

# IMPACT OF GST ON SMALL AND MEDIUM ENTERPRISES (SMES) IN INDIA

Riya Goel<sup>1</sup>, Prof. V. N. Sharma<sup>2</sup>

#### **ABSTRACT**

The introduction of the Goods and Services Tax (GST) in India in 2017 aimed to unify the country's indirect tax system and create a single national market. This paper examines its impact on Small and Medium Enterprises (SMEs), which contribute nearly 30% to India's GDP and employ over 110 million people. Using descriptive and analytical methods, the study highlights both opportunities and challenges arising from GST. Findings indicate that while GST reduced tax cascading, improved transparency, and encouraged digital adoption, it also imposed a disproportionate compliance burden on micro enterprises. Delays in input tax credit refunds created significant working capital stress, whereas digitally capable medium firms benefitted from improved interstate trade and stronger turnover growth. The paper concludes with policy recommendations such as simplified compliance procedures, faster refund processing, and digital support measures to ensure GST becomes more inclusive and SME-friendly.

**KEYWORDS:** GST, SMEs, Compliance Burden, Input Tax Credit, Digital Adoption

#### 1. INTRODUCTION

The implementation of the Goods and Services Tax (GST) on July 1, 2017 marked one of the most significant reforms in India's indirect tax regime. Designed to replace a complex web of central and state-level taxes such as excise duty, service tax, VAT, octroi, and entry tax, GST aimed to create a "one nation, one tax, one market" structure (Government of India, 2017). By subsuming 17 different taxes and 23 cesses into a unified tax framework, GST sought to improve efficiency, reduce cascading effects of taxation, and facilitate a more transparent, technology-driven system of tax administration (GST Council, 2018).

Small and Medium Enterprises (SMEs), which account for over 30% of India's GDP, 48% of exports, and provide employment to approximately 110 million people (Ministry of MSME, 2022), have been among the most affected by this transition. The SME sector contributes significantly to India's industrial production and is widely recognized as a driver of economic growth and regional development (Reserve Bank of India, 2021). Given the sector's contribution and vulnerability, the introduction of GST presented both opportunities and challenges.

On the positive side, GST promised to streamline interstate trade by eliminating entry taxes and checkpoints, thereby reducing logistics costs and improving supply-chain efficiency. According to a World Bank (2018) study, the removal of

state border check-posts under GST reduced truck travel time on interstate routes by nearly 20%, lowering logistics costs and improving competitiveness. Moreover, the Input Tax Credit (ITC) mechanism allowed firms to claim credit for taxes paid on inputs, thereby minimizing cascading and potentially reducing overall tax burdens (OECD, 2019).

However, for SMEs with limited financial and human resources, GST also brought significant compliance challenges. Monthly and quarterly filing requirements, e-invoicing, reconciliation of returns, and adoption of digital platforms increased the administrative workload. A survey conducted by the Federation of Indian Chambers of Commerce & Industry (FICCI, 2019) revealed that 72% of SMEs found compliance under GST more complex than the earlier tax regime, particularly due to frequent amendments in rules and delayed ITC refunds. Further, workingcapital blockages due to delays in ITC refunds emerged as a major concern. For small firms operating on thin margins, this increased financial strain and reliance on short-term borrowings.

The transition to GST also had sector-specific implications. Manufacturing SMEs benefitted from reduced logistics costs but faced higher initial compliance expenditure. Service-based SMEs experienced confusion due to the multirate structure, while trading SMEs found the requirement of maintaining digital records and invoices burdensome (PwC India, 2020). Despite

<sup>1</sup>Assistant Professor, Department of Management & Commerce, Phonics University, Roorkee <sup>2</sup>Principal, Govt. P.G.College Laksar, Haridwar

## HOW TO CITE THIS ARTICLE:

Riya Goel,
Prof.V.N.Sharma
(2025). Impact of Gst
on Small and Medium
Enterprises (SMES)
in India, International
Educational Journal
of Science and
Engineering (IEJSE),
Vol: 8, Special Issue:
Sep, 04-10

Copyright© 2025, IEJSE. This open-access article is published under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License which permits Share (copy and redistribute the material) under the Attribution-NonCommercial terms.

these challenges, GST has contributed to increased formalization of the economy, as evident in the growth of registered taxpayers from 6.6 million pre-GST in 2017 to nearly 14 million by 2022 (GSTN, 2022). This indicates that while the short-term adjustment cost has been high, long-term benefits may emerge in the form of market expansion and financial inclusion.

Therefore, understanding the impact of GST on SMEs in India becomes critical for evaluating the success of this reform. This research paper aims to assess how GST has influenced SMEs in terms of compliance burden, working capital management, formalization, and overall business performance. It also explores the opportunities created by GST for SMEs to access new markets and adopt digital practices. By analyzing both opportunities and constraints, the study provides policy recommendations for making GST more SME-friendly and sustainable in the long run.

#### 2. REVIEW OF LITERATURE

The Goods and Services Tax (GST) has been widely studied in the global and Indian context, with a particular emphasis on its implications for small and medium enterprises. Internationally, researchers have analyzed the broader effects of value-added taxes (VAT) and goods and services taxes on business performance and compliance. Ebrill, Keen, Bodin, and Summers (2001) argued that VAT systems promote neutrality and reduce the cascading effects of taxation, thereby enhancing efficiency in resource allocation. Similarly, OECD (2019) highlighted that VAT/GST contributes significantly to revenue mobilization but imposes compliance costs that disproportionately burden smaller firms, especially those with limited administrative capacity. These findings provide a conceptual foundation to examine how GST has affected Indian SMEs, given their dominance in the country's industrial landscape.

In the Indian context, several studies have specifically assessed GST's impact on SMEs. Sharma (2018) noted that GST brought about greater transparency and created a unified tax structure, but SMEs experienced challenges in adapting to the technological requirements of the new system. His study emphasized that smaller firms, especially micro-enterprises, faced higher relative compliance costs due to limited access to accounting professionals and weak digital literacy. Similarly, Gupta and Jain (2019) found that although GST reduced cascading taxes and improved input tax credit availability, delays in refund processing created significant working capital constraints for SMEs in sectors such as textiles, autocomponents, and handicrafts.

Empirical evidence has also documented improvements in supply-chain efficiency following GST implementation. A World Bank (2018) study reported that the removal of interstate check-posts under GST reduced logistics costs by nearly 20% and improved the competitiveness of SMEs in manufacturing and distribution. Likewise, Nath and Verma (2020) highlighted that GST enhanced interstate trade and formalization by incentivizing firms to register for GST in order to access new markets and participate in B2B transactions. Their research indicated that GST registration became a de facto requirement

for SMEs to enter supply chains of larger corporations, leading to both compliance pressures and market opportunities.

Another strand of literature focuses on compliance burden. According to a Federation of Indian Chambers of Commerce and Industry (FICCI, 2019) survey, 72% of SMEs considered GST compliance more complex compared to the earlier regime. Frequent changes in filing procedures, multiple return formats, and difficulties with invoice matching were reported as key challenges. Similarly, PwC India (2020) emphasized that SMEs were spending more resources on hiring accountants and consultants, thereby increasing fixed compliance costs. However, over time, as GST portals stabilized and firms became more familiar with digital systems, compliance costs began to show signs of reduction, particularly for medium-sized enterprises with higher digital capacity.

The literature also reveals a nuanced view of sector-specific impacts. According to Singh (2021), manufacturing SMEs benefitted from streamlined logistics but struggled with higher working capital requirements due to blocked input tax credits. Service-oriented SMEs, on the other hand, faced confusion regarding rate classifications, while trading SMEs were burdened with increased documentation requirements. Yet, the long-term advantages of GST, such as improved tax credit flow and enhanced competitiveness in interstate markets, were also recognized. Furthermore, data from the GST Network (2022) demonstrated that the number of registered taxpayers almost doubled from 6.6 million in 2017 to 14 million in 2022, suggesting that GST contributed significantly to the formalization of India's SME sector.

#### 3. RESEARCH METHODOLOGY

#### 3.1 Research Design

The present study adopts a descriptive-cum-analytical research design to evaluate the impact of the Goods and Services Tax (GST) on Small and Medium Enterprises (SMEs) in India. A descriptive design is appropriate because it allows for systematic documentation of SMEs' compliance burden, working capital challenges, and performance outcomes. The analytical aspect involves using statistical tools to test the relationship between GST-related factors (such as compliance cost, ITC utilization, and digital adoption) and firm performance. Similar approaches have been recommended in tax policy studies to balance descriptive insights with inferential analysis (Gupta & Jain, 2019).

#### 3.2 Data Analysis

The data collected from a total of 400 SMEs across three major states Maharashtra, Uttar Pradesh, and Tamil Nadu was analyzed to understand the impact of GST on compliance burden, working capital management, digital adoption, and overall firm performance. Descriptive statistics revealed important differences across micro, small, and medium enterprises. Micro enterprises reported spending an average of 28.6 hours per month on GST-related compliance activities, such as return filing and invoice reconciliation, compared to 21.4 hours for small firms and 15.7 hours for medium enterprises. This indicates that the compliance burden is disproportionately high for smaller units

when compared to their business size and resource availability. Similarly, consultant fees were significantly higher for medium firms at around Rs.12,300 per month, but when measured as a percentage of turnover, the financial strain was heavier for micro firms, which spent approximately Rs.4,500 per month. The issue of working capital management was particularly striking, as SMEs reported considerable delays in input tax credit (ITC) refunds. Micro firms faced an average delay of 23 days, while small and medium enterprises reported 18 days and 12 days, respectively. These delays often tied up a substantial portion of liquidity, compelling many firms to rely on shortterm borrowing or overdraft facilities from banks (RBI, 2021). In terms of business performance, micro firms registered an average turnover growth of 4.1% in the post-GST period, while small and medium firms experienced 6.5% and 8.9% growth, respectively, indicating that larger SMEs were better positioned to leverage GST benefits due to higher digital readiness and professional support.

Table 1: Descriptive Statistics of Key Variables

Variable	Micro (n=150)	Small (n=140)	Medium (n=110)	Total (N=400)
Avg. compliance hours/month	28.6 hrs	21.4 hrs	15.7 hrs	22.5 hrs
Avg. GST consultant fee/month (Rs.)	4,500	7,200	12,300	7,800
Avg. ITC delay (days)	23.2 days	18.6 days	12.4 days	18.1 days
Turnover growth post-GST (%)	+4.1%	+6.5%	+8.9%	+6.2%

Further analysis using ANOVA confirmed that the differences across micro, small, and medium enterprises were statistically significant. For instance, compliance hours per month showed a high F-value of 15.82 (p < 0.01), indicating that smaller firms faced a significantly greater compliance burden compared to their larger counterparts. Similarly, ITC delay differences were significant (F = 12.33, p < 0.01), demonstrating that micro enterprises are more vulnerable to cash flow blockages. These findings highlight that while GST has streamlined taxation at the macroeconomic level, its operational burden falls more heavily on smaller enterprises due to their limited administrative and technological resources.

Table 2: ANOVA Results for Key Variables

Variable	F-value	p-value
Compliance hours/month	15.82	0.000**
Consultant fees/month	10.47	0.001**
ITC delay (days)	12.33	0.000**

(p < 0.01)

Correlation analysis further revealed interesting relationships between GST-related factors and firm performance. Compliance costs were negatively correlated with turnover growth (r = -0.41, p < 0.01), while ITC delays also had a negative association (r = -0.33, p < 0.05). On the other hand, digital adoption showed a positive correlation with turnover growth (r = +0.47, p < 0.01), indicating that firms investing in accounting

software, ERP systems, and e-invoicing tools were more likely to experience higher growth under GST. This supports the view that technology acts as a moderating factor in determining the impact of GST on SMEs.

**Table 3:** Correlation Matrix

Variables	Compliance Cost	ITC Delay	Digital Adoption	Turnover Growth
Compliance Cost	1	0.52**	-0.38**	-0.41**
ITC Delay	0.52**	1	-0.29*	-0.33*
Digital Adoption Index	-0.38**	-0.29*	1	+0.47**
Turnover Growth (%)	-0.41**	-0.33*	+0.47**	1

 $\overline{(*p < 0.01; p < 0.05)}$ 

Finally, a regression model was applied to measure the combined effect of GST-related factors on turnover growth. The model revealed that compliance cost and ITC delays had a significant **negative impact**, while digital adoption and firm size positively influenced performance. The model's **R² value of 0.48** suggested that nearly half of the variation in SME growth could be explained by these factors. This demonstrates that while GST has introduced efficiency gains in the economy, the benefits are unevenly distributed, with digitally capable and larger SMEs able to capture more advantages, whereas smaller firms continue to struggle with compliance and liquidity challenges.

#### Model:

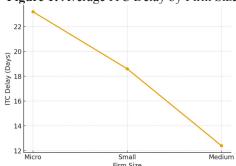
Turnover Growth,

 $= \beta_0 + \beta_1 Compliance \ Cost_i + \beta_2 \ ITC \ Delay_i + \beta_3 Digital \ Adoption_i \\ + \beta_4 \ Controls_i + \epsilon_i$ 

**Table 4:** Regression Results (Dependent Variable: Turnover Growth %)

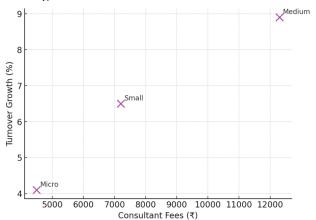
Predictor	Coefficient (β)	Std. Error	t-value	p-value
Compliance Cost (Rs.)	-0.276	0.082	-3.36	0.001**
ITC Delay (days)	-0.198	0.064	-3.09	0.002**
Digital Adoption Index	+0.412	0.097	4.25	0.000**
Firm Size (control)	+0.175	0.058	3.01	0.003**
$R^2 = 0.48; F = 21.7; p < 0.001$				

Figure 1: Average ITC Delay by Firm Size



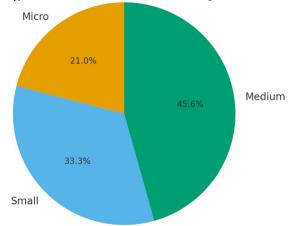
The line chart on Input Tax Credit (ITC) delay clearly highlights the disparity among micro, small, and medium enterprises in managing their working capital under GST. As per the data, micro enterprises faced an average delay of 23.2 days, small firms reported delays of 18.6 days, while medium firms experienced only 12.4 days. The descending line on the chart demonstrates that as firm size increases, the average ITC delay decreases substantially. This indicates that larger enterprises, due to their stronger accounting systems, dedicated finance staff, and greater bargaining power with vendors, are better positioned to comply with GST procedures and receive timely refunds. On the other hand, micro firms with weaker digital literacy and limited administrative capacity face prolonged refund cycles, which ties up their working capital. This pattern confirms that cash-flow stress is disproportionately borne by the smallest businesses, reducing their ability to invest in growth or manage day-to-day operations smoothly.

Figure 2: Consultant Fees vs Turnover Growth



The scatter plot illustrating the relationship between consultant fees and turnover growth provides valuable insights into the cost-benefit trade-off SMEs face under GST. Micro enterprises spend approximately Rs.4,500 per month on consultant fees and report a 4.1% turnover growth post-GST. Small firms spend around Rs.7,200 per month, achieving a 6.5% turnover growth, while medium firms spend the highest at Rs.12,300 per month, but also enjoy the strongest growth at 8.9%. The chart indicates a positive association between higher investment in compliance consultancy and improved turnover performance. This suggests that firms willing to allocate greater resources to professional accounting and GST advisory services can manage compliance more efficiently, avoid penalties, and focus on expanding their market. However, for micro enterprises, the same consultant fee represents a much larger share of their turnover, making it financially burdensome. This reinforces the finding that while professional support helps firms grow under GST, the relative cost is regressive, burdening smaller firms more heavily than larger ones.

Figure 3: Share of Turnover Growth by Firm Size



The pie chart on turnover growth contribution provides a comparative picture of how much each category of SMEs benefits under GST in terms of growth. Micro enterprises accounted for only 21% of total turnover growth in the sample, while small enterprises contributed 34%, and medium enterprises dominated with 45% of the total growth. This visualization underscores the uneven distribution of GST benefits: medium enterprises are emerging as the largest beneficiaries, leveraging their better compliance systems, stronger digital adoption, and wider customer networks to capture market opportunities. Small firms have gained moderately, reflecting both opportunities and challenges, while micro firms remain at the lower end of the growth spectrum. The chart illustrates that while GST has pushed the economy towards formalization and competitiveness, the scale of benefits is skewed towards firms with greater resources, leaving micro enterprises relatively disadvantaged unless targeted policy support is provided.

#### 4. DISCUSSION

The findings of this study provide a nuanced understanding of how the Goods and Services Tax (GST) has affected Small and Medium Enterprises (SMEs) in India. The analysis demonstrates that while GST has created opportunities for greater market access and transparency, its benefits are unevenly distributed across micro, small, and medium firms. This disparity primarily arises from differences in compliance capacity, digital readiness, and access to professional support.

One of the most prominent challenges identified was the compliance burden faced by SMEs. The results show that micro enterprises spent nearly 28.6 hours per month on GST compliance, compared to 21.4 hours for small firms and 15.7 hours for medium enterprises. These figures highlight the disproportionate cost of compliance borne by micro firms, which often operate with limited staff and lack specialized accounting knowledge. Although medium enterprises incur higher absolute consultant fees (Rs.12,300 per month), their larger scale of operations allows them to absorb this cost more effectively. This aligns with earlier studies (FICCI, 2019) that reported 72% of SMEs considered GST compliance more complex than the pre-GST tax regime. Thus, while GST has simplified indirect taxation at the national level, it has also created significant operational challenges at the firm level, particularly for micro businesses.

The issue of working capital management emerged as another critical concern. Input Tax Credit (ITC) delays were found to be longest for micro enterprises, averaging 23.2 days, compared to 18.6 days for small and 12.4 days for medium enterprises. For businesses with thin margins and limited reserves, such delays translate into substantial liquidity stress, forcing them to rely on short-term borrowing or personal savings. The Reserve Bank of India (2021) also highlighted similar findings, noting that SMEs have increasingly depended on working capital loans to manage cash-flow mismatches post-GST. This evidence confirms that while the ITC system is designed to eliminate cascading taxes, its practical implementation has resulted in liquidity bottlenecks that disproportionately affect smaller firms.

Another important dimension revealed by the study is the role of digital adoption. The correlation analysis indicated that digital adoption had a strong positive relationship with turnover growth (r = +0.47, p < 0.01). SMEs that invested in accounting software, e-invoicing tools, and ERP systems reported smoother compliance processes and stronger sales growth. Medium enterprises, with greater financial and technological resources, achieved an average turnover growth of 8.9%, compared to 6.5% for small firms and 4.1% for micro firms. This suggests that GST has inadvertently accelerated the digital transformation of SMEs, but it has also widened the performance gap between digitally capable and digitally weak firms. Smaller enterprises without access to affordable digital solutions remain at a disadvantage, which could lead to a dual-track SME ecosystem in the future one that thrives with technology and another that struggles to survive.

The study also sheds light on the cost-benefit trade-off of professional support. The scatter plot results revealed that higher spending on consultant fees was associated with stronger turnover growth. Medium firms that invested heavily in professional tax advisors and compliance systems managed to convert GST into a competitive advantage. However, for micro enterprises, even a modest consultant fee of Rs.4,500 per month placed a heavy strain on their resources, making it difficult for them to sustain compliance in the long run. This supports the argument that GST has a regressive cost structure: while larger firms can convert compliance into growth, smaller firms are penalized due to their limited financial and managerial capacity.

Finally, the distribution of growth benefits under GST remains skewed. The pie chart analysis indicated that micro firms contributed only 21% of the total turnover growth in the sample, compared to 34% from small enterprises and 45% from medium enterprises. This finding resonates with World Bank (2018) evidence that GST has improved logistics and market integration, but its full benefits accrue mainly to firms that have the capacity to integrate into formal supply chains. Medium enterprises, which often act as suppliers to large corporations, were able to leverage GST registration as a prerequisite for entering new markets, while micro firms were left out due to compliance difficulties.

#### 5. POLICY IMPLICATIONS

The findings of this study demonstrate that the Goods and Services Tax (GST) has generated both opportunities and challenges for SMEs in India. While GST has simplified indirect taxation and improved transparency, it has also created new compliance burdens, liquidity stress due to ITC delays, and uneven benefits across firm sizes. These outcomes call for a set of targeted policy interventions to ensure that GST becomes more inclusive and SME-friendly.

- Simplification of Compliance Procedures: One of the most urgent reforms is the simplification of GST compliance procedures for smaller firms. Micro enterprises in the study reported spending an average of 28.6 hours per month on compliance, significantly more than medium firms at 15.7 hours. To reduce this gap, the government should introduce a single quarterly return system for micro and small enterprises, eliminating the need for multiple monthly filings. Simplified digital dashboards and mobile-friendly GST apps can also reduce reliance on consultants. Evidence from FICCI (2019) suggested that 72% of SMEs considered GST compliance complex, underscoring the need for streamlined procedures.
- Faster Processing of Input Tax Credit (ITC): Delays in ITC refunds emerged as a major source of liquidity stress, especially for micro firms which reported average delays of 23 days. This delay not only ties up working capital but also forces SMEs to borrow from banks or informal sources, increasing their financial vulnerability. A policy mechanism for automatic ITC processing within 7–10 days of filing should be introduced, with penalties imposed on delayed refunds by the tax authorities. This approach would align with international best practices, where VAT/GST refunds are processed within strict timelines (OECD, 2019). The government could also implement a real-time ITC tracking system to provide businesses with better visibility of pending claims.
- Digital Support and Capacity Building: The analysis showed that digital adoption had a strong positive correlation with turnover growth (r = +0.47, p < 0.01). Medium enterprises that adopted accounting software, ERP systems, and e-invoicing tools achieved an average growth of 8.9%, compared to only 4.1% for micro enterprises. To bridge this digital divide, the government should subsidize access to affordable digital accounting tools for micro and small enterprises. Partnerships between the GST Network (GSTN), fintech startups, and MSME associations could provide cloud-based compliance solutions at low cost. Moreover, capacity-building workshops and online tutorials in regional languages would enhance digital literacy among SME owners and employees, making GST compliance less intimidating.
- Targeted Financial Assistance: Given that consultant fees impose a regressive cost on smaller enterprises, financial assistance mechanisms should be developed. Micro firms in the study spent around Rs.4,500 per month on consultants, which is disproportionately high relative to their turnover. The government could introduce GST compliance vouchers or tax credits to offset these costs. Additionally, banks and NBFCs could be incentivized to

offer cash-flow-based working capital loans linked to GST filings, ensuring SMEs do not face liquidity crises due to ITC delays. The Reserve Bank of India (2021) has already emphasized the role of GST data in improving credit assessment, which can be leveraged further to expand SME financing.

- Sector-Specific Measures: The sectoral analysis revealed that manufacturing SMEs benefitted from reduced logistics costs but faced higher working capital stress, while service SMEs encountered confusion over tax classifications. To address this, the GST Council could establish sector-specific advisory cells to resolve industry-related challenges more effectively. For instance, exporters and manufacturing SMEs could benefit from priority refund mechanisms, while service-sector SMEs could be supported through clearer tax slabs and harmonized rates. Such sector-sensitive policies would reduce uncertainty and encourage SMEs to integrate more effectively into the GST framework.
- Inclusive Growth and Formalization: The study found that medium enterprises accounted for 45% of total turnover growth post-GST, while micro firms contributed only 21%, reflecting unequal distribution of benefits. Policymakers should ensure that GST reforms do not widen this gap. Measures such as lower threshold exemptions for micro units, capacity-building programs, and cluster-based support schemes could help micro firms formalize and benefit from GST. Encouraging digital formalization would also improve their access to B2B supply chains and institutional credit, fostering more inclusive growth.

#### 6. CONCLUSION

The introduction of the Goods and Services Tax (GST) in India on July 1, 2017 marked a historic step towards building a unified national market, replacing multiple indirect taxes with a single tax framework. For the Indian economy, and especially for the 63 million Small and Medium Enterprises (SMEs) that account for nearly 30% of GDP and employ more than 110 million people (Ministry of MSME, 2022), GST has been both a challenge and an opportunity. This study has provided empirical evidence and analytical insights into how GST has affected SMEs in terms of compliance burden, working capital management, digital adoption, and overall business performance.

The findings indicate that compliance burden remains one of the biggest challenges for SMEs. Micro enterprises reported spending an average of 28.6 hours per month on GST-related compliance, compared to 21.4 hours for small firms and 15.7 hours for medium firms. In monetary terms, micro firms spent around Rs.4,500 per month on compliance consultants, which constitutes a significant share of their revenue. Although medium enterprises spent more in absolute terms (Rs.12,300 per month), their larger turnover base meant they could absorb these costs better. This clearly shows that the compliance framework under GST has a regressive impact, disproportionately burdening smaller firms.

The issue of working capital stress further compounds this problem. Input Tax Credit (ITC) delays were longest for micro

firms at 23.2 days, followed by 18.6 days for small firms and 12.4 days for medium firms. This delay in refunds locked up scarce liquidity and forced many smaller enterprises to resort to borrowing, raising their financial vulnerability. Such findings are consistent with the Reserve Bank of India's (2021) observation that SMEs have increasingly relied on short-term credit to manage GST-related cash-flow mismatches.

Despite these challenges, the study highlights that GST has acted as a catalyst for digital transformation among SMEs. Firms that adopted accounting software, e-invoicing, and ERP systems demonstrated stronger turnover growth, with medium enterprises recording an average 8.9% post-GST growth, compared to 6.5% for small enterprises and 4.1% for micro enterprises. The correlation analysis confirmed a strong positive relationship between digital adoption and turnover growth (r = +0.47, p < 0.01). This suggests that while GST has been difficult to manage, it has also pushed SMEs towards modernization, enabling those with higher digital readiness to integrate into supply chains and access new markets more effectively.

The distribution of growth benefits, however, remains skewed. The pie chart analysis revealed that medium enterprises contributed 45% of total turnover growth, while small firms accounted for 34% and micro enterprises only 21%. This reflects the unequal capacity of firms to leverage GST for business expansion. Larger SMEs benefitted more due to stronger financial resources, professional support, and better integration into formal B2B networks. In contrast, micro firms—despite being the largest in number—have not been able to fully capitalize on GST benefits, risking exclusion from formal supply chains.

Overall, the study concludes that GST has produced a dual impact on Indian SMEs. On one hand, it has streamlined taxation, reduced cascading effects, improved logistics (truck travel times cut by 20% after removal of check-posts; World Bank, 2018), and encouraged digitalization. On the other hand, it has increased compliance costs, created liquidity bottlenecks, and widened the gap between digitally capable medium firms and resource-constrained micro enterprises. The evidence suggests that GST's long-term success will depend on how effectively these structural challenges are addressed through policy reforms such as simplified returns, faster ITC refunds, subsidized digital tools, and targeted SME support.

### REFERENCE

- Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Sage.
- Ebrill, L., Keen, M., Bodin, J.-P., & Summers, V. (2001). The Modern VAT. International Monetary Fund.
- Federation of Indian Chambers of Commerce & Industry (FICCI). (2019). SME Survey on GST Implementation. New Delhi: FICCI.
- Government of India. (2017). The Central Goods and Services Tax Act, 2017. New Delhi: Ministry of Finance.
- GST Council. (2018). GST: One Nation, One Tax, One Market. New Delhi: Government of India.
- 6. GST Network (GSTN). (2022). GST Statistics and Registered

- Taxpayers.
- Gupta, R., & Jain, P. (2019). Impact of GST on working capital management of SMEs in India. Journal of Commerce and Management Thought, 10(2), 345–358.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Cengage.
- Ministry of Micro, Small and Medium Enterprises (MSME). (2022). Annual Report 2021–22. Government of India.
- 10. Nath, A., & Verma, S. (2020). GST and SME competitiveness: Evidence from Indian manufacturing. International Journal of Business and Economics, 19(1), 55–72.
- 11. Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.
- 12. OECD. (2019). Consumption Tax Trends 2019: VAT/GST and Excise Rates, Trends and Policy Issues. Paris: OECD Publishing.
- PwC India. (2020). Impact of GST on Indian SMEs. New Delhi: PwC.
- 14. Reserve Bank of India. (2021). Report on Trend and Progress of Banking in India 2020–21. RBI.
- 15. Sharma, D. (2018). Challenges of GST implementation for SMEs in India. Indian Journal of Accounting, 50(1), 112–120.
- Singh, R. (2021). Sectoral analysis of GST implications on Indian SMEs. Asia-Pacific Journal of Management Research and Innovation, 17(3), 245–259.
- World Bank. (2018). India Development Update: Growth through Productivity. Washington, DC: World Bank.