

# Impact of Goods and Services Tax (GST) on Business Operations, Compliance, and Trade Competitiveness: Evidence from SMEs in Bangalore, Karnataka.

## Abstract:

The implementation of the Goods and Services Tax (GST) in India represents a significant structural reform aimed at simplifying the indirect tax regime and promoting economic integration. This study examines the impact of GST on business operations, tax compliance, and trade competitiveness among Small and Medium Enterprises (SMEs) in Bangalore, Karnataka. A quantitative research design was adopted, and primary data were collected from 192 SMEs using a structured questionnaire. Statistical tools such as descriptive statistics, correlation, regression analysis, and ANOVA were employed to analyze the data. The findings reveal that GST has significantly enhanced tax compliance while moderately improving operational efficiency and trade competitiveness. However, the compliance burden and technological challenges continue to hinder SME performance. The study offers policy recommendations to improve GST implementation and support SME growth.

**Keywords:** GST, SMEs, Tax Compliance, Operational Efficiency, Trade Competitiveness,

## 1. Introduction

Taxation plays a crucial role in shaping the economic structure of a country. The introduction of the Goods and Services Tax (GST) in India in July 2017 marked a paradigm shift in the indirect taxation system. By replacing multiple indirect taxes such as VAT, excise duty, and service tax, GST aimed to establish a unified tax framework and eliminate cascading effects.

The primary objectives of GST include enhancing transparency, improving compliance, reducing tax evasion, and facilitating ease of doing business. The introduction of GST has also contributed to the digitalization of tax administration, thereby promoting accountability and efficiency.

Small and Medium Enterprises (SMEs) are vital to India's economy, contributing significantly to GDP, exports, and employment. In Bangalore, Karnataka—one of India's leading industrial and technological hubs—SMEs play a pivotal role in economic development. However, the transition to GST has created both opportunities and challenges for SMEs.

While GST simplifies taxation and removes interstate barriers, SMEs face issues such as compliance complexity, increased administrative costs, and technological adaptation. Therefore, it becomes essential to assess the actual impact of GST on SME performance.

34 This study aims to analyze the impact of GST on SMEs in Bangalore, focusing on operational  
35 efficiency, tax compliance, and trade competitiveness.

## 36 **2. Review of Literature**

37 The introduction of the Goods and Services Tax (GST) in India has attracted significant academic  
38 attention, particularly in relation to its impact on Micro, Small, and Medium Enterprises (MSMEs).  
39 The existing literature highlights both opportunities and challenges associated with GST  
40 implementation, focusing on compliance burden, financial performance, digital transformation, and  
41 structural changes in the SME sector.

42 Early studies emphasized the transformative potential of GST for SMEs. Raman and Iyer (2018)  
43 and Chandrasekaran et al. (2018) observed that GST aimed to simplify the indirect taxation system  
44 and create a unified national market, although initial operational challenges were evident. Similarly,  
45 Mehta and Patel (2019) and Prasad and Reddy (2019) identified issues such as lack of awareness,  
46 technological barriers, and transition-related difficulties faced by small enterprises during the early  
47 phase of GST implementation.

48 A substantial body of research has examined the compliance burden imposed by GST. Ahuja and  
49 Gupta (2021) and Chatterjee and Pal (2022) reported that GST has increased compliance costs due  
50 to frequent return filing requirements, complex documentation, and reliance on digital platforms.  
51 Khan and Pathak (2023) further highlighted that SMEs, particularly in less developed regions,  
52 continue to face significant compliance challenges due to limited technical expertise.

53 The financial implications of GST on SMEs have also been widely studied. Bhattacharya and Singh  
54 (2022) and Hussain and Khan (2022) found that GST has adversely affected working capital  
55 management due to delays in input tax credit and increased liquidity pressures. Dutta and Bose  
56 (2021) reported mixed effects on profitability, noting that while some firms benefited from tax  
57 rationalization, others experienced increased operational and compliance costs.

58 Several studies have explored GST's role in formalization and economic integration. Joshi and  
59 Yadav (2020) and Narayanan (2021) argued that GST has contributed to integrating the informal  
60 sector into the formal economy by encouraging tax registration and improving transparency.  
61 Srivastava and Tiwari (2021) further emphasized that GST has strengthened tax compliance culture  
62 and expanded the tax base.

63 The sectoral and operational impact of GST has also been extensively analyzed. Chaudhary and  
64 Jain (2020) and Raju and Thomas (2021) found that while the manufacturing sector experienced  
65 initial disruptions, it also benefited from improved efficiency over time. Kumar and Verma (2022)

66 and Sharma and Kapoor (2020) highlighted improvements in supply chain efficiency due to the  
67 elimination of interstate tax barriers under GST.

68 The digital transformation driven by GST has emerged as another important theme in the literature.  
69 Das and Roy (2023) and Venkatesh and Rao (2022) noted that GST has accelerated the adoption of  
70 digital technologies among SMEs, particularly in accounting and tax compliance. However,  
71 Mohanty and Nayak (2023) pointed out the persistence of a digital divide, especially among rural  
72 and small-scale enterprises.

73 Regional and sector-specific studies have also provided valuable insights. Dhillon et al. (2022) and  
74 Sherpa et al. (2022) documented region-specific challenges such as inadequate infrastructure and  
75 lack of awareness. Lichchavi et al. (2021) highlighted similar issues in Bangalore, Karnataka,  
76 including compliance difficulties and increased cost burdens for SMEs.

77 Recent studies have adopted a more balanced perspective, examining both the positive and negative  
78 impacts of GST. Gupta and Sharma (2023) and Dhavaleshwar (2024) concluded that GST has had a  
79 dual impact—enhancing transparency, efficiency, and competitiveness, while simultaneously  
80 increasing compliance burden and financial strain on SMEs. Agarwal and Arora (2023) specifically  
81 focused on rural micro enterprises and found that GST presents both challenges, such as digital  
82 illiteracy and compliance costs, and opportunities, including market expansion and formalization.

83 In addition, studies by Tandon and Bhalla (2023) and Kaur and Singh (2021) highlighted  
84 improvements in export competitiveness due to input tax credit benefits and reduced cascading  
85 effects of taxation. However, Sen and Basu (2022) raised concerns about inflationary pressures  
86 affecting the sustainability of SMEs under the GST regime.

87 Overall, the literature suggests that GST has brought significant structural changes to the SME  
88 sector in India. While it has enhanced transparency, efficiency, and formalization, challenges  
89 related to compliance burden, working capital constraints, and digital readiness persist. The mixed  
90 findings across studies indicate the need for further empirical research, particularly focusing on  
91 rural enterprises and long-term sustainability under GST.

92

93

94

95

### 96 **3. Research Gap**

97 Existing literature on GST and SMEs in India largely focuses on individual aspects such as  
98 compliance burden, working capital, or digital adoption, with limited studies adopting a holistic

99 approach. Most research is conducted at the national or regional level, with insufficient focus on  
100 urban business hubs like Bangalore, where SMEs operate under unique economic and technological  
101 conditions.

102 Further, there is a lack of empirical, primary data-based studies examining the combined impact of  
103 GST on business operations, compliance behavior, and trade competitiveness. Additionally, the  
104 relationship between GST-driven compliance requirements and operational efficiency remains  
105 underexplored.

106 Thus, a clear gap exists for a comprehensive, city-specific empirical study that integrates these  
107 dimensions to better understand the real impact of GST on SMEs in Bangalore, Karnataka

#### 108 **4. Objectives of the Study**

- 109 1. To analyze the impact of GST on operational efficiency of SMEs
- 110 2. To evaluate the effect of GST on tax compliance
- 111 3. To examine the influence of GST on trade competitiveness
- 112 4. To assess the overall impact of GST on SME performance

#### 113 **5. Hypotheses of the Study**

- 114 • **H1:** GST has a significant positive impact on operational efficiency
- 115 • **H2:** GST has a significant positive impact on tax compliance
- 116 • **H3:** GST has a significant positive impact on trade competitiveness

#### 117 **6. Research Methodology**

##### 118 **6.1 Research Design**

119 The study adopts a **quantitative and descriptive research design** to analyze the impact of GST on  
120 SMEs.

##### 121 **6.2 Data Collection**

122 Primary data were collected through a structured questionnaire using a five-point Likert scale  
123 ranging from strongly disagree to strongly agree.

### 6.3 Sample Design

- Sample Size: 192 SMEs
- Sampling Technique: Convenience sampling
- Study Area: Bangalore, Karnataka

### 6.4 Variables

- Independent Variable: GST Implementation
- Dependent Variables: Operational Efficiency, Tax Compliance, Trade Competitiveness, SME Performance

### 6.5 Tools for Analysis

- Descriptive Statistics
- Correlation Analysis
- Regression Analysis
- ANOVA

## 7. Data Analysis and Interpretation

This section presents the analysis and interpretation of the data collected to examine the impact of Goods and Services Tax (GST) on Small and Medium Enterprises (SMEs) in Bangalore, Karnataka. The analysis is based on primary data collected from 192 respondents using a structured questionnaire.

The section is organized into descriptive statistics, correlation analysis, regression analysis, and hypothesis testing. The results are interpreted in line with the research objectives, followed by a discussion connecting findings with existing literature.

### 7.1 Descriptive Statistics

Descriptive statistics provide a preliminary understanding of the data by summarizing the central tendency and dispersion of variables.

**Table 1: Descriptive Statistics of Key Variables**

Variables	Mean	Std. Deviation	N
GST Implementation	3.85	0.72	192
Operational Efficiency	3.67	0.68	192
Tax Compliance	3.92	0.75	192
Trade Competitiveness	3.58	0.70	192
SME Performance	3.60	0.73	192

The results indicate that the mean value for GST implementation is 3.85, suggesting that respondents generally perceive GST implementation to be moderately effective. Tax compliance shows the highest mean (3.92), indicating a relatively strong perception of improved compliance under GST.

Operational efficiency (mean = 3.67) and trade competitiveness (mean = 3.58) reflect moderate improvements, while SME performance (mean = 3.60) suggests a balanced but not highly positive outcome.

The standard deviation values are relatively low (ranging from 0.68 to 0.75), indicating consistency in responses among SMEs.

**Interpretation:**

Overall, SMEs perceive GST as beneficial in improving compliance and transparency, but its impact on operational efficiency and competitiveness is moderate rather than substantial.

**7.2 Correlation Analysis**

Correlation analysis was conducted to examine the strength and direction of relationships among the variables.

**Table 2: Pearson Correlation Matrix among the Study Variables**

Variables	GST Impl.	Oper. Eff.	Tax Comp.	Trade Comp.	SME Perf.
GST Implementation	1	.620**	.710**	.580**	.540**
Operational Efficiency	.620**	1	.550**	.600**	.630**
Tax Compliance	.710**	.550**	1	.520**	.500**
Trade Competitiveness	.580**	.600**	.520**	1	.610**
SME Performance	.540**	.630**	.500**	.610**	1

**Notes:**

- N = 192
- Correlation is significant at 0.01 level (2-tailed)

The findings reveal that GST implementation has a **strong positive correlation with tax compliance (r = 0.71)**, indicating that GST significantly enhances transparency and adherence to tax regulations.

A **moderate positive correlation exists between GST and operational efficiency (r = 0.62)**, suggesting that GST contributes to improvements in business processes, though not uniformly.

Similarly, GST shows a **moderate positive relationship with trade competitiveness ( $r = 0.58$ )**, implying that the removal of interstate barriers has improved market access for SMEs. SME performance is positively correlated with all variables, particularly operational efficiency ( $r = 0.63$ ) and trade competitiveness ( $r = 0.61$ ).

#### **Interpretation:**

The correlation results confirm that GST is positively associated with key business outcomes. However, the strength of relationships varies, indicating that while GST improves compliance significantly, its effect on operational and competitive performance is comparatively moderate.

### **7.3 Regression Analysis**

Regression analysis was employed to determine the causal impact of GST on key dependent variables.

#### **Consolidated Regression Model Summary**

**Table 3: Summary of Regression Models**

<b>Model No.</b>	<b>Regression Relationship</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error</b>
Model 1	GST → Operational Efficiency	0.620	0.384	0.381	0.52
Model 2	GST → Tax Compliance	0.710	0.504	0.501	0.49
Model 3	GST → Trade Competitiveness	0.580	0.336	0.332	0.55
Model 4	Compliance Burden → SME Performance	0.460	0.212	0.208	0.61

#### **Interpretation**

Table 3 presents the consolidated regression model summaries for all four models. Among the models, **Model 2 (GST → Tax Compliance)** explains the highest proportion of variance with  $R^2 = 0.504$ , indicating that 50.4% of the variation in tax compliance is explained by GST implementation. Model 1 explains 38.4%, Model 3 explains 33.6%, and Model 4 explains 21.2% of the variation in the dependent variables.

## 7.4 ANOVA

### Consolidated ANOVA Results

**Table 4: ANOVA Results for Regression Models**

Model No.	Regression Relationship	Sum of Squares	df	Mean Square	F Value	Sig.
Model 1	GST → Operational Efficiency	65.24	1	65.24	60.06	0.000
Model 2	GST → Tax Compliance	98.10	1	98.10	102.82	0.000
Model 3	GST → Trade Competitiveness	58.30	1	58.30	41.47	0.000
Model 4	Compliance Burden → SME Performance	42.60	1	42.60	20.25	0.000

#### Interpretation

As shown in Table 4, all four regression models are statistically significant at the **1% level** ( $p < 0.001$ ). The highest F-value is observed in **Model 2** ( $F = 102.82$ ), indicating that GST implementation has the strongest predictive effect on tax compliance.

## 7.5 Regression Coefficients

### Combined Regression Coefficients

**Table 5: Regression Coefficients for All Models**

Model No.	Predictor Variable	B	Std. Error	Beta	t	Sig.
Model 1	GST → Operational Efficiency	0.62	0.08	0.620	7.75	0.000
Model 2	GST → Tax Compliance	0.71	0.07	0.710	10.14	0.000
Model 3	GST → Trade Competitiveness	0.58	0.09	0.580	6.44	0.000
Model 4	Compliance Burden → SME Performance	-0.45	0.10	-0.460	-4.50	0.000

#### Interpretation

The regression coefficients reveal that GST implementation has a **significant positive impact** on operational efficiency, tax compliance, and trade competitiveness, whereas compliance burden exerts a **significant negative effect** on SME performance.

## 8. Hypothesis Testing Summary

All null hypotheses ( $H_{01}$ ,  $H_{02}$ ,  $H_{03}$ ,  $H_{04}$ ) are rejected at the 5% significance level.

### Interpretation:

- GST significantly affects operational efficiency
- GST significantly improves tax compliance
- GST significantly influences trade competitiveness
- Compliance burden significantly affects SME performance

## 9. Results / Findings

The findings of this study provide important insights into the impact of GST on SMEs in Bangalore, Karnataka. The results indicate that GST has successfully enhanced tax compliance and transparency, which aligns with previous studies emphasizing the role of GST in improving tax administration and reducing evasion.

The positive relationship between GST and operational efficiency supports the argument that a unified tax system reduces inefficiencies caused by multiple taxation layers. Similarly, improvements in trade competitiveness confirm that GST has facilitated the creation of a unified national market by removing interstate tax barriers.

However, the study also highlights significant challenges faced by SMEs. The negative impact of compliance burden on performance suggests that the procedural and technological requirements of GST impose additional costs on smaller enterprises. This finding is consistent with earlier research indicating that SMEs often lack the resources and expertise required to adapt to complex tax systems.

Furthermore, the moderate explanatory power of the regression models indicates that GST is not the sole determinant of business performance. External factors such as market conditions, financial constraints, and managerial capabilities also play a crucial role.

Overall, the study reveals a **dual impact of GST**:

- **Positive:** Improved compliance, transparency, and market integration
- **Negative:** Increased compliance burden and operational challenges

## 10. Conclusion and Recommendations

### 10.1 Introduction

The overall conclusions derived from the study on the impact of Goods and Services Tax (GST) on Small and Medium Enterprises (SMEs) in Bangalore, Karnataka. It summarizes the key findings, discusses policy implications, offers practical recommendations, and outlines limitations along with directions for future research.

### 10.2 Summary of the Study

The primary objective of this study was to examine the impact of GST on business operations, tax compliance, and trade competitiveness among SMEs in Bangalore, Karnataka. A quantitative research design was adopted, and primary data were collected from 192 SME respondents using a structured questionnaire.

The study employed statistical tools such as descriptive statistics, correlation analysis, regression analysis, and ANOVA to analyze the data and test the hypotheses.

### 10.3 Major Findings of the Study

Based on the empirical analysis, the key findings are summarized as follows:

#### 1. Impact on Business Operations

- GST has a **significant positive effect on operational efficiency**.
- It has reduced tax cascading and improved supply chain processes.
- However, SMEs faced initial challenges related to system upgrades and process adjustments.

#### 2. Impact on Tax Compliance

- GST has **significantly improved tax compliance and transparency**.
- Digital filing systems have standardized tax procedures.
- Despite improvements, SMEs experience **compliance complexity and administrative burden**.

#### 3. Impact on Trade Competitiveness

- GST has **enhanced trade competitiveness** by removing interstate tax barriers.
- It has improved logistics and market accessibility.
- However, increased compliance costs and working capital constraints limit benefits for smaller firms.

#### 4. Compliance Burden and SME Performance

- A **significant negative relationship** exists between compliance burden and SME performance.
- Complex filing requirements and technological demands adversely affect smaller enterprises.

## 5. Overall Impact of GST

- GST has a **mixed impact** on SMEs:
  - Positive in terms of transparency, compliance, and market integration
  - Negative in terms of compliance burden and adaptation challenges

### 10.4 Conclusions

The study concludes that GST represents a transformative reform in India's taxation system, with substantial implications for SMEs in Bangalore, Karnataka. The reform has successfully achieved its key objectives of enhancing tax compliance, improving transparency, and creating a unified market.

However, the benefits of GST are not uniformly distributed across all enterprises. SMEs, due to their limited financial and technological resources, face significant challenges in adapting to the new tax regime. The increased compliance burden, digital requirements, and working capital issues continue to hinder their overall performance.

Thus, while GST has improved the structural efficiency of the tax system, its practical implementation reveals gaps that need to be addressed to ensure inclusiveness and sustainability.

### 10.5 Policy Implications

The findings of this study have important implications for policymakers and regulatory authorities:

- There is a need to **simplify GST compliance procedures** to reduce the burden on SMEs.
- Policymakers should focus on **enhancing digital infrastructure and accessibility** for small businesses.
- Continuous **policy revisions and stakeholder feedback mechanisms** are essential to improve GST effectiveness.
- Special attention should be given to **bridging the gap between large firms and SMEs**.

### 10.6 Recommendations

Based on the findings, the following recommendations are proposed:

#### 1. Simplification of Compliance Procedures

- Reduce the frequency and complexity of GST return filing
- Introduce simplified compliance schemes specifically for SMEs

#### 2. Capacity Building and Training

- Conduct regular training programs on GST procedures
- Enhance awareness of input tax credit mechanisms and digital systems

### **3. Technological Support**

- Provide affordable and user-friendly digital tools for tax compliance
- Encourage government-supported platforms for SMEs

### **4. Financial Support Measures**

- Address working capital issues caused by delays in input tax credit
- Provide financial assistance or incentives for GST compliance

### **5. Strengthening Institutional Support**

- Establish help desks and advisory services for SMEs
- Promote collaboration between government agencies and business associations

## **10.7 Limitations of the Study**

Despite its contributions, the study has certain limitations:

- The study is limited to SMEs in Bangalore, Karnataka and may not represent other regions
- The sample size, though adequate, may not capture all sectoral variations
- The study relies on self-reported data, which may involve response bias
- Only quantitative methods were used; qualitative insights could provide deeper understanding

## **10.8 Scope for Future Research**

Future research can build upon this study in several ways:

- Conduct **comparative studies across different states or countries**
- Include **sector-wise analysis** of GST impact
- Use **mixed-method approaches** combining quantitative and qualitative data
- Examine **long-term effects of GST** on business growth and sustainability
- Study the role of **digital transformation in GST compliance**

## **10.9 Concluding Remarks**

In conclusion, GST has brought significant structural changes to India's taxation system and has positively influenced transparency and compliance. However, for SMEs in Bangalore, Karnataka, the transition has been accompanied by operational and compliance challenges.

To fully realize the potential of GST, it is essential to create a more supportive ecosystem for SMEs through simplified procedures, technological assistance, and policy support.

Addressing these challenges will ensure that GST not only enhances efficiency but also promotes inclusive economic growth.

## References

- Agarwal, R., & Arora, M. (2023). Impact of GST on micro enterprises in rural India: Challenges and opportunities. *International Journal of Management Research*, 15(2), 112–124. <https://doi.org/10.1016/ijmr.2023.02.005>
- Ahuja, P., & Gupta, S. (2021). GST compliance burden on small businesses: A critical analysis. *Journal of Indian Taxation*, 8(1), 45–59.
- Basu, D., & Banerjee, S. (2020). GST reform and its implications for SMEs in India. *Economic and Political Weekly*, 55(48), 35–42.
- Bhattacharya, R., & Singh, A. (2022). GST and its effect on working capital management in SMEs. *Asian Journal of Economics and Finance*, 4(3), 201–214.
- Chandrasekaran, V., Natarajan, K., & Kumar, S. (2018). Impact of GST on SMEs: An analysis of opportunities and challenges. *International Journal of Commerce and Business Management*, 11(1), 67–74.
- Chatterjee, A., & Pal, R. (2022). GST in India: An analysis of compliance costs for SMEs. *Small Enterprise Research*, 29(1), 54–72. <https://doi.org/10.1080/13215906.2022.2022434>
- Chaudhary, P., & Jain, R. (2020). SMEs under GST regime: A sectoral performance review. *Global Business Review*, 21(6), 1574–1589. <https://doi.org/10.1177/0972150919892668>
- Das, S., & Roy, A. (2023). GST and digital compliance: The SME perspective in India. *Indian Journal of Accounting*, 55(1), 80–94.
- De, P., & Ghosh, S. (2019). GST and its implications for India's trade competitiveness. *South Asia Economic Journal*, 20(2), 233–249.
- Dhavaleshwar, C. (2024). The implementation of the Goods and Services Tax (GST) in India and its impact on SMEs. *Journal of Business and Economic Policy*, 11(1), 1–15.
- Dhillon, M., Kaur, P., & Singh, G. (2022). Challenges faced by MSMEs under GST regime: Evidence from Punjab. *International Journal of Applied Research*, 8(4), 1–8.
- Dutta, A., & Bose, R. (2021). Impact of GST on profitability of small enterprises in India. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 7(2), 159–176. <https://doi.org/10.1177/23939575211010842>
- Garg, S., & Bansal, A. (2020). GST and Indian SMEs: A study of readiness and adaptability. *International Journal of Trade and Global Markets*, 13(3–4), 213–227.
- Ghosh, S. (2021). GST and tax compliance culture in India. *Journal of Development Policy and Practice*, 6(1), 45–63.
- Goel, R., & Sharma, V. N. (2025). Impact of GST on small and medium enterprises (SMEs) in India. *International Educational Journal of Science and Engineering (IEJSE)*, 8(Special Issue), 4–10.
- Gupta, R., & Sharma, P. (2023). The dual impact of GST on Indian SMEs: Boon or bane? *International Journal of Financial Studies*, 11(2), 35–48. <https://doi.org/10.3390/ijfs11020035>

Hussain, A., & Khan, R. (2022). Working capital constraints under the GST regime: Evidence from Indian SMEs. *Journal of Small Business and Enterprise Development*, 29(4), 655–673.

Jain, A., & Mehta, S. (2019). GST transition and its effect on MSME operations in India. *Indian Journal of Economics and Development*, 15(2), 231–240.

Joshi, R., & Yadav, M. (2020). GST's role in integrating the informal sector with the mainstream economy. *Journal of Public Policy and Governance*, 4(2), 90–104.

Kaur, H., & Singh, B. (2021). GST and export competitiveness of Indian SMEs. *International Journal of Economics and Business Research*, 22(1), 17–31.

Khan, A., & Pathak, V. (2023). Post-GST challenges in SME tax compliance: Evidence from Uttar Pradesh. *Global Journal of Management and Business Research*, 23(5), 45–58.

Kumar, A., & Sharma, S. (2021). GST and its effect on SME financing. *Journal of Indian Business Research*, 13(4), 456–470.

Kumar, N., & Verma, P. (2022). GST implementation and supply chain efficiencies in SMEs. *Operations and Supply Chain Management*, 15(1), 48–59.

Kundhadia, D. (2025). Impact of Goods and Services Tax (GST) on small and medium enterprises (SMEs). *Journal of Advances and Scholarly Researches in Allied Education*, 22, 61–75. <https://doi.org/10.29070/g3en8024>

Lichchavi, P., Ramesh, K., & Narayan, M. (2021). GST and its impact on small enterprises: A study in Karnataka. *Journal of Taxation Studies*, 14(2), 101–119.

Maheshwari, V., & Agarwal, P. (2020). Impact of GST on employment in SMEs. *International Journal of Economics and Development Studies*, 8(3), 59–72.

Mehta, P., & Patel, R. (2019). GST in India: Challenges for micro and small enterprises. *International Journal of Social Economics*, 46(6), 752–765.

Mishra, S., & Sinha, R. (2022). GST and the informal SME sector: Transition challenges. *Journal of Economic Policy Research*, 19(4), 323–339.

Mohanty, S., & Nayak, B. (2023). GST and the digital divide in Indian SMEs. *International Journal of Development Issues*, 22(2), 231–245.

Mukherjee, S. (2020). Impact of GST on interstate trade in India (Working Paper No. 294). *National Institute of Public Finance and Policy*, 1–38.

Nair, R., & Menon, S. (2022). GST and entrepreneurial resilience in India. *Entrepreneurship and Sustainability Issues*, 9(4), 198–212.

Narayanan, S. (2021). GST's role in formalising the Indian economy. *Indian Economic Journal*, 69(3), 345–362.

Patel, M., & Shah, D. (2020). GST and SME competitiveness: An Indian perspective. *International Journal of Competitiveness*, 20(1), 84–98.

Prasad, K., & Reddy, G. (2019). SMEs under GST regime: Financial and operational challenges. *Small Business International Review*, 3(2), 19–32.

Raghavan, S., & Dasgupta, A. (2022). GST compliance and SME growth in India. *Asian Journal of Business and Accounting*, 15(2), 45–63.

Raju, R., & Thomas, L. (2021). GST and sectoral impacts: Case of manufacturing SMEs. *Journal of Manufacturing Technology Management*, 32(9), 54–69.

Raman, V., & Iyer, K. (2018). Understanding GST's implications for SMEs in India. *Indian Journal of Accounting*, 50(1), 112–125.

- Rao, S., & Shetty, P. (2019). GST and financial health of SMEs: A pre- and post-analysis. *International Journal of Financial Research*, 10(5), 189–201.
- Roy, T., & Das, M. (2021). GST and innovation in small businesses: An Indian context. *Journal of Small Business Strategy*, 31(2), 45–60.
- Sarkar, A., & Dey, S. (2020). GST compliance technology adoption by SMEs in India. *Technology in Society*, 63, 101394. <https://doi.org/10.1016/j.techsoc.2020.101394>
- Saxena, N., & Singh, H. (2023). GST and rural SMEs: A case study approach. *International Journal of Rural Management*, 19(1), 89–105.
- Sen, A., & Basu, K. (2022). GST, inflation, and SME sustainability in India. *Indian Journal of Economics*, 103(409), 785–803.
- Sharma, A., & Kapoor, V. (2020). GST and supply chain restructuring in Indian SMEs. *International Journal of Logistics Management*, 31(4), 765–780.
- Sherpa, S., Lepcha, P., & Tamang, R. (2022). GST and its impact on MSMEs: A study in Sikkim. *International Journal of Commerce*, 10(2), 55–68.
- Singh, A., & Gupta, P. (2019). GST transition challenges for service sector SMEs. *Journal of Services Research*, 19(2), 123–140.
- Srivastava, M., & Tiwari, R. (2021). GST and its role in SME formalisation. *Journal of Economic Structures*, 10(12), 1–18.
- Subramanian, A., & Singh, R. (2019). GST and ease of doing business in India: SME perspectives. *Journal of Business Environment*, 11(3), 56–69.
- Tandon, P., & Bhalla, N. (2023). GST implementation and SME export performance. *Journal of International Trade and Economic Development*, 32(6), 789–806.
- Varma, K., & Rathi, S. (2020). GST impact on small retailers in India. *Retail and Consumer Studies Journal*, 8(1), 43–59.
- Venkatesh, S., & Rao, R. (2022). GST, compliance, and technology adoption in SMEs. *Journal of Business Research*, 148, 274–285. <https://doi.org/10.1016/j.jbusres.2022.04.021>