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LEVERAGING DIGITAL GOVERNANCE FOR INCLUSIVE ECONOMIC GROWTH: GST REFORMS AND FISCAL FEDERALISM IN TAMIL NADU

Editors

Dr. A. Anandhiprabha

Dr. M. Jeeva

Ms. A. Gomathi

Dr. S. Mahalakshmi

Volume - II

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© **Dr. A. Anandhiprabha**
Dr. M. Jeeva
Ms. A. Gomathi
Dr. S. Mahalakshmi

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LEVERAGING DIGITAL PLATFORMS FOR TRANSPARENT INTERGOVERNMENTAL FISCAL RELATIONS



Dr. B. Rohini

Assistant Professor, M.Com IB
NGM College, Pollachi
rohiniimb@gmail.com

Abstract

In 2017, the implementation of the Goods and Services Tax (GST) in India has brought about a complete overhaul to the nation's tax structure by consolidating all forms of indirect taxes under a newly created digitally managed governance model. Digital interfaces (e.g.: GST Network (GSTN), e-invoicing and e-way bill systems) have increased levels of transparency, enhanced levels of compliance, and improved the degree of collaboration between the Central and State governments in India. The purpose of this research is to explore how the use of technology enabled GST mechanisms has supported greater transparency and accountability with regard to intergovernmental fiscal relations, particularly in terms of revenue sharing, compliance monitoring, and anti-evasion. To achieve this goal, secondary data was collected from official reports, GST revenue amounts and Tamil Nadu's budget documents between 2018 and 2024 to evaluate revenue trends and the use of digital compliance tools within the GST paradigm. The results of the analysis show evidence that digital audit trails, real-time data sharing and automated reconciliation processes have helped reduce levels of information asymmetry and thereby strengthened the collaboration between the Central and State governments in India. In the case of Tamil Nadu, technology enabled changes in compliance, include increased growth rates and ultimately the formation of a more fiscally stable environment. Ultimately, it was determined that digital platforms play a critical role in enhancing cooperative federalism through the promotion of transparency, accountability and systematically improving revenue collection processes. To fully realize the long-term benefits of digital fiscal governance, ongoing technology advancements, capacity development and strong cybersecurity initiatives are required.

Keywords: Digital Governance, Fiscal Federalism, Tax Transparency, Cooperative Federalism

Introduction

Implemented in 2017, the Goods and Services Tax (GST) constituted a significant change in the indirect tax system and fiscal structure of India. GST was intended to simplify the previously disparate Central and State taxes into a single tax regime. As such, it was also designed to help create a unified national marketplace, increase compliance with taxes, and promote transparency with respect to the collection of taxes. More importantly, GST fundamentally changed the fiscal relationship between the Centre and the States by establishing a common taxation regime on an integrated basis. Technology-based platforms are of growing support to governments in today's world to promote accountability and efficiency through the application of technology. The implementation of the Goods and Services Tax Network has resulted in a technology infrastructure that provides the means to file return forms in real time, pay taxes, match invoices, and to share

information between the different levels of government for taxpayers across the country. The growing use of personal computers/human-digital tools, e-invoicing, and e-way bills has enhanced the ability of governments to monitor compliance with tax obligations while reducing the opportunity for taxpayers to evade paying their taxes. Transparency between the Centre and the States should be fundamental components of India's federal structure given that all revenue powers are divided between the two. Technology-based platforms allow for the reduction of information asymmetries, enhance coordination among the parties involved, and allow for the timely receipt of funds in order for cooperation between the two. For States like Tamil Nadu, where there is a strong base of manufacturing and commercial activity, the continued positive impact of the implementation of technology-based solutions in the administration of GST

Literature View

According to the latest studies, the digital transformation of tax administration has been a major contributor to increasing both transparency and improving compliance in the Goods and Services Tax framework. Researchers note that e-invoicing and real-time transaction reporting have provided increased monitoring and reduced tax evasion by enabling automated data sharing and risk-based analytics (Bharti, Kumar, & Kumari, 2024). Studies show that e-invoicing and other digital platforms significantly improve the accuracy of tax records and streamline compliance processes; thus enhancing the visibility of the business transaction. Research has also shown that the analysis of fiscal federalism in relation to GST has led to changing intergovernmental fiscal relations due to the use of centralized digital tax data, which allows for evidence-based fiscal decision-making, as well as raising questions about state autonomy and revenue distribution (D. Ananda, 2024). Narrative reviews of digital taxation frameworks have suggested that digital tax systems can assist in the development of efficient and equitable fiscal governance and that electronic taxation has changed both the behaviour of taxpayers and administrative processes (Anggraeni, 2024). Overall, the literature has concluded that technology-enabled tax governance plays a critical role in fostering transparency and improving compliance, as well as changing collaborative fiscal relationships; however, several challenges (related to capacity, integration, and uniform implementation) exist and warrant further research. However, most studies have focused on macro.

Research Gap

Current research tends to concentrate on GST reform and digital tax compliance at a national level, with comparatively few studies dedicated specifically to determining the effects of digital platforms on creating transparent intergovernmental fiscal relationships at the state level, specifically within Tamil Nadu. This research aims to fill this void within the literature.

Statement of the Problem

In India, implementation of the Goods and Services Tax (GST) was a transformative change to its fiscal system. This new tax structure is based on the principles of a unified tax system and a digital infrastructure for its ongoing operation. Technology-enabled platforms such as the Goods and Services Tax Network (GSTN), electronic invoicing, and e-way bill systems were established to improve transparency and reduce tax evasion. However, concerns about the efficacy of these systems in achieving equal and transparent intergovernmental transactions continue to be raised. Despite access to near real-time data and automated compliance systems, there continue to be problems related to revenue-sharing; delays in settlements; differing levels of technological capacity across states; and difficulties with integrating data across jurisdictions. States like Tamil Nadu have an industrially-developed economy that contributes a large share of the total GST collections, but there remains considerable uncertainty about their revenue autonomy and fiscal predictability under the centralized digital tax revenue systems. While digital systems were designed to assist with identifying potential tax evasion using analytics and audit trails, there are many obstacles hindering compliance with and the mitigation of taxpayer fraud that prevent these systems from achieving optimal outcomes. Little empirical research regarding state-level performance of digital systems has been conducted assessing how digital GST systems enhance transparency within intergovernmental transactions and the overall effectiveness of digital systems for preventing tax evasion.

Thus, the principal research question addressed by this investigation is whether technology-based GST systems ultimately strengthen the transparency of the intergovernmental fiscal relationship between the Central government and state governments.

Objectives of the Study

- To examine the role of digital platforms, particularly the Goods and Services Tax Network (GSTN), in enhancing transparency in GST administration under the Goods and Services Tax framework.
- To analyze the effectiveness of technology-enabled anti-evasion mechanisms such as e-invoicing and e-way bills in improving tax compliance.
- To assess the impact of digital GST systems on intergovernmental fiscal relations and revenue stability in Tamil Nadu.

Research Methodology

Using both quantitative and qualitative methods, this project seeks to understand how digital platforms can improve transparency and support fiscal relations between different levels of government through the GST system. The research is based primarily on existing secondary data from a variety of sources, including GST Council official reports and documents, technical reports from the GST Network, the annual report of the RBI, the Tamil Nadu State Budget, the state budget finance accounts, and related peer-reviewed articles published from 2017 - 2024. Using Tamil Nadu as an example, the research

assessed revenue generation within the GST framework; as well as digital compliance processes and anti-evasion schemes in Tamil Nadu. Data were analysed using trend analysis, comparative revenue pattern assessment, and qualitative evaluation of each policy instrument. Limitations of this research include reliance on existing secondary data and the rapidly changing nature of digital governance reforms, which could impact the overall assessment of this research.

Limitations of the Study

- The study is based mainly on secondary data from government reports and publications, which may limit detailed insights from taxpayers or officials.
- The analysis uses aggregated revenue data, which may not show detailed sector-wise or business-level trends.
- Digital tax systems and policies change quickly, so some findings may be time-sensitive.

Scope for Further Research

Digital platforms and transparency have been a focal point in intergovernmental fiscal relations with respect to the Goods and Services Tax (GST) particularly concerning (e.g. Tamil Nadu) in the present research study. However, many subjects will require further investigation within the various sectors of intergovernmental fiscal relations presenting researchers with the potential for future research opportunities. For example, other researchers might provide comparative analyses among different states of India for evaluating the different digital experience compared to other states as well as comparing revenue generation through the use of digital technology.

Researchers could also employ empirical methodologies involving primary data from officials, businesses, and policymakers regarding their levels of compliance, efficiencies related to their administrative processes, and other aspects of the Goods and Services Tax Network (GSTN). Finally, researchers could be involved in advanced technological research using artificial intelligence, blockchain and big data in anti-evasion management and improved tax administration. Longitudinal assessments regarding how digital GST reforms may provide long-term sustainability to state fiscal capacity or strength to cooperative federalism would be valuable. Lastly, there are many sectors that could use additional studies to determine how small and medium enterprises (SMEs), exporters, and the informal sector may be able to fully engage with a digital tax system, contributing to an understanding of inclusive digital governance and fiscal federalism across a broader geographical, technological, and sectoral framework.

Analysis and Interpretation

Table 1: Trend in GST Revenue Collection in India (2018–2024)
(Amount in ₹ Crore)

Year	Total GST Collection	Growth Rate (%)
2018–19	11,77,000	—
2019–20	12,22,000	3.8

2020-21	11,36,000	-7.0
2021-22	14,76,000	29.9
2022-23	18,10,000	22.6
2023-24	20,18,000	11.5

Source: Ministry of Finance (GST Revenue Press Releases, 2018–2024).

The continued growth trend from the pre-pandemic period during 2021-2022 up to 2020-2021 is likely related to the introduction of mandate digitally invoice through e-invoice processes, which supports the likelihood that increasing revenue with the increased use of digital processes produces positive results related to revenue generation.

Table 2: GST Revenue Performance of Tamil Nadu (2018–2024)
(Amount in ₹ Crore)

Year	State GST Revenue	Annual Growth (%)
2018-19	73,000	—
2019-20	76,500	4.8
2020-21	70,200	-8.2
2021-22	89,000	26.7
2022-23	1,05,000	18.0
2023-24	1,18,500	12.9

Source: Government of Tamil Nadu, Budget Documents (2018–2024); RBI State Finances Report (2023).

As indicated by the gross revenue data, there appears to be a trend toward continued growth in total GST revenues following COVID-19, with the lack of substantial increases over time for a continued period of time after 2020. In addition to the continued trend of increasing total GST receipts, the trend in developing e-invoicing electronically is correlated with improved flow of e-invoices throughout the entire supply chain, improving compliance focussed on reducing revenue stream interruptions.

Table 3: Key Digital Anti-Evasion Mechanisms Under GST

Mechanism	Purpose	Transparency Impact
E-Invoicing	Real-time invoice reporting	Reduces fake billing
E-Way Bill	Tracking movement of goods	Prevents tax leakage
ITC Matching	Input Tax Credit verification	Minimizes fraud
Data Analytics	Risk profiling of taxpayers	Improves compliance monitoring

Source: Compiled from Goods and Services Tax Network Annual Reports and GST Council Policy Documents

Table 3 reflects the primary digital tools used by the GST system to combat tax evasion. E-invoicing reports transactions in real time to eliminate the use of phony invoices. E-way bills track the movement of goods to eliminate any potential loss of revenue due to taxation. Input Tax Credit (ITC) matching uses input tax credits as a method for reducing fraud. Through the use of data analytics, taxpayer behavior and compliance with taxation rules are monitored to enhance compliance. Collectively, these tools make GST collection more transparent and reliable.

Table 4: Share of Tamil Nadu in National GST Collection (%)

Year	Tamil Nadu GST	National GST	Share (%)
2021-22	89,000	14,76,000	6.03
2022-23	1,05,000	18,10,000	5.80
2023-24	1,18,500	20,18,000	5.87

Source: Computed from Ministry of Finance GST Revenue Data and Government of Tamil Nadu Budget Reports (2018–2024).

Table 4 shows the share of Tamil Nadu's GST collected by the entire country. The statistics demonstrate that Tamil Nadu contributed roughly 5.8% (approx.) to India's total GST revenue from 2021 to 2023 (approx.). Although the total amount of GST collected in Tamil Nadu over the period has grown, its proportionate share of total GST collected in India has not varied much. This means that while the revenue generated by Tamil Nadu is improving, so too is the percentage increase in total GST collected nationally. The amount reported by the table indicates that Tamil Nadu has a very strong commercial and industrial base and that it plays an important role in the national tax system. From the perspective of a fiscal federalism, the amount of revenue reported by Tamil Nadu is representative of the usefulness of transparent digital systems that allow for immediate data reporting and settlement as it pertains to intergovernmental fiscal relationships.

Overall, the data that is provided in this table indicates that digital governance implemented through GST continues to support consistent revenue generation in Tamil Nadu and will continue to strengthen Tamil Nadu's position as an important contributor to national tax revenues.

Findings

- The implementation of the GST has improved transparency and accountability in tax administration through an integrated and technology-based system.
- The creation of the GSTN has allowed for the instantaneous filing of returns, the matching of invoices, and the automated reconciliation of data between the Centre and the States.
- E-invoicing and e-way bills have supported anti-evasion measures by providing digital audit trails and decreasing the occurrence of fraudulent billing.

- Revenue trends under GST indicate increased levels of compliance and a recovery of collections to pre-COVID-19 levels of performance on both a national and state (Tamil Nadu) basis.
- The digital framework of GST has improved fiscal coordination between different levels of government due to the ability to share revenue in a systematic, shared manner and to settle revenue transparently.
- Despite these positive developments, challenges remain, including gaps in technological capability, an increased burden associated with compliance for small businesses, and concerns regarding data security.

Suggestions

- The GST framework's digital infrastructure needs to be improved by continually modernizing the GSTN platform to ensure it can manage the increasing volume of data that is being created and transmitted through the system.
- Provide training and capacity-building for both tax officials and small businesses to improve their digital literacy and compliance.
- Improve security and maintain confidence in electronic governance systems through improving SM/BT security on the SM and BT systems will provide for improved civil service, enhance civil service competencies, support civil service operations, help provide for more timely revenue settlement between states and the central government so as to reduce the uncertainty created by the current structure of central versus state revenue distribution.
- Introduce simple compliance procedures for MSMEs to reduce the administrative burden on them while increasing transparency.
- Encourage the use of AI and big data analytics to strengthen existing anti-evasion mechanisms.

Conclusion

With the implementation of Goods and Services Tax (GST), India's fiscal policy has undergone a major transformation through the combination of tax systems with digital governance. The introduction of Goods and Services Tax Network (GSTN), as well as technology-driven methods like e-invoices and e-way bills have increased transparency, facilitated compliance, and provided improved anti-evasion measures. These digital reforms have lowered the informational asymmetries existent between the Centre and States, thus creating a more accountable and cooperative environment within revenue administration. The research shows how digital platforms offer a more organized and transparent approach to intergovernmental fiscal relations, particularly by allowing for real-time data sharing and formalized settlement of revenues. Overall this has increased the amount of tax being paid by all states and has contributed to fiscal sustainability for the State of Tamil Nadu. In order for digital governance to fully realize inclusive economic growth through GST, it will be necessary for there to be continuous technological

developments, strong cybersecurity systems, and ongoing capacity-building initiatives. In conclusion, the utilization of digital platforms under GST is contributing positively toward strengthening India's fiscal federalism by fostering transparency, efficiency, and cooperative governance within an evolving federal structure. Hence, digital governance under GST should not just be viewed as a technological reform but rather as a fundamental change to India's total fiscal federal framework.

References

1. Anggraeni, W. A. (2024). E-taxation and fiscal governance: Compliance, efficiency, and equity in digital tax systems. *Summa: Journal of Accounting and Tax*, 3(2), 45–58.
2. Bharti, P., Kumar, S., & Kumari, P. (2024). GST accountability in the era of digitalization: Curbing tax fraud through intelligent systems. *Computer Fraud & Security*, 2024(6), 12–18.
3. Chakraborty, P. (2020). Fiscal federalism in India under GST: Issues and challenges. *Economic and Political Weekly*, 55(12), 45–53.
4. Kelkar, V. (2019). GST and cooperative federalism in India. *Journal of Public Affairs*, 19(3), e1912.
5. Musgrave, R. A. (1959). *The theory of public finance: A study in public economy*. McGraw-Hill.
6. Oates, W. E. (1972). *Fiscal federalism*. Harcourt Brace Jovanovich.
7. Panagariya, A. (2018). GST reform and its implications for India's economic integration. *Indian Economic Review*, 53(1), 1–15.
8. Reserve Bank of India. (2023). *State finances: A study of budgets 2023–24*. RBI Publications.
9. Singh, N. (2019). Digital governance and fiscal decentralization in India. *India Review*, 18(4), 321–340.
10. Government of India. (2023). *GST annual report 2022–23*. Ministry of Finance.
11. Goods and Services Tax Council. (2023). *GST Council reports and policy documents*. Government of India.
12. Goods and Services Tax Network. (2023). *GSTN annual report*. GSTN Publications.