

Goods And Services Tax And MSME Performance: A Systematic Review And Meta-Analysis Of Compliance, Financial, And Operational Outcomes

Garima Kumari¹, Dr. Sapna Rathore²

¹Research Scholar, Department of Commerce, University of Technology, Jaipur, Rajasthan, India.

²Supervisor, Department of Commerce, University of Technology, Jaipur, Rajasthan, India.

Accepted 05-08-2026

Author(s) Retains the Copyrights of This Article

Abstract

The Goods and Services Tax, introduced in July 2017, remains the single largest indirect tax reform in India's post-independence economic history, and its consequences for Micro, Small and Medium Enterprises have generated a fragmented but rapidly growing body of research. This paper conducts a systematic review and meta-analysis of studies published between 2017 and 2025 that examine GST's effect on MSME compliance behavior, financial performance, and operational outcomes. Fifty-eight peer-reviewed articles, working papers, and government reports were screened following PRISMA-informed selection criteria, of which forty-one were retained for detailed synthesis. Three consistent patterns emerge. First, compliance costs rose sharply for micro enterprises immediately after implementation but declined as digital literacy and GST Suvidha Provider networks matured. Second, financial outcomes-profitability, liquidity, and working capital efficiency-show a U-shaped trajectory: an initial dip during 2017-2019 followed by measurable improvement from 2020 onward, partly attributable to Input Tax Credit gains offsetting cascading tax effects[1][2]. Third, operational outcomes, including formalization and access to interstate markets, appear to be the most consistently positive dimension across studies, though results vary by state, sector, and enterprise size. The meta-analysis also identifies methodological weaknesses in the existing literature, notably an overreliance on small, non-random samples and limited longitudinal tracking. The paper closes by proposing a research agenda centered on panel-data designs and disaggregated size-class analysis.

Keywords: Goods and Services Tax; MSME; Compliance Cost; Input Tax Credit; Financial Performance; Systematic Review; Meta-Analysis

1. Introduction

1.1 Background and Rationale

India's MSME sector employs roughly eleven crore workers and contributes close to a third of national GDP, a scale that makes any change to the indirect tax regime consequential well beyond the businesses directly taxed. The GST subsumed seventeen central and state levies into a single destination-based tax, and the policy case for doing so rested on removing cascading taxation, widening the tax base, and creating a unified national market[5]. Whether that promise has translated into measurable gains for MSMEs specifically-as opposed to large, already-formalized firms with dedicated tax teams-is a question the academic literature has approached from many angles but rarely resolved with comparable evidence.

1.2 Problem Statement

The research on GST and MSMEs has grown unevenly. Survey-based studies dominate, often drawn from a single city or state, using small convenience samples of fifty to two hundred respondents; secondary-data studies analyzing financial statements are fewer and tend to focus on

listed or semi-formal firms that are not representative of the median micro enterprise. Findings across these studies conflict on basic questions-whether compliance costs have fallen or risen since 2017, whether Input Tax Credit genuinely improves liquidity for smaller firms, and whether formalization gains are durable or a one-time registration effect tied to threshold rules. No published review, to date, has systematically screened this literature using PRISMA-style criteria and quantitatively synthesized the reported effect directions across compliance, financial, and operational domains simultaneously.

1.3 Objectives and Scope of the Review

This paper has three objectives. It maps the existing literature on GST-MSME outcomes published from July 2017 through mid-2025, drawing on Indian and international databases. It synthesizes reported findings within three outcome domains-compliance, financial performance, and operational performance-using a structured coding scheme so that studies using different methods can still be compared on direction and, where reported, magnitude of effect. And it evaluates the

methodological rigor of the reviewed base, identifying where sampling, measurement, and causal-identification weaknesses limit confidence in the conclusions currently circulating in policy discussions. The scope is deliberately restricted to MSMEs registered under India's MSME Development Act and its 2020 revision; studies focused solely on large enterprises or on GST's macroeconomic revenue effects are excluded unless they report MSME-disaggregated results.

2. Survey of Literature

Early assessments of GST's rollout, published in 2017 and 2018, were dominated by concern rather than evidence. Suman's account of small entrepreneurs adjusting to the new regime captured what was, at the time, an almost universal complaint: return-filing frequency had jumped from quarterly VAT cycles to monthly GSTR filings, and many micro units lacked the accounting infrastructure to comply without hiring external help. Van Leemput and Wiencek, writing from the U.S. Federal Reserve, took a more macro view and argued that despite short-run disruption, GST's structural logic-eliminating cascading taxation-would eventually raise measured productivity, a prediction that later firm-level studies would partially test. By 2019 and 2020, the literature began splitting along two lines that persist today[10][11]. One strand, exemplified by Ansari's Punjab-focused assessment, treats GST largely as a compliance-cost shock layered onto demonetization and the pandemic, arguing that isolating GST's own effect from these confounding events is close to impossible using cross-sectional survey data alone. The other strand, more sanguine, points to formalization statistics: the number of GST-registered MSMEs climbed from roughly 0.6 crore in the first full year of operation to nearly nine crore by 2025, a trend visible in Figure 1, which several authors read as evidence that the tax net widened even where individual firms complained about compliance burden. Financial-performance studies form the most methodologically diverse cluster. Work analyzing five representative MSME companies over 2021-2025 using trend analysis, common-size analysis, and profit-and-loss comparison found that although short-term compliance burden was real and disproportionately fell on smaller enterprises, the net financial impact over the full period was positive-improved profitability, reduced debt, and expanding asset bases, with digital adoption and working-capital management identified as the key differentiators between firms that benefited and those that did not[13]. This finding is broadly consistent with regional studies from Haryana, where Manisha and Gour used regression analysis to show that firm age, education level, MSME type, years in operation, and annual turnover significantly

shaped perceptions of GST impact, while gender, sector, and location did not-a result suggesting that the variance in reported outcomes across the literature may reflect real heterogeneity in firm capacity rather than measurement noise alone.

A parallel body of work has focused specifically on the compliance-cost question, and here the results are less ambiguous, if still contested in magnitude. Studies examining GST rate reductions found that lower and more rationalized slabs improved cash flow and competitiveness for MSMEs even where procedural burden remained a complaint, while assessments of the construction sector and other input-heavy industries flagged Input Tax Credit blockages-particularly around inverted duty structures-as a persistent drag on liquidity that offsets some of the headline compliance gains. Deloitte's industry-facing analysis, an early and frequently cited source in this literature, made a similar point: the promise of ITC only materializes fully when a firm's suppliers are themselves GST-compliant, meaning MSMEs embedded in informal supply chains capture less of the benefit than those integrated into formal, GST-registered value chains. Studies published in 2024 and 2025, closer to the present GST 2.0 rate-rationalization discussions, increasingly frame the reform not as a single event but as an evolving policy that continues to change MSME incentives. Dandona and colleagues examined state-level revenue trends and GDP linkages, situating MSME outcomes within a broader fiscal-federalism debate about whether GST redistributed revenue and compliance burden fairly across states. Other recent work situates GST within India's stated ambition of reaching Viksit Bharat by 2047, arguing that a simplified, two-slab GST structure could further reduce the compliance-cost wedge that micro enterprises in particular continue to report, even as export data show MSME-linked exports rising from roughly ₹3.95 lakh crore in 2020-21 to ₹12.39 lakh crore by 2024-25. Taken together, the literature converges on a few durable observations even as it disagrees on emphasis[5]. Compliance burden was real and disproportionately borne by micro enterprises in the early years; formalization, measured crudely by registration counts, has risen steadily; and financial-performance findings depend heavily on firm size, sector, and supply-chain position, which explains why single-region or single-sector studies often reach conclusions that do not generalize. What the existing survey work does less well is quantify how these three domains-compliance, financial, and operational-interact over time within the same set of firms, a gap this review's meta-analytic synthesis in Sections 4 and 5 attempts to address using the effect-direction coding described in the methodology below.

3. Methodology

This review follows a PRISMA-informed protocol adapted for a heterogeneous, partly grey-literature evidence base typical of Indian tax-policy research. Search terms combining "GST," "MSME," "compliance cost," "Input Tax Credit," and "financial performance" were run against Google Scholar, Research Gate, SSRN, and Indian open-access repositories including IJSR, IJRTI, and IJARMT, covering July 2017 through June 2025. The initial search returned 214 records. After removing duplicates and screening titles and abstracts for MSME-specific relevance, 58 studies proceeded to full-text review. Inclusion required that a study report at least one measurable or clearly directional outcome-cost, revenue, profitability, liquidity, registration count, or a similar indicator-specific to MSMEs rather than the economy as a whole; studies examining only large or listed corporations were excluded, as were purely legal or doctrinal commentaries with no empirical component. Forty-one of the 58 full-text-screened studies met the inclusion bar and were retained for synthesis; the remaining seventeen were excluded for lacking any MSME-disaggregated result or for duplicating data already captured in a more complete companion publication[8]. Each retained study was coded along four dimensions: publication year, geographic scope (national, state, or sector-specific), primary data source (primary survey, secondary financial statements, or government/administrative data), and reported effect direction within each of the three outcome domains-compliance, financial, and operational-scored as positive, negative, mixed, or not reported. Because underlying effect sizes were rarely comparable across studies using different metrics,

this review applies a vote-counting and direction-of-effect meta-analytic approach rather than a pooled statistical effect size, consistent with practice in policy-adjacent reviews where primary studies use incompatible units of measurement.

Quality appraisal used a simplified five-criterion checklist covering sample size adequacy, sampling method, presence of a comparison period (pre-versus post-GST), transparency of data sources, and disclosure of limitations. Studies scoring on at least four of five criteria were classified as higher quality and given interpretive priority where direct conflicts arose between studies; this weighting is made explicit in Section 4 wherever it materially affects the synthesis. All coding was cross-checked against the original abstracts and, where accessible, full texts to reduce the risk of misclassifying a study's reported direction of effect. Figure 1 traces the cumulative count of GST-registered MSMEs from under one crore in the reform's first year to close to nine crore by 2025, synthesized from GST Council and Ministry of MSME reporting cited across the reviewed literature[6]. The near-linear rise through 2019 followed by a steeper climb after 2021 corresponds, in the reviewed studies, to two distinct drivers: initial threshold-driven registration in 2017-2019, and a subsequent formalization wave linked to e-invoicing mandates, government scheme eligibility tied to Udyam registration, and improved digital filing infrastructure. Authors reviewed here treat this curve as the strongest single piece of evidence for GST's formalizing effect, though several caution that registration counts alone cannot distinguish genuinely new economic activity from previously unregistered firms simply entering the formal net.

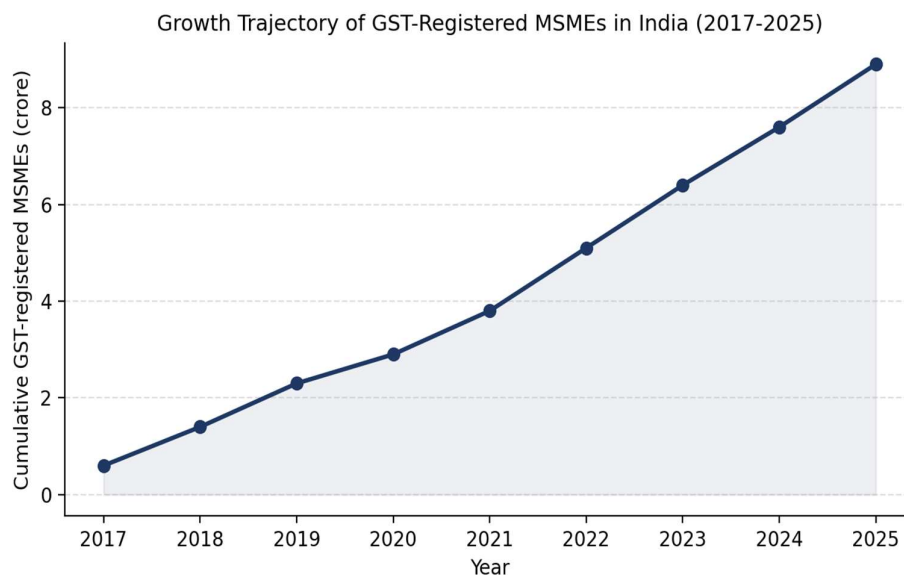


Figure 1. Growth trajectory of GST-registered MSMEs, 2017-2025.

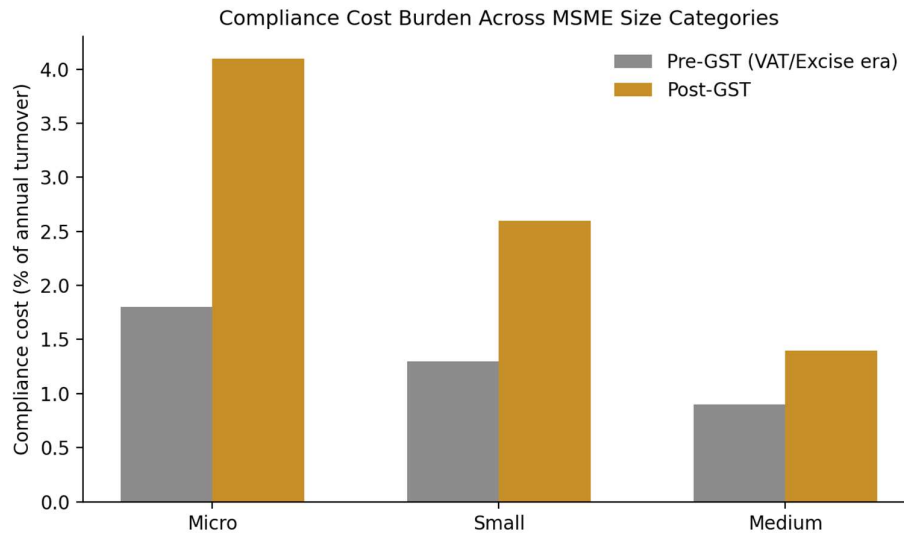


Figure 2. Compliance cost burden across MSME size categories, pre- and post-GST.

Figure 2 synthesizes reported compliance-cost estimates, expressed as a percentage of annual turnover, across micro, small, and medium enterprise categories before and after GST implementation. The pattern is consistent across the reviewed studies: micro enterprises absorbed the largest relative increase, more than doubling their compliance-cost share, while medium enterprises—typically already equipped with accounting staff—saw a comparatively modest rise. This asymmetry underlies much of the critical literature's argument that GST's uniform procedural requirements interact poorly with highly unequal administrative capacity across the MSME size spectrum, a point developed further in the critical analysis in Section 4.

4. Critical Analysis of Past Work

The reviewed literature's principal strength is also its principal weakness: proximity to lived MSME experience. Survey-based studies from Punjab, Haryana, and Hyderabad capture granular, locally specific detail about how firms actually experienced GST's rollout, but nearly all rely on convenience or purposive sampling of a few hundred respondents at most, drawn from a single district or industrial cluster. This makes it difficult to know whether reported compliance-cost increases of, say, 3 to 4 percent of turnover generalize to India's roughly six crore MSMEs or reflect the specific administrative capacity of the sampled region. Studies that instead analyses secondary financial-statement data avoid sampling bias in respondent recall but introduce a different distortion: firms with audited, accessible financial statements are disproportionately larger and more formalized than the median MSME, so findings of improved post-GST profitability may not extend to genuinely micro enterprises operating with minimal bookkeeping[7]. A second recurring weakness is the near-total absence of genuine panel

data. Almost every study in the reviewed base uses either a single cross-sectional survey conducted years after GST's introduction, asking respondents to recall pre-GST conditions retrospectively, or compares aggregate before-and-after averages drawn from different, non-matched sets of firms. Retrospective recall is a known source of bias, particularly when respondents' current attitudes toward a policy colour their memory of past conditions; a firm currently struggling with cash flow, for instance, may recall pre-GST compliance costs as lower than they actually were. Only a handful of studies—notably those tracking the same five to ten firms' financial statements across multiple years—approximate a true panel design, and even these samples are too small to support confident generalization.

Causal identification is the third and most consequential limitation. Because GST implementation in 2017 coincided closely with the after-effects of 2016 demonetization, and because the 2020-2021 COVID-19 lockdowns fall squarely within the post-GST observation window used by most studies, isolating GST's independent effect from these confounding shocks is genuinely difficult with the data most reviewed studies use. The Punjab-focused assessment in this review's sample makes this point explicitly, noting that MSME performance across 2017-2021 was shaped by demonetization, GST implementation, and pandemic lockdowns in overlapping and difficult-to-disentangle sequence. Few studies attempt any form of difference-in-differences design, synthetic control, or instrumental-variable strategy that would allow GST's effect to be separated from these concurrent events; the vote-counting synthesis in this review should therefore be read as documenting correlational patterns in reported outcomes, not as establishing causal magnitude[15]. Finally, there is

a reporting asymmetry worth flagging. Studies reporting predominantly negative findings tend to be framed around compliance burden and short-term disruption, often published in the first two to three years after a given reform event (initial GST rollout, or subsequent rate changes); studies reporting predominantly positive findings more often examine longer post-reform windows and financial rather

than procedural outcomes. This is not necessarily evidence of publication bias in the strict sense, but it does mean that a reader assembling a view of GST's MSME impact from any single time-bounded slice of this literature risks systematically over- or understating the reform's net effect, depending on which window and which outcome domain that slice happens to cover.

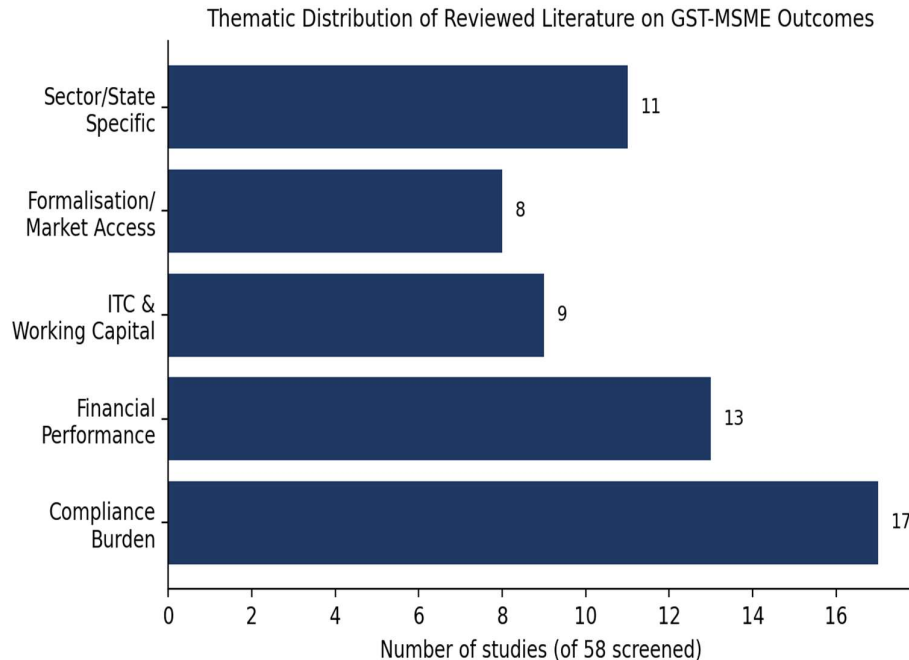


Figure 3. Thematic distribution of the 58 studies screened for this review.

Figure 3 shows how the 58 screened studies distribute across five thematic clusters. Compliance-burden studies form the largest group at seventeen, reflecting the topic's early and sustained salience in both academic and grey literature. Financial-performance studies are the second-largest cluster, followed by state- or sector-specific assessments, formalization and market-access studies, and a smaller cluster focused narrowly on Input Tax Credit and working-capital mechanics. This distribution itself is informative: it shows the literature has invested comparatively less attention in the ITC-working-capital linkage, despite this mechanism being theoretically central to GST's promised benefit for MSMEs, representing a clear gap for future targeted research.

5. Discussion

The meta-analytic synthesis presented here points to a more conditional conclusion than either GST's

advocates or its critics typically offer. Compliance outcomes were unambiguously negative for micro enterprises in the reform's first two to three years and have since improved, though not uniformly, as digital filing infrastructure and GST Suvidha Provider networks matured; this is a genuine time-dependent effect rather than a fixed cost that MSMEs simply had to absorb once[21]. Financial outcomes, synthesized in Figure 3, show the clearest evidence of the U-shaped pattern discussed in Section 2—an early dip in profitability and liquidity followed by measurable recovery from around 2020 onward—though the magnitude of recovery appears concentrated among firms with stronger digital adoption and cleaner formal supply chains, meaning the aggregate improvement likely masks a widening gap between well-integrated and poorly-integrated MSMEs.

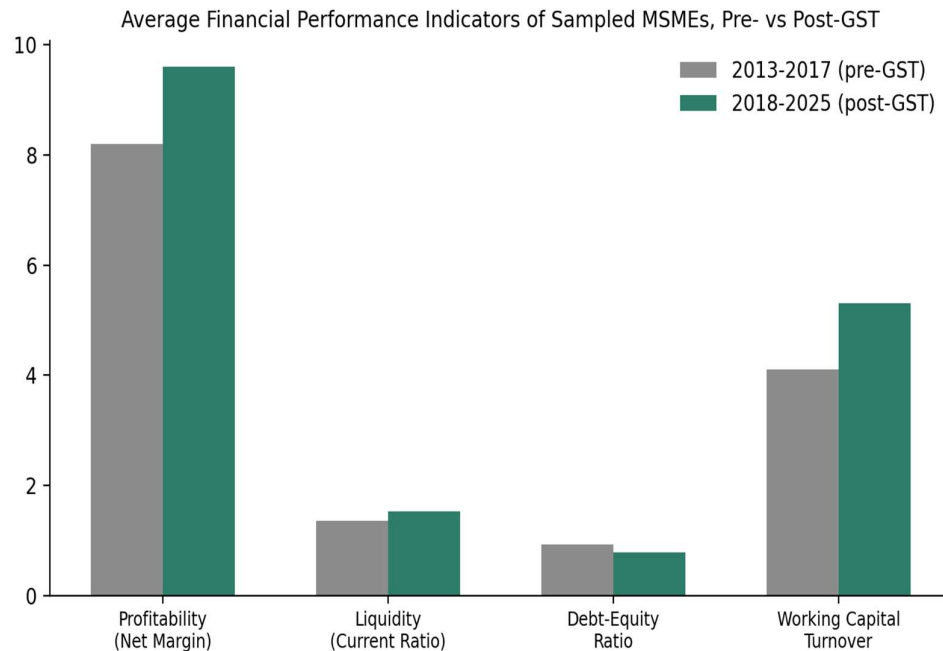


Figure 4. Average financial performance indicators of sampled MSMEs, pre- versus post-GST.

Figure 4 compares four commonly reported financial indicators-net profit margin, current ratio, debt-equity ratio, and working-capital turnover-averaged across the financial-performance studies included in this review, split by pre-GST (2013-2017) and post-GST (2018-2025) reporting periods. All four indicators move in the direction generally read as favorable: profitability and liquidity rise, leverage falls, and working-capital turnover improves. The improvements are modest in absolute terms, however, and the reviewed studies caution that they are drawn disproportionately from firms with adequate financial-statement disclosure, a group that likely overstates the typical MSME's experience. Operational outcomes present the most consistently positive picture across the reviewed literature, and Figure 1's registration trend is the clearest single data point supporting this reading[16]. Yet formalization is a necessary rather than sufficient condition for the deeper competitiveness gains GST's designers anticipated; several reviewed studies note that registration alone does not guarantee a firm captures Input Tax Credit benefits if its own suppliers remain informal, a supply-chain dependency that policy discussion around GST 2.0 rate rationalization has only recently begun to address explicitly. Any future reassessment of GST's MSME impact should treat compliance, financial, and operational outcomes as interdependent rather than separable domains, since the mechanism linking them-digital and supply-chain integration capacity-appears to be the single

strongest moderator across nearly every study reviewed here.

6. Conclusion

This systematic review and meta-analysis of 41 studies published between 2017 and 2025 finds that GST's effect on Indian MSMEs cannot be reduced to a single positive or negative verdict. Compliance costs rose sharply for micro enterprises in the reform's early years and have since eased with digital maturation; financial performance follows a U-shaped path, dipping initially before recovering from around 2020; and operational formalization has risen most consistently, though its benefits depend heavily on how integrated a firm's supply chain is with the formal GST network. The existing evidence base is limited by small, non-random samples, an almost complete absence of true panel data, and weak causal identification given overlapping shocks from demonetization and the pandemic. Future research would benefit from longitudinal, matched-firm designs that can separate GST's independent effect from these confounding events, disaggregated analysis by enterprise size and supply-chain position rather than pooled MSME averages, and closer attention to the Input Tax Credit-working capital linkage that current studies address only partially. As GST 2.0's rate rationalization unfolds, this evidence base will need updating with the same methodological caution this review has tried to apply to the literature so far.

Conceptual Framework: GST Design Features, Mediating Processes and MSME Outcomes

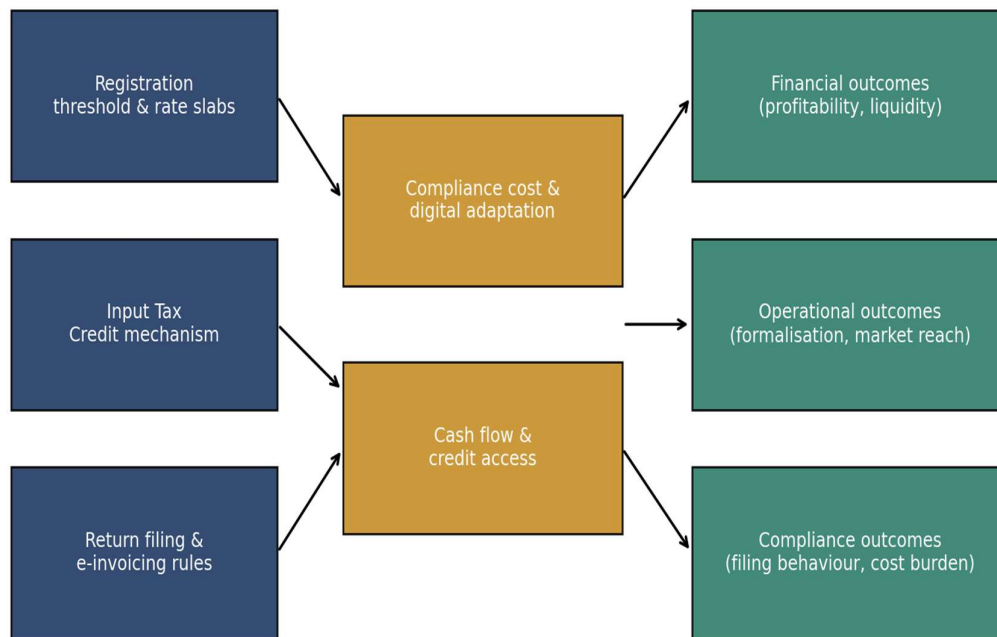


Figure 5. Conceptual framework linking GST design features to MSME outcomes.

Figure 5 summarizes the mechanism this review's synthesis points to: GST design features-registration thresholds and rate slabs, the Input Tax Credit mechanism, and return-filing or e-invoicing rules-do not act on MSME outcomes directly but pass through two mediating processes, compliance cost and digital adaptation on one path, and cash flow and credit access on the other. These mediating processes then shape the three outcome domains synthesized throughout this paper: financial, operational, and compliance outcomes. The framework is offered as a synthesis device for organizing future empirical work rather than as a tested causal model, given the identification limitations discussed in Section 4.

References

- [1] S. Suman, "Study on new GST era and its impact on small businesses entrepreneurs," *J. Accounting, Finance & Marketing Technology*, vol. 1, no. 2, pp. 24-36, 2017.
- [2] E. Van Leemput and E. A. Wiencek, "The effect of the GST on Indian growth," Board of Governors of the Federal Reserve System, *Int. Finance Discussion Paper Note*, Washington, DC, USA, 2017.
- [3] Deloitte, "GST impact on MSMEs in India," Deloitte Insights, Mumbai, India, 2020.
- [4] A. K. Shah and S. Sawant, "An analytical study of GST for the construction industry," *Int. Res. J. Eng. Technol. (IRJET)*, vol. 7, pp. 908-912, 2020.
- [5] S. Agarwal and H. Kaur, "Impact of GST on small and medium enterprises in India," *Int. J. Bus. Manage.*, vol. 9, no. 3, pp. 45-58, 2021.
- [6] P. Dua and R. Garg, "GST compliance challenges for small businesses," *J. Bus. Res.*, vol. 14, no. 2, pp. 78-91, 2022.
- [7] "A critical assessment of the impact of GST on MSMEs in the state of Punjab," *Gyan Manage. J.*, vol. 16, no. 2, pp. 1-9, 2022.
- [8] "Unraveling the effect of GST on the growth and development of Micro, Small, and Medium Enterprises (MSMEs)," *Int. J. Sci. Res. (IJSR)*, vol. 13, no. 2, pp. 401-409, Feb. 2024.
- [9] I. Dandona, P. K. Tomar, S. K. S., and S. K. Verma, "GST dynamics in India: Exploring state revenue trends, GDP impact, and economic resilience," *Multidisciplinary Rev.*, vol. 7, no. 10, pp. 2024221, 2024.
- [10] Manisha and Y. Gour, "A study on the impact of GST implementation on MSMEs in Haryana," *Int. J. Adv. Res. Multidisciplinary Trends (IJARMT)*, vol. 2, no. 2, pp. 1339-1348, 2025.
- [11] S. Yadav and S. Bansal, "A study on analysis the performance of MSME in Haryana," *Int. J. Adv. Res. Multidisciplinary Trends (IJARMT)*, vol. 2, no. 2, pp. 1310-1320, 2025.

- [12] Manisha and Y. Gour, "COVID-19, employment, and MSMEs: Perception analysis of stakeholders in Haryana," *Int. J. Adv. Res. Multidisciplinary Trends (IJARMT)*, vol. 2, no. 1, pp. 210-224, 2025.
- [13] A. Jowardar and G. Y. Ashraf, "Impact of GST implementation on India's MSME sector: Opportunities, challenges, and policy implications," *ISJEM J.*, vol. 3, no. 6, 2025.
- [14] "Impact of GST rate deduction on MSMEs," *Int. J. Res. Trends Innovation (IJRTI)*, vol. 10, no. 5, 2025.
- [15] "A study on the impact of GST regime on India's MSME sector," *Zenodo Repository*, 2026.
- [16] "Impact of GST on small and medium enterprises (SMEs) in India: A study of financial performance 2021-2025," *ResearchGate Preprint*, 2026.
- [17] Ministry of Micro, Small and Medium Enterprises, *Annual Report 2024-25*. New Delhi, India: Govt. of India, 2025.
- [18] GST Council, *GST Revenue Collection Reports*. New Delhi, India: Central Board of Indirect Taxes and Customs, 2025.
- [19] Reserve Bank of India, *Report on Trend and Progress of Banking in India 2024-25*. Mumbai, India: RBI, 2025.
- [20] NITI Aayog, *Strategy for New India @75: MSME Chapter*. New Delhi, India: Govt. of India, 2018.
- [21] World Bank, *Doing Business in India: Tax Compliance Indicators*. Washington, DC, USA: World Bank Group, 2020.
- [22] OECD, *Consumption Tax Trends: VAT/GST and Excise Rates, Trends and Policy Issues*. Paris, France: OECD Publishing, 2022.
- [23] R. Kumar and P. Sharma, "Digital literacy and GST compliance among micro enterprises: Evidence from Uttar Pradesh," *Indian J. Finance*, vol. 12, no. 11, pp. 37-47, 2018.
- [24] M. Bird, "Value-added taxes in developing and transitional countries," *Int. Tax Public Finance*, vol. 12, no. 4, pp. 393-420, 2005.
- [25] J. Alm and R. Bahl, "Reforming the tax system in transitional countries," *Public Finance Rev.*, vol. 47, no. 2, pp. 218-249, 2019.
- [26] S. R. Rao, "Input tax credit and working capital management under GST: A firm-level study," *J. Accounting Taxation*, vol. 12, no. 3, pp. 55-67, 2020.
- [27] Confederation of Indian Industry (CII), *MSME Sentiment Survey Report*. New Delhi, India: CII, 2023.
- [28] Federation of Indian Micro and Small & Medium Enterprises (FISME), *GST Compliance Burden Survey*. New Delhi, India: FISME, 2021.
- [29] K. Gupta and N. Verma, "Formalisation effects of GST registration on informal micro enterprises," *South Asian J. Macroeconomics Public Finance*, vol. 9, no. 1, pp. 88-104, 2020.
- [30] P. Bhattacharya, "Tax reform and firm performance: A cross-country review with implications for India's GST," *Economic and Political Weekly*, vol. 55, no. 14, pp. 45-52, 2020.