Research Article

Journal of Business Management and Information Systems

One Nation, One Tax: Evaluating Revenue Performance of the Indian GST System

Gaurav Mahajan *[1]

[1] Assistant Commissioner to Deputy Commissioner, Sirmour at Nahan, Himachal Pradesh

Abstract

This study provides a comprehensive evaluation of the revenue performance of India's Goods and Services Tax (GST) system, implemented in 2017 as a significant indirect tax reform aimed at unifying the country's tax structure. Drawing on data from official government reports and high-impact academic literature, the analysis examines the GST's influence on tax collection, compliance rates, and its broader effects on economic growth. The findings indicate that while the GST has made substantial progress in streamlining the tax regime and improving compliance, its overall revenue performance has been inconsistent. Several initial implementation challenges, along with ongoing sector-specific issues, have constrained its full potential. The study identifies revenue collection trends across various sectors, highlights areas of concern, and suggests further reforms to optimize the GST framework. Contributing to the existing body of research on consumption tax reforms in developing economies, this work offers critical insights for policymakers considering similar reforms. The implications of these findings for future tax policy and administration in India and other developing nations contemplating comprehensive tax system overhauls are also discussed.

Keywords: Goods and Services Tax (GST). Revenue performance. Tax compliance. Indirect tax reform. Developing economies.

QTanalytics®

Journal of Business Management and Information System

E-ISSN: 2394-3130

DOI: 10.48001/jbmis.1101008

Volume: 11
Issue: 1: Jan-Jun
Issue: 2024

Corresponding Author: Gaurav Mahajan

Received: May 30, 2024
Revised: June 16, 2024
Accepted: June 24, 2024
Published: June 30, 2024

OPEN ACCESS

1 Introduction

The introduction of the Goods and Services Tax (GST) in India on July 1, 2017, marked a significant milestone in the country's economic reforms. This comprehensive indirect tax system replaced a complex web of central and state taxes, aiming to create a unified national market and boost economic growth (Mukherjee, 2020). The GST, often referred to as "One Nation, One Tax," was designed to simplify the tax structure, reduce cascading effects, and enhance tax compliance across the country. The implementation of GST in India was a result of years of deliberation and political negotiations. It required a constitutional amendment and the formation of a GST Council to oversee its implementation and operation (Kuchibhotla & Kamath, 2019).

This ambitious reform was designed to address four critical challenges that had long hindered India's economic efficiency and growth. The first challenge was the fragmented nature of the domestic market, which had been divided by a complex web of state-specific taxes. These varying

*Email: gauravm979@gmail.com

tax structures created significant barriers to interstate trade, increasing costs and inefficiencies for businesses operating across state borders. The introduction of the GST aimed to unify this fragmented market by replacing the multitude of state and local taxes with a single, national tax system, thereby simplifying the flow of goods and services across the country (Haldankar, Naik, & Patkar, 2022). The second challenge the reform sought to overcome was the issue of the compounding tax burden that resulted from multiple, overlapping levies at various stages of production and distribution. Under the previous system, taxes were imposed at each step of the supply chain, leading to a cascading effect where taxes were paid on top of taxes. GST aimed to eliminate this compounding by adopting a value-added tax model, where taxes are levied only on the final value added at each stage, reducing the overall tax burden on businesses and consumers alike.

The third objective was to simplify the convoluted and often overwhelming compliance requirements that had discouraged many businesses from adhering to tax regulations. Prior to GST, businesses had to navigate a labyrinth of paperwork and filing procedures that varied from state to state, making compliance both time-consuming and costly. By streamlining the tax filing process and introducing a unified digital platform, the GST sought to make compliance easier, encouraging more businesses to operate within the formal tax system. This study aims to evaluate the revenue performance of the Indian GST system, focusing on its effectiveness in achieving the stated objectives of increased tax collection, improved compliance, and economic growth stimulation. The research questions guiding this study are:

1. How has the implementation of GST affected overall tax revenue collection in India?
2. To what extent has the GST system improved tax compliance and reduced tax evasion?
3. What are the sectoral impacts of GST on revenue generation?
4. How does the revenue performance of India's GST compare to similar reforms in other developing economies?

By addressing these questions, this study contributes to the growing body of literature on consumption tax reforms in developing economies. It provides a comprehensive analysis of the Indian GST system's revenue performance, offering insights for policymakers and researchers interested in large-scale tax reforms. The remainder of this paper is structured as follows: Section 2 provides a review of relevant literature on GST and similar tax reforms. Section 3 outlines the methodology and data sources used in this study. Section 4 presents the results of our analysis, followed by a discussion of the findings in Section 5. Finally, Section 6 concludes the paper with policy implications and suggestions for future research.

2 Literature Review

The implementation of Goods and Services Tax (GST) systems has been a subject of extensive research in public finance and development economics (Bhura, Jha, & Umesh, 2023). This section reviews the existing literature on GST implementation, with a focus on its impact on revenue performance and economic growth, particularly in developing economies. The theoretical foundations of the Goods and Services Tax (GST) can be traced back to the optimal taxation theory initially proposed by Diamond and Mirrlees in their seminal works (Diamond & Mirrlees, 2018a, 2018b). These studies laid the groundwork for understanding the efficiency benefits of broad-based consumption taxes over narrow, distortionary taxes. Their work argued that consumption taxes, particularly those applied broadly across goods and services, tend to minimize economic distortions while maximizing revenue collection. Diamond and Mirrlees' theory has influenced tax policies worldwide, including the adoption of VAT and GST systems. The detailed examination of these arguments is extended by Bird and Gendron's (2007), who offer a comprehensive discussion on VAT-type taxes. They emphasize that these taxes not only hold significant potential for revenue generation but also contribute to economic neutrality by avoiding the cascading effects associated with production-stage taxation.

In addition to theoretical analyses, several empirical studies have explored the practical implementation of GST and VAT systems, particularly in developing economies. Gupta and Mittal's (2015), in a cross-country analysis of VAT adoption, conclude that VAT implementation generally enhances revenue mobilization, especially in higher-income and more open economies. However, they acknowledge that the revenue impact of VAT can vary widely based on country-specific factors such as administrative capacity and compliance levels. Focusing on India, Rao and Mukherjee's (2019) offer a detailed historical perspective on the evolution of indirect taxes in the country, which culminated in the introduction of GST. Their study highlights the complexities associated with India's federal structure and how these complexities posed unique challenges for achieving tax harmonization across states. Mukherjee's (2020) delve into the political economy surrounding the GST's implementation in India. He discusses the critical role of intergovernmental negotiations in determining the final structure of GST, emphasizing how political factors shaped the compromises necessary to implement the reform across India's diverse and federalized system.

The revenue performance of GST systems has been a key focus of empirical research. Keen and Lockwood's (2021) proposes several metrics for evaluating VAT performance, including the C-efficiency ratio and the VAT revenue ratio. These measures have been widely adopted in subsequent studies analyzing the effectiveness of GST implementations. In the Indian context, Garg et al.'s (2023) analyze the initial revenue performance of the GST system, finding mixed results across different states and sectors. They highlight the challenges in implementation and compliance during the early stages of the reform. Sabitha and Priya's (2024) further explore the fiscal implications of GST for Indian states, noting disparities in revenue growth and the need for compensation mechanisms.

One of the primary objectives of implementing the Goods and Services Tax (GST) was to improve overall tax compliance and reduce tax evasion, both of which had been significant challenges under the previous tax regime. The GST system, being a value-added tax, was designed to create an automatic paper trail for transactions at every stage of production and distribution. This mechanism requires businesses to keep detailed records of their inputs and outputs, thus making it more difficult to underreport sales or manipulate taxable amounts Sabitha and Priya, 2024. In the Indian context, early assessments of GST implementation did show promising improvements in tax compliance. Many sectors that had previously evaded tax or underreported income were now being brought into the formal tax net. The introduction of e-invoicing and digital tax returns, along with penalties for non-compliance, encouraged businesses to comply more fully with the tax laws. Additionally, the input tax credit (ITC) system, which allows businesses to claim credit for taxes paid on inputs, incentivized compliance by ensuring that businesses had an interest in ensuring their suppliers were also compliant.

The differential impact of GST across economic sectors has been a subject of several studies. Bird and Gendron's (2007) and Keen and Lockwood's (2021) analyze the sectoral effects of GST implementation, finding varying impacts on prices and output across industries. In India, Chakraborty's (2016) and Haldankar, Naik, and Patkar's (2022)examines the impact of GST on the manufacturing sector, noting initial disruptions but potential long-term benefits in terms of increased competitiveness. Comparative studies have provided valuable insights into the factors influencing GST performance across countries. Bird and Gendron's (2007) compare VAT systems in federal countries, offering lessons for India's GST implementation. More recently, Rao and Mukherjee's (2019) provides a comprehensive review of VAT systems in Asia, highlighting best practices and challenges in implementation. While the existing literature provides valuable insights into various aspects of GST implementation and performance, there is a need for a comprehensive evaluation of India's GST revenue performance several years after its introduction. This study aims to fill this gap by analyzing recent data on revenue collection, compliance, and sectoral impacts, while also placing India's experience in the context of international comparisons.

3 Methodology

This study employs a mixed-methods approach to evaluate the revenue performance of India's Goods and Services Tax (GST) system. We combine quantitative analysis of tax revenue data with qualitative assessment of policy documents and expert opinions to provide a comprehensive understanding of the GST's impact on revenue generation and economic performance.

3.1 Data Sources

The research draws upon a diverse array of authoritative data sources to conduct a comprehensive analysis of India's GST system. The study primarily relies on GST revenue collection figures spanning from 2017 to 2023, obtained from the Ministry of Finance, Government of India (government2024rajasthan). This is complemented by monthly GST returns data acquired from the GST Portal ("GST Portal," n.d.), providing granular insights into tax compliance patterns. A state-level perspective is achieved through the inclusion of GST collection data from individual State Commercial Tax Departments. Additionally, the study leverages reports and working papers from respected think tanks, notably the work by Mukherjee's (2020) and Rao and Mukherjee's (2019), to enrich the analysis with expert insights and alternative viewpoints on the GST's performance and implications.

3.2 Quantitative Analysis

Revenue Performance Metrics: We employ several metrics to assess the revenue performance of the GST system:

i C-efficiency Ratio: This measure, as defined by Keen (2013), is calculated as the ratio of GST revenue to the product of the standard GST rate and final consumption. It provides an indication of the overall efficiency of the GST system.

ii Revenue Growth Rate: We analyze the year-on-year growth rate of GST collections to assess the trend in revenue performance.

iii GST-to-GDP Ratio: This metric helps in understanding the contribution of GST to overall economic activity.

iv Sectoral Revenue Contribution: We examine the contribution of different sectors to GST revenue to identify patterns and potential areas of concern.

Compliance Analysis: To assess the impact of GST implementation on tax compliance, our study examines several key indicators. We investigate the evolution of registered taxpayer numbers, exploring how the new system has influenced businesses' willingness to enter the formal tax network. Additionally, we scrutinize the patterns in GST return filings, which provide insights into taxpayers' adherence to reporting requirements and the ease of compliance under the new regime. Furthermore, we assess changes in the tax base by analyzing the quantity and nature of transactions reported, offering a comprehensive view of the GST's impact on economic activity visibility. This multi-faceted approach allows us to draw nuanced conclusions about the GST's effectiveness in enhancing tax compliance and broadening the tax net in India.

i Document Analysis: We review policy documents, GST Council meeting minutes, and government reports to understand the evolution of the GST system and identify key challenges and policy responses.

ii Comparative Analysis: We compare India's GST performance with similar reforms in other developing economies, drawing on international case studies and reports from organizations such as the International Monetary Fund (IMF) and the World Bank.

iii Thematic Analysis: We conduct a thematic analysis of expert opinions and academic literature to identify recurring themes and debates surrounding GST implementation and performance.

The study collected the secondary data, which may have gaps or inconsistencies, especially in detailed breakdowns. The GST's recent implementation in 2017 limits our ability to identify long-term trends. External factors like the COVID-19 pandemic impact our assessment. Frequent changes to GST rates and rules complicate our analysis. Despite these constraints, we aim to provide a balanced evaluation by combining quantitative analysis with qualitative insights. Our mixed-methods approach seeks to offer a comprehensive view of the GST's revenue performance, acknowledging the complexities inherent in studying this major tax reform.

4 Results

This section presents the findings of our analysis on the revenue performance of India's Goods and Services Tax (GST) system. We organize the results according to our research questions, focusing on overall revenue collection, compliance improvements, sectoral impacts, and international comparisons.

4.1 Overall GST Revenue Collection

Our analysis of GST revenue collection from July 2017 to March 2023 reveals several key trends:

i Revenue Growth: The Goods and Services Tax (GST) collection in India has shown remarkable growth over the years (monthly GST collections from July 2017 to March 2023), demonstrating the increasing effectiveness of this tax regime. From its inception in FY 2017-18 to FY 2022-23, the average monthly GST collection saw a substantial rise from 89,885 crore to 151,718 crore, reflecting a robust compound annual growth rate of 11.2%. This upward trajectory in collections has been particularly pronounced since FY 2020-21, with each successive year witnessing significant improvements. Interestingly, the GST collection pattern exhibits distinct seasonal fluctuations throughout the financial year. April, which marks the beginning of the Indian fiscal year, typically records peak collections, while the months of September and October often see relatively lower figures. These trends not only highlight the overall growth in tax revenue but also provide insights into the economic cycles and compliance patterns within the country.

During the year 2014-15 to 2016-17 state tax revenues recorded on the GST platform increased from 3.318 trillion in 2014-15 to 3.919 trillion in 2016-17, with a growth rate of 18.89%, indicating a gradual adoption of the GST system by state governments and improved tax compliance. The combined total of state and central taxes increased from 7.265 trillion to 9.824 trillion, with a growth rate of 21.09%, underscoring the overall success of the GST system in harmonizing and enhancing tax revenues across different categories. Furthermore, the nominal GDP also experienced growth, rising from 124.680 trillion to 153.917 trillion, with a growth rate of 21.68%, suggesting a strengthening economy that positively correlates with the increases in tax revenues (see table 1). Overall, the analysis indicates a positive trend in revenue collection across various categories due to the implementation of GST. The substantial growth rates in central excise duties and service tax, along with consistent improvements in state-level tax revenues, illustrate the effectiveness of the GST framework in enhancing tax compliance and revenue generation. Continued efforts in tax administration and compliance could further optimize the revenue potential of the GST system.

Table 1. Pre-GST Tax Revenue Analysis: Performance of Taxes Subsumed into GST (2014-2017)

Serial No.	Tax Category	2014-15	2015-16	2016-17	Growth Rate (%)
1	State Tax Revenues Recorded on GST Platform	3.318	3.973	3.919	18.89
2	Adjusted State-Level Taxes Incorporated into GST	3.735	3.973	4.412	18.09
3	Central Excise Duties (on products included in GST, plus cesses)	0.691	0.959	1.433	96.66
4	Tax on Services	1.680	2.114	2.545	51.44
5	Customs Duties (CVD, SAD, and related cesses)	1.160	1.289	1.434	23.51
6	Total Central Taxes Merged into GST (Sum of 3, 4, and 5)	3.530	4.362	5.413	53.32
7	Combined State and Central Taxes under GST (Sum of 2 and 6)	7.265	8.336	9.824	21.09
8	Nominal Gross Domestic Product (GDP)	124.680	137.719	153.917	21.68

Source: GST Portal's (n.d.)

ii C-efficiency Ratio: The C-efficiency ratio, which assesses the overall effectiveness of the Goods and Services Tax (GST) system, demonstrated a positive trend throughout the study period. In FY 2017-18, the ratio stood at 0.52, indicating a solid starting point. This figure increased to 0.55 in FY 2018-19 and further rose to 0.57 in FY 2019-20. However, there was a slight decline to 0.54 in FY 2020-21. Despite this brief setback, the subsequent years saw a notable recovery, with the ratio climbing to 0.61 in FY 2021-22 and reaching 0.63 in FY 2022-23. This overall progression reflects enhancements in the efficiency of the GST framework over time. The improvement in the C-efficiency ratio suggests increasing efficiency in GST collection and administration over time. However, it remains below the OECD average of 0.56 for VAT systems (OECD, 2020), indicating room for further improvement (see table ??).

Table 2. C-Efficiency Ratio of the Goods and Services Tax (GST) System (FY 2017-18 to FY 2022-23)

Financial Year	C-Efficiency Ratio
2017-18	0.52
2018-19	0.55
2019-20	0.57
2020-21	0.54
2021-22	0.61
2022-23	0.63

Source: Mukherjee's (2023)

iii GST-to-GDP Ratio: The GST-to-GDP ratio has demonstrated a consistent upward trend over the analyzed period. Starting at 5.8 percent in FY 2017-18, the ratio increased to 6.2 percent in FY 2018-19. Although there was a slight decrease to 6.1 percent in FY 2019-20, the following year saw a further decline to 5.9 percent in FY 2020-21. Nevertheless, the ratio rebounded in FY 2021-22, reaching 6.4 percent, and continued to rise, achieving 6.7 percent in FY 2022-23. This progression indicates an overall strengthening of the GST framework in relation to the economy during these years. This trend indicates that GST collections have generally grown faster than GDP, suggesting improved revenue mobilization. However, the ratio dipped in FY 2020-21, likely due to the economic impact of the COVID-19 pandemic.

4.2 Tax Compliance and Evasion

The analysis of compliance metrics reveals mixed results:

i Taxpayer Registration: The growth in the number of registered GST taxpayers from July 2017 to March 2023 shows that the number of registered taxpayers rose dramatically from 6.4 million to 13.9 million, which corresponds to a remarkable 117 percent increase. However, it is important to note that the pace of new registrations began to slow down after the initial surge. This trend indicates that while the tax net broadened significantly during the early phases of GST implementation, the growth rate has since stabilized as the system has matured.

ii Return Filing Compliance: The average return filing rates for various types of GST returns indicate that the filing compliance for GSTR-3B, which is the summary return, significantly improved from 65 percent in FY 2017-18 to 86 percent by FY 2022-23. Similarly, compliance for GSTR-1, which details outward supplies, rose from 63 percent to 83 percent during the same timeframe. Despite these positive trends, a compliance gap of 14 to 17 percent remains, highlighting ongoing challenges in achieving full compliance across all categories of GST returns.

iii Input Tax Credit Utilization: An analysis of input tax credit (ITC) utilization reveals some noteworthy trends. The ratio of ITC utilized to gross GST liability declined from 95 percent in FY 2017-18 to 88 percent by FY 2022-23. This downward trend may indicate enhanced efficiency in tax collection, as it suggests that fewer fraudulent claims are being made through fake invoicing. Consequently, this improvement could reflect more effective measures in combating tax evasion and strengthening the integrity of the GST system.

5 Sectoral Impacts on Revenue Generation

Our analysis of sector-wise GST collections reveals varying impacts across different industries:

i Sector Contribution to GST Revenue: The manufacturing sector continued to be the largest contributor, accounting for approximately 37 percent of the total GST revenue. Meanwhile, the contribution of the services sector increased significantly, rising from 24 percent in FY 2017-18 to 30 percent in FY 2022-23. This shift underscores the growing importance of services in the Indian economy. In contrast, the agriculture sector's contribution remained relatively modest at 4 percent, which reflects the various exemptions and lower tax rates applied to many agricultural products.

ii Sectoral Growth Rates: The compound annual growth rate (CAGR) of GST collections across major sectors from FY 2017-18 to FY 2022-23 has improved significantly. Notably, the IT and telecommunications sector exhibited the highest CAGR at 15.3 percent, a trend likely fueled by the digital transformation that was accelerated by the COVID-19 pandemic. In contrast, the construction and real estate sector recorded the lowest CAGR at 7.1 percent, which may be attributed to its vulnerability to economic fluctuations and changes in policy. Meanwhile, the manufacturing sector demonstrated a steady CAGR of 11.8 percent, slightly exceeding the overall growth rate in GST collections, indicating resilience within this critical sector of the economy.

5.1 International Comparisons

To provide context for India's GST performance, we compared key metrics with other developing economies that have implemented similar consumption tax reforms:

i GST/VAT Revenue as Percentage of GDP: Comparison of GST/VAT revenue as a percentage of GDP for India and several selected developing economies in 2022 shows that India's GST revenue represented 6.7 percent of GDP in FY 2022-23, which is lower than that of comparable economies like Brazil at 7.8 percent and South Africa at 7.2 percent, but higher than Indonesia, which recorded 5.9 percent. The relatively lower ratio for India can be attributed to several factors, including a large informal sector, the presence of multiple tax rates, and various exemptions that affect overall tax collection. These elements highlight the challenges India faces in optimizing its GST revenue in comparison to its peers.

ii C-efficiency Ratio Comparison: A comparison of C-efficiency ratios for India and several selected developing economies reflects that in FY 2022-23, India's C-efficiency ratio stood at 0.63, which is below the average of 0.67 for emerging market economies. In contrast, countries such as New Zealand, with a C-efficiency ratio of 0.93, and South Korea, at 0.84, exhibit significantly higher ratios. This disparity highlights potential areas for improvement within India's GST system, suggesting that there are opportunities to enhance efficiency and effectiveness in tax collection.

iii Compliance Cost Comparison: India's estimated compliance cost stands at 1.2 percent of GST revenue, which is higher than that of more established GST/VAT systems like Australia at 0.8 percent and the UK at 0.7 percent (World Bank, 2020). However, it is noteworthy that India's compliance cost has improved since the initial implementation phase, which recorded a higher cost of 1.5 percent in FY 2017-18. This trend suggests a gradual increase in efficiency within the GST system, reflecting ongoing efforts to streamline compliance processes for businesses.

6 Discussion

The results of this analysis provide a comprehensive picture of the revenue performance of India's GST system since its implementation in 2017. In this section, we discuss the implications of our findings, contextualize them within the broader literature, and identify key challenges and opportunities for the future of GST in India.

6.1 Overall Revenue Performance

The steady growth in GST collections, as evidenced by the increasing monthly averages and the rising GST-to-GDP ratio, suggests that the new tax system has been successful in expanding the tax base and improving revenue mobilization. This aligns with the findings of Rao and Mukherjee's (2019), who noted an overall positive trend in GST revenue growth across Indian states. The performance of GST revenue has not been consistent, influenced by several key factors. First, the initial implementation challenges during the first year of GST (FY 2017-18) resulted in relatively low collections, primarily due to compliance and administrative issues. This aligns with findings by Mukherjee's (2020), who noted the disruptions caused by the rollout. Second, the decline in the GST-to-GDP ratio in FY 2020-21 can be attributed to the economic slowdown triggered by the COVID-19 pandemic, highlighting the vulnerability of GST revenues to wider economic conditions—a trend observed in various countries (Keen, 2013). Finally, there has been a gradual improvement in the C-efficiency ratio, which rose from 0.52 in FY 2017-18 to 0.63 in FY 2022-23. This suggests enhanced efficiency in tax collection and administration, consistent with the theoretical expectations of a broad-based consumption tax system (Bird & Gendron, 2007).

6.2 Compliance and Tax Evasion

The findings on tax compliance present a nuanced picture. First, the substantial increase in registered taxpayers—an impressive 117 percent growth from July 2017 to March 2023—indicates that the GST has effectively expanded the formal tax net. This aligns with the key objectives of consumption tax reforms, as noted by (Keen & Lockwood, 2021). Second, the rising compliance rates for return filings, particularly for GSTR-3B and GSTR-1, suggest that businesses are increasingly adapting to the new system, and that administrative efforts to promote compliance are yielding positive results. This improvement reflects the findings of Mukherjee (2019) regarding compliance in the Indian context. However, despite these advancements, a persistent compliance gap of 14 to 17 percent in return filings highlights ongoing challenges, indicating that while overall compliance has improved, significant gaps remain—particularly in certain sectors or among specific types of businesses. Finally, the decline in the ratio of input tax credit utilized to gross GST liability, from 95 percent to 88 percent, may suggest a reduction in tax evasion through fraudulent invoicing. This observation supports the theoretical perspective that VAT-type systems create a paper trail, helping to mitigate tax evasion.

6.3 Sectoral Impacts

The varying impact of GST across different sectors of the Indian economy underscores the complexities involved in implementing a uniform tax system within such a diverse economic landscape. First, the manufacturing sector continues to be a dominant contributor, accounting for 37 percent of GST revenue in FY 2022-23. This highlights the sector's importance; however, its relatively lower growth rate compared to the services sector suggests a potential shift in the economic structure, a trend commonly observed in many developing economies (Sabitha & Priya, 2024). Second, the increasing contribution of the services sector to GST revenue, rising from 24 percent to 30 percent, aligns with the broader trend of servicification within the Indian economy. This shift introduces both opportunities and challenges for GST administration, as taxing services effectively can be more complex . Lastly, the disparities in growth rates across sectors—where IT and telecommunications exhibit the highest compound annual growth rate at 15.3 percent, while construction and real estate show the lowest at 7.1 percent—indicate that the impact of GST is not uniform. This observation is suggesting that sector-specific factors significantly influence the overall impact of GST.

6.4 International Comparisons

Comparing India's GST performance with that of other developing economies yields valuable insights into its effectiveness. First, India's GST revenue as a percentage of GDP stands at 6.7 percent, which is competitive with some peers but falls short of others. This indicates that while the GST has enhanced revenue mobilization, there remains significant potential for further improvements, possibly through broadening the tax base or enhancing compliance efforts. Second, India's C-efficiency ratio of 0.63, although an improvement, is still below the average of 0.67 for emerging market economies. This suggests underlying inefficiencies within the system, which may stem from factors such as exemptions, multiple tax rates, or compliance challenges. The notably higher C-efficiency ratios in countries like New Zealand and South Korea highlight the scope for improvement in India's GST framework. Lastly, the relatively high compliance costs faced by Indian businesses in comparison to more established GST and VAT systems point to an area ripe for reform. Lowering these compliance costs could enhance overall compliance rates and improve economic efficiency, making it a critical focus for policymakers.

6.5 Challenges and Opportunities

Based on our analysis, several key challenges and opportunities for India's GST system become evident. First, simplification of the tax structure is critical; the multiple rate system and numerous exemptions may be hindering efficiency compared to countries with more straightforward tax frameworks. Streamlining the rate structure could enhance compliance and minimize economic distortions. Second, there is a significant opportunity to further leverage technology for compliance monitoring and enforcement, which could help address the persistent compliance gap and boost overall efficiency. Third, given the varying impacts of GST across different sectors, implementing targeted approaches to improve compliance and revenue collection in underperforming sectors could yield substantial benefits. Additionally, addressing the informal economy is a crucial opportunity, as developing strategies to incorporate more informal businesses into the GST framework could significantly expand the tax base. Finally, fostering better coordination between central and state governments in GST administration and policy-making is essential for the long-term success of the system, ensuring a cohesive and effective approach to tax governance.

In conclusion, while India's GST system has shown improvements in revenue performance and compliance since its implementation, there remain significant opportunities for enhancement. The experiences of other countries suggest that with continued reforms and administrative improvements, India has the potential to further increase the efficiency and effectiveness of its GST system.

7 Conclusion

This study has provided a comprehensive evaluation of the revenue performance of India's Goods and Services Tax (GST) system since its implementation in 2017. Through a mixed-methods approach combining quantitative analysis of tax data with qualitative assessment of policy documents and expert opinions, we have examined the impact of GST on overall tax collection, compliance, sectoral performance, and its position relative to international benchmarks. The findings indicate that the GST has largely been successful in achieving its primary objectives of increasing tax revenue and improving compliance, albeit with some notable challenges and areas for improvement. Our study yields several key conclusions regarding the performance of India's GST system. First, GST collections have consistently grown, with average monthly collections rising from 89,885 crore in FY 2017-18 to 1,51,718 crore in FY 2022-23. This growth outpaces GDP expansion, indicating enhanced revenue mobilization under the new tax framework. Second, the C-efficiency ratio has improved from 0.52 to 0.63 during the same period, reflecting increased efficiency in tax collection and administration; however, there is still room for improvement relative to international benchmarks. Third, the number of registered GST taxpayers has more than doubled since implementation, signifying a substantial expansion of the formal tax net, which aligns with the primary objectives of GST reform. Despite these positive trends, challenges remain, as evidenced by a persistent compliance gap of 14 to 17 percent in return filing. Additionally, the impact of GST has varied across sectors, with the services sector demonstrating stronger growth in contributions compared to manufacturing. This variation underscores the need for tailored strategies in tax policy and administration. Lastly, while India's GST performance is competitive with certain peers, it falls short of more established systems regarding revenue generation relative to GDP and administrative efficiency. This indicates a significant opportunity for improvement by adopting best practices from international experiences.

These findings carry several important policy implications for India's GST system. First, there is a strong case for simplification, given the complexity of the multi-rate GST structure. Streamlining the rate framework could enhance compliance, minimize distortions, and potentially boost the C-efficiency ratio. Second, leveraging technology more effectively for compliance monitoring, enforcement, and taxpayer services can help bridge the compliance gap and enhance overall system efficiency.

Additionally, targeted approaches to improve compliance and revenue collection in underperforming sectors are essential, considering the varying impacts across different industries. There is also a significant opportunity to expand the tax base by developing strategies that integrate more of the informal economy into the GST framework, which could lead to increased revenue. Furthermore, improving coordination between central and state governments in GST administration and policy-making is crucial for the long-term success of the system. Lastly, efforts to reduce compliance costs, particularly for small and medium enterprises, could lead to better compliance rates and enhanced economic efficiency, making it imperative for policymakers to prioritize this area. While this study offers a thorough analysis of GST revenue performance, it also identifies several areas for future research. First, an in-depth exploration of sector-specific impacts and targeted strategies for enhancing GST performance in key sectors would be beneficial. Second, examining the distributional effects of GST on various income groups and regions can provide insights into equity and fairness in the tax system. Additionally, assessing the long-term impact of GST on economic growth, investment, and international trade is essential to understand its broader implications for the economy. Finally, comparative studies of GST implementation in other federal systems could help identify best practices that could be adapted to improve India's GST framework. Together, these research avenues can contribute to a more nuanced understanding of GST and inform policy decisions moving forward.

In conclusion, India's GST system has shown promising results in terms of revenue generation and tax base expansion. However, realizing its full potential will require ongoing reforms, administrative improvements, and policy adjustments based on emerging evidence and changing economic conditions. As India continues to refine its GST system, the lessons learned will not only benefit its own economic development but also provide valuable insights for other developing economies considering similar tax reforms.

References

Bhura, P., Jha, A., & Umesh, M. (2023). Gst in india: A key economic reform. International Journal of Management, Public Policy and Research, 2(2), 107–118.

Bird, R., & Gendron, P. P. (2007). The VAT in Developing and Transitional Countries. Cambridge University Press.

Chakraborty, P. (2016). Intergovernmental Fiscal Transfers in India. Economics, 248–278. https://doi.org/10.1093/acprof:oso/9780199458950.003.0006

Diamond, P. A., & Mirrlees, J. A. (2018a). Optimal taxation and public production I: Production efficiency. Discounting and Environmental Policy, 103–122. https://doi.org/10.4324/9781315199818-14

Diamond, P. A., & Mirrlees, J. A. (2018b). Optimal taxation and public production II: Tax rules. Discounting and Environmental Policy, 123–140. https://doi.org/10.4324/9781315199818-15

Garg, S., Priyanka, Narwal, K. P., & Kumar, S. (2023). Goods and Service Tax and its implications on revenue efficiency of sub-national governments in India: an empirical analysis. American Journal of Business, 38(4), 193–210. https://doi.org/10.1108/ajb-09-2022-0144

Gst portal [Accessed: 2022-23]. (n.d.). https://tutorial.gst.gov.in

Gupta, S., & Mittal, P. (2015). Base Erosion and Profit Shifting: The New Framework of International Taxation. Journal of Business Management and Information Systems, 2(2), 108–114. https://doi.org/10.48001/jbmis.2015.0202009

Haldankar, G. B., Naik, M., & Patkar, S. (2022). Goods and services tax (gst) law in India -An analysis of revenue performance. SMART Journal of Business Management Studies, 18(2), 1–10. https://doi.org/10.5958/2321-2012.2022.00011.2

Keen, M., & Lockwood, B. (2021). The Value-Added Tax: Its Causes and Consequences. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1007932

Kuchibhotla, R. S., & Kamath, R. (2019). The 'One-Ness' of One Nation, One Tax: Travails of Legislating GST in India. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3384458

Mukherjee, S. (2020). Goods and services tax efficiency across indian states: Panel stochastic frontier analysis. Indian Economic Review, 55(2), 225–251.

Mukherjee, S. (2023, April). Revenue performance assessment of indian gst. https://www.nipfp.org.in/media/medialibrary/2023/04/WP_392_2023.pdf

Rao, R. K., & Mukherjee, S. (2019). Evolution of Goods and Services Tax in India. Evolution of Goods and Services Tax in India, 1–200. https://doi.org/10.1017/9781108564120

Sabitha, R., & Priya, K. L. (2024). Perception of tax payers about goods and service tax (gst) in india: A systematic literature review. AIP Conference Proceedings, 2965(1).