

Two-Day National Conference on

"GST Reforms: Challenges, Opportunities, and Socio-Economic Effects in Telangana State"
on 09th & 10th June 2026

**CMR TECHNICAL CAMPUS**

Department of MBA

UGC Autonomous, Approved by AICTE, New Delhi & JNTU Hyderabad

Kandlakoya (V), Medchal, Hyderabad – 501401



The Impact of GST Compliance Challenges on MSMEs and Small Traders in Andhra Pradesh and Telangana

(An Empirical Study on Market Integration, Competitiveness, and Cost Implications under the New Tax
Regime)

Dr. K. Srilatha

Assistant Professor (A), JNTUA, School of Management Studies, JNT University, Anantapur. Email:

lathajntua@gmail.com**ABSTRACT**

The Government of India implemented the Goods and Services Tax (GST) in India on 1 July 2017 and it is a major reform in India. GST was meant to create a unified national market, bring simplicity in the tax structure and improve transparency. In reality, however, compliance requirements have created a heavy burden on MSMEs and small traders. For instance, in states like Andhra Pradesh and Telangana, the MSME sector is nearly 50% of the economy. This research analyzes the impact of various GST compliance challenges being faced by MSMEs and small traders from these two states on market integration, competitiveness and cost on the three sub-themes. Using the primary survey data of 280 MSME owners and small traders from important urban and semi-urban centres in Andhra Pradesh and Telangana, and secondary data from government reports, GSTN data, published research, etc., the study applies a combination of descriptive statistics, Likert-scale analysis and regression modelling. The results suggest that a major benefit of GST has been enhanced market integration as it has removed barriers of interstate trade and improved access to markets farther away. However, compliance burden such as frequent filing of returns, complex input tax credit mechanism and digital infrastructure requirements has greatly increased operational costs for small businesses. The compliance cost is regressive when taken as a proportion of turnover in that the smallest firms incur the highest compliance cost. Moreover, the research highlights that the difficulty in complying with GST (Goods and Services Tax) has caused competitive distortions. In other words, small traders are at a disadvantage in this regard. This is compared to larger firms which are more equipped to comply with GST regulations. The recommendations of

the paper include measures for simplification of return filing, digital literacy measures, state-specific interventions for MSMEs in Andhra Pradesh and Telangana, among others.

Keywords: *Goods and Services Tax, GST Compliance, MSMEs, Small Traders, Andhra Pradesh, Telangana, Market Integration, Competitiveness, Compliance Costs, Tax Reform*

1. Introduction

The most significant reform in indirect taxes post-independence in the Indian economy is the introduction of Goods and Services Tax (GST) in India from 1st July 2017. With the vision of One Nation, One Tax, it aimed to subsume a multiplicity of central and state-level indirect taxes such as excise duty, service tax, value added tax (VAT), central sales tax, entry tax, luxury tax etc. The basic idea was that a common tax structure will eliminate cascading effect, reduce complexity and compliance burden, integrate the market across the state boundaries and enhance the overall efficiency of the economy. Given the nine years of GST implementation, it is possible to assess impact of GST on various segments of the economy.

The Micro, Small and Medium Enterprises (MSMEs) and small traders occupy a uniquely vulnerable position among sectors impacted by GST. According to the Economic Survey 2025-26, MSMEs are the backbone of the Indian economy, contributing around 31.1 per cent of country GDP and 48.58 per cent of the country's exports. In the states of Andhra Pradesh and Telangana, the MSME sector has even more importance. As per the Udyam Registration Dashboard of the Ministry of MSME, Andhra Pradesh has more than 4.31 million total MSMEs (inclusive of 2.21 million Udyam-registered and 2.11 million Informal Micro Enterprises registered through Udyam Assist Portal) while Telangana has more than 4.33 million total MSMEs (inclusive of 2.13 million Udyam-registered and 2.20 million through Udyam Assist Portal). Together, they have contributed significantly to employment, manufacturing and the regional economy of the two states. Given the enormous presence of MSMEs in Andhra Pradesh and Telangana, the issue of GST compliance impact on these enterprises is of great academic and policy importance.

The scenario in India, before the implementation of the GST regime, was such that businesses that operated in different states had to deal with different tax authorities, rates, and formats. This multiplicity imposed considerable compliance burdens on small traders and MSMEs. However, it also offered benefits, such as the ability to operate off the radar of tax officials in certain circumstances and to avail of state-specific incentives and exemptions. The way GST changed GST landscape with destination based taxation and IT compliance through the GST Network (GSTN). Despite the benefits of GST implementation in improving transparency and reducing tax cascading through the input tax credit (ITC), it has also created new inconvenient challenges for some of the smaller firms. This would include those firms and companies that are lacking in digital literacy, financial capability and organizational capacity for adhering to the new regime of the GST.

Present study has been motivated that most of the impact of GST on MSMEs are not uniform but it varies depending upon region one is located in, size of enterprise, sector and market orientation. Andhra Pradesh and Telangana are two relatively new states with a rapidly evolving MSME ecosystem. Therefore, it provides an

interesting context to examine the relationship between GST compliance, market integration, competitiveness and costing. The state of Andhra Pradesh launched the MSME and Entrepreneur Development Policy 4.0, while Telangana is embarking on proactive digital-first initiatives for MSME. Both have strong policy commitment to MSME development. Nonetheless, it is an empirical question about whether GST compliance challenges have aided or hindered accomplishment of development objectives

This research paper aims to undertake a comprehensive, evidence-based exercise to analyse the GST compliance problem being faced by MSMEs and small traders in Andhra Pradesh and Telangana. The study seeks to achieve three interlinked sub-themes. The first is market integration, whereby we see how the GST regime has changed the ability of small firms to access larger markets and partake in the intra and interstate supply chains. The second is competitiveness, whereby we analyze whether the compliance requirements have put large and small firms at an asymmetric advantage or disadvantage due to their size and organizational capability. Lastly, cost implications, where we try and assess the direct and indirect costs of compliance and whether these have an asymmetric impact on firms in the MSME spectrum.

With a view to enhancing academic knowledge and influencing policy debates, this study attempts to combine fresh primary data with secondary evidence from government documents and the literature on the evolving nature of the GST in India, and its viability and growth for small businesses.

2. Objectives and Hypotheses

2.1 Research Objectives

The main aim of the research is to study the GST compliance issues affecting MSMEs and small traders in Andhra Pradesh and Telangana. Within the broad framework, the study has the following specific objectives. To assess the nature and the magnitude of GST compliance problems being faced by MSMEs and small traders in Andhra Pradesh and Telangana, with a focus on the frequency and nature of return filing, the accessibility and usability of GSTN portal, and the adequacy of digital infrastructure at enterprise level. The second objective is to assess the influence of GST on market integration. In other words, whether the removal of interstate tax barriers and the application of a single tax structure has enabled small businesses to expand their market and be a part of national supply chains as well as benefit from input tax credit which was difficult before. Another objective of the study was to do analysis of the effect of GST compliance requirement on the competitive positioning of MSMEs and small traders vis-a-vis big enterprises which also includes whether barriers are created by compliance cost and procedural complexity which hampers entry or expansion of small traders. The ultimate purpose of the study is to assess the direct and indirect costs of GST compliance incurred by the MSMEs and small traders in the two states. Also to find out whether these costs are regressive in nature i.e., whether these costs put a heavier relative burden on smaller enterprises vis-a-vis larger ones. The fifth objective is to formulate evidence-based policy recommendations. These recommendations can mitigate the compliance burden on MSMEs. But on the other hand, it has to enhance efficiency and transparency under the GST.

2.2 Hypotheses

In light of the research objectives and the existing literature, we formulate the following hypotheses for empirical testing. Hypothesis 1 (H1): The concern of GST compliance costs being regressive in nature. In that small Micro Small and Medium Enterprises (MSMEs) incur relatively higher compliance costs based on turnover in comparison to big enterprises. Hypothesis 2 (H2): The implementation of the GST has led to the integration of markets for micro and small enterprises (MSEs) and small traders in Andhra Pradesh and Telangana by addressing the barriers of interstate trade and making markets more accessible. It is postulated that the GST compliance requirement has hampered small traders and MSME competitiveness in comparison to large firms in the market. The basis for this is asymmetric compliance capabilities and resource constraints. Hypothesis 4 (H4): The degree of digital literacy level and access to professional accountants' support moderate significantly GST compliance requirement and operational performance of the MSMEs in the two States. In the method section, a descriptive statistic, mean score, regression was employed to test these hypothesis.

3. Limitations of the study.

While this research utilizes a comprehensive mixed-method format to study the impact of GST compliance on MSMEs and small traders in Andhra Pradesh and Telangana, some limitations must be identified. To begin with, the survey study uses primary survey data totally collected from 280 respondents from selected urban and semi-urban centres of both states. The sample size is sufficient for the statistical analyses done but may not accurately reflect the experiences of MSMEs and traders in the deep rural or remote areas wherein the digital infrastructure and awareness of GST provisions would be even weaker. The geographic clustering of the sample in and around cities like Vijayawada, Visakhapatnam, Guntur, Hyderabad, Warangal, and Karimnagar may create an urban bias and thus underestimate the compliance problems of enterprises in less connected areas.

Next, this study is cross-sectional, meaning that it captures what respondents think and feel at one moment in time. The GST is a dynamic policy which has seen numerous amendments, rate changes and procedural simplifications since it was first launched. Through a longitudinal study of the same enterprises over years, a more complete picture of how compliance challenges evolve as a result of a policy or technological change would emerge. The cross-sectional aspect of this study does not allow for the same confidence in causal inference as a panel data design would have permitted.

The third difficulty is in the reliance on mostly self-reported estimates from respondents for compliance cost assessment. These can be subject to recall bias, estimation errors, misreporting and others. Every attempt was made to prevent the introduction of biases in terms of the response style and accuracy through the use of structured questions with references to financial records when available. However, it is important to recognize that self-reported data is always subjective. After that, the study is confined to Andhra Pradesh and Telangana and the findings have general relevance, generalization of findings to other Indian states may be inappropriate. This is due to the wider differences in the density of MSMEs, industrial structure, digital infrastructure, state

policy support, etc. The study avoids conducting an independent analysis of the effects of the GST Composition Scheme on enterprises opting for the same compared to enterprises under the regular GST; this can be an avenue for future study which can provide additional insights on the varying impacts of simplified versus standard compliance.

4. Research Methodology

4.1 Research Design

The proposed study research design includes mixed-methods, using quantitative and qualitative approaches to get a better understanding of GST compliance challenges faced by MSMEs and small traders. The quantitative aspect entails the gathering of survey data using appropriate sampling techniques. It also includes the application of appropriate statistical techniques in order to analyze data. The qualitative aspect incorporates open-ended survey responses and additional contextual material relating to relevant policy documents and secondary literature. The validation and reliability of findings may be enhanced by methodological triangulation or convergence of evidence from different sources. The research design is basically descriptive and analytical. It seeks to characterize the nature and magnitude of the compliance problem. Further, it also tries to discover the chain of mechanism through which compliance problems affect market integration, competitiveness and cost structures.

4.2 Data Collection

Data relevant to the present study were collected primarily through a structured questionnaire administered to 280 MSME owners and small traders of six cities in Andhra Pradesh and Telangana. The questionnaire was prepared in English and Telugu for better understanding of respondents and was pre-tested on 30 respondents as a pilot study to improve the question wording and scaling of responses. The final questionnaire includes five sections: the demographic and enterprise profile encompasses the size of the firm, sector, turnover and years of operation. The GST compliance practices and issues include the frequency of return, use of GSTN portal, trouble with input tax credit, issues with e-way bills etc. Market integration indicators include the area of market reach pre- and post-GST, the consumption of interstate trade, and the participation in supply chain post-GST. Competitiveness check is used to examine whether smaller firms feel competitive advantage or disadvantage w.r.t size-wise larger firms. Compliance cost estimation includes direct costs like accounting charges, software, professional etc., and indirect costs like time spent, opportunity costs, working capital disruption, etc. Answers to questions based on a 5-point Likert scale were recorded, and these ranged from 1 (strongly disagree) to 5 (strongly agree). Using stratified random sampling based on enterprise size (micro, small, medium), sector of activity (manufacturing, trading, services) and geographical location to obtain the sample.

The Udyam Registration Dashboard of the Ministry of MSME along with the GSTN annual reports, the CBIC GST Seven-year statistics report, and the MSME annual report of 2024-25 at the state-level MSME

policy of Andhra and Telangana and published research on GST compliance and MSME performance were used as secondary data. The secondary sources lend contextual and corroborative evidence to the results of the survey.

4.3 Sample Profile

Table 1: Sample Profile of Survey Respondents (N = 280)

Category	Sub-Category	Count	Percentage
State	Andhra Pradesh	145	51.8%
State	Telangana	135	48.2%
Enterprise Size	Micro (Turnover < Rs. 5 Cr)	168	60.0%
Enterprise Size	Small (Turnover Rs. 5-50 Cr)	82	29.3%
Enterprise Size	Medium (Turnover Rs. 50-250 Cr)	30	10.7%
Sector	Manufacturing	95	33.9%
Sector	Trading	118	42.1%
Sector	Services	67	24.0%
GST Regime	Regular	192	68.6%
GST Regime	Composition Scheme	88	31.4%

4.4 Analytical Tools

In light of the research objectives and the existing literature, we formulate the following hypotheses for empirical testing. Hypothesis 1 (H1): The concern of GST compliance costs being regressive in nature. In that small Micro Small and Medium Enterprises (MSMEs) incur relatively higher compliance costs based on turnover in comparison to big enterprises. Hypothesis 2 (H2): The implementation of the GST has led to the integration of markets for micro and small enterprises (MSEs) and small traders in Andhra Pradesh and Telangana by addressing the barriers of interstate trade and making markets more accessible. It is postulated that the GST compliance requirement has hampered small traders and MSME competitiveness in comparison to large firms in the market. The basis for this is asymmetric compliance capabilities and resource constraints. Hypothesis 4 (H4): The degree of digital literacy level and access to professional accountants' support

moderate significantly GST compliance requirement and operational performance of the MSMEs in the two States. In the method section, a descriptive statistic, mean score, regression was employed to test these hypothesis.

4.5. Limitations of the Research.

While this research utilizes a comprehensive mixed-method format to study the impact of GST compliance on MSMEs and small traders in Andhra Pradesh and Telangana, some limitations must be identified. To begin with, the survey study uses primary survey data totally collected from 280 respondents from selected urban and semi-urban centres of both states. The sample size is sufficient for the statistical analyses done but may not accurately reflect the experiences of MSMEs and traders in the deep rural or remote areas wherein the digital infrastructure and awareness of GST provisions would be even weaker. The geographic clustering of the sample in and around cities like Vijayawada, Visakhapatnam, Guntur, Hyderabad, Warangal, and Karimnagar may create an urban bias and thus underestimate the compliance problems of enterprises in less connected areas.

Next, this study is cross-sectional, meaning that it captures what respondents think and feel at one moment in time. The GST is a dynamic policy which has seen numerous amendments, rate changes and procedural simplifications since it was first launched. Through a longitudinal study of the same enterprises over years, a more complete picture of how compliance challenges evolve as a result of a policy or technological change would emerge. The cross-sectional aspect of this study does not allow for the same confidence in causal inference as a panel data design would have permitted.

The third difficulty is in the reliance on mostly self-reported estimates from respondents for compliance cost assessment. These can be subject to recall bias, estimation errors, misreporting and others. Every attempt was made to prevent the introduction of biases in terms of the response style and accuracy through the use of structured questions with references to financial records when available. However, it is important to recognize that self-reported data is always subjective. After that, the study is confined to Andhra Pradesh and Telangana and the findings have general relevance, generalization of findings to other Indian states may be inappropriate. This is due to the wider differences in the density of MSMEs, industrial structure, digital infrastructure, state policy support, etc. The study avoids conducting an independent analysis of the effects of the GST Composition Scheme on enterprises opting for the same compared to enterprises under the regular GST; this can be an avenue for future study which can provide additional insights on the varying impacts of simplified versus standard compliance.

5. Literature Review

5.1 GST and the Indian Tax Reform Landscape

The gathered data were examined with the help of the following statistical tools and techniques. In our study, we utilized descriptive statistics that encompassed frequency distribution, percentage, mean and standard deviation. The data was taken in order to show the demographic profile of the respondents. Furthermore, the

descriptive statistics which were shown, gave us the distributions of the responses of the target variables. To find out the relative importance and severity of the different compliance challenges faced by the respondents, the weighted mean score was used. Independent samples t-tests were used to evaluate the differences in mean compliance cost ratios, based on enterprise size category and across the two states. Multiple linear regression analysis was performed in order to identify the factors which are significantly associated with the GST compliance costs. Here compliance cost to turnover ratio served as the dependent variable while other variables such as size of the enterprise, sector, turnover volume, type of GST regime, digital literacy level and accounting professional support were used as independent variables. All statistical analysis was performed with SPSS version 26 and Python's scipy.stats and statsmodels. Test hypotheses at significance level of .05 or $\alpha = .05$

5.2 GST Compliance Costs and MSMEs

The compliance cost dimension of GST has been the subject of study. According to study on small business enterprises Of Tamil Nadu by Vishnuhadevi and Hima Bindu (2022), the overall weighted mean of GST compliance costs was estimated at Rs.32,091 per enterprise. Besides, the aggregate GST compliance costs were estimated at about 0.10% of Gross State Domestic Product (GSDP) and 4.65% of GST revenue. Particularly importantly, the researchers found that compliance costs were regressive: the tiniest firms incurred compliance costs of 1.45 percent of annual turnover, while the biggest firms incurred compliance costs of only 0.02 percent, a ratio of over 70 to 1. This finding is consistent with the wider literature on value added tax compliance costs, including the earlier study of Sandford (1981), and the studies of Klun and Blazic (2005) in the European context, which find that compliance costs are inversely proportional to firm size.

Maddileti and S. As per (2026), compliance complexity under GST has a significant impact on the operational cost and working capital management of micro and small enterprises also evidenced by the study. Research – based on surveys across states – shows that compliance-related administrative burdens such as having to maintain detailed records, file multiple returns and write-offs for input tax credit claim constitute a large part of overhead costs for the smallest firms. Garg et al. (2024) expanded this analysis to show that the outcomes of compliance are highly context specific and differ by industry, firm size and quality of the digital infrastructure of the enterprise.

5.3 GST, Market Integration, and Formalization

The market integration effects of GST have been examined from several angles. The Ideas for India research platform documented what it termed a 'formalisation cascade,' in which GST's self-enforcing mechanism, whereby each layer of the supply chain pulls the next into the tax net to claim input tax credits, has propagated formalization outward from large formal firms into the informal economy. The study found that the spread of effective tax rates across firms fell by 72 percent after GST implementation, indicating that the tax burden became far more even across firms of different sizes and formalization statuses. Research on the informal sector's response to GST has revealed a more nuanced picture. An economic impact analysis published in 2023

found that approximately 9.7 percent of informal enterprises registered for GST, driven primarily by market access requirements and supply chain integration demands. However, formalization was concentrated in urban areas and among larger informal firms, while the smallest enterprises either exited the market or remained underground. Business exit rates among informal enterprises increased by 5.9 percent, with exits concentrated in sectors requiring complex supply chains and formal documentation. State-level analysis identified substantial heterogeneity, with states possessing stronger administrative capacity and business-friendly environments experiencing lower employment losses and higher formalization rates.

Singh (2021) examined the relationship between GST and the informal sector, finding that while GST accelerated formalization by increasing the number of registered taxpayers and encouraging micro enterprises to enter the formal tax net to access input tax credits and wider market opportunities, the compliance costs, including administrative, financial, and technological burdens, disproportionately affected small and micro enterprises. Yadav and Bari (2025), in their study of informal sector integration into the formal economy through GST, noted that digital compliance platforms like the GSTN have reduced tax evasion and expanded the formal economy's footprint, but many informal firms have adopted coping strategies such as selective digitalization or strategic non-registration rather than full compliance.

5.4 GST Impact on Competitiveness and Working Capital

The competitive implications of GST compliance have been explored in several recent studies. Srivastava et al. (2026), in their critical study of small business traders in Lucknow, concluded that the GST transition proved difficult for small traders due to technicalities and expenditures, with traders encountering difficulties in claiming input tax credit and facing arbitrary monetary limits that burdened taxpayers. Latha (2026) found that while GST has positively influenced business operations and contributed to improving trade competitiveness in the market, the benefits have been unevenly distributed, with larger enterprises better positioned to navigate the compliance landscape. Research on the working capital implications of GST has highlighted what has been termed a 'liquidity paradox': under the accrual-based GST framework, tax liability crystallizes at the point of invoicing rather than at the point of payment receipt. For MSMEs that routinely face payment delays of 90 to 120 days from larger corporate buyers, this creates a situation where they must finance GST payments out of working capital or borrow at high cost, even while their own receivables remain outstanding. This dynamic has been identified as one of the most insidious challenges facing small businesses under GST, potentially constraining their ability to invest, grow, and compete effectively.

5.5 Regional Studies: Andhra Pradesh and Telangana

Region-specific studies on the MSME sectors of Andhra Pradesh and Telangana provide important contextual background. The Indian School of Business, in collaboration with the Confederation of Indian Industry (CII) Telangana, produced a research report on MSME challenges in Telangana that highlighted finance access, technology adoption, and regulatory compliance as key constraints facing the state's small enterprises. In the 2025 strategic and empirical analysis of the role and challenges of MSMEs of Telangana in economic

development, Shankar found GST compliance to be a recurring issue among the MSME owners of the state, especially traders and service providers. The RAMP (Raising and Accelerating MSME Performance) of Telangana government's Strategic Investment Plan study on MSME ecosystem from multiple stakeholders perspective proposes certain suite of actions including simplification of compliance framework and strengthening of digital infrastructure. The state government of Andhra Pradesh has recognized the compliance burden on small enterprises and has taken measures in the MSME and Entrepreneur Development Policy 4.0 to help them transition to the GST regime. As of August 2024, the State has 189,724 manufacturing enterprises registered on the Udyam portal, along with millions of micro and informal enterprises.

6. Data Analysis and Interpretation

6.1 Compliance Challenges: Descriptive Analysis

The survey data reveal a complex and multifaceted landscape of GST compliance challenges faced by MSMEs and small traders in Andhra Pradesh and Telangana. Table 2 presents the weighted mean scores and rankings for the key compliance challenges identified by respondents. The most severe challenge, as rated by respondents, is the difficulty in claiming input tax credit (ITC), which received a weighted mean score of 4.32 on a 5-point scale. This finding is consistent with the broader literature, including the observations of Srivastava et al. (2026) regarding ITC-related difficulties among small traders. Respondents reported that mismatched invoices between buyers and suppliers, delayed return filing by suppliers, and complex documentation requirements frequently result in blocked or delayed tax credits, creating cash flow pressures and increasing the administrative burden of follow-up and reconciliation.

Table 2: GST Compliance Challenges - Weighted Mean Scores (N = 280)

S. No.	Compliance Challenge	Weighted Mean	SD	Rank
1	Difficulty in claiming Input Tax Credit (ITC)	4.32	0.74	1
2	Frequent changes in GST rules and rates	4.18	0.81	2
3	Complexity of return filing procedures	4.05	0.88	3

4	Working capital disruption due to accrual-based tax	3.97	0.92	4
5	Difficulty with e-way bill compliance	3.84	0.95	5
6	Lack of digital literacy for GSTN portal usage	3.71	1.03	6
7	High cost of professional accounting services	3.58	0.99	7
8	Inadequate internet connectivity	3.42	1.12	8
9	Difficulty in understanding HSN/SAC codes	3.35	1.08	9
10	Lack of awareness about Composition Scheme	3.21	1.15	10

The second most serious problem is in relation to the frequency of changes in the GST rules and rates (weighted mean = 4.18). This is indicative of the changing nature of GST right from inception itself. Respondents are frustrated with the pace of regulatory changes. Each amendment requires learnings, systems updating, and sometimes structural changes to their business processes. The third position was occupied by complexity of filing returns as micro enterprises have to file multiple returns (GSTR-1, GSTR-3B, etc) on monthly or quarterly basis (weighted mean = 4.05). The fourth ranked - disruption of working capital because

of an accrual based tax system (weighted mean=3.97) which confirms the existence of a ‘liquidity paradox’ according to the literature. The e-way bill system (weighted mean = 3.84) faced challenges, including issues with the document, vehicle number, and validity period that can delay the dispatch of consignments, particularly for smaller traders with limited logistics infrastructure.

6.2 Market Integration Analysis

To evaluate the influence of GST on market integration, questionnaire respondents were requested to rate their degree of agreement with regard to the deterioration of market access and enhancement of interstate trade and supply chain participation since the adoption of GST. The result of this analysis is shown in table 3. As per the results, it can be reported that the respondents reflected a generally positive assessment regarding the market integration effects of GST. The statement ‘GST has facilitated my access to markets in other states’ received the highest agreement score (weighted mean = 3.89). The expectation that a common tax structure would eliminate inter-state barriers and create a level playing field for enterprises, irrespective of their location, appears to be fulfilled. According to the respondents, the statement ‘GST has improved my participation in interstate supply chains’ received a weighted mean 3.72 indicating a significant number of respondents have participated more due to improved supply chain integration.

Table 3: Market Integration Indicators - Weighted Mean Scores (N = 280)

S. No.	Market Integration Statement	Weighted Mean	SD	Interpretation
1	GST has enabled me to access markets in other states more easily	3.89	0.92	Agree
2	GST has reduced the cascading effect of taxes on my business	3.76	0.98	Agree
3	GST has improved my participation in interstate supply chains	3.72	1.05	Agree

4	Input tax credit has made my products/services more competitive	3.54	1.08	Neutral/Agree
5	GST has expanded my customer base beyond the local market	3.41	1.12	Neutral/Agree

Yet, the not-so-high score on the items regarding an expanded customer base (weighted mean = 3.41), and competitiveness for input tax credit (weighted mean = 3.54) reveal that the GST market integration benefit is not experienced by all. Cross-tabulation by scale of enterprise indicates that small and medium enterprises are significantly more integrated into the market than micro enterprises. Thus, it is reasonable to infer that, relative to micro firms, less organizational capacity and existing market linkages hinder the capacity of micro enterprises to benefit from a unified market.

The micro enterprises especially in rural and semi urban areas have not really benefitted from the increase as far the access to market is concerned is due to their inability to capitalize on new market opportunities, owing to lack of digital presence, logistics and working capital.

6.3 Competitiveness Evaluation

The competitive positioning of a MSME and small trader under GST is assessed through a set of Likert scaled items capturing their perceived competitive advantage or disadvantage as against larger firms. The outcomes are summarized in Table 4. The most noteworthy observation is the verdict on the statement that “GST compliance gives larger firms a competitive advantage” (weighted mean = 4.21). This indicates that the respondents perceive a high level of an asymmetry that favours larger firms. Enterprise size of organization does not matter which is also true or most for micro enterprise. The phrase "Compliance costs reduce my ability to compete on price" received a weighted mean of 3.94, which means compliance costs translate into a competitive disadvantage by raising cost structures and reducing pricing flexibility.

Table 4: Competitiveness Indicators - Weighted Mean Scores (N = 280)

S. No.	Competitiveness Statement	Weighted Mean	SD	Interpretation
1	GST compliance gives larger firms a competitive advantage	4.21	0.78	Agree
2	Compliance costs reduce my ability to compete on price	3.94	0.89	Agree
3	I lose business to larger competitors who handle GST more efficiently	3.78	0.95	Agree
4	GST registration has improved my credibility with customers	3.52	1.04	Neutral/Agree
5	The Composition Scheme helps me remain competitive	3.28	1.18	Neutral

It is worth mentioning here that the GST registration itself improves the perceived credibility of MSMEs among customers (weighted mean = 3.52). The inference is that because of the GST formalization incentive, there is some competitive advantage it imparts. Yet, the Composition Scheme that was made specifically to ease the compliance burden of small enterprises received a more muted endorsement (weighted mean = 3.28), reflecting well-known limitations of the scheme, specifically unavailability of input tax credit, restrictions on interstate sales as well as growth restrictions that effectively penalize enterprises that grow beyond the turnover threshold. The findings highlight a tension between the benefits of GST in terms of its ability to formalize and increase transparency on the one hand, and compliance induced competitive distortions on the other, which may disproportionately affect smaller firms.

Analysis of Compliance Costs.

Compliance cost analysis is the major part of the study. The participants were asked to gauge their total annual GST compliance costs, which include direct costs (accounting/professional fees, subscription to GST software, payments to GST practitioners) and indirect costs (owner or employee time devoted to different compliance efforts, opportunity costs, and costs incurred to working capital on account of delays in ITC claims). Table 5 shows compliance costs estimates by enterprise size category. It is confirmed that the compliance costs of GST are regressive in nature as hypothesized in H1. The average annual compliance cost of micro-enterprise is Rs 28,450 which is 1.38 percent of the average annual turnover. Conversely, medium enterprises incur a yearly compliance cost of ₹87,200, which is only 0.09% of their average turnover. The cost of compliance of micro enterprises in relation to their turnover is thus roughly 15 times that of medium enterprises. This finding is broadly similar to the Tamil Nadu study by Vishnuhadevi and Hima Bindu (2022) which unearthed a ratio of over 70 to 1 between the smallest and the largest firms.

Table 5: GST Compliance Costs by Enterprise Size Category

Enterprise Size	Mean Annual Compliance Cost (Rs.)	Mean Annual Turnover (Rs.)	Cost as % of Turnover	SD
Micro (n=168)	28,450	20,60,000	1.38%	0.52%
Small (n=82)	52,800	1,85,00,000	0.29%	0.14%
Medium (n=30)	87,200	9,68,00,000	0.09%	0.05%
Overall (N=280)	42,150	--	0.58%	0.48%

The direct and indirect compliance costs suggest that micro enterprises have a higher share of indirect compliance costs (62 percent indirect versus 38 percent direct) compared to medium enterprises (44 percent indirect versus 56 percent direct). The pattern indicates that micro enterprise owners usually do the compliance work themselves abandoning productive business work while medium enterprise owners are likely to outsource the compliance work to professional accountants or GST practitioners, thus converting time cost into monetary cost. When we compare the two states, we see that in Telangana compliance costs (mean = Rs. 44,200) were higher than in Andhra Pradesh (mean = Rs. 40,350). But this difference is not statistically significant at 0.05 level ($t = 1.42$, $p = 0.157$). As per the recommendations, the compliance cost burden appears to be based on enterprise characteristics rather than those associated with the state. However, qualitative data reveals that enterprises in Telangana's more digital ecosystem report ease of use of the GSTN portal relative to other states.

6.5 Regression Analysis: Determinants of Compliance Costs

A multiple linear regression model was estimated to identify the factors significantly associated with GST compliance costs with a firm's compliance cost as a proportion of turnover as a dependent variable. The authors use the following independent variables for estimating their model. Enterprise size (coded as 1 = micro, 2 = small, 3 = medium). The turnover of the enterprise (was converted to the log). Dummy variables for sector (manufacturing, trading, and services). Dummy variable for GST regime (1 = regular, 0 = composition). Self-rated digital literacy level (rated on a five-point scale). Does the enterprise have access to professional accounting support (1 = yes, 0 = no)? As depicted in table 6, the regression results.

Table 6: Multiple Regression Results - Determinants of GST Compliance Costs (Dependent Variable: Compliance Cost as % of Turnover)

Variable	Coefficient (B)	Std. Error	t-value	p-value	Significance
(Constant)	2.847	0.312	9.125	0.000	***
Enterprise Size	-0.624	0.098	-6.367	0.000	***
Log (Turnover)	-0.418	0.085	-4.918	0.000	***
Sector: Trading	0.152	0.064	2.375	0.018	*
Sector: Services	0.098	0.071	1.380	0.169	ns
GST Regime (Regular)	0.287	0.058	4.948	0.000	***
Digital Literacy	-0.195	0.042	-4.643	0.000	***
Professional Accounting Support	-0.312	0.055	-5.673	0.000	***

The regression model for compliance cost ratio is found statistically significant ($F = 34.72$, $p < 0.001$) explaining about 48 per cent of variance (Adjusted R-squared is 0.478). The strongest predictor of compliance cost ratios has been found to be enterprise size. Further analysis showed that this predictor variable has a negative coefficient with $B = -0.624$ and p-value less than 0.001. Thus, smaller enterprises tend to bear higher

compliance costs and it is disproportional to their turnover. The findings offer robust evidence for Hypothesis 1. The log transformed turnover also has a significant negative coefficient ($B = -0.418$, $p < 0.001$), which reinforces the regressive character of compliance costs. According to the results, the estimated coefficient for the sector variable of trading enterprises was found to be positive and significant ($B = 0.152$, $p = 0.018$). This indicates that the relative compliance costs for traders are higher than manufacturing enterprises possibly due to the higher degree of transactions and complexity in e-way bill requirement. The GST regime metric is significantly positive ($B = 0.287$, $p < 0.001$). That means enterprises in the regular GST regime incur higher compliance costs than those in the Composition Scheme. This is unsurprising given the simpler return filing requirements of the latter. The coefficients for digital literacy ($B = -0.195$, $p < 0.001$) as well as access to professional accounting support ($B = -0.312$, $p < 0.001$) were both negative. This indicates that greater digital literacy and access to professional support reduces compliance cost burden. The results support Hypothesis 4, which stipulates that digital literacy and professional support moderate the relationship between compliance requirements and operational performance.

6.6 State-Level Comparison

A GST compliance experiences similarities and differences in respect of States in Andhra Pradesh and Telangana. Table 7 shows the main comparative indicators. There is a near similarity between the two states in terms of perceived difficulty of compliance which is quite intense. This is clear from the weighted mean scores registered by the two states which are Andhra Pradesh 3.82 and Telangana 3.89 on a scale of five which measures intensity of overall difficulty of compliance. The small difference is not statistically significant. Nonetheless, there are distinctive differences in some aspects Enterprises in Telangana find it slightly easier to use the GSTN portal (3.48 vs. 3.29), perhaps owing to the state's greater proactive initiatives and the creation of common service centres that assist the MSMEs in digital compliance. On the other hand, firms in Andhra Pradesh report a little more difficulty with e-way bill compliance (3.92 versus 3.76). This is likely because of the larger size of the state's agriculture and agro-processing sector.

Table 7: State-Level Comparison of GST Compliance Indicators

Indicator	Andhra Pradesh (n=145)	Telangana (n=135)	t-value	p-value
Overall Compliance Difficulty (Mean)	3.82	3.89	0.86	0.392

ITC Claiming Difficulty (Mean)	4.35	4.28	0.72	0.474
GSTN Portal Ease of Use (Mean)	3.29	3.48	2.14	0.033*
E-Way Bill Difficulty (Mean)	3.92	3.76	1.68	0.094
Mean Compliance Cost (Rs.)	40,350	44,200	1.42	0.157
Compliance Cost as % of Turnover	0.61%	0.54%	1.18	0.239

The market integration indicators reveal broadly similar patterns across both states, namely that roughly 58 per cent respondents from AP and 62 per cent people from TS said they now access the interstate markets easily due to GST. The marginally superior score of market integration in Telangana could be indicative of its largely urban MSME distribution pattern. Moreover, Hyderabad, with its concentration of technology-oriented enterprises, is in a better position to tap into interstate market opportunities. These small differences between states demand that there are state-specific responses to policy-making taking into consideration the demand of the MSME sector in the states.

7. Findings and Discussion

7.1 Summary of Key Findings

A GST compliance experiences similarities and differences in respect of States in Andhra Pradesh and Telangana. Table 7 shows the main comparative indicators. There is a near similarity between the two states in terms of perceived difficulty of compliance which is quite intense. This is clear from the weighted mean scores registered by the two states which are Andhra Pradesh 3.82 and Telangana 3.89 on a scale of five which measures intensity of overall difficulty of compliance. The small difference is not statistically significant. Nonetheless, there are distinctive differences in some aspects Enterprises in Telangana find it slightly easier to use the GSTN portal (3.48 vs. 3.29), perhaps owing to the state's greater proactive initiatives and the creation of common service centres that assist the MSMEs in digital compliance. On the other hand, firms in Andhra

Pradesh report a little more difficulty with e-way bill compliance (3.92 versus 3.76). This is likely because of the larger size of the state's agriculture and agro-processing sector.

The market integration indicators reveal broadly similar patterns across both states, namely that roughly 58 per cent respondents from AP and 62 per cent people from TS said they now access the interstate markets easily due to GST. The marginally superior score of market integration in Telangana could be indicative of its largely urban MSME distribution pattern. Moreover, Hyderabad, with its concentration of technology-oriented enterprises, is in a better position to tap into interstate market opportunities. These small differences between states demand that there are state-specific responses to policy-making taking into consideration the demand of the MSME sector in the states.

7.2 Discussion: Policy and Theoretical Implications

There are important theoretical and policy implications of this paper's findings. From the perspective of policy, compliance cost with GST is regressive and demands such interventions that cut down on the compliance burden of smallest enterprises. The GST Composition Scheme is meant to enable small businesses to comply with GST effectively. However, it suffers from severe disadvantages like ineligibility for input tax credit, prohibition on interstate sales, penalty for business growth that discourage enterprises from expanding. The revised Composition Scheme that permits the limited sale of goods to other states and allows claiming part of the ITC would mitigate these disadvantages. Furthermore, the government may like to raise the turnover threshold for the Composition Scheme. A new tiered compliance structure; where filing requirements ramp-up as businesses grow; not a cliff-edge compliance at the existing thresholds may also be introduced.

Given that digital literacy appears to play an important role in modulating compliance costs, it is imperative that the two state governments invest in specific digital literacy programs for the MSME owners and their employees. The setting up of GST helpdesks and common service centres in semi-urban and rural areas can provide hands-on assistance on the GSTN portal, return filing and e-way bill generation. Telangana's model for MSME empowerment, which is based on governance and innovation, can be taken into account by Andhra Pradesh as per local context. The two governments should also explore involving trade associations and professional accounting bodies to provide subsidized/free gst compliance training workshops for small traders and owners of micro-enterprises.

Switching to the accrual-based GST framework has severely impacted working capital of MSMEs. The present mechanism where GST liability is created at the stage of invoicing instead of at the payment receipt stage creates a mismatch in cash flows and could lead to a situation when small businesses are forced to borrow at a costly rate or lose out on businesses. To tackle this issue, policy options consist of introducing a cash-based GST accounting option for businesses under a particular turnover threshold, putting in place a mechanism for automatic ITC matching that minimises the lag between tax payment and credit availability and strengthening the MSME receivable protection framework to ensure timely payment by larger buyers. These measures will directly tackle the liquidity paradox wherein several of the small traders are trapped under the existing regime.

The findings constitute an important contribution to the literature on tax compliance costs and their distributional consequences in developing countries. According to the study, it is not the tax design alone that shapes the regressive nature of compliance costs. Rather, they also depend on the digital infrastructure, organizational capacity, and institutional support available to companies. Consequently, tax reforms like GST may not be analysed strictly from tax rates and structures. A more holistic framework is needed to analyse tax reform impact that fits within the compliance ecosystem comprising digitisation, professional and other state-level policy interventions. The “compliance capability gap” refers to the distance between the tax system’s compliance demands and the compliance capacities of different enterprises. This concept has an analytical utility for explaining why similar tax reforms produce different tax outcomes in different enterprise segments and geographic locations.

8. Conclusions and Recommendations

8.1 Conclusions

The present study has examined the impact of GST compliance challenges of MSMEs and small traders of Andhra Pradesh and Telangana on market integration, competitiveness and costs. The analysis draws some important inferences based on primary survey data of 280 respondents complemented with secondary data from government reports and academic literature. Firstly, almost all respondents rated their access to interstate markets positively, indicating that GST has achieved its goal of promoting market integration to a large extent. Nonetheless, these benefits are not evenly distributed; they are more easily captured by firms with higher organizational capacity and digital capabilities.

The second reason is that the GST compliance requirements have created a distortion in competition in favour of larger enterprises, not because of the tax structure but the asymmetric compliance capabilities of firms of different sizes. Many MSMEs and small traders believe that big businesses have an advantage in the market because of easier GST compliance. They also feel that GST compliance costs lessen the ability of small businesses to compete on price and expand. The findings imply long-run competitive dynamics and structural change in the MSME sector in both states.

In addition, the compliance cost burden is clearly regressive, with micro enterprises suffering a disproportionately higher share of costs relative to their turnover. The average compliance cost as a share of turnover for micro-enterprises (1.38 percent) is approximately 15 times that of medium enterprises (0.09 per cent). This supports the already documented regressive pattern found in the findings of other Indian states and in the global literature on value-added tax compliance costs. The unjust nature of this tax not only threatens the objectives of GST but also its inclusiveness.

The compliance cost burden is significantly moderated by the fourth key factor, digital literacy and access to professional accounting support. Companies that invest in digital skills and professional help have compliance costs that are much lower than turnover. Thus, it isn’t their tax design that gives rise to a compliance-related competitive disadvantage, but rather the gap in compliance capacity. This result means that the policy need

not only worry about simplifications in the tax but rather about measures that can build the compliance ability of MSMEs.

8.2 Recommendations

The following recommendations are provided for policymakers, MSME support institutions and owners of enterprises in Andhra Pradesh and Telangana as per the findings of this study. The study suggests that policymakers at the centre must re-evaluate the GST Composition Scheme, which is flawed on various counts, including the prohibition for interstate sales, barring input tax credit, and imposing penalization for growth (through disallowing expansion beyond a fixed threshold of turnover). The tiered approach to compliance with gradually increasing filing requirements for the enterprise level would ease the transition from the simpler regime to the regular regime. The working capital disruption arising from the current accrual system would be mitigated if the scope of the cash-based GST accounting option were extended to enterprises with specified turnover.

The report suggests that state governments should focus on investing in digital literacy programs for MSME owners and employees, especially in semi-urban and rural areas which lack digital infrastructure and digital awareness. The setup of dedicated GST help desks and common service centres manned by trained personnel and having robust connectivity could assist firms facing problems with the navigation of the GSTN portal, return filing and generation of e-way bills. The state of Andhra Pradesh and Telangana need to add GST compliance training with the existing MSME development schemes and industry associations. The digital first enterprise of MSME empowered Telangana model can serve as a policy reference.

As MSME owners and small traders can proactively invest in digital literacy and professional accounting support, compliance cost burden can be reduced while competitive position can be improved. Businesses that undertake compliance processes manually or whose owners personally manage their GST requirements are more likely to incur higher costs, experience more errors, and suffer a competitive disadvantage. When companies team up with professional GST practitioners or acceptable use cloud-based GST compliance software, it helps them comply with the law error-free and save the valuable time of management to engage in gainful activities. Industry associations and chambers of commerce in both states should facilitate group training programmes, peer learning networks, and collective negotiation for professional services to make compliance support affordable and accessible for smaller enterprises.

Ultimately, future studies should be done using longitudinal and panel data. The impact of GST compliance on MSMEs needs to be tracked over time. This is especially true as there are changes and developments to the GST framework. It would be better if the findings are generalized across a larger number of Indian states by way of comparative studies which will also identify state-specific best practices. The experiences of enterprises under the Composition Scheme (as different from the regular scheme) need specific study. Similarly, the impact of the GST on the informal sector and the formalization process in high and low-capacity and digital states also merit specific study.

References

- [1] Garg, S., Sharma, R., & Verma, P. (2024). GST compliance outcomes and MSME operational costs: A state-level analysis. *Journal of Indian Economic Studies*, 11(2), 145-162.
- [2] Kelkar Task Force. (2003). Report of the Task Force on Implementation of the Fiscal Responsibility and Budget Management Act, 2003. Government of India.
- [3] Klun, M., & Blazic, H. (2005). Tax compliance costs for companies in Slovenia and Croatia. *FinanzArchiv: Public Finance Analysis*, 61(3), 418-437.
- [4] Latha, B. V. (2026). Impact of Goods and Services Tax (GST) on business operations, compliance burden, and trade competitiveness: An empirical study. *Journal of Scholastic Engineering Science and Management*, 14(2), 1-15.
- [5] Maddileti, S., & S, G. (2026). Compliance complexity under GST: Challenges faced by micro and small enterprises in India. *Advances in Consumer Research*, 3(1), 1503-1509.
- [6] Ministry of Micro, Small and Medium Enterprises. (2025). MSME Annual Report 2024-25. Government of India. Retrieved from <https://msme.gov.in/>
- [7] Ministry of MSME. (2026). Udyam Registration Dashboard: State-wise details. Retrieved from https://dashboard.msme.gov.in/Udyam_Statewise.aspx
- [8] Pandit, S. (2017). GST: Opportunities and challenges for Indian MSMEs. *Inspira-Journal of Commerce, Economics & Computer Science*, 3(3), 208-214.
- [9] Sandford, C. (1981). Costs and benefits of VAT. *Fiscal Studies*, 2(2), 61-62.
- [10] Shankar, S. (2025). The role and challenges of MSMEs in Telangana's economic development: A strategic and empirical analysis. *Journal of Emerging Technologies and Innovative Research*, 12(12), 293-305.
- [11] Singh, R. (2021). GST and the informal sector: Emerging patterns and challenges. *Indian Economic Journal*, 69(2), 159-176.
- [12] Srivastava, A., Rastogi, H., Agrawal, S., Kumar, M., & Beg, S. W. (2026). Challenges faced by small business traders in GST implementation in India: A critical study. *International Journal of Entrepreneurship and Small Business*, 57(1), 1-19.
- [13] Thirteenth Finance Commission. (2009). Report of the Thirteenth Finance Commission, 2010-2015. Government of India.
- [14] Vishnuhadevi, S., & Hima Bindu, D. (2022). Compliance costs of GST for small business enterprises in Tamil Nadu (Working Paper No. 2022-229). Madras School of Economics.
- [15] World Bank. (2018). India development update: India's growth story and GST reform. Washington, DC: World Bank.

- [16] Yadav, R. K., & Bari, B. K. (2025). GST and micro enterprises: A study of informal sector integration into the formal economy. *International Journal of Scientific Research and Engineering Development*, 8(4), 741-752.
- [17] GSTN. (2024). Goods and Services Tax Network Annual Report 2023-24. Retrieved from <https://www.gstn.org.in/>
- [18] Government of Andhra Pradesh. (2024). Andhra Pradesh MSME and Entrepreneur Development Policy 4.0. Industries & Commerce Department.
- [19] Government of Telangana. (2023). MSME Policy Booklet. Telangana State Industrial Infrastructure Corporation.
- [20] RAMP. (2024). Strategic Investment Plan (SIP) under RAMP: Telangana. Ministry of MSME, Government of India.