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Determinants of GST Revenue Performance: Demonstrating the Fiscal Advantage of Manufacturing States in India

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Determinants of GST Revenue Performance: Demonstrating the Fiscal Advantage of Manufacturing States in India

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Abstract

Revenue mobilisation is the process of generating revenue, influenced by a complex interplay of factors. The capacity to mobilise revenue may vary depending on the nature of taxes and the factors that affect their collection. The Goods and Services Tax (GST) was implemented in India in 2017, with the expectation that it would reform the indirect tax system significantly and enhance revenue mobilisation. However, the States did not achieve the targeted revenue performance level for various reasons, including the COVID pandemic. Earlier, there was the notion that the manufacturing States would be the net losers and the Consumer States the gainers. In this regard, this paper explores the ground reality of GST revenue mobilisation in the States with a special focus on manufacturing States. The major findings indicate that the change from origin-based to destination-based tax did not have a significant negative impact, as expected, because states with a substantial manufacturing base have a broad consumption base and a sizeable service tax base, which mitigated potential losses.

Key Words: GST, VAT, Revenue mobilisation, IGST Settlement

1. Introduction

To finance the fundamental pillars of economies and communities, such as public services, infrastructure facilities, and other initiatives that stimulate economic growth, governments require stable revenue sources (Akgun et al., 2017; Garg et al, 2022). The capacity to generate public revenue varies across countries, subnational governments, and, more specifically, regions, and is determined by the characteristics and taxable resources of each region/State, along with the efficiency of tax administration. The dynamics of revenue generation depend on various factors, such as economic conditions, government policies, resources, population size, consumption patterns, manufacturing base, Service base, and export base, among others (Tanzi, 1988; Bahl and Wallace, 2005; Castro and Camarillo, 2014; Garg et al., 2025). Low- and middle-income countries that rely heavily on indirect taxes as a source of revenue tend to have poor revenue performance because indirect taxes are regressive, placing a heavy burden on the poor (Anjarwi, 2025). However, it is expected that Value Added Tax (VAT) has greater potential to improve revenue performance in emerging nations than traditional commodity taxes, for various reasons. It is expected that VAT would broaden the tax base and eliminate the cascading effects associated with turnover taxes and some sales tax systems, as it covers services within its scope (Sen Gupta, 2007); VAT would enhance efforts to mobilise much-needed tax revenue directly and through wider improvements in tax administration and compliance (Keen and Lockwood, 2010); and the self-enforcing mechanism of VAT has the potential to increase compliance are some of the reasons. By taking its broader scope, uniformity, and seamless Input Tax Credit (ITC) mechanism, which eliminates the "tax on tax" or cascading effect that prevailed under the VAT regime, the Goods and Services Tax (GST) was introduced in India.

When a unified tax system like GST is implemented in a diverse country like India, it was certain that its revenue performance would vary from state to state based on their economic, structural and social bases. It is important to note that the States' revenue base surrendered under GST is much higher than that of the Union government. However, the GST revenue collected is shared equally between the Union and the States, further accentuating the vertical fiscal imbalance between the Union and the States (Isaac et al., 2019; Joseph and Ramalingam, 2020). Again, the adoption of GST reduced the states' tax capacity, leaving them unable to generate revenue as expected (Mukherjee, 2020; Dey, 2021; Garg et al., 2023). All these worsened the States' fiscal position after the introduction of the country's prestigious tax reform. The ambiguity persists even after eight years of its inception in the Central Goods and Services Tax (CGST) and Integrated Goods and Services Tax (IGST) Acts passed by the Parliament, and the State Goods and Services Tax (SGST) Acts of various State Legislatures, which have led to judicial review and interpretation. The loopholes in these Acts further led to a situation in which destination-based States were deprived of receiving their share of eligible tax, thus annulling the very purpose of GST (Thekkekkara, 2021).

Earlier, there was a notion that the manufacturing States would be the net losers and the Consumer States would be the gainers. But what happened in reality? Who are the gainers and losers? Based on the experience of the GST over the past eight years, all stakeholders must actively examine the flexibility of the GST design to fit the diverse needs of the Union and the State's income (Kumar, 2019). Against this background, this study examines the GST performance of States in detail, with a focus on the predominantly manufacturing/service-oriented/trade-dependent States. It also examines the various determinants of GST revenue across states. Apart from the introduction, the paper is organised into three sections. Section 1 gives the background of the study. Section 2 analyses the GST performance of the States in detail, with a focus on the predominantly manufacturing/ service-oriented/trade-dependent States. Section 3 presents the concluding observations and the areas for future research in GST.

Section 1: Background of the study

The state-level Value Added Tax (VAT) introduced in India in 2005, following years of political and economic debate, replaced the erstwhile Sales Tax system. It was one of the most radical reforms implemented in the country, with the potential to bring India together into a sizable common market. The primary goals of VAT were to reduce the tax burden on manufacturers, traders, and the general public by lowering prices and to assist the government in maximising revenue collection by reducing tax evasion and cascading. With the introduction of VAT, the attraction of foreign and domestic investment was expected. VAT expanded the tax base and eliminated several levies and taxes, including turnover tax and various surcharges. The tax on the sale or purchase of commodities inside a State is a state subject, as stated in Entry 54 of List II (State List) in the Seventh Schedule to the Indian Constitution. The Empowered Committee (EC) imposed VAT in all states, and 20 States implemented the VAT system in April 2005. Those states that were reluctant to adopt the 2005 tax reform implemented VAT in subsequent years.

The major component of the State's Own Tax Revenue (SOTR) is taxes on commodities and services, which contribute more than 85 per cent of the SOTR. The larger States such as Maharashtra, Uttar Pradesh, Tamil Nadu, Karnataka, Gujarat, Rajasthan, and Andhra Pradesh are the top collectors of the component 'taxes on commodities and services' during both the pre- and post–GST periods, together accounting for more than 60 per cent of the total revenue mobilised. Sales Tax was the major component, which contributed more than 70 per cent of the 'taxes on commodities and services'. Obviously, States such as Maharashtra, Tamil Nadu, Uttar Pradesh, Gujarat, Karnataka, and Andhra Pradesh were the top collectors of Sales Tax, and together accounted for around 60 per cent of the total sales tax collected by All States in the country. Sales Tax revenue consisted of components such as 'State Sales Tax/VAT' and 'Central Sales Tax (CST)', which together accounted for almost 95 per cent of the total. Out of this, around 85 per cent of the total Sales Tax Revenue is 'State Sales Tax/VAT', and the remaining 10 per cent is CST. The top performers of 'State Sales Tax/VAT' were Maharashtra, Tamil Nadu, Uttar Pradesh, Andhra Pradesh, Kerala, Karnataka, and Gujarat, together collecting more than 60 per cent of the total tax collected by All States. The revenue performance of the 'State Sales Tax/VAT' is presented in Table 1, which attempts to analyse the periodical change in their share from the pre-VAT to the VAT regime.

Table 1: Revenue Performance of the State Sales Tax/VAT - State-wise (in %)

		2001-02 to 2004-05	2005-06 to 2008-09	2009-10 to 2012-13	2013-14 to 2016-17
Top	Maharashtra	11.8	16.2	15.0	15.6
	Tamil Nadu	12.5	11.6	10.6	13.1
	Uttar Pradesh	6.6	7.4	9.1	10.1
	Andhra Pradesh	11.3	11.2	10.7	8.1
	Kerala	*7.0*	*6.0*	*6.0*	*7.0*
	Karnataka	7.6	8.0	7.5	5.0
	Gujarat	5.9	7.6	8.2	5.0
	Total	**62.7**	**68.0**	**67.1**	**63.8**
Middle	Telangana				4.9
	West Bengal	5.6	4.8	4.7	4.5
	Madhya Pradesh	3.6	3.7	3.7	4.4
	Haryana	3.8	4.1	3.8	4.4
	Odisha	2.2	2.4	2.4	2.8
	Punjab	3.5	3.5	3.6	2.7
	Total	**18.7**	**18.5**	**18.1**	**23.7**
Bottom	Bihar	2.3	1.6	1.9	2.4
	Chhattisgarh	1.2	1.5	1.5	1.9
	Jharkhand	1.7	1.5	1.5	1.8
	Assam	1.7	1.4	1.6	1.7
	Rajasthan	4.8	4.7	4.6	1.2
	Goa	0.6	0.5	0.5	0.3
	Total	**12.3**	**11.1**	**11.6**	**9.3**
Remaining States		**6.3**	**2.4**	**3.1**	**3.2**

Table 1: Revenue Performance of the State Sales Tax/VAT - State-wise (in %)

Source: Calculated based on data taken from various issues of the State finances: A study of State Budgets

However, the second main sales tax component, the Central Sales Tax (CST) (a tax on the interstate sale of goods) collected by the manufacturing states, was not subject to VAT and contributed significantly to the States' exchequers. The States that contributed more than 50 per cent of the CST revenue are Maharashtra, Gujarat, Tamil Nadu, and Karnataka, which have a strong manufacturing base. Along with these States, Uttar Pradesh, Haryana, West Bengal, Telangana, and Rajasthan also collected a moderate level of CST revenue. Assam, Punjab, Kerala, and Bihar are the bottom States in the list of CST revenue collection (Table 2).

Table 2: Revenue Performance of the Central Sales Tax (CST) - State-wise (in %)					
		2001-02 to 2004-05	**2005-06 to 2008-09**	**2009-10 to 2012-13**	**2013-14 to 2016-17**
Top	Maharashtra	17.5	15.1	15.2	16.2
	Gujarat	10.5	11.3	17.7	15.9
	Tamil Nadu	10.5	11.3	10.2	10.9
	Karnataka	7.2	7.7	4.2	7.6
	Uttar Pradesh	2.8	6.7	7.5	5.3
	Haryana	7.5	7.9	5.9	5.3
	West Bengal	4.1	4.7	5.0	5.2
	Andhra Pradesh	6.2	7.5	7.2	4.7
	Total	**66.3**	**72.2**	**72.9**	**71.2**
Middle	Telangana				4.4
	Rajasthan	1.9	2.5	3.9	4.1
	Jharkhand	3.0	4.1	3.5	3.4
	Madhya Pradesh	3.9	3.1	3.2	3.0
	Chhattisgarh	2.8	3.5	3.7	2.6
	Odisha	1.6	3.5	2.8	2.6
	Total	**13.2**	**16.6**	**17.0**	**20.2**
Bottom	Assam	0.0	0.5	1.8	1.9
	Punjab	3.8	1.9	1.7	1.6
	Kerala	*3.4*	*3.5*	*1.3*	*1.0*
	Bihar	0.6	0.3	1.8	0.4
	Goa	0.4	0.3	0.4	0.3
	Total	**8.2**	**6.5**	**7.1**	**5.2**
Remaining States		**12.2**	**4.6**	**2.9**	**3.4**
Source: *Same as Table 1*					

There were serious concerns that, until the CST is eliminated, the primary goal of VAT will not be achieved, undermining its advantages in streamlining supply chain management and eliminating inefficiencies in interstate sales of goods. However, those States, especially manufacturing States that raised revenue from CST, had opposed its abolition, and a 2 per cent CST continued during the VAT regime. However, India's indirect tax system underwent significant modifications further when the Goods and Services Tax (GST) was implemented on July 1, 2017. As an extension of VAT on goods and services, GST is introduced after subsuming VAT and various other indirect taxes of both the Centre and States, including CST. It is anticipated that the GST will improve the general well-being of Indians and be an inclusive policy that benefits all Indian states (Van Leemput and

Wiencek, 2017). Even if the implementation of such a unified tax in a federal country like India is remarkable, it could cause initial repercussions. It is a fact that almost all the countries that have implemented GST have taken considerable time to settle down (Rao, 2019). Here, one of the major concerns raised by the manufacturing State was the subsumption of CST, which would badly hit its state exchequer. How far is it true? In this regard, the following section analyses the GST performance of the Indian States for the past years since its implementation.

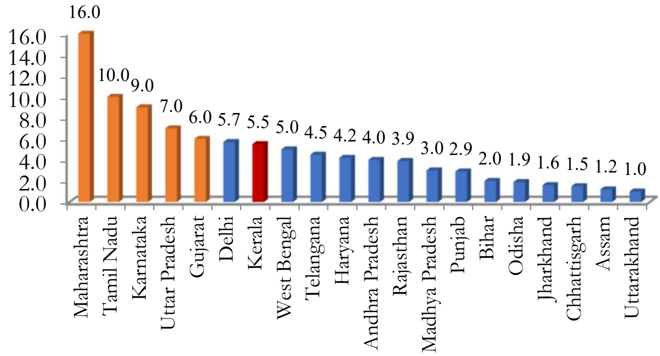
Section 2: GST performance of Indian states

2.1 General performance

As per the Economic Survey 2017-18, the top states with potential GST base (share of the total GST base) are Maharashtra (16%), Tamil Nadu (10%), Karnataka (9%), Uttar Pradesh (7%), and Gujarat (6%), followed by Delhi and Kerala. While comparing this with the average (from 2020-21 to 2024-25) performance of both GST collection and GST revenue (SGST+IGST settlement) of the States, there are changes in the States' positions and shares. However, as projected in the Economic Survey, the major manufacturing States such as Maharashtra, Tamil Nadu, Karnataka, Gujarat, and Uttar Pradesh top both collections and revenue.

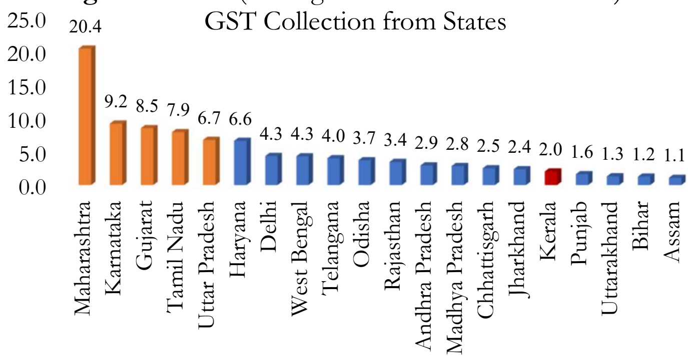
Contrary to expectations based on the potential tax base (Figure 1), the actual collection share in Tamil Nadu decreased from 10 per cent to 7.9 per cent, while that of Gujarat increased from 6 per cent to 8.5 per cent (Figure 2). Tamil Nadu was the second top performer in collecting revenue from taxes on commodities and services, Sales tax, and State Sales Tax/VAT during both the pre-VAT and the VAT regime. But they lagged behind Karnataka and Gujarat in terms of GST collection throughout the GST period, and also trailed behind Karnataka and Uttar Pradesh in terms of the State's GST revenue (SGST+IGST settlement).

Figure 1: State's Share in Potential GST Base (%)



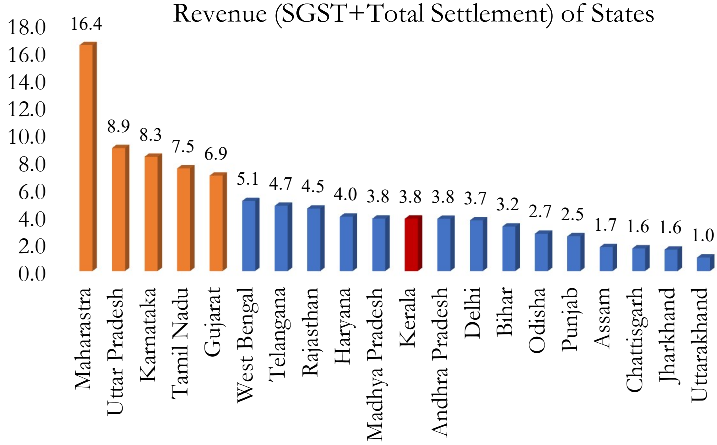
Source: Economic Survey 2017-18

Figure 2: Share (Average from 2020-21 to 2024-25) of GST Collection from States



Source: Calculated based on the data available from the GST portal

Figure 3: Share (Average 2020-21 to 2024-25) of GST Revenue (SGST+Total Settlement) of States

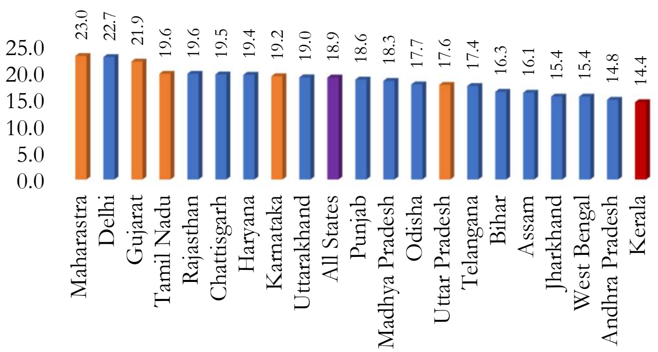


Source: Same as Figure 2

One interesting fact is that Kerala is significantly behind many other States, with actual collection of 2 per cent, as against the projected potential share of 5.5 per cent. Additionally, the state's share of total actual revenue is also lower, at 3.8 per cent (Figure 3). As the economic review projected, Kerala anticipated that a state with a substantial service-sector share would be able to generate more revenue from it. Furthermore, as a consumer state, Kerala would be able to make a substantial revenue from a destination-based tax such as the GST. But the data show that neither of these propositions worked in Kerala. The possible reason for this huge decline could be the smaller size of the State's economy and the low share of the taxable service sector (Sebastian and Kumary, 2010).

While examining the state's GST revenue growth rate over the past five years, we can see that the major manufacturing States perform well. Maharashtra leads with a growth rate of 23 per cent. Growth performance in major manufacturing States such as Gujarat (21.9%), Tamil Nadu (19.6%), and Karnataka (18.9%) is also strong. Other manufacturing States like Rajasthan, Chhattisgarh, and Haryana, along with Delhi, which has a vast taxable service sector, performed well in terms of growth in GST revenue.

Figure 4: Average (from 2020-21 to 2024-25) GST Revenue (SGST+IGST) Growth Rate of States



Source: Same as Figure 2

Table 3 shows the net GST revenue performance of the States based on the average from 2020-21 to 2024-25. Maharashtra is the top performer in both total revenue collection and the State's revenue, including IGST settlement. The next best-performing States in collecting higher shares of CGST and SGST are Gujarat (9% & 8.5%), Tamil Nadu (8.2% & 8.5%), and Karnataka (8.0% & 8.2%). However, along with Maharashtra (20.0%), Haryana (10.7%), Karnataka (8.5%), Gujarat (7.6%), Delhi (7.0%), and

Tamil Nadu (6.8%) collect significant shares of IGST, indicating that these States are the leading suppliers of goods and services to other states. Similarly, the States collecting higher shares of Cess are Maharashtra (15.9%), Uttar Pradesh (12.5%), Karnataka (11.3%), Tamil Nadu (7%), Odisha (6.8%), Chhattisgarh (6.3%), and Madhya Pradesh (6.2%). In the nutshell, manufacturing States such as Maharashtra (20.5%), Karnataka (8.6%), Gujarat (8%), Tamil Nadu (7.7%), Uttar Pradesh (6.9%), and Haryana (6.6%) together account for more than half (58.3%) of the total GST collection. The actual collection of CGST, SGST, IGST, and cesses is given in Appendix tables 1 to 4.

Table 3: Average Share (from 2020-21 to 2024-25) of GST Revenue of Indian States

	GST Collection					**State's GST Revenue**	
	CGST	**SGST**	**IGST**	**CESS**	**Total**	**Total Settlement**	**SGST + Total settlement**
Maharashtra	22.9	20.7	20.0	15.9	20.5	11.9	16.4
Uttar Pradesh	6.3	7.1	5.5	12.5	6.9	11.0	8.9
Karnataka	8.1	8.2	8.5	11.3	8.6	8.4	8.3
Tamil Nadu	8.2	8.5	6.8	7.0	7.7	6.3	7.5
Gujarat	9.0	8.5	7.6	5.7	8.0	5.3	6.9
West Bengal	5.4	5.3	3.1	3.7	4.4	4.9	5.1
Telangana	4.0	4.2	2.7	5.7	3.8	5.4	4.7
Rajasthan	3.8	3.9	3.5	1.6	3.5	5.2	4.5
Haryana	4.1	4.4	10.8	5.3	6.6	3.5	4.0
Madhya Pradesh	2.8	2.9	2.1	6.2	2.9	4.8	3.8
Kerala	*3.0*	*3.1*	*1.2*	*0.1*	*2.1*	*4.5*	*3.8*
Andhra Pradesh	3.0	3.2	2.8	2.5	2.9	4.5	3.8
Delhi	3.6	3.4	7.0	1.0	4.5	4.0	3.7
Bihar	1.5	2.0	0.5	1.8	1.3	4.6	3.2
Odisha	3.7	3.5	3.0	6.8	3.7	1.9	2.7
Punjab	1.5	1.8	1.8	0.3	1.6	3.3	2.5
Assam	1.4	1.4	0.9	0.6	1.2	2.1	1.7
Chhattisgarh	2.2	2.0	2.7	6.3	2.7	1.2	1.6
Jharkhand	1.9	2.0	2.7	5.5	2.5	1.1	1.6
Uttarakhand	1.1	1.2	2.0	0.1	1.3	0.8	1.0
All States & UTs	97.5	97.2	95.3	99.8	96.8	94.7	96.0

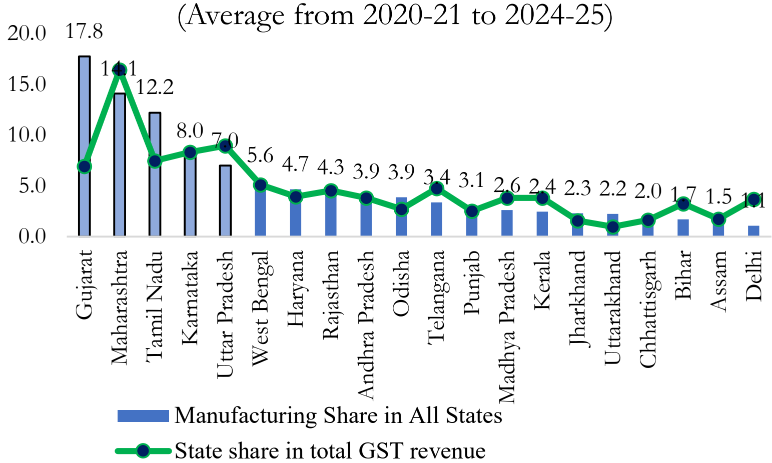
Source: Calculated based on the data available from the GST portal

An interesting thing to note is that States that receive a higher share of the total IGST settlement are those with a strong manufacturing base in the country. The States such as Maharashtra (11.9%), Uttar Pradesh (11%), Karnataka (8.4%), Tamil Nadu (6.3%), Telangana (5.4%), Gujarat (5.3%), and Rajasthan (5.2%) together receive more than half of the IGST settlement to the States. This implies that the manufacturing States are also better consumers of goods and services from other States

2.2 Performance of manufacturing states in pre and post GST period

The manufacturing states could collect Central Sales Tax (CST) on interstate transactions under the VAT regime. Even if the tax system were transferred to destination-based VAT, CST was retained as compensation to these States. We have seen that the major recipients of this tax revenue were States such as Maharashtra, Gujarat, Tamil Nadu, and Karnataka, together collecting more than 50 per cent of the total CST revenue (Table 2). The performance of Uttar Pradesh, Haryana, West Bengal, Telangana, and Rajasthan is also not that bad in collecting a decent share of CST revenue. There were serious apprehensions among these States that there would be a potential revenue loss when they shifted from VAT to GST, by shifting revenues from manufacturing States to consuming States. Tamil Nadu had opposed the GST precisely for this reason, as it estimated a revenue loss of around 9,270 crore under GST. Gujarat also apprehended that it would take away the State's autonomy in taxation and inflict revenue loss of over Rs. 3,000 Crore. The states already had revenue concerns about keeping sectors like alcohol, tobacco, and certain petroleum products out of GST for an uncertain period (Teltumbde, 2017). But CST has no place in integrating the domestic market into 'One Tax, One Nation, One Market' and is thus subsumed in GST. Despite its inherent disincentives for the manufacturing states, it was thought that GST may improve manufacturing supply chain efficiency. Additionally, it was anticipated that the change might not have a significant negative impact because states with a substantial manufacturing base would also likely have a substantial service sector, which would mitigate any potential losses (Subrahmanian, 2015).

Figure 5: Share of Manufacturing Sector GSDP out of total Manufacturing Sector and GST Share (Average from 2020-21 to 2024-25)



Source: Calculated from the GSDP figures given by EPWRF and GST data given by the GST Portal

Figure 5 shows the State's average share of manufacturing sector GSDP and average GST revenue share for the past five years from 2020-21 to 2024-25. It is seen from the figure that those

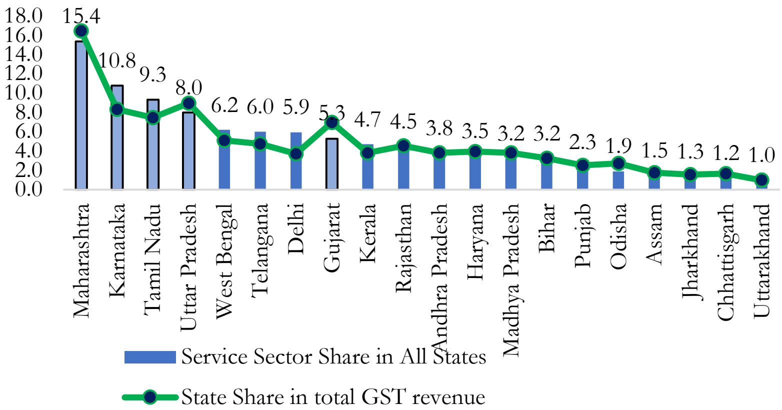
States, such as Gujarat, Maharashtra, Tamil Nadu, Karnataka and Uttar Pradesh, that are contributing almost 60 per cent of the total manufacturing GSDP and have a strong manufacturing base, are still in a better position to generate more than half of the GST revenue in the country. The possible reason these States remain in the top position in generating a lion's share of total GST revenue is their broad consumption base and the sizeable number of service sector taxpayers.

2.3 Revenue outcomes in service-dominant economies

GST widened the tax base by bringing services within the tax net. The initial belief was that the poorer States would be the major beneficiaries of GST implementation, since they consume more and their economies are more services-based than manufacturing-based (Subrahmanian, 2015). However, the contribution of service tax was not commensurate with the high share of services in India’s GDP (Thomas, 2015). From a revenue perspective, it is important to consider two factors: the extent of taxable services and the size of service providers (Sebastian and Kumary, 2010). The services contribute largely to the service sector GSDP and are not taxable under GST; they will not realise revenue. For example, most of the education and health services are outside the scope of GST. As such, a large portion of the service sector, which would have contributed additional revenue under GST, is kept out of the tax ambit, resulting in a decline in service revenue (Kumary and Mathew, 2019).

Similarly, the small service providers that come below the threshold limit cannot contribute to service tax collection. For example, typical service providers such as courier agencies, travel agents, tour operators, manpower recruiting agencies, pandal shamiana contractors, real estate agents/consultants, cable operators, beauty parlours, dry cleaning services, internet cafes, catering services, cleaning services, etc., can be found in any town. But it is not certain how many of them can exceed the threshold limit of Rs 20 lakhs and obtain GST registration (Sebastian et al., 2017). That is, the number of service providers above the threshold, rather than the total number of service providers, will determine the potential for resource mobilisation.

Figure 6: Share of Service Sector GSDP out of Total Service Sector and GST Share (Average from 2020-21 to 2024-25)



Source: Same as Figure 5

The major States that contribute to the total Service sector GSDP in the country are Maharashtra, Karnataka, Tamil Nadu, Uttar Pradesh, and West Bengal, which together account for 50 per cent of the total Service sector GSDP (Figure 6). Those States are also the toppers in GST revenue collection. This implies that the

States' anxieties about the loss of CST revenue are not a reality; the States with large manufacturing and service tax bases are the real beneficiaries of GST implementation. That is, the GST experience over the past five years shows that revenue collection is still in favour of manufacturing economies rather than mere service-oriented economies.

Table 4: Share of Service Taxes Originated in the State (in crores)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Maharashtra	175	284	417	446	418	512	688	922	1069	1147
Uttar Pradesh	145	225	317	360	341	422	569	768	862	937
Tamil Nadu	97	155	186	229	224	287	405	566	659	724
Karnataka	56	100	117	186	183	235	333	469	560	615
West Bengal	84	137	173	196	185	228	307	412	490	534
Gujarat	64	99	167	212	193	230	301	392	463	515
Kerala	74	116	162	196	180	217	286	376	435	477
Rajasthan	61	99	139	152	150	193	273	384	430	458
Telangana							220	284	323	403
Andhra Pradesh	49	84	106	132	127	160	221	303	351	383
Madhya Pradesh	48	84	107	140	131	159	212	281	310	340
Bihar	46	77	92	104	101	129	179	247	294	330
Punjab	51	88	110	121	112	136	181	238	270	285
Haryana	30	43	72	85	84	110	157	223	258	277
Jharkhand	16	26	40	53	49	59	78	102	119	130
Odisha	18	30	34	50	47	59	79	106	117	128
Assam	13	20	35	48	44	54	71	94	110	122
Chhattisgarh	15	31	50	44	39	46	59	77	87	95

Source: Morris, S., Pandey, A., Agarwalla, S. and Agarwalla, A. (2019). Does GST in India Hurt Producing Regions? A New Estimate of the Tax Base Under GST of Select States, W. P. No. 2019-03-01/March 2019, Indian Institute of Management, Ahmedabad (Table 9 - Service Taxes Originating in the State Slated Towards State GST (Rs. Crore)) Accessed from: https://www.iima.ac.in/sites/default/files/rnpfiles/19307876842019-03-01.pdf

Table 4 provides a snapshot of the service tax collection pattern during the pre-GST period. According to this, Maharashtra, Uttar Pradesh, Tamil Nadu, and Karnataka were the top performers in service tax collection. Other States that collected a decent share of service tax during this period were: West Bengal, Gujarat, Kerala, and Rajasthan. When we compare the GST performance of these

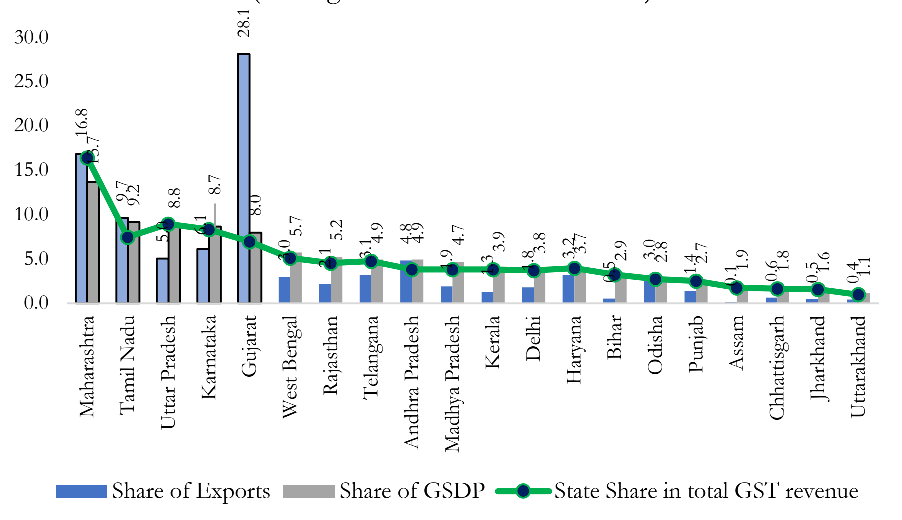
States, we can see that these are the front-runners in collecting a higher share of revenue during the GST regime (Figure 7).

2.4 Do export-intensive states perform better under GST?

Trade openness has a significantly positive effect on the total tax revenue-GDP ratio. The significantly positive relationship between openness and the trade-tax GDP ratio is evident, as trade tax revenue is derived from taxes on the country's exports and imports (Khattry and Rao, 2002). The degree of international trade - measured by the share of exports and imports – is also a matter of revenue performance. Per capita GDP and the import share appear to have a strong positive relationship with revenue performance (Sen Gupta, 2007).

Obviously, a question arises: since export is zero-rated under GST, how could it be linked to the performance of GST? The answer could be the high demand for goods and services in States with a strong export base. This would, in turn, increase economic activity and thereby improve the States' revenue performance. Maharashtra, Uttar Pradesh, Tamil Nadu, Karnataka, and Gujarat, the top five states in terms of GST income collection, combined, accounted for almost 65% of India's exports (Figure 7) and half of the nation's GSDP from 2020-21 to 2024-25, implies that the top exporters with a strong manufacturing and service tax base are the best performers in collecting revenue under GST.

Figure 7: Share of Exports, GSDP, and GST Revenue (Average from 2020-21 to 2024-25)



Source: Calculated; export data availed from National Import-Export Record for Yearly Analysis of Trade Portal, GSDP data is from EPWRF, and GST data is from GST Portal

2.5 Dependence on inter-state trade in revenue mobilisation

It is anticipated that the States will be more integrated and engage in greater interstate trade following the implementation of the GST. IGST is the tax levied on the inter-state supply of goods and services, collected by the Union government from the exporting States. The business entity that exports the goods and services is eligible for the ITC, and the importer can claim ITC for the local sales of the imports. The IGST collected is shared equally between the Union government and the State government where the goods and services are ultimately consumed, in accordance with the IGST settlement. Therefore, being a destination-based tax, it is anticipated that the GST would help consuming states to increase their revenue. If that holds, the States that should be the ultimate beneficiaries are Bihar, Kerala, West Bengal, Telangana, and Assam (Table 4). The IGST (collection) component is the lowest in the composition of GST in those States, indicating their very low interstate export base. However, in actuality, the states with a robust interstate export base continue to hold the top spot even after the CST was abolished and the GST was implemented.

Table 4: Composition of GST Collection (net) in States (based on the average figures from 2020-21 to 2024-25)

	States	CGST	SGST	IGST	CESS	Total
SGST<IGST (collection)	Haryana	15.2	20.4	56.8	7.5	100
	Delhi	19.7	23.6	54.6	2.0	100
	Uttarakhand	19.1	27.6	52.6	0.7	100
	Punjab	23.8	34.9	39.7	1.6	100
	Jharkhand	18.1	24.0	37.6	20.4	100
	All States and UTS	**24.4**	**31.1**	**35.1**	**9.4**	100
	Karnataka	23.0	29.8	34.9	12.3	100
	Rajasthan	26.4	34.4	34.9	4.3	100
	Chhattisgarh	19.6	23.4	34.7	22.2	100
	Maharashtra	27.3	31.3	34.2	7.2	100
	Gujarat	27.4	32.8	33.2	6.6	100
SGST >IGST (Collection)	Andhra Pradesh	25.0	33.6	33.2	8.2	100
	Tamil Nadu	25.9	34.4	31.1	8.6	100
	Odisha	24.5	29.6	28.5	17.4	100
	Uttar Pradesh	22.6	32.0	28.3	17.2	100
	Assam	29.9	38.3	26.6	5.2	100
	Madhya Pradesh	23.8	30.6	25.6	20.0	100
	Telangana	25.9	34.5	25.4	14.2	100
	West Bengal	30.2	37.4	24.5	7.9	100
	Kerala	34.1	46.1	19.5	0.3	100
	Bihar	27.4	46.8	13.2	12.7	100

Source: Same as Table 3

Here, we can analyse how the IGST settlement to States works by constructing an indicator to measure the dependence on interstate trade for revenue mobilisation, which will show whether the State is primarily a producing or a consuming State. This indicator is the ratio of IGST settlement to SGST revenue, which reflects the "dependence" on inter-state trade and commerce or the degree of integration with the rest of the country (Rao, 2024). Since it measures the ratio of imports to domestic consumption, the indicator should be higher for consuming States and lower for producing States. Here, we can assume that States with a ratio higher than 'one' are predominantly consuming States, and those with a ratio lower than 'one' are manufacturing States.

Table 5 presents that states such as Maharashtra, Tamil Nadu, Gujarat, and Karnataka, which have higher manufacturing GSDP, have lower values than the All States and UTs and are also the top performers in GST revenue collection. This implies that the consumption base of these States is comparatively higher, and they are less dependent on other States. In other words, the States with a strong manufacturing and service tax base have stronger local economies than other States. This ratio changes from 0.5 in Odisha to 2 in Bihar, implying that Bihar is the most dependent state on other states, and Odisha is the least in 2024-25.

Table 5: The Ratio of IGST Settlement to SGST

	2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Bihar	2.0	2.2	2.1	2.3	2.0

Punjab	1.5	1.7	1.8	1.9	2.0
Madhya Pradesh	1.3	1.5	1.6	1.7	1.7
Uttar Pradesh	1.3	1.5	1.5	1.4	1.5
Rajasthan	1.0	1.2	1.3	1.3	1.5
Assam	1.2	1.3	1.5	1.5	1.4
Andhra Pradesh	1.3	1.4	1.3	1.3	1.4
Kerala	*1.3*	*1.5*	*1.4*	*1.2*	*1.2*
Telangana	1.1	1.2	1.4	1.1	1.2
Delhi	0.9	1.2	1.1	1.1	1.1
West Bengal	0.8	0.8	0.9	0.8	1.0
All States and UTs	***0.9***	***0.9***	***1.0***	***0.9***	***1.0***
Karnataka	0.9	1.0	1.0	0.9	0.9
Haryana	0.7	0.7	0.8	0.8	0.8
Chhattisgarh	0.5	0.4	0.5	0.7	0.8
Gujarat	0.4	0.6	0.6	0.6	0.7
Tamil Nadu	0.7	0.7	0.7	0.7	0.7
Uttarakhand	0.5	0.7	0.6	0.6	0.6
Jharkhand	0.7	0.5	0.5	0.4	0.6
Maharashtra	0.5	0.6	0.6	0.5	0.6
Odisha	0.7	0.4	0.4	0.6	0.5
Source: Same as Table 3					

When we observe the changes in this IGST settlement to SGST ratio over the period (2020-21 to 2024-25), the States such as Kerala (1.3 to 1.2), Jharkhand (0.7 to 0.6), and Odisha (0.7 to 0.5) show a decline, and this decline in IGST settlement would affect their GST revenue collection negatively. Especially in Kerala, where per capita consumption expenditure is very high, and the manufacturing base is very low, it is questionable why this ratio is declining continuously. It is well known that Kerala exports goods worth barely Rs 550 billion to other states, while importing goods worth almost Rs 1.5 trillion from other states (Khanna, 2020).

The trade deficit is approximately Rs 1 trillion (Rs one lakh crore) with the rest of the country. Then the IGST ratio would be at least 3. This is not reflected in the IGST share of Kerala is a puzzle yet to be resolved. This implies that Kerala's dependence on other states through interstate purchases has not improved its IGST ratio.

Section 3 : Conclusion

Revenue generation is influenced by a complex interplay of factors, determined by the nature of taxes and the factors that influence their collection. The Goods and Services Tax (GST) is implemented with the expectation that the reform will enhance revenue mobilisation. But the difference between the potential GST base predicted under pre-GST and the actual share of GST revenue shows that the States could not achieve the targeted level of revenue performance due to various factors, including the COVID pandemic. In this regard, it is very important to understand the States' performance in GST revenue mobilisation.

The analysis of GST revenue growth in the state over the past five years shows that major manufacturing States such as Maharashtra, Gujarat, Tamil Nadu, and Karnataka perform better than other States. An interesting thing to note is that the States that received a higher share of the total IGST settlement are manufacturing States, which implies they are also good consumers of goods and services from other States. There were serious apprehensions among these States that there would be a potential revenue loss when they shifted from VAT to GST, by shifting revenues from manufacturing States to consuming States. But the change did not have a significant negative impact as expected, because states with a substantial manufacturing base have a broad consumer base and a sizeable service tax base, which mitigated potential losses. Even though the export is zero-rated under GST, demand would be high in States with a strong export base. This would, in turn, increase economic activity and thereby improve the States' revenue performance. In that way, the top exporters with a strong manufacturing and service tax base are the best performers in collecting revenue under GST. Lastly, it is anticipated that the GST would help the consuming states to increase their revenue, since GST is destination-based. However, in reality, the states with a robust interstate export base continue to hold the top spot even after the abolition of CST and the implementation of GST.

The ratio of IGST settlement to SGST revenue reflected the dependence on inter-state trade and commerce. Since it measures the ratio of imports to domestic consumption, the assumption was that the indicator value would be higher for the consuming States and lower for the producing States. The ratio shows that States with a strong manufacturing and service base have stronger local economies than other States. Kerala exports commodities worth around Rs 550 billion to other states, while importing items worth almost Rs 1.5 trillion from them. The trade deficit is approximately Rs 1 trillion (Rs one lakh crore) with the rest of the country. Considering this, the SGST-to-IGST ratio in Kerala would be at least 3. But the IGST share in Kerala is only 1.2, which is a puzzle yet to be resolved. This implies that Kerala's dependence on other states through interstate purchases has not improved its IGST ratio. This needs further detailed analysis to identify the reasons for Kerala's low IGST ratio.

Appendix Tables

Appendix Table 1: CGST Collection

	2020-21	2021-22	2022-23	2023-24	2024-25
Andhra Pradesh	5975.5	7397.7	9042.3	10175.3	10481.5
Assam	2957.6	3598.5	3942.6	4676.9	5052.8
Bihar	3111.9	3671.1	4419.3	4928.2	5383.8
Chhattisgarh	4563.1	5753.2	6208.9	6793.1	7392.7
Delhi	6733.8	8522.5	10654.5	12701.9	14726.5
Gujarat	17870.3	23149.2	26818.5	29596.6	32540.4
Haryana	7946.6	9843.9	12218.2	13977.8	16322.7
Jharkhand	3661.2	4904.5	5766.6	6206.6	6655.2
Karnataka	15087.7	18643.2	24385.9	28791.8	31026.5
Kerala	5547.7	6870.0	9008.4	10494.2	11413.9
Madhya Pradesh	5953.6	6781.6	7839.5	9669.6	10662.9
Maharashtra	41602.0	53846.4	67337.4	80697.0	93320.3
Odisha	6027.5	9963.8	11085.0	12902.4	13872.0
Punjab	3085.9	4036.4	4123.8	5013.7	5715.7
Rajasthan	7775.9	9473.5	11004.9	12789.4	13726.0
Tamil Nadu	15476.2	19388.3	24159.0	28793.7	31115.5
Telangana	7731.4	9365.9	11230.7	14004.7	15680.3
Uttar Pradesh	12333.8	15424.8	18075.5	22000.0	24265.7
Uttarakhand	2158.7	2425.1	3138.4	3696.5	3832.2
West Bengal	11233.9	13664.7	16673.9	18157.7	18353.4
Grand Total	191744.8	242767.2	294755.7	345404.6	380098.6

Source: GST Portal

Appendix Table 2: SGST Collection					
	2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Andhra Pradesh	8336.6	10093.7	11943.2	13458	13805.4
Assam	3849.3	4591.3	5119.4	5917.6	6461.4
Bihar	5279.4	5965.9	7412.8	8441.3	9878
Chhattisgarh	5355.4	6717.2	7366.7	8044.2	9229.1
Delhi	8284.6	10423.6	12821.5	14989.1	17262.9
Gujarat	21699.1	27862.7	31988.2	35802.9	38223.6
Haryana	11005.9	13516	16323.6	18300.1	21167.6
Jharkhand	4806.9	6180.1	7700.1	8711	8780.7
Karnataka	20158	24497.8	31315.1	36329	39702.9
Kerala	8158.2	9650.5	12023.1	13566.7	14394.7
Madhya Pradesh	7812.5	8779.7	10280.6	12303.1	13313.5
Maharashtra	48427.5	61904.6	77489.8	93045.5	104021.8
Odisha	7692.4	11859	13172.6	15336.4	16994.9
Punjab	4842.2	5732.2	6364.6	7125.3	7967.2
Rajasthan	10444.9	12505.2	14437.6	16357.1	17337.5
Tamil Nadu	20853.6	26216.7	31896.5	36956.1	41542.5
Telangana	10584.9	12936.4	15157	18395.8	19683.7
Uttar Pradesh	18480.7	22197.8	25452.5	30583.3	32786.1
Uttarakhand	3085.5	3565.5	4569	5167.6	5561.7
West Bengal	14345.5	17272.2	20421.9	22142.6	22414.3
Grand Total	250610.1	311117.5	374003.9	433654.1	473700.7

Source: Same as Appendix Table 1

Appendix Table 3: IGST Collection					
	2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Andhra Pradesh	8031.9	10022.9	11219.1	14082.4	13955.1
Assam	2810.2	3298.5	3867.5	3735.0	4083.3
Bihar	1292.7	1677.0	2400.8	2379.5	2719.1
Chhattisgarh	8393.3	9982.3	11060.3	12025.1	12673.2
Delhi	19032.6	23607.8	28952.5	35408.0	40954.7
Gujarat	22383.6	28103.3	33339.9	33951.0	39022.3
Haryana	28155.0	33840.9	45899.0	54848.1	65640.2
Jharkhand	7232.9	10983.2	12455.9	12607.2	13221.0
Karnataka	20679.3	28729.8	38313.4	44516.3	48668.6
Kerala	3008.7	4763.2	5438.1	5443.2	5850.3
Madhya Pradesh	6253.4	7610.1	8933.6	10238.6	10788.5
Maharashtra	53945.1	68205.9	84740.6	100873.2	111577.0
Odisha	8274.0	11490.3	12136.1	13191.5	16721.2
Punjab	4465.0	6359.2	7398.7	9049.1	9965.3
Rajasthan	10368.6	12195.1	15409.6	16116.4	18040.7
Tamil Nadu	19039.9	23144.6	28033.6	35492.4	36993.1
Telangana	7797.8	9454.2	11710.5	13392.8	14143.8
Uttar Pradesh	14228.7	18544.9	24219.0	27551.5	31720.1
Uttarakhand	6458.5	6939.7	8348.0	9542.9	10263.1
West Bengal	9045.1	10787.0	13430.4	14032.7	16368.5
Grand Total	275864.6	347126.7	426490.7	490297.5	547113.0

Source: Same as Appendix Table 1

Appendix Table 4: CESS Collection					
	2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Andhra Pradesh	2019.8	2262.5	3739.2	3293.4	2722.2
Assam	305.1	400.4	624.1	1023.0	1397.4
Bihar	1674.9	1939.9	2003.5	2042.3	2078.4
Chhattisgarh	5714.4	6681.7	6927.0	7637.0	7500.8
Delhi	865.8	999.2	989.2	1269.2	1219.2
Gujarat	4454.3	5643.1	6128.3	7449.3	7723.7
Haryana	3812.3	4972.3	6028.2	7038.7	7865.7
Jharkhand	4556.0	5399.4	5757.1	6900.8	7794.5
Karnataka	7400.8	9384.5	13219.5	16804.3	17561.1
Kerala	76.3	78.5	74.0	56.0	84.4
Madhya Pradesh	5426.7	6192.6	6937.4	7464.8	7881.4
Maharashtra	8917.1	13900.0	19797.9	23114.1	25550.4
Odisha	5119.9	6717.1	7928.3	8532.8	9439.7
Punjab	170.7	217.2	319.5	372.2	449.0
Rajasthan	1479.1	1850.9	1477.9	1824.9	1998.9
Tamil Nadu	5562.8	7028.7	8038.2	8712.9	9248.2
Telangana	5110.7	6288.4	6458.1	6538.8	6320.2
Uttar Pradesh	10468.3	12426.5	14057.0	15394.0	16418.5
Uttarakhand	82.7	81.7	119.1	125.8	125.9
West Bengal	3143.6	3384.5	4089.0	4457.9	5366.1
Grand Total	76486.1	95996.8	114935.5	130298.6	138979.3

Source: Same as Appendix Table 1

Appendix Table 5: Total IGST Settlement					
	2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Andhra Pradesh	10601.0	13765.8	15981.4	17597.9	18813.5
Assam	4721.2	6005.3	7429.8	8680.6	9024.5
Bihar	10801.0	13293.3	15812.6	19086.7	19370.0
Chhattisgarh	2621.1	2765.3	3901.4	5720.8	7045.2
Delhi	7672.6	11998.6	14596.2	16518.2	18422.9
Gujarat	8734.6	15592.5	20100.0	21631.7	27659.3
Haryana	7562.3	9971.6	12712.5	14566.9	16457.5
Jharkhand	3128.9	3375.6	3656.5	3616.0	5251.3
Karnataka	18425.0	25534.2	30066.4	34217.1	37493.8
Kerala	10939.2	14098.3	16846.4	16906.1	17887.8
Madhya Pradesh	10537.2	13347.5	16842.9	20727.6	22457.3
Maharashtra	23310.1	35310.2	43258.1	48271.6	58609.7
Odisha	5528.1	4542.4	5361.8	8486.6	8033.7
Punjab	7142.5	9932.6	11708.4	13700.6	15555.9
Rajasthan	10535.6	15100.1	19304.9	21608.7	25270.5
Tamil Nadu	14039.5	19475.3	21739.1	24752.3	29538.0
Telangana	12040.3	15890.2	21026.4	20637.1	22733.0
Uttar Pradesh	24748.3	32584.0	38554.1	44114.8	49418.5
Uttarakhand	1485.2	2381.2	2740.5	2987.7	3512.3
West Bengal	11250.6	14056.6	17460.7	18540.3	22698.0
Grand Total	217884.0	295497.8	358893.1	403027.9	457405.9

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