low per capita income than India inherited. It almost doubled within the next 15 years, and despite the much-castigated Hindu growth rate, the ratio increased to reach 16% in 1989-90 - on the eve of embarking on globalization. Although the country managed to record a turnaround in GDP growth under globalization, the tax to GDP ratio stagnated (Isaac et al. 2019). It remained in the company of many of the African countries (Levin 2021), such that Raj Krishna would have christened it as "Hindu tax effort". When it comes to the tax GDP ratio of the Centre, the trend during the last four decades shows only a marginal improvement while that of the states increased from 3.8% during the1970s to 6.2% during 2011-12 to 2016-17. Overall, the higher rate of growth in GDP did not translate into a larger revenue base (Isaac et al. 2019a). The issue of Centre-State relations came to the fore in a context wherein, along with low and stagnating tax GDP ratio, there has been a growing vertical imbalance (Isaac et al 2019; Sharma 2012) between resource endowments and expenditure obligations of the centre and the states. Since the new tax reform has been put in such a context the critical issue is to what extent the new institutional innovations that led the Indianized GST paradigm helped ensuring revenue productivity of states a *sine qua non* for building cooperative federalism in the country.

---

[6] On inter-state variation in the performance of GST, please refer Dash and Kakarlapudi (2022)

Table 4 presents data on the state level ratio of own tax revenue to GSDP of non-special category states during the pre and post GST period. The table also presents aggregate data for the special category states along with that of the union territories. We consider two time points as representative years (2013-14 and 2015-16) from the pre-GST period and 2019-20 to represent the post- GST period. It is evident from table 4 that out of the 17 general category states (Telangana excluded) the tax GSDP ratio has declined in the case of 13 states. Hence the tax GSDP ratio for the general category states as a whole declined from 7.7% in 2013-14 to 6.7% in 2015-16, indicating that the tax effort has been on the declining trend even before the introduction of GST. The observed pattern was holding good in the case of special category states as a group (from 5.7% in 2013-14 to 4.9% in 2015-16) and the union territories.

The introduction of GST was envisaged to make a turnaround in this trend as GST was perceived to raise the Tax GSDP by about 1-2%. However, as we move to 2019-20, in the post GST period, it is evident that 12 out of 18 non special category states showed a decline in Tax GSDP ratio. For the non-special category of states as a whole, the ratio declined from 6.7 per cent in 2015-16 to 6.4 per cent in 2019-20. For the special category states, the ratio declined to 4.6 percent 2019-20 with the union territories also showing a decline. Thus viewed, belying our expectations, with the introduction of GST there has been no evidence of increased tax effort among the Indian states

Table 4: Tax Effort across Indian States

States	Own Tax Revenue as % of GSDP							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1. Non-Special Category	7.7	7.1	6.7	6.6	6.5	6.71	6.37	6.38
Andhra Pradesh	7.9	7.5	8.1	6.5	7	6.5	6.8	5.9
Bihar	5.5	5.8	5.5	6.7	6.4	6.1	5.8	5.6
Chhattisgarh	7.9	7.7	6.7	6.5	7.8	7.7	7.2	7.7
Goa	6.9	7.3	9.6	7.3	7.2	7.1	6.7	6.5
Gujarat	8.2	7.4	6.9	6.1	5.6	5.6	5.4	5.8
Haryana	6.9	6.6	6.3	6.4	6.9	6.7	5.8	5.8
Jharkhand	5.4	5.4	4.8	5	6.6	5.2	5.0	6.4
Karnataka	10.4	10.2	7.6	7.5	7.3	6.7	6.3	6.0

Kerala	8.6	8.1	6.7	7	7.2	6.9	6.5	6.4
Madhya Pradesh	8.5	7.7	7.6	7.6	6.9	6.9	6.4	6.0
Maharashtra	7.8	7.2	6.4	6.3	6.1	7.1	7.2	6.9
Odisha	6	6.2	6.2	6.8	6.2	7.1	6.3	6.3
Punjab	7.9	7.6	6.9	6.8	7.1	6.6	6.0	5.9
Rajasthan	6.5	6.5	6.3	6.2	6.2	6.5	6.2	6.9
Tamil Nadu	9.6	8.6	7.2	6.9	6.7	6.6	6.5	6.5
Telangana	-	-	5.7	7	7.8	7.7	7.6	7.4
Uttar Pradesh	7.4	7.7	7.1	7.2	7.3	8	7.4	7.6
West Bengal	5.4	5.1	4.9	4.6	4.6	5.8	5.7	5.2
2. Special Category	5.7	5.6	4.9	4.9	5.1	5.4	4.6	4.6
3. All States	6.6	6.3	6.3	6.2	6.2	6.6	6.4	6.6
NCT Delhi	6.7	6.6	5.4	5.5	5.3	5.2	4.7	4.6
Puducherry	11.4	9	8.3	9	8.8	7.5	7.1	7.7

indicating that GST has not been helpful in improving the revenue position of the states. Similar conclusion has been arrived at by Rao (2022) based on an analysis of the inter-state variation in the GST revenue that the average rate of growth prior to GST appears to be higher than that in the years subsequent to the introduction of GST.

Especially notable has been the experience of Kerala wherein, the tax GSDP was as high as 8.6% in 2013-14 and declined thereafter to 7 percent in 2016-17. With the introduction of GST, Kerala's tax GSDP ratio recorded one of the highest decline among the Indian states to reach 6.4% in 2020-21. Its relatively poor performance is evident from the decline in its rank among the major States from 6 in 2013-14 to 13 in 2019-20. A comparison of VAT and GST revenue growth rate for Kerala presented in table 5 reveals that the rate of growth in tax revenue has been significantly higher during the pre-GST period as compared to the post GST period. Although the growth rate was 12.3 percent in 2018-19 under GST, the recorded growth rate in 2019-20 and 2020-21 has been negative (-4.9 per cent and -0.3 per cent). Despite a higher growth rate of 10.1 percent recorded in 2021-22, the GST revenue growth rate after its introduction turned out to be only 4.3 percent as compared to over 13 percent recorded during the VAT regime; from 2012-13 to 2016-17.

Table 5: Growth of VAT/ GST collection in Kerala

Year	VAT / GST collection (in crore)	Growth rate(%)
2011-12	9803	
2012-13	12171	24.16
2013-14	13513	11.03
2014-15	14605	8.08
2015-16	16131	10.45
2016-17	18474	14.52
2017-18*	19020	3.0
2018-19	21366	12.3
2019-20	20316	-4.9
2020-21	20255	-0.3
2021-22	22302	10.12

*Source: Commercial Taxes Dept/ SGST Dept, Govt of Kerala, Compensation amount is not included in GST collection. *In 2017-18 data includes VAT and GST collection*

Concluding observations

The design and implementation of GST within a democratic federal structure is often perceived as a difficult task. This is more so in a developing country like India wherein the states, that account for over 60% of the combined expenditure with only 40% of the combined revenue, were expected to surrender the sales tax, their major source of revenue leading to significant revenue loss. Hence the introduction of GST has been considered as a great achievement of India's fiscal federalism. Against this background this paper explored the unique characteristics of India's GST from a fiscal federal perspective and the tax performance of states under GST. It is argued that the Indianized GST paradigm, built on the edifice of GST council and the pillars of revenue neutrality, equitable tax sharing between the centre and the states and the provision for GST compensation, although destined towards fostering cooperative federalism was fraught with fault lines in its design.

With respect to its implementation, it was revealed that the revenue neutrality, a *sine qua non* for any taxable reform to be acceptable, has not been ensured on account of the equality in SGST and CGST along with high pitched rate reduction after the introduction in GST especially for those in the 28% category. There were also issues with tax sharing with substantial monies remaining unshared under IGST costing dearly to the revenue starved states. Thus, the clearing house mechanism under IGST remained as an unclearing house *inter alia* on account of the issues

associated with the GSTN. With these first two pillars not being strong, most of the states had no option but to depend heavily on the third pillar – GST compensation. This pillar, along with the GST council which is edifice of the whole paradigm, is also shown to be defective by design and also by implementation. Considering the enormous sacrifice that the states have made for the making of the GST, limiting GST compensation for the initial five years is not justified. We argued that so long as there is GST the states shall have the entitlement for GST compensation. Moreover, there have been instances wherein the Central Government reneged even with respect to the constitutionally provided GST compensation. Further, contrary to the expectations, there has been no evidence of increased tax effort among the Indian states indicating that GST has not been helpful in improving the revenue position of the states. On the whole, there is reason to believe that while the Indianized GST paradigm, by design, has been cognisant of the imperative of fostering cooperative federalism, there were fault lines in its design and implementation leading to strong tendencies towards coercive federalism.

Acknowledgement

We are very thankful to Prof T M Thomas Isaac for his guidance and encouragement. An earlier version of this paper was presented in the International Seminar on India's Experience with Goods and Services Tax organised by GIFT. Authors acknowledge the participants of the seminar for their helpful comments. This paper also benefitted from discussions with Dr N Ramalingam, Dr Zakaria Siddiqui and Dr Kiran Kumar Kakarlapudi. For omissions, errors and wrong interpretations, if any, we blame each other.

References

Bagchi, A (2007). "International Lessons in Goods and Services Tax," *Economic & Political Weekly*, 42(45), 28–32.

Bagchi, A. (2006). "Towards GST: Choices and trade-offs", *Economic and Political Weekly*, 41(14) 1314-1317.

Bagchi, A. (2006). Towards GST: Choices and Trade-Offs. *Economic and Political Weekly*, 41(14) 1314-1317.

Bagchi, A. (2007). Role of planning and the planning commission in the New Indian economy: case for a review. *Economic and political Weekly*, 42(44), 92-100.

Banerjee, S., & Prasad, P. (2017). "Small businesses in the GST regime", *Economic and Political Weekly*, *52*(38).

Bhaskar V (2021). "Sharing of Goods and Services Tax Revenues, A Case of Unequal Fiscal Federalism?" *Economic and Political Weekly*, 46 (30) 52-58

Bhaskar, V (2014). "Case for Including Immovable Property in the GST," *Economic & Political Weekly*, 49 (52).

Bhaskar, V. and Kailash Nath (2015). "What Ails the Implementation of the Goods and Services Tax?" *Economic & Political Weekly*, Vol 50, No 37, pp 12–14.

Bhaskar, V., & Nath, P. K. (2015). What Ails the Implementation of the Goods and Services Tax?. *Economic and Political Weekly*, 50(37), 12-14.

Bhaskar, V., (2021). Sharing of Goods and Services Tax Revenues A Case of Unequal Fiscal Federalism?. *Economic and Political Weekly*, 56(30), 52-58.

Bird, R. M. (2012). The GST/HST: Creating an integrated sales tax in a federal country. *Rotman School of Management Working Paper*, (2115620).

Bird, R., & Gendron, P. P. (2007). The VAT in developing and transitional countries. *Cambridge Books*.

Chakravartti, P and Siddiqui, M, Z, (2022). Burden of Uniform Tax Rate by Household Consumption Expenditure Class: A Study of GST in India. GIFT Discussion Paper 2022/01. Gulati Institute of Finance and Taxation, Thiruvananthapuram, India

Das, S. (2017). "Some concerns regarding the goods and services tax", *Economic and Political Weekly*, *52*(9).

Dash, S K and Kakarlapudi, K K, (2022). What Explains Interstate Variation in GST Collection?. GIFT Discussion Paper 2022/02. Gulati Institute of Finance and Taxation, Thiruvananthapuram, India

Dutta, R., & Kumar, B. (2018). "Value added tax scams and introduction of the goods and services tax", *Economic and Political Weekly*, *53(44)*.

EPW (2019). "Difficulty of Goods and Services Tax Is the central government circumventing structural crisis of GST in the name of compliance?", *Economic and Political Weekly* (Editorial), 54(35).

Gillis, Malcolm, Carl S Shoup and Gerardo Sicat (eds) (1990): *Value A Taxation in Developing Countries*, World Bank, Washington

GoI (2014). *Report of the Committee on Revenue Neutral Rates for States GST and Central GST and place of Supply rules in GST Regime,* Empowered Committee of State Finance Ministers, Ministry of Finance, New Delhi.

Government of India (2009). *Report of the 13th Finance Commission*, Ministry of Finance, New Delhi.

Isaac, Thomas, T. M., Mohan, R., & Chakraborty, L. (2019). Challenges to Indian fiscal federalism. *Economic & Political Weekly*, *54*(9), 33-40.

Isaac, Thomas, T. M., Mohan, R., & Chakraborty, L. (2019a). *Challenges to Indian fiscal federalism*. Leftword. New Delhi.

Joseph K J and N Ramalingam (2020) "One Nation One Tax wasn't an Act of God, Mint available at https://www.livemint.com/opinion/online-views/-one-nation-one-tax-wasn-t-an-act-of-god-11602256300969.html

Joseph, K. J. (1992). “Market Segmentation and Performance of Firms: Case Study of Indian Television Industry in 1980s”. *Economic and Political Weekly*, 27 (48) M141-M148.

Kumar, A S and Dash, S K, (2022). Impact of GST on inflation: Evidence from Bayesian causal analysis. GIFT Discussion Paper 2022/03. Gulati Institute of Finance and Taxation, Thiruvananthapuram, India

Kumar, A. (2015). Macroeconomic aspects of goods and services tax. *Economic and Political Weekly*, 50(29), pp.26-30.

Kumary, Anitha L and Mathew, Shency (2019). “Revenue performance of Value Added Tax (VAT) and Goods and Services Tax (GST): An interstate comparison with special reference to Kerala” DP No.2, GIFT

Levin, J. (2021). *Taxation for inclusive development: challenges across Africa*. Nordiska Afrikainstitutet.

Mukherjee, S. (2020a). “Performance Assessment of Indian GST: State-level Analysis of Compliance Gap and Revenue Growth”, *Working Paper No. 301* (No. 20/301). National Institute of Public Finance and Policy, New Delhi.

Mukherjee, S. (2020b). “Goods and Services Tax efficiency across Indian States: panel stochastic frontier analysis”. *Indian Economic Review*, 55(2), 225-251.

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.

Mukhopadhyay, S. (2003). Classification of Goods for Taxation: Need for Artificial Definitions. *Economic and Political Weekly*, 38(29), pp.3033-3035.

NIPFP (2014). “Revenue Implications of GST and Estimation of Revenue Neutral Rate: Estimates for 2011-12”, New Delhi

Oates, W. E. (1999). An essay on fiscal federalism. *Journal of economic literature*, *37*(3), 1120-1149.

Patnaik, Prabhat (2016) “A blow against federalism: The Implications of a Uniform Goods and Services Tax,” Telegraph, 28 June.

Prasanna, A. K. (2016). “Goods and Services Tax: An Exercise in controlled Federalism?”. *Economic and Political Weekly*, 51(34), 10-11.

Rao, M G. (2009) “Goods and Services Tax: Some Progress towards Clarity”, *Economic and Political Weekly 44 (51),* 8-11.

Rao, M. G. (2011). Goods and Services Tax: A Gorilla, Chimpanzee or a Genus Like ‘Primates’? *Economic and Political Weekly*, 46 (7), 43-48.

Rao, R. K., & Chakraborty, P. (2010). “Goods and services Tax in India: An assessment of the Base. *Economic and Political Weekly*, 45(1), 49-54.

Rao, R. K., (2010). “Goods and services tax: The 13th Finance Commission and the way Forward”. *Economic and Political Weekly*, 45(48), 71-77.

Rao, R. K., (2016). “New Assumptions, New Estimates: Scrutinising a New Report on Revenue Neutral Rate”. *Economic and Political Weekly*, 51(4), 63-66.

Rao, R. K., Mukherjee, S., & Bagchi, A. (2019). *Goods and services tax in India*. Cambridge University Press. New Delhi

Reddy Y V and G. R. Reddy (2019) *Indian Fiscal Federalism, Oxford University Press, New Delhi.*

Reddy, Y. V. (2019). "New Approached to Fiscal Federalism in India", *Review of Development and Change*, 24(2) 163–186.

Reddy, Y. V. (2019). New approaches to fiscal federalism in India. *Review of Development and Change*, *24*(2), 163-186.

Renjith, P S, (2022). GST and debt sustainability: The Indian experience. GIFT Discussion Paper 2022/04. Gulati Institute of Finance and Taxation, Thiruvananthapuram, India

Sharma, C. K. (2021). The Political Economy of India's Transition to Goods and Services Tax. German Institute of Global and Area Studies.

Subramanian, A. (2015). *Report on the revenue neutral rate and structure of rates for the Goods and Services Tax (GST).* *Retrieved from p://www. gstcouncil. gov. in/sites/default/files/CEA-rpt-rnr. pdf.*

Subramanian, A. (2018). *Of Counsel: The Challenges of the Modi-Jaitley Economy*, Penguin Random House, New Delhi.

Tait, M. A. A. (1988). *Value added tax: International practice and problems* (Vol. 24). International Monetary Fund.

Thirteenth Finance Commission. (2009). Report of the Task-Force on Goods and Services Tax. Government of India