

Impact of GST on MSME Export Performance in India: Secondary Data Evidence (2017–2023)

¹Aftab Alam, ²Amol Parmeshwar Kamble

¹M.C.E Society's Abeda Inamdar Senior College of Arts, Science and Commerce (Autonomous) Savitribai Phule Pune University

aftabalam@azamcampus.org

<https://orcid.org/0000-0002-1593-5365>

²Vishwakarma University, Pune

amol.kamble@vupune.ac.in

<https://orcid.org/0000-0001-6342-5426>

Abstract

This study aims to analyse the causal and dynamic effects of the Goods and Services Tax (GST), which was implemented on 1 July 2017, on the export performance of Micro, Small and Medium Enterprises (MSMEs) in India from 2014-15 to 2022-23. The paper uses Descriptive Trend Analysis, Difference-in-Differences (DID) model, Panel Data Fixed-Effects model and the Vector Autoregression (VAR) model, based on the official secondary data sourced from Directorate General of Commercial Intelligence and Statistics (DGCI&S), Reserve Bank of India (RBI) and Press Information Bureau (PIB).

The results validate the positive causal impact of GST on MSME exports, with the DID coefficient value being statistically significant at USD 22.74 billion per year, which is above the pre-GST trend. The VAR model shows that cost shocks to compliance have an immediate negative impact on exports, while the positive impact of compliance formalisation dividends occurs by lag three. The compliance burden, however, is disproportionately high for micro enterprises, and the structural export ineligibility of the Composition Scheme is a major policy conflict that needs to be resolved. The paper adds to the scanty causal literature on GST and MSME internationalisation in India that spans the longitudinal period.

Keywords: GST, MSME Exports, Difference-in-Differences, Input Tax Credit, VAR, India, Indirect Tax Reform, Formalisation, Export Competitiveness.

1. Introduction

1.1 GST as a Structural Reform

The Goods and Services Tax (GST) of India replaced the previously existing multi-tier indirect tax regime, which included various Cesses, Entry Taxes, Service Tax, and State-level Value Added Tax (VAT), and was introduced on 1 July 2017 (Thirupathi and Devanna, 2024). The reform introduced a dual tax rate system, comprising Central GST, State GST and Integrated GST for inter-state transactions, under a destination-based tax structure with 5 tax rates of 0%, 5%, 12%, 18% and 28%. The GST Council, set up under Article 279A of the Constitution, has the authority to determine rates in a cooperative federation. Dandona, Tomar and Verma (2024) describe GST as a 'long-term structural reform' which has become structural in nature, yielding the benefits in a gradual manner, where most changes have happened at the sector level after 2019.

The three mechanisms that support the theoretical concept of GST as a tool to improve export competitiveness are as follows: destination based zero rating which means that no tax is embedded in the exported goods; input tax credit (ITC) which means that cascading tax is eliminated by allowing the registered firm to offset tax paid on inputs against the output tax

liability; and market unification where the logistical cost of the inter-state market is reduced (Guna and Anuradha, 2021; MP, 2024; Haldankar and Patkar, 2026).

1.2 MSMEs in India's Export Framework

With an estimated contribution of 43-50 per cent in merchandise export and 30.1 per cent in GDP, the MSME sector employs around 11 crore people in India, during the study period (2000-2022) (PIB, 2023; Beemabai and Krishnakumar, 2019). Official DGCI&S data confirm that the value of MSME-related product exports was USD 130.77 billion in 2015–16, USD 137.07 billion in 2016–17, and USD 147.39 billion in 2017–18, the first post-GST year (PIB, 2018). The registered MSME exports stood at USD 125,525.75 million, while India's total merchandise exports stood at USD 451,070 million in 2022–23 (DGCI&S, 2024). The number of exporting MSMEs recorded on the Udyam portal grew from 52,849 in 2020–21 to 1,73,350 by 2024–25 (PIB, 2025).

1.3 Research Problem and Objectives

The impact of GST on MSME exports is still inconclusive. The net positive effects are detailed in the studies carried out by Bhalla, Sharma, and Kaur (2023) and Bhalla, Kaur, and Sharma (2024), while the early compliance stress and working capital disruption are detailed in the studies carried out by Beemabai and Krishnakumar (2019), Kumari (2017), and Geeta, Mathiraj, and Bharathi (2019). Adesh, Upadhyay and Negi (2025) have particularly requested longitudinal causal identification studies to settle this debate, and Yadav and Rastogi (2025) have also emphasised this. This paper aims to fill this gap with a pre-post DID approach with panel fixed-effects controls and VAR dynamic analysis over the entire arc of 2014 and 2023.

2. Literature Review

2.1 Theoretical Framework: ITC, Zero-Rating, and Competitiveness

A systematic review by Guna and Anuradha (2021) on GST dimensions for small and moderate business units shows that GST with seamless ITC enhances export competitiveness of the SMEs by eliminating the embedded domestic taxes in export prices. In an extensive study of the operational dynamics of MSMEs under the provisions of the GST, MP (2024) points to ITC as being the top avenue where the GST reduces the effective cost of production for MSME exporters. In the systematic literature review with future research agenda on GST in India, Haldankar and Patkar (2026) place these benefits in the context of the evidence of tax unification benefits around the world, finding that VAT unification consistently benefits export-oriented firms relative to domestically oriented firms in the medium run.

2.2 Positive GST Outcomes

Bhalla, Sharma and Kaur (2023) test registered MSMEs (404) in Punjab through partial least squares structural equation modelling and conclude that ease of doing business, operational efficiency and profitability were positively affected by GST determinants (technology transition, tax awareness and system change). Bhalla, Kaur and Sharma (2024) extend this finding to a multivariate analysis of variance with a multi-layer perceptron neural network using sixty months of secondary data and conclude there are significant gains in MSME exports, revenues and GDP contribution after the implementation of the GST. The authors Jayanthi and Selvam (2024) and Selvam (2024) have recorded a well-thought-out tax plan in GST which is capable of creating sustainable MSME development pathways, particularly for

export-oriented MSMEs that are able to make the most of ITC chains and LUT mechanisms. Yadav and Rastogi (2025) compare the growth performance and financial efficiency of MSMEs before and after the implementation of the Goods and Services Tax (GST) and find that there is size-based heterogeneity in terms of financial efficiency gains after GST. Vihap, Anshu and Vidani (2025) report that the recent changes in the rate of GST have reduced effective tax burdens on MSMEs in labour-intensive industries, especially in textiles and leather.

2.3 Compliance Burden and Working Capital Challenges

In an empirical study on blocked credit and ITC denial, Sureka and Bordoloi (2024) also conclude that ITC denial has an obvious effect of raising production costs for MSMEs and reducing export margins, as this is an indirect credit extension by MSMEs to the government. Based on first-hand evidence collected from MSME clusters in Bengaluru, Kavitha and Vijayasree (2026) argue that the operational concern of MSME exporters is a significant direct impact of ITC delays, particularly for micro MSMEs who do not access formal working capital facilities.

In a critical assessment of the impact of GST on MSMEs in Rajasthan, Garg, Modi and Bhayani (2024) conclude that while the compliance cost is a fixed cost, the cost is higher on a smaller revenue share for micro enterprises compared to small and medium enterprises in accordance with the regressivity hypothesis in international tax compliance literature. Ghosh (2022), through his survey-based research on the MSMEs under the GST regime, states that the B2B restriction in the Composition Scheme and the export ineligibility for LUT pose a structural disparity between the thrust of the scheme for simplifying compliance and export participation. Geeta and Mathiraj (2023) analyse the effects of the GST on MSMEs in India with the help of cross-sectional data, and find that the unified structure would result in a reduction of costs for medium enterprises, but an increase in costs for the compliance of MSMEs in the short and medium term.

2.4 Sectoral and Longitudinal Studies

Negi *et al.*, (2022) study the effect of GST on motor and pump exports, which concluded that the MSMEs in the capital goods sub-sectors had better export performance post-GST due to ITC availability, which reduced the embedded tax cost on the production of the goods. Sarkar *et al.*, (2025) provide a review of the impact of GST on exports of agro-processing MSMEs, highlighting the fact that there are differential impacts across sectors based on the GST tax rates and the extent of the ITC chain. Acknowledging the ‘decade of economic transformation’ period from 2014 to 2024, Yoganandham (2025) places GST in its context by asserting that it was post-2019, with a stabilisation of compliance infrastructure, that the internationalisation benefits of MSMEs took a significant boost. Adesh, Upadhyay and Negi (2025) clearly state that there is no longitudinal causal study on the entire span that encompasses 2017-2023 as a key literature gap, thus driving this study.

2.5 Research Gap

The VAR dynamic modelling, state-level controls and secondary data from 2014 to 2023 are new features that have not been matched in an existing study. This study directly addresses this gap, and is the first multi-method quasi-experimental study to provide a causal estimate of the impact of GST on MSME export performance in India.

3. GST and MSMEs: Policy and Structural Overview

3.1 Architecture, Threshold Provisions, and Composition Scheme

Earlier, the compulsory threshold for registering for GST was Rs. 20 lakhs for all businesses and was changed to Rs. 40 lakhs for goods suppliers for MSMEs. The Composition Scheme gives the possibility to capture turnover of up to Rs. 1.5 crore under a flat rate and quarterly returns. The QRMP scheme from January 2021 was introduced to allow taxpayers with the turnover of up to Rs. 5 crores to file their returns quarterly. Under the scheme, however, the registrants of the Composition Scheme are statutorily barred from exports using the Letter of Undertaking (LUT), which adds to the conflict between the two. However, the two collide as the Composition Scheme registrants are statutorily prohibited from using the Letter of Undertaking (LUT) for exports (Ghosh, 2022). This structural tension is the only single most impactful unaddressed design issue in the Indian GST regime for MSME exporters, and this is also substantiated through the panel fixed-effects results of this study.

3.2 Zero-Rating, LUT, and ITC Refund Mechanism

Under the IGST Act, 2017, exports are zero-rated in the GST regime under Section 16 of the IGST Act, 2017. There are two options available for the exporters: Export without paying IGST and claim an ITC refund, or pay IGST and claim a full refund. The LUT route is advantageous as the working capital is not paid in advance for tax. According to Sureka and Bordoloi (2024), the ITC refund mechanism was grossly restricted in the initial three years of the GST regime (2017-19) due to mismatches in the supplier filing in the GSTN system, with about Rs 10,000 crore of valid claims by MSMEs being thwarted.

3.3 Atmanirbhar Bharat Reclassification, 2020

MSME classification has been updated with a composite investment & turnover basis with the Atmanirbhar Bharat Abhiyan, effective from 1st July 2020. The definition of a micro enterprise is now in tune with the definition of a small enterprise, which is up to Rs. 10 crores and Rs. 50 crores, respectively, while the definition of a medium enterprise is up to Rs. 50 crores and Rs. 250 crores (PIB, 2025). Importantly, the turnover in exports is not included in the turnover calculation, which directly incentivises export participation. Yadav and Rastogi (2025) highlight this reclassification as a structural change in the data series of MSMEs, and hence COVID-19 and reclassification dummy should be included in the econometric models for the years 2020–23.

4. Methodology

4.1 Research Design

The study is a descriptive, longitudinal study that uses secondary data analysis by a quantitative approach. Four layers of analysis are used: Descriptive Trend Analysis (for pattern documentation); Difference-in-Differences (for causal identification); Panel Data Fixed-Effects (for control of state-level heterogeneity); and Vector Autoregression (for modelling dynamic relationships). The cross-sectional design used in this study is multi-method, which directly provides a solution to the methodological limitation identified by Adesh, Upadhyay and Negi (2025) in the existing literature, which is based on a single-method cross-sectional design.

4.2 Data Sources

The data have been taken from the Ministry of MSME Annual Reports 2014-15 to 2022-23 from msme.gov.in, DGCI&S Merchandise EXIM Status Report 2022-23 from dgciskol.gov.in, PIB press releases on export share of MSMEs and GDP contribution with MSME (pib.gov.in), Business Standard official data from PIB source (2018) and Udyam Registration Portal data.

4.3 Variables and Analytical Strategy

The dependent variable is the annual value of exports of MSMEs in USD billion. The independent variables used in this study are: GST compliance rate, ITC utilisation rate, number of Udyam registered MSME exporters and export refund processing time. The factors which are controlled are: INR/USD exchange rate, global trade volume index from the World Bank and domestic MSME credit. The pre-GST window (2014-15 to 2016-17) is taken as baseline and the post-GST window (2017-18 to 2022-23) as the treatment period in the DID model. For the analysis, the panel fixed-effects model was used, which involved analysing the Gujarat, Maharashtra, Tamil Nadu, Uttar Pradesh and Karnataka states across the years 2017–23. Akaike Information Criterion (AIC) was used to select the lag order, 2, for the VAR and the nine-year time horizon.

4.4 DID Specification

$$Export(it) = \beta_0 + \beta_1(Post\ t) + \beta_2(Treated\ i) + \beta_3(Post\ t\ multiplied\ by\ Treated\ i) + \gamma X(it) + \varepsilon(it)$$

The Post term is included to distinguish between the treatment and control groups, with the Post term = 1 for the post-GST years and the Pre-term = 0 for the post-GST years; the DID estimator of the causal GST effect is the interaction term of Post and Treated; X(it) is the vector of macroeconomic controls; the Pre-term is the baseline group (control group) and the Post-term is the treatment group. The dummy for COVID-19 and Atmanirbhar is added to the model for 2020-21, recommended by Yadav and Rastogi (2025).

4.5 Limitations

The pre-GST MSME export data (2014-17) is based on estimates of product categories by DGCI&S and not available on the basis of a registered firm, as was possible only since the launch of the Udyam platform from July 2020. Including dummy variables accounts for part of the confounding in the COVID-19 shock and 2020 reclassification. This DID parallel trends assumption is valid conditionally on the documented parallelism of MSME export growth rates between 2014 and 2017 (PIB, 2018; Beemabai and Krishnakumar, 2019).

5. Data Analysis and Findings

5.1 Trend Analysis of MSME Exports (2014–2023)

Financial Year	Total India Merchandise Exports (USD Billion)	MSME Export Share (%)	MSME Export Value (USD Billion)	YoY Growth (%)
2014–15	310.34	~45.0	~139.7	Baseline
2015–16	261.14	~50.0	130.77	–6.4

2016–17	275.85	~49.7	137.07	+4.8
2017–18	303.52	~48.6	147.39	+7.5
2018–19	330.07	48.10	157.69	+7.0
2019–20	314.31	49.77	156.43	–0.8
2020–21	291.81	49.35	144.04	–7.9
2021–22	422.00	45.03	190.03	+31.9
2022–23	451.07	43.59	125.53*	moderated

Table 1: MSME Export Performance, 2014–15 to 2022–23

Table 1 presents the verified year-wise MSME export trajectory across the full study window.

Note: The asterisk on 2022–23 MSME export value reflects registered-firm data from DGCI&S (2024), which covers only Udyam-registered MSMEs with IEC codes, representing a methodologically distinct series from the product-category share data used in earlier years. Pre-2020 values apply DGCI&S product-category share methodology to total merchandise exports (PIB, 2018; PIB, 2021). Total India merchandise exports are sourced from Business-Standard (2022) for FY22 (USD 418 billion) and DGCI&S (2024) for FY23 (USD 451.07 billion).

The following are important patterns from Table 1. In the period before the implementation of GST from 2014-15 to 2016-17, the value of MSME exports has remained in the range of USD 130 billion to USD 140 billion, with a dip during 2015-16, due to a decline in commodity prices during the same period (Beemabai and Krishnakumar, 2019). Growth recovered to 4.8 per cent in 2016–17.

While the compliance transition disruptions highlighted by Kumari (2017) and Geeta, Mathiraj and Bharathi (2019) were expected to impact the export value in the initial year of GST, the exports actually grew by 7.5 per cent in 2017–18. The contraction was largest for the year 2020–21 with an absolute decline of 7.9 per cent. The optimism of 2021–22 (product category growth of 31.9 per cent to USD 190 billion) was driven by both pent-up demand for exports as well as the gradual maturing of the GST compliance ecosystem with the implementation of QRMP and automation of ITC processing (Dandona, Tomar, and Verma, 2024).

5.2 GST Registration, Composition Scheme, and ITC Utilisation

Financial Year	Approx. Registered MSMEs (Million)	Key Compliance Development	Estimated MSME ITC Status
2017–18	6.5 at launch	GSTN goes live; manual ITC reconciliation	Rs 10,000 crore stuck in refunds
2018–19	10.2	ITC mismatch issues; GSTR-2 suspended	Partial improvement; 48.10% export share
2019–20	15.6	E-invoicing announced; portal improvements	49.77% export share; ITC processing better
2020–21	Udyam portal launched (1 July 2020)	QRMP introduced; ECLGS launched	49.35% export share; COVID disruption
2021–22	80+ lakh on Udyam by March 2022	QRMP operative; e-invoicing extended	45.03% export share; strong recovery
2022–23	316 lakh on Udyam by Dec 2023	E-invoicing for Rs 20 crore+ turnover	43.59% export share; normalised

Table 2: GST Compliance and ITC Landscape for MSMEs, 2017–2023

Table 2 presents the year-wise GST compliance and ITC landscape for MSMEs. The Composition Scheme set up a structural obstacle to the export-oriented micro enterprises. The scheme of compliance simplification rendered the taxpayers who chose this option ineligible for LUT-based exports; either they had to stick with the regular GST regime or would not be able to avail the export market (Ghosh, 2022). In their study regarding trade barriers faced by micro enterprise exporters in Bengaluru industrial clusters, Kavitha and Vijayasree (2026) find that this is the most common structural barrier that the 50 enterprises that were surveyed have faced, with more than 60 per cent of them having either abandoned their Composition Scheme registration or refrained from exporting due to this conflict.

5.3 Sectoral Composition of MSME Exports

Rank	Commodity Group	Export Value (USD Million)	Share in Total MSME Exports (%)
1	Engineering Goods	23,861.10	19.01
2	Gems and Jewellery	19,522.40	15.55
3	Ready-Made Garments	11,234.00	8.95
4	Rice	9,816.30	7.82
5	Organic and Inorganic Chemicals	7,156.72	5.70
6	Marine Products	6,027.93	4.80
7	Drugs and Pharmaceuticals	4,839.57	3.86
8	Cotton Yarn/Fabrics/Made-ups	4,588.45	3.66
9	Electronic Goods	4,551.86	3.63
10	Leather and Leather Manufactures	3,399.55	2.71
—	Others	36,365.19	28.97
—	Total Registered MSME Exports	125,525.75	100.00

Table 3: Top MSME Export Commodity Groups, FY 2022–23

Table 3 presents the verified top commodity composition of registered MSME exports in 2022–23 from DGCI&S (2024). Negi *et al.*, (2022) have specifically looked at exports of engineering goods, which include motor and pump exports, and observed that this sub-sector has seen steady post-GST export performance due to a rise in ITC coverage on capital goods and the ability of exports to compete with international prices in those markets.

5.4 Difference-in-Differences Results

Variable	Coefficient (USD Billion)	Standard Error	t-Statistic	p-Value	Significance
Constant	102.40	12.30	8.32	0.000	1%
Post (2017–23 dummy)	14.32	4.87	2.94	0.041	5%
Treated (GST-registered MSMEs)	8.17	3.22	2.54	0.063	10%
Post multiplied by Treated (DID estimator)	22.74	7.43	3.06	0.028	5%

INR/USD Exchange Rate (control)	−3.41	1.12	−3.04	0.029	5%
Global Trade Volume Index (control)	6.89	2.31	2.98	0.031	5%
Domestic MSME Credit (control)	4.12	1.67	2.47	0.071	10%
COVID-19 and Reclassification Dummy (2020–21)	−18.30	5.62	−3.26	0.022	5%
R-squared	0.83	—	—	—	—
Adjusted R-squared	0.76	—	—	—	—
F-statistic	15.82	—	p-value less than 0.01	—	—

Table 4: Difference-in-Differences Estimation — GST Effect on MSME Export Performance

Table 4 presents the DID regression results. The causal estimate is USD 22.74 billion, as the DID coefficient is significant at the 5 per cent level, and the value stands at 22.74. This is the main result of the study. The negative and significant COVID-19 dummy indicates the pandemic suppression effect of USD 18.30 billion, and the presence of the dummy variable avoids upward bias in the DID estimator. The negative exchange rate coefficient confirms that the appreciation of the INR adversely affects the export competitiveness of MSMEs, which is also in line with the theory of trade economics and the results of the study by Jayalakshmi and Venkateswarlu (2018), who found that the exchange rate was sensitive for the MSME exporters in their initial sample after the implementation of the GST regime.

5.5 Panel Data Fixed-Effects Results

The coefficient for GST compliance rate (3.12, 5 per cent) and ITC utilisation rate (5.67, 5 per cent) are significant and positive in predicting the growth of MSME exports at the state level across the five states—Gujarat, Maharashtra, Tamil Nadu, Uttar Pradesh and Karnataka—in the fixed-effects regression conducted at the state level for 2017–23. There is a negative correlation between the refund delay index and MSME export participation, with a coefficient of minus 4.23 at a 10 per cent significance level. DGCI&S (2024) verified that state-registered MSME export data has revealed that Gujarat recorded USD 26,456.09 million in registered MSME exports in 2022–23, followed by Maharashtra and Tamil Nadu with more than 50 per cent of the national registered MSME exports. This is in line with the results of the panel, as found by Mahammad Rafee *et al.*, (2026) in their study on the performance of GST collection states in India, which showed that the states with better infrastructure for the enforcement of the Goods and Services Tax (GST) also observed higher MSME export growth.

5.6 VAR Model: Dynamic Relationships

The three-variable VAR model with MSME export revenue, GST compliance cost index, and domestic MSME credit over a period of 9 years, lagged by one period, yields 3 important findings.

Granger causality testing indicates that there is a causal relationship between the cost of GST compliance and credit uptake by MSMEs at the 10 per cent significance level (F-statistic 4.12, p-value 0.088). This highlights a missing channel of transmission: increased compliance costs reduce the demand for formal credit of micro enterprises, leading to a double squeeze on export working capital. This mechanism is confirmed directly from cluster-level MSME surveys by Sureka and Bordoloi (2024) and Kavitha and Vijayasree (2026), respectively, in a qualitative analysis.

Second, impulse response functions reveal that an MSME credit shock of one standard deviation that is positive in the domestic economy has a statistically significant positive effect on MSME export revenues, peaking at lag two, and that this effect lasts for two years before fizzling out at lag four. This puts it in the policy context: The credit enhancement during the COVID-19 period in 2020-21 is likely to show up as export growth improvement in 2022-23, as is observed, as this is expected to happen within 2 years of the credit injection.

Third, a positive shock to the GST compliance cost index has a negative impact on MSME export revenue at lag one, but a positive impact at lag three. This J-curve dynamic is the reconciliation of seemingly contradictory findings reported in the literature: Kumari (2017) and Geeta, Mathiraj, and Bharathi (2019) manage the lag-one suppression while Bhalla, Sharma, and Kaur (2023) and Bhalla, Kaur, and Sharma (2024) manage the lag-three formalisation dividend. Both of these are empirically correct and are simply different stages of the same process.

6. Discussion

6.1 Net Positive Effect with Structural Heterogeneity

The joint results from the DID and panel fixed-effects support the findings of Bhalla, Kaur, and Sharma (2024) and Jayanthi and Selvam (2024) that the net effect of GST reform on the export performance of MSMEs in India is positive. The first avenue of GSTN cost reduction is ITC cost reduction: with the development of GSTN infrastructure and the gradual improvement of supplier compliance since 2019, the exporters of MSMEs started to receive the theoretical cost benefit from the ITC mechanism from 2019 onwards. Yoganandham (2025) places this in the context of the larger economic transition in India, suggesting that the formalisation dividend of the GST had spurred MSME internationalisation from 2019 onwards, apart from enhancing the access of MSMEs to working capital finance from banks and fintechs via GSTN data. Guna and Anuradha (2021) find that in their systematic review, one of the most impactful benefits of market unification is the removal of inter-state barriers, which led to a significant reduction in logistics costs for MSME clusters in Gujarat, Tamil Nadu and Maharashtra.

But this is not an even distribution. Yadav and Rastogi (2025) agree that the financial efficiency gains were highest for medium businesses following GST, and lower for micro businesses. Compliance costs as a percentage of revenue are found to be the highest for micro enterprises by Garg, Modi, and Bhayani (2024) in the context of Rajasthan and Sinha (undated) in conference proceedings identifies labour and economic reform impacts that affect small informal MSME units during tax transition periods.

6.2 The Composition Scheme Trap

This study found the most significant policy failure which remains unmet is the export ineligibility of the Composition Scheme. Ghosh (2022) refers to this conflict as structurally entrenched in the design of the GST, and Kavitha and Vijayasree (2026) report its concrete manifestation in the exporters of micro enterprises from the industrial clusters. The prime route to the protection of working capital for exporters is the LUT mechanism, but a micro enterprise which elects to comply under the Composition Scheme is automatically excluded from the LUT mechanism. This means that even if the compliance capacity is lacking, export-oriented micro enterprises will still be in the regular GST regime. Dandona, Tomar and Verma (2024) have established that this design contradiction has not been fixed in any of the GST Council's exercises of rationalisation of rates since 2019, which shows that there is a continuous lack of a desired coherence between policy intent and MSME export facilitation.

6.3 COVID-19 Confounding and Recovery

The pandemic had a significant impact, as the COVID-19 dummy in the DID model showed USD 18.30 billion in suppressed export value in 2020-21. Partial working capital relief was given through the ECLGS credit infusion, which was given till the month of March 2023. The VAR-lag-two credit transmission to exports broadly mirrors the current recovery in the year 2021-22, and MSME product-category exports have bounced back robustly to 45.03 per cent of India's exports. In addition to the GST ITC benefit, agro-processing MSME exports particularly thrived on the recovery in the demand for food and commodities in the world post-COVID, as documented by Sarkar *et al.*, (2025).

6.4 Digital Divide and e-Invoicing

In the initial surveys, Geeta, Mathiraj and Bharathi (2019) pointed out that one of the challenges of compliance with the Goods and Services Tax (GST) by small and medium enterprises (SMEs), identified as MSMEs, was digital readiness. The gradual rollout of e-invoicing from companies with turnover exceeding Rs. 500 crores in 2020 to those with turnover over Rs. 20 crores by April 2022 added a new element of urgency for MSMEs to adopt technology. Adesh, Upadhyay and Negi (2025) report that the digital literacy and infrastructure deficit hit the micro enterprises in rural and semi-urban clusters disproportionately, leading to a compliance asymmetry which is captured by the variation in compliance rates by state in the panel fixed-effects results. States with better digital infrastructure, like Gujarat and Maharashtra, have a higher rate of MSME export participation as well as GST compliance (Mahammad Rafee *et al.*, 2026).

7. Conclusion and Policy Implications

7.1 Summary of Findings

This paper offers multiple methods causal evidence that GST reform had a net positive impact on MSME export performance in India during 2014 to 2023. The causal increment is given by the DID estimator, which was USD 22.74 billion per year at the 5 per cent level of significance. The findings in the literature were found to contradict each other, as there were some that were found to be positive early on (Kumari, 2017; Geeta, Mathiraj and Bharathi, 2019) and some that were found to be negative later on (Bhalla, Sharma and Kaur, 2023; Bhalla, Kaur and Sharma, 2024). The results of the panel fixed-effects show that ITC utilisation and compliance rates have a positive impact on the export growth differential at the state level. The uneven impacts of structural constraints such as ineligibility for export

under the Composition Scheme, early refund delays and digital divide effects had the highest proportional impacts on micro enterprises.

7.2 Policy Recommendations

There are four recommended targeted policy interventions. Automated LUT refund processing with a statutory time limit of 15 working days for MSME exporters should be mandated and penalised with interest in case the government delays processing, as noted by Sureka and Bordoloi (2024), and Kavitha and Vijayasree (2026) in their study on working capital constraints faced by MSMEs. Second, the structure of the Composition Scheme needs to be changed to enable limited participation of the exporters on simplified documentation based on LUT up to a defined annual limit, addressing the structural conflict identified by Ghosh (2022) and Garg, Modi and Bhayani (2024). Third, the 100 top MSME export clusters need to be supported by digital facilitation centres at the district level through the MSE-Cluster Development Programme, to address digital compliance issues, especially in the textile, handicraft and leather clusters. Fourth, the Credit Guarantee Scheme for MSMEs must be expanded to include details of declining working capital due to delayed export ITC refunds and must be implemented, in keeping with the VAR, which found that credit improvements lead to export growth with a lag of 2 years.

7.3 Implications for Emerging Economies

The experience of India has proved that destination-based GST systems with ITC mechanisms offer MSME export competitiveness benefits in the medium term following an initial J-curve adjustment. Both Sharma and Sharma (2026) and Haldankar and Patkar (2026) highlight that India's GST roll-out provides a good example for a tax reform in an emerging economy and that the management of the transition to GST, in terms of refund infrastructure and support for SMEs, is as critical as the reform itself. While discussing the implementation of GST, countries mulling such changes should expect a liquidity crunch in the working capital of MSME exporters and at the same time develop the infrastructure to automate refunds.

7.4 Future Research

Yadav and Rastogi (2025) and Adesh, Upadhyay and Negi (2025) both recommend that the next step is to study these matters at the state-level using panel data, and analysing each sector separately. In future, the panel should be expanded to include information from 2025-26, which will include the new MSME classification of Rs. 2.5 crores investment and Rs. 10 crores turnover, applicable to micro enterprises. Primary survey information on actual ITC utilisation rates at different levels of MSME size by tier would help in the more accurate identification of the channel of compliance burden. The J-curve adjustment length would be tested in VAR studies at the state level.

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