Journal DOI: 10.36713/epra0412 ISSN: 2277–7741
International Journal of
Asian Economic Light (JAEL) – Peer Reviewed Journal
SJIF Impact Factor (2026): 8.835 Volume: 14 | Issue: 10 | October 2026

MSME FORMALISATION, GST REVENUE, AND REGIONAL ECONOMIC DISPARITY IN INDIA: A SYSTEMATIC REVIEW

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Article DOI: https://doi.org/10.36713/epra29172
DOI No: 10.36713/epra29172

ABSTRACT

The Goods and Services Tax (GST), implemented in India from July 2017, was intended to unify a fragmented indirect tax structure and, through mechanisms such as input tax credit, e-way bills, mandatory digital invoicing, and the Udyam registration framework, to draw a large share of Micro, Small and Medium Enterprises (MSMEs) out of the informal economy. This paper combines a systematic review of literature published between 2017 and 2026 with an original secondary-data analysis to examine whether the formalisation and revenue benefits associated with GST have been shared evenly across Indian states or have instead reinforced pre-existing regional economic imbalances. The review synthesises twenty-three studies across three themes: GST-led MSME formalisation, state-wise GST revenue performance, and interstate disparity. This is supplemented with an original cross-sectional dataset of twenty-two major states, compiled from Press Information Bureau GST revenue releases, Ministry of Statistics and Programme Implementation (MoSPI) Gross State Domestic Product (GSDP) statistics, and Udyam registration compilations, on which descriptive statistics, Gini coefficients, Pearson and Spearman correlations, and ordinary least squares (OLS) regression are computed. GST collection is very strongly and significantly correlated with GSDP (Pearson $r = 0.90$, $p < 0.001$) and strongly correlated with MSME registration counts ($r = 0.84$, $p < 0.001$); GSDP alone explains approximately 80 percent of the cross-state variance in GST collection. The Gini coefficient for GST collection across the sampled states (0.47) exceeds that for GSDP (0.39) and MSME density (0.38), indicating that GST revenue is somewhat more concentrated than the underlying economic base itself. These findings support the view that GST, rather than acting as a levelling reform, is reproducing the regional economic geography that predates it. The paper concludes with policy recommendations for GST administrative capacity building, targeted MSME formalisation support, and revised fiscal-transfer criteria for lagging states, and identifies the panel-data and spatial-econometric extensions that a fuller data infrastructure would allow.

KEYWORDS: *GST; MSME formalisation; Udyam registration; GST revenue; regional disparity; fiscal federalism; Gini coefficient; secondary data*

1. INTRODUCTION

The Goods and Services Tax (GST) was introduced in India on 1 July 2017 as a single, destination-based indirect tax that replaced a layered structure of central excise duty, service tax, value added tax, and a range of other state-level levies. By removing the cascading effect of taxes paid on taxes and by allowing input tax credit only where both the buyer and the seller are registered on the GST network, the reform was intended to create a genuinely national market, improve transparency in business transactions, and widen the tax base by drawing informal economic activity into a documented, digitally tracked system.

Micro, Small and Medium Enterprises occupy a central place in this story because a very large share of them historically operated outside any formal registration system, which limited their access to institutional credit, government procurement, and organised supply chains. GST is understood to have encouraged MSME formalisation through several linked channels: the incentive to register in order to claim input tax credit; the introduction of the Udyam Registration portal and, later, the Udyam Assist Platform for informal micro enterprises; the spread of e-invoicing and e-way bills, which make transactions traceable; and the use of GST filing history by banks and financial institutions as a proxy for creditworthiness when assessing MSME loan applications. As of end-February 2026, official figures place cumulative registrations on the Udyam Registration Portal and Udyam Assist Platform at over 7.83 crore enterprises, up from 0.79 crore at the close of FY 2021-22, illustrating the scale of formalisation since the portal's launch.

2. LITERATURE REVIEW

A substantial part of the reviewed literature agrees that GST has pushed a meaningful share of MSMEs into the formal economy. Veena (2026) traces this through the steady rise in GST registrations among MSMEs and the parallel growth of input tax credit claimed by this segment, and argues that the credit mechanism itself is the strongest formalisation lever, since credit can only be claimed where both trading parties are registered. Sharma and Sharma (2026) similarly find that GST's compliance architecture has expanded formal credit flow to MSMEs, though the same architecture imposes a proportionally heavier burden on micro enterprises

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that lack dedicated accounting capacity. Government reporting corroborates the scale of this shift: cumulative Udyam and Udyam Assist registrations rose from 0.79 crore at the end of FY 2021-22 to 6.19 crore by the end of FY 2024-25, and to over 7.83 crore by February 2026.

A second cluster of studies analyses how GST revenue and MSME formalisation are distributed across states rather than assuming a uniform national pattern. Dandona et al. (2024) examine state-level GST revenue trends against state GDP and conclude that revenue growth tracks pre-existing industrial and consumption strength rather than converging across states. Santosh, Sonu and Hegde (2026) provide a region-wise breakdown of GST collections and report that western and southern states, led by Maharashtra, account for a disproportionately large share of national GST revenue, a pattern the authors link to differences in industrialisation, urbanisation, and administrative capacity. A recent quantitative study (IJIREM, 2026) applies Gini and Theil inequality indices directly to state- and district-wise Udyam registration data and finds that MSMEs are highly concentrated in a limited number of economically developed regions, with concentration increasing with enterprise size — medium enterprises are more spatially concentrated than micro enterprises, which are comparatively dispersed. At the single-state level, Chopra and Modi (2025) examine GST's effect on SMEs in Rajasthan from an accounting perspective and find that state-level administrative and compliance conditions materially shape how uniformly national GST benefits are realised on the ground.

Table 1. Thematic Summary of Reviewed Literature

Author (Year)	Year	Country	Objective(s)	Methodology	Sample	Statistical Technique	Findings
Veena (2026)	2026	India	Sectoral opportunities and compliance challenges of GST-led MSME formalisation	Descriptive/analytical, secondary data (GSTN, MSME bulletins)	National-level MSME GST registrant time series, 2017–2025	Growth rate analysis, descriptive trend analysis	GST registration among MSMEs rose from 65 lakh (2017) to c. 1.53 crore (2025); ITC is the primary formalisation lever
Sharma & Sharma (2026)	2026	India	Impact of GST on SMEs	Descriptive, secondary data	National SME compliance and credit-access indicators	Descriptive statistics	GST has expanded formal credit access for SMEs but raised compliance costs for micro units
Dandona, Tomar, Sharma & Verma (2024)	2024	India	GST dynamics: state revenue trends, GDP impact, and economic resilience	Descriptive/trend analysis of PIB and GSDP data	State-wise GST revenue and GSDP, multi-year	Trend and correlation analysis	GST revenue growth tracks pre-existing industrial and consumption strength rather than converging across states
Santosh, Sonu & Hegde (2026)	2026	India	GST collection trends and regional disparities	Descriptive, region-wise breakdown	State/region-wise GST collection	Descriptive, regional classification	Western and southern states account for a disproportionate share of national GST revenue
Chakravarty & Dehejia (2017)	2017	India	Whether GST widens or narrows regional income divergence	Convergence/divergence analysis using nightlights proxy	State panel, pre/post-GST	Convergence regression	GST may widen rather than narrow interstate income disparity by reducing state tax-policy autonomy

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Chopra & Modi (2025)	2025	India (Rajasthan)	GST implementation impact on SMEs in Rajasthan	Accounting-perspective case analysis	Single-state SME sample	Descriptive/case analysis	State-level administrative and compliance factors shape how uniformly GST benefits are realised
MSME Sector in India: State-wise Disparity Analysis (2026, IJIREM)	2026	India	State- and district-wise disparity in MSME distribution	Quantitative, secondary data	State- and district-wise Udyam registration counts	Gini coefficient, Theil index, coefficient of variation, rank analysis	MSMEs are highly concentrated in a limited set of industrially developed states; concentration is sharper for medium than micro enterprises

Source: compiled by the authors from the cited studies. Research-gap column omitted from the table for space and integrated narratively in Section 2.4.

3. OBJECTIVES OF THE STUDY

1. To examine state-wise disparities in MSME formalisation, as reflected in Udyam registration counts, and their statistical association with state-wise GST revenue performance.
2. To identify the policy and administrative-capacity factors that plausibly explain why GST's formalisation and revenue benefits are unevenly distributed across states.

4. METHODOLOGY

4.1 Research Design

This study adopts a mixed descriptive-quantitative design combining a systematic literature review with an original cross-sectional secondary-data analysis. Descriptive statistics (mean, median, standard deviation, coefficient of variation) were computed for GST collection, GSDP, MSME count, and GST growth rate. Concentration was measured using the Gini coefficient and the ratio of the maximum to the minimum value in the sample (a simple disparity ratio). Association between variables was tested using both Pearson correlation (linear association) and Spearman rank correlation (monotonic association, robust to the skew present in state-level economic data). A simple OLS regression of GST collection on GSDP was estimated, followed by a multiple OLS regression adding MSME count as a second regressor; the Variance Inflation Factor (VIF) was computed for both regressors to test for multicollinearity, given the strong correlation between GSDP and MSME count documented in Section 5.

5. DATA ANALYSIS AND INTERPRETATION

5.1 State-wise GST Revenue, August 2023 vs August 2024

Table 2. Gross GST Revenue by State, August 2023 and August 2024 (Rs crore)

State	Aug-2023	Aug-2024	YoY Growth
Maharashtra	23,282	26,367	13.3%
Karnataka	11,116	12,344	11.0%
Gujarat	9,765	10,344	5.9%
Tamil Nadu	9,475	10,181	7.5%
Haryana	7,666	8,623	12.5%
Uttar Pradesh	7,468	8,269	10.7%
Delhi	4,620	5,635	22.0%
West Bengal	4,800	5,077	5.8%
Odisha	4,408	4,878	10.7%
Telangana	4,393	4,569	4.0%
Rajasthan	3,626	3,820	5.4%
Madhya Pradesh	3,064	3,438	12.2%
Andhra Pradesh	3,479	3,298	-5.2%
Jharkhand	2,721	2,850	4.7%
Chhattisgarh	2,896	2,611	-9.8%

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Kerala	2,306	2,511	8.9%
Punjab	1,813	1,936	6.8%
Bihar	1,379	1,491	8.1%
Assam	1,148	1,353	17.9%
Uttarakhand	1,353	1,351	-0.1%
Himachal Pradesh	725	827	14.1%
Goa	509	531	4.3%

Source: Press Information Bureau / Goods and Services Tax Network, monthly state-wise GST revenue release, August 2024. States are ordered by August 2024 collection.

The table 2 shows state-wise electricity consumption for August 2023 and August 2024 along with year-on-year growth rates. Overall, electricity demand increased in most Indian states during the one-year period. Maharashtra recorded the highest consumption, followed by Karnataka, Gujarat, and Tamil Nadu, indicating their strong industrial and economic activity. Delhi registered the highest YoY growth (22.0%), while Assam and Himachal Pradesh also experienced substantial increases. Moderate growth was observed in several states, whereas Andhra Pradesh and Chhattisgarh recorded declines and Uttarakhand remained nearly unchanged. Overall, the findings reveal a broad upward trend in electricity consumption across India, driven by economic growth, urbanization, and rising energy requirements.

5.2 GSDP and MSME Registration by State

Table 3. GSDP (FY 2023-24) and Udyam-Registered MSME Count, by State

State	GSDP (Rs lakh crore)	MSMEs (lakh)	MSMEs per Rs 1 lakh crore GSDP
Maharashtra	40.56	37.12	91,522
Karnataka	25.57	12.00	46,926
Gujarat	24.26	15.53	64,020
Tamil Nadu	26.89	21.74	80,849
Haryana	10.86	8.00	73,698
Uttar Pradesh	26.43	20.28	76,735
Delhi	11.13	5.00	44,927
West Bengal	16.51	18.00	1,09,000
Odisha	7.99	6.50	81,355
Telangana	14.62	8.00	54,726
Rajasthan	15.22	15.57	1,02,333
Madhya Pradesh	13.54	10.00	73,866
Andhra Pradesh	14.22	13.00	91,414
Jharkhand	4.66	4.00	85,904
Chhattisgarh	5.12	4.50	87,872
Kerala	11.35	9.00	79,269
Punjab	7.72	7.00	90,704
Bihar	8.77	10.00	1,13,999
Assam	5.69	7.50	1,31,744
Uttarakhand	3.33	3.00	90,091
Himachal Pradesh	2.12	2.50	1,17,831
Goa	1.07	0.50	46,934

Sources: GSDP — Ministry of Statistics and Programme Implementation (MoSPI), current prices, FY 2023-24, as compiled by StatisticsTimes.com. MSME count — Udyam registration data compiled from the Open Government Data Platform (data.gov.in) by a secondary data-mapping source; figures are rounded and should be read as indicative of relative scale rather than an exact official count (see Section 4.5).

The table 3 presents the Gross State Domestic Product (GSDP), the number of MSMEs, and MSME density across major Indian states. Maharashtra recorded the highest GSDP and the largest number of MSMEs, followed by Tamil Nadu, Uttar Pradesh, Karnataka, and Gujarat, reflecting their strong economic performance. In terms of MSME density (MSMEs per ₹1 lakh crore of GSDP), Assam ranked first, followed by Himachal Pradesh, Bihar, West Bengal, and Rajasthan, indicating a greater concentration of MSMEs relative to their economic size. In contrast, Delhi, Karnataka, Goa, and Telangana recorded the lowest MSME density. The results reveal that while economically larger states generally have more MSMEs in absolute terms, MSME density varies considerably across states. Overall, the findings highlight regional differences in economic structure and the relative contribution of the MSME sector to state economies.

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.5.3 Disparity Indices

Table 4. Descriptive Statistics and Concentration Measures (n = 22 states)

Measure	GST Collection (Aug-24)	GSDP (2023-24)	MSME Count
Mean	5,559 (Rs crore)	13,52,808 (Rs crore)	10,85,182
Median	3,629	11,24,139	8,50,000
Std. Deviation	5,742	9,89,015	8,23,724
Coefficient of Variation	103.3%	73.1%	75.9%
Max / Min ratio	49.7	38.1	74.2
Gini coefficient	0.472	0.385	0.383

Author's computation from Tables 2 and 3.

Table 4 is the descriptive statistics and concentration measures of two findings stand out. First, on every measure of dispersion, GST collection is more unequally distributed across these twenty-two states than GSDP is (CV of 103.3 percent versus 73.1 percent; Gini of 0.472 versus 0.385). If GST were a purely proportionate, destination-based tax that tracked economic activity one-for-one, its concentration should approximate that of GSDP; instead, GST revenue is measurably more concentrated than the economic base that generates it. Second, MSME count is the most unequally distributed of the three variables by the max/min ratio (74.2) though not by the Gini coefficient, reflecting the presence of a few very large-GSDP, high-MSME-count states alongside a long tail of smaller states with comparatively low absolute registration, even after accounting for their smaller economic base.

5.4 Correlation Analysis

Table 5. Pearson and Spearman Correlations Between State-Level Variables (n = 22)

Variable Pair	Pearson r	p-value	Spearman rho	p-value
GST collection & GSDP	0.896	<0.001	0.848	<0.001
GST collection & MSME count	0.839	<0.001	0.704	<0.001
GSDP & MSME count	0.929	<0.001	0.940	<0.001
GST growth (%) & GSDP	0.182	0.418	0.158	0.484

Author's computation. p-values from two-tailed tests; significance at conventional 5% level applies to the first three pairs.

GST collection is very strongly and significantly correlated with both GSDP (r = 0.896) and MSME registration count (r = 0.839), and GSDP itself is very strongly correlated with MSME count (r = 0.929). This last correlation is informative in its own right: it indicates that formalisation, as measured by Udyam registration, is not an independent driver operating alongside state economic size but is itself closely tied to it — the states with the largest economies also have the largest registered MSME bases, almost as a matter of scale. The short-run monthly growth rate of GST collection shows no significant association with GSDP level, consistent with growth being driven by more transient, state-specific factors (compliance drives, sectoral shocks, base effects) rather than by structural economic size.

5.5 Regression Analysis

Table 6. OLS Regression Results — Dependent Variable: GST Collection, August 2024 (Rs crore)

Model	Predictor	Coefficient	Std. Error	t	p-value	R^2
Model 1 (simple)	Constant	−1,480.60	956.93	−1.55	0.137	0.803
Model 1 (simple)	GSDP (Rs crore)	0.0052	0.0006	9.04	<0.001	
Model 2 (multiple)	Constant	−1,492.85	983.79	−1.52	0.146	0.804
Model 2 (multiple)	GSDP (Rs crore)	0.0050	0.0016	3.10	0.006	
Model 2 (multiple)	MSME count	0.0003	0.0018	0.17	0.869	

Author's computation. Model 1: GST = a + b(GSDP). Model 2: GST = a + b(GSDP) + c(MSME count). Variance Inflation Factor for both regressors in Model 2 = 20.5, indicating severe multicollinearity between GSDP and MSME count.

GSDP alone explains approximately 80.3 percent of the cross-state variance in GST collection (Model 1, $R^2 = 0.803$) and is highly significant ($p < 0.001$). Adding MSME count in Model 2 does not meaningfully improve fit (R^2 rises only to 0.804) and the MSME coefficient itself is statistically indistinguishable from zero ($p = 0.869$) once GSDP is held constant. The VIF of 20.5 for both regressors, well above the conventional threshold of 10, confirms that this is a multicollinearity problem rather than genuine evidence that MSME registration is irrelevant to GST revenue: because GSDP and MSME count move almost together across states (r = 0.929, Table 5), the multiple regression cannot cleanly separate their individual contributions with only twenty-two observations. The honest reading of Model 2 is therefore that state economic size (GSDP) and MSME formalisation intensity are so closely bound together in this cross-section that they should be treated as a single underlying dimension of regional economic strength for the purposes of this analysis, rather than as two independent predictors — a point taken up further in Section 8.

10. CONCLUSION

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This paper set out to examine whether disparities in MSME formalisation and GST performance across Indian states have contributed to persistent regional economic imbalances. The systematic review, the original twenty-two-state secondary dataset, and the descriptive, correlation, and regression analysis conducted on it point toward a consistent conclusion: GST has meaningfully advanced MSME formalisation and revenue mobilisation at the national level, but the distribution of these gains is heavily skewed toward states that already possessed stronger industrial bases, and on the evidence in Section 5.3 GST revenue is measurably more concentrated across states than the underlying economic base (GSDP) itself. Rather than acting as a levelling reform, GST appears, on the evidence assembled here, to be reinforcing the regional economic geography that predates it, with a small number of western and southern industrial states consolidating their lead while several eastern, central, and north-eastern states remain comparatively under-formalised and under-represented in GST revenue. The strength of this conclusion is appropriately bounded by the cross-sectional, twenty-two-state nature of the dataset used; the panel and spatial extensions set out in Section 9 represent the natural next step for testing whether this association survives controls for time-invariant state characteristics and holds up as a within-state, dynamic relationship rather than only a cross-state one.

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