



Original Article

The Dual Engines of India's Growth: Analysing the Dynamics, Challenges, and Economic Contribution of the MSME and Start-up Ecosystems (2024-2025)

Dr. Rupali K. Sanap

Assistant Professor, K.V. N. Naik Shikshan Prasarak Sanstha's
Art's, Commerce & Science College, Nashik, Affiliated to SPPU

Manuscript ID:
RIGJAAR-2025-021229

ISSN: 2998-4459
Volume 2
Issue 12
Pp. 137-141
December 2025

Submitted: 12 Nov. 2025
Revised: 17 Nov. 2025
Accepted: 18 Dec. 2025
Published: 31 Dec. 2025

Correspondence Address:
Dr. Rupali K. Sanap
Assistant Professor
K.V. N. Naik Shikshan
Prasarak Sanstha's
Art's, Commerce & Science
College, Nashik, Affiliated to
SPPU
Email:
rupalisnap4@gmail.com

Quick Response Code:



Web: <https://rlgjaar.com>



DOI:
[10.5281/zenodo.18143536](https://doi.org/10.5281/zenodo.18143536)

DOI Link:
<https://doi.org/10.5281/zenodo.18143536>



Creative Commons



Abstract

The sustained growth of the Indian economy, which achieved 8.2% expansion in FY2024, is powered by the Micro, Small, and Medium Enterprises (MSME) sector and the burgeoning start-up ecosystem. MSMEs serve as the foundational backbone, contributing nearly one-third to India's GDP and employing over 111 million people. The start-up ecosystem acts as the catalyst, driving high-tech innovation, creating over 17.28 lakh direct jobs in formal sectors like IT and Healthcare, and establishing India as the world's third-largest start-up hub. However, realizing India's long-term economic goals requires overcoming entrenched structural challenges: a massive estimated MSME credit gap of ₹80 lakh crore, a pervasive digital divide, and a structural imbalance where 97% of enterprises are low-productivity micro-units. Targeted policies, such as the Production Linked Incentive (PLI) scheme, have successfully integrated mid-level MSMEs into global supply chains, boosting exports. Strategic recommendations center on financial ecosystem reform (leveraging Digital Public Infrastructure for data-driven underwriting), subsidized B2B SaaS adoption for non-tech MSMEs, and policies to resolve the critical medium enterprise bottleneck.

Keywords—MSMEs, Economics Growth, Start-up, Ecosystem.

Introduction and Foundational Framework

Contextualizing India's Economic Architecture: MSMEs as the Backbone, Start-ups as the Catalyst

The MSME sector, with its 63.4 million units, is the traditional cornerstone of the Indian economy, promoting development in rural and semi-urban areas and imparting resilience against global uncertainties. In parallel, the start-up ecosystem drives high-growth, technology-led transformation, rapidly creating wealth, generating high-quality jobs, and enhancing India's global position in emerging technologies. Both are pivotal to the government's goals, including 'Make in India' and 'Viksit Bharat' by 2047.

The Evolving Regulatory Definition of MSMEs

The operational definition of MSMEs is governed by the MSMED Act, 2006. A critical policy reform in May 2020 rationalized the criteria, applying a unified set of investment and turnover limits for both manufacturing and services sectors. This revision elevated the financial limits, addressing the historical "fear of growth" and incentivizing enterprises to formalize and scale their operations.

The current categorization is based on investment in plant and machinery/equipment and annual turnover.

Micro: Investment INR 10 million; Turnover INR 50 million.

Small: Investment INR 100 million; Turnover INR 500 million.

Medium: Investment INR 500 million; Turnover INR 2.5 billion.

Dynamics of Convergence and Divergence

The sectors diverge in operational characteristics: MSMEs are geographically dispersed,

Creative Commons (CC BY-NC-SA 4.0)

This is an open access journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/) Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

How to cite this article:

Sanap, R. K. (2025). The Dual Engines of India's Growth: Analysing the Dynamics, Challenges, and Economic Contribution of the MSME and Start-up Ecosystems (2024-2025). Royal International Global Journal of Advance and Applied Research, 2(12), 137–141. <https://doi.org/10.5281/zenodo.18143536>



rely heavily on debt financing, and often have low technological sophistication. whereas start-ups are concentrated in urban tech hubs, rely on equity capital, and focus on high-tech sectors. However, a strong convergence exists, particularly through B2B services. The exponential growth of B2B start-ups catering to MSME financing and digital transformation indicates a massive unmet demand. These start-ups bridge the technology gap by democratizing access to software-as-a-service (SaaS) and Fintech solutions, effectively making the MSME sector a crucial anchor client base for the innovation ecosystem.

Quantifying Economic Contribution and Resilience

Aggregate Contribution to National GDP and Gross Value Added (GVA)

The MSME sector is a foundational source of national income, contributing nearly one-third to India's Gross Domestic Product (GDP). The Gross Value Added (GVA) by MSMEs grew from 29.7% in 2017-18 to 30.1% in 2022-23. Specifically, MSMEs contribute approximately 6.11% of the manufacturing GDP and a substantial 24.63% of the GDP from service activities. This sector demonstrated remarkable resilience, sustaining a 27.3% contribution to India's GDP even during the severe disruptions of 2020-21, rebounding to 29.6% in 2021-22.

Employment Dynamics: Scale, Quality, and Geographic Distribution

MSMEs are the backbone of mass employment, standing as the second-largest employment generator in India, employing more than 111 million people as of FY 2022. In contrast, DPIIT-recognized start-ups contribute significantly to formal, high-skill job creation, reporting over 17.28 lakh direct jobs as of December 31, 2024. Job creation is concentrated in IT Services (leading at 2.10 lakh jobs), Healthcare & Lifesciences (1.51 lakh), and Professional & Commercial Services (96,474). A critical structural

Table 1: Key Macroeconomic Contributions of the Indian MSME and Start-up Ecosystems (FY2022-FY2025 Trends)

Metric	Latest Value/Period	MSME / Start-up	Source/Context
Contribution to GDP (GVA)	30.1% (FY2022-23)	MSME	Foundational economic role
Contribution to Total Exports	45.79% (May 2024)	MSME	Growing global trade presence.
Total Employment Generated	>111 million (FY2022)	MSME	Second-largest employer nationally
Direct Jobs Created	>17.28 lakh (Dec 2024)	Start-up	Job creation in high-tech sectors
Total DPIIT Recognized Units	1.59 lakh (Jan 2025)	Start-up	3rd largest global ecosystem

Dynamics and Market Trends (2023–2025)

MSME Financial Dynamics: Formalization, Credit Growth, and Capital Market Engagement

Government focus on formalization is driving enhanced credit penetration.¹ Outstanding credit availed by MSMEs under priority sector lending increased by 24.1% in FY2024. Total credit outstanding by Scheduled Commercial Banks (SCBs) to MSMEs stood at ₹27.25 lakh crore as of March 31, 2024, reflecting annual growth rates of 12.39% and 20.58% in the preceding two financial years. Formalization extends to the micro-level, with the microfinance portfolio growing by 18.4% in FY2024. Furthermore, SMEs are engaging directly with capital markets, registering a record 196 equity issuances (IPOs) in FY2024, mobilizing ₹6,095 crore 2.6 times the funds raised in FY2023.

imbalance exists within MSME employment: informal micro-enterprises (IMEs) are responsible for 80% of MSME employment but contribute only 20% of the sector's output. This composition results in low labour productivity per unit and a deficit of formal, productive small and medium enterprises (SMEs). Both sectors show positive trends in inclusive growth, with women-owned MSMEs constituting 20.5% of Udyam. Portal registrations, and 73,151 recognized start-ups including at least one-woman director as of October 2024.

International Trade Impact: MSMEs' Role in Export Growth

The MSME sector is a vital component of India's global trade presence. The sector's export volume surged from ₹3.95 lakh crore in 2020-21 to ₹12.39 lakh crore in 2024-25. Their contribution to national exports grew from 45.73% in 2023-24 to 45.79% by May 2024. This boom correlates with targeted policies like the Production Linked Incentive (PLI) scheme, which has encouraged the number of exporting MSMEs to increase considerably, from 52,849 in FY 2020-21 to 1,73,350 in FY 2024-25.

Innovation and Global Competitiveness: Start-up Ecosystem's Value Creation

India is firmly established as the third-largest start-up ecosystem globally, with over 1.59 lakh DPIIT-recognized start-ups as of January 15, 2025. This vibrant ecosystem is home to over 100 unicorns.⁵ India's aggressive support for innovation has led to a significant leap in the Global Innovation Index, moving from 81st in 2015 to 40th in 2023. Investment is increasingly directed toward high-tech sectors like deep-tech, space exploration, and Artificial Intelligence (AI). Indian innovation is often characterized by low-cost, frugal technology solutions designed to address specific societal challenges in healthcare and education, ensuring a high functional impact.

Start-up Funding Cycle Analysis: Rebound and Investor Vigilance

The Indian start-up ecosystem experienced a recovery in 2024, following the global "funding winter". While the prior slowdown saw a 53% decline in total start-up investments in 2023, 2024 signalled a rebound, with total funding surging to between 12 billion and 13.7 billion. This increase (20% to 43% over 2023) reflects a shift toward financing "more sustainable, fundamentally strong ventures". Early-stage start-ups benefited significantly, with 40 dedicated funds totalling 1.94 billion launched to support seed and growth stages. Investment distribution was uneven, with Fintech securing the highest share (15.6% of funds launched), and while sectors like logistics faced sharp drops (62.32% decline).



Emergent Sector Focus: DeepTech, Fintech, and Healthtech as Investment Drivers

Investment is increasingly channeled into complex, high-impact sectors. Fintech remains dominant, with specific growth in the convergence of fintech and healthtech, where "embedded finance" models are integral to optimizing revenue cycles and improving patient affordability. DeepTech and Artificial Intelligence (AI) are also seeing dramatic growth, with India's AI investments estimated to surge to 11 billion in 2025. The healthtech segment, comprising over 10,000 start-ups, is leveraging supportive government policies like the Ayushman Bharat Digital Mission (ABDM) to drive the digitization of health records.

The Convergence Point: MSME-Start-up Collaboration through B2B SaaS

The collaboration is best exemplified by the B2B Software-as-a-Service (SaaS) market, which is projected to surge to between 13-15 billion by 2025. This growth is heavily driven by the massive MSME sector, which is compelled toward digitization by government policies like GST. Start-ups are democratizing technology by providing accessible ERP, CRM, and management tools, enabling MSMEs to compete globally. Crucially, the adoption of B2B SaaS solutions generates formal, verifiable transaction data, which mitigates the information asymmetry historically held by lenders and enables fintech start-ups to underwrite MSME loans more accurately.

Structural and Operational Challenges

Access to Finance: Diagnosis of the MSME Credit Gap and Collateral Impediments

The demand-supply disparity in MSME financing is the single greatest impediment to the sector's scaling potential. The MSME sector suffers from a massive credit gap, which was estimated to have ballooned to approximately ₹80 lakh crore by fiscal 2021. In fiscal 2017, formal financing met only 16% of the total debt demand, with the remainder overwhelmingly met through informal sources, often at extremely high interest rates, ranging from 30% to 60%.

The primary constraint is the perception of SMEs as high-risk by traditional financial institutions, compounded by the enterprises' inability to provide sufficient collateral, high transaction costs in verifying creditworthiness, and insufficient credit history. This lack of affordable, structured finance adversely affects firm performance, labour productivity, and export orientation.

Table 2: Critical Challenges and Quantified Gaps in the MSME Ecosystem

Challenge Area	Quantified Gap/Data Point	Consequence/Impact	Source
MSME Credit Gap	Estimated ₹80 lakh crore (FY2021)	Reliance on informal finance (30%-60% interest rates); limits expansion ⁶	
Structural Imbalance	97% of registered units are Micro	Low productivity; deficit of formal SMEs; penalizes scaling ⁹	
Technology Adoption	Technological Illiteracy & Outdated Infrastructure	Widens gap between 'digital haves and have-nots'; limits export diversification ⁸	
Talent/Skilling	Shortage in AI, ML, Cybersecurity expertise	Hinders effective monetization and scaling of AI initiatives ³³	

Policy Interventions and Impact Assessment

Evaluation of Credit Facilitation Schemes

The Pradhan Mantri MUDRA Yojana (PMMY) has been highly instrumental in promoting entrepreneurship and

The Digital Divide: Barriers to Technology and AI Adoption (Beyond Cost)

The heterogeneous nature of the Indian MSME segment, dominated by micro-enterprises, presents significant barriers to technological transformation. Challenges extend beyond cost, encompassing human capital and infrastructure. Many MSME owners and employees suffer from technological illiteracy, lacking the digital skills needed to effectively adopt and optimize modern management software. Inadequate internet connectivity and poor access to modern technology form significant physical barriers, especially in semi-urban and rural areas. The digital divide is particularly evident among micro and female-owned businesses. Furthermore, for both tech and non-tech SMEs, the lack of trust in technology and insufficient regulatory safeguards discourage full digital connectivity.

Human Capital Deficits and the Skilling Imperative

Low productivity within the micro-enterprise structure is linked to low-quality human capital, manifesting as a significant national skills gap. India faces a shortage of specialized talent in emerging technologies crucial for the innovation economy, including AI, Machine Learning (ML), and cybersecurity. Sustaining digitalization requires extensive reskilling and continuous learning to align the workforce with industry needs. The Human Capital thematic working group under the India AI Mission is tasked with developing an equitable AI reskilling ecosystem to equip individuals, irrespective of socio-economic or geographic background, to participate meaningfully in the evolving AI economy.

Regulatory Complexity and Structural Imbalances

A major structural deficiency is the significant imbalance in unit size: a disproportionate 97% of registered MSMEs are micro-enterprises, while only 2.7% are small, and a mere 0.3% are medium enterprises. This "medium enterprise bottleneck" is highly detrimental to job creation, as medium enterprises generate significantly more employment (averaging 89.14 employees per unit) compared to micro-enterprises (5.7 employees). The lack of growth is primarily attributed to complex regulation. Compliance with multiple laws—across taxation, labour, and environmental clearances—is costly and time-consuming, actively discouraging the growth and formalization necessary to achieve scale and global competitiveness.

MSME growth, emerging as the most effective scheme among select entrepreneurial development programmes. The Credit Guarantee Fund Trust for MSMEs (CGTMSE) provides essential support by offering collateral-free loans



to MSMEs, directly mitigating the fundamental barrier of insufficient collateral for formal finance. The Stand-Up India initiative has focused on inclusive growth, providing financial benefits (e.g., 25% subsidy on machinery) and marketing/mentoring support to Scheduled Caste and Scheduled Tribe entrepreneurs. Research confirms a significant positive relationship between the amount sanctioned under Stand-Up India and the upliftment of MSMEs.

Detailed Analysis of the Production Linked Incentive (PLI) Scheme

The PLI scheme represents a major shift toward industrial policy designed to integrate domestic manufacturers, including MSMEs, into global supply chains. The scheme has generated massive investment, with over ₹1.5 lakh crore invested and resulting in total production exceeding ₹13 lakh crore. PLI is explicitly designed to ensure the integration of small businesses into supply chains. This has benefited 176 MSMEs and created approximately 7 lakh jobs across key sectors such as electronics and pharmaceuticals. The scheme's success lies in its multiplier effect, where performance-based incentives compel large manufacturing anchors to generate demand for local MSME suppliers, boosting revenue and necessitating the adoption of higher quality standards. This directly contributed to the surge in MSME export volumes.

Start-up India Initiative: Fostering Innovation and Ecosystem Support

The Start-up India initiative, launched in 2016, has driven the explosive growth of the innovation ecosystem. The number of DPIIT-recognized start-ups has grown exponentially from approximately 500 in 2016 to over 1,59,157 as of January 2025. Key support mechanisms include simplified compliance, tax exemptions for three consecutive financial years, and funding support through the ₹10,000 crore Fund of Funds for Start-ups (FFS). The impact extends beyond major metropolitan areas, with focused support networks encouraging smaller cities to contribute to entrepreneurial momentum.⁵ Research indicates a strong relationship between the number of recognized start-ups and the jobs reported under the Start-up India scheme.

Strategic Recommendations for Sustained Growth and Conclusion

The ambition to realize 'Viksit Bharat' by 2047 requires structural solutions to the MSME and start-up challenges, focusing on closing the credit gap, accelerating technological adoption, and resolving the medium enterprise bottleneck.

Strategic Recommendations

Financial Ecosystem Reforms: Leveraging Fintech and DPI to Close the Credit Gap. Given the ₹80 lakh crore MSME credit gap, traditional collateral-based lending must be systematically replaced by data-driven underwriting. Policy should mandate and incentivize banks and NBFCs to leverage Digital Public Infrastructure (DPI) components, such as the Account Aggregator framework and validated GST data, to use verifiable digital transaction history as a substitute for stringent collateral requirements.

Furthermore, specific financial policies should be created for medium enterprises to ensure adequate capital access tied to investments in scaling and Industry 4.0 technologies.

Accelerating Digital and AI Transformation. To overcome technological illiteracy and financial constraints, collaboration between government and B2B SaaS start-ups should be supported to build and subsidize affordable, multilingual, mobile-friendly AI/SaaS tools specifically for MSMEs. Financial assistance should be provided for the early adoption of these solutions. This must be complemented by Scalable Skilling Frameworks for AI readiness, with a focus on sector-specific, locally delivered training to address the skill deficit in emerging technologies like AI and ML.

Fostering Scale: Growth-Incentivizing Regulatory Regime. The policy environment must actively encourage upward transition, particularly addressing the structural imbalance where 97% of registered units are micro-enterprises. Legislative focus should prioritize market facilitation and ease of doing business by minimizing regulatory friction that penalizes growth.² This includes streamlining complex compliance processes (e.g., labour and environmental reporting) to ensure scaling does not result in an overwhelming compliance burden.

Conclusion

The Indian MSME and start-up ecosystems are the interdependent engines of economic transformation. The MSME sector provides foundational stability and mass employment, contributing nearly one-third of the nation's GDP. The start-up ecosystem injects the necessary dynamism, technology, and high-quality job creation, positioning India as a global innovation leader.

However, the primary barrier to realizing the full potential of these dual engines remains the entrenched structural challenges: the colossal ₹80 lakh crore credit gap, persistent digital and skill deficits, and a structural imbalance heavily skewed toward low-productivity micro-enterprises.

Evidence demonstrates that targeted policy such as the success of the PLI scheme in driving exports and supply chain integration, and the effectiveness of MUDRA in formal finance access yields significant results. For India to successfully navigate its path toward becoming a developed nation ('Viksit Bharat'), the national strategy must synthesize the strengths of both sectors. This requires directing the agility and innovation capacity of the start-up ecosystem (Fintech, B2B SaaS, AI) toward solving the fundamental structural deficiencies of the MSME base (lack of data, lack of collateral, low productivity). Through comprehensive financial reform, technological democratization, and targeted support for medium enterprise growth, India can ensure that its primary economic drivers achieve the scale and competitiveness required for sustained global leadership.

Acknowledgment

The author would like to express sincere gratitude to all those who contributed directly and indirectly to the completion of this research paper. I am deeply thankful to K. V. N. Naik Shikshan Prasarak Sanstha's Arts, Commerce & Science College, Nashik, affiliated with Savitribai Phule Pune University, for providing a supportive academic



environment and necessary institutional facilities that enabled this study.

I extend my heartfelt thanks to my colleagues and senior faculty members for their valuable suggestions, constructive feedback, and academic encouragement throughout the research process. Their insights greatly enriched the conceptual clarity and analytical depth of this work.

Finally, I am grateful to my family and well-wishers for their constant moral support, patience, and encouragement, which motivated me to complete this research successfully. Any limitations or errors in this study remain solely the responsibility of the author.

Financial support and sponsorship

Nil.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References

1. (PDF) MSME Sector in India: Comparative Analysis with BRICS, https://www.researchgate.net/publication/380403159_MSME_Sector_in_India_Comparative_Analysis_with_BRICS_Countries
2. "Raising and Accelerating MSME Performance" (RAMP) Scheme - PIB, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2041699>
3. A Comprehensive Review of MUDRA Loan Scheme: Implications for MSME Development, https://www.researchgate.net/publication/390086892_A_Comprehensive_Review_of_MUDRA_Loan_Scheme_Implications_for_MSME_Development
4. ACCESS TO CREDIT FOR INDIAN MSMEs Dr Sanjiv Layek https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/EN/wasme_access_to_credit_for_indian_msme.pdf
5. Budget 2025-26: Fuelling MSME Expansion-PIB, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2099687>
6. CGTMSE Loan Scheme | Get Collateral-Free Credit for MSME Growth - HDFC Bank, <https://www.hdfcbank.com/sme/msme-government-schemes/cgtmse>
7. Committee Report: Impact of COVID-19 Pandemic on. PRS India, <https://prsindia.org/policy/report-summaries/impact-of-covid-19-pandemic-on-msme-sector>
8. CONTRIBUTION OF MSMEs TO THE GDP - Press Release: Press <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2035073>
9. DC-MSME, <https://www.dcsmse.gov.in/ssiindia/performance.htm>
10. Enhancing MSMEs Competitiveness in India - NITI Aayog, https://www.niti.gov.in/sites/default/files/202505/Enhancing_Competitiveness_of_MSMEs_in_India.pdf
11. ET Make in India SME Regional Summit, Kolkata, showcases Bengal's tech-tradition blend amid labour and tariff hurdles, <https://m.economictimes.com/small-biz/sme-sector/et-sme-regional-summit-kolkata-showcases-bengals-tech-tradition-blend-amid-labour-and-tariff-hurdles/articleshow/123758143.cms>
12. Examples of successful clusters - European Cluster Collaboration, https://www.clustercolabouration.eu/sites/default/files/international_cooperation/examples_of_successful_clusters_in_india.pdf
13. Factors Influencing the Success of SMEs: Evidence from German Mittelstands - Atlantis Press, <https://www.atlantispress.com/article/125973926.pdf>
14. How India's MSMEs Are Embracing Tech and What's Holding Them, <https://www.dqindia.com/features/how-indias-msmes-are-embracing-tech-and-whats-holding-them-back-9648759>
15. Indian MSMEs: A decade of resilient growth and innovation - ET Edge Insights, <https://etedgeinsights.com/featured-insights/indian-msmes-a-decade-of-resilient-growth-and-innovation/>
16. List of Government Business Loan Schemes for MSMEs, <https://www.ujjivansfb.in/banking-blogs/borrow/complete-list-of-government-msme-loan-schemes>
17. Logistics & MSMEs face barriers in adopting tech - Cargo Talk, <https://cargotalk.in/logistics-msmes-face-barriers-in-adopting-tech/>
18. Micro, Small and Medium Enterprises - Reserve Bank of India, <https://www.rbi.org.in/commonman/english/scripts/FAQs.aspx?Id=966>
19. Mittelstand - Wikipedia, <https://en.wikipedia.org/wiki/Mittelstand>
20. MSME Role and its Importance in the Indian Economy - Kotak Mahindra Bank, <https://www.kotak.com/en/stories-in-focus/loans/business-loan/msme-importance-in-indian-economy.html>
21. MSME sector: The missing link in India's growth story | Policy Circle, <https://www.policycircle.org/economy/state-of-indias-msme-sector/>
22. MSME Schemes, https://msme.gov.in/sites/default/files/MSME_Schemes_English_0.pdf
23. MSMEs' Role in Economic Growth -a Study on India's Perspective - Research Gate, https://www.researchgate.net/publication/343189302_MSMEs'_Role_in_Economic_Growth_-_a_Study_on_India's_Perspective
24. Mudra Loan and Growth Path of Micro Small and Medium Enterprises in India, <https://jier.org/index.php/journal/article/download/352/348/563>



26. NITI Aayog Releases Report on “Enhancing Competitiveness of MSMEs in India” PIB, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2126063>
27. Raising and Accelerating MSME Performance (RAMP) | National Institute for Micro, Small and Medium Enterprises (ni-msme), <https://www.nimsme.gov.in/about-scheme/raising-and-accelerating-msme-performance-ramp->
28. Rethinking Business Models...How COVID-19 Affected Indian Business - AITD - Amity, <https://aitd.amity.edu/blog/rethinking-business-models/>
29. Role of Micro, Small, and Medium Enterprises in Promoting RJPN, <https://rjpn.org/ijnti/papers/IJNTI2503018.pdf>
30. Supporting the Resilience of Small Businesses in India: The Value of Flexible Funding During a Crisis - NextBillion, <https://nextbillion.net/supporting-resilience-small-businesses-in-india-value-flexible-funding-during-crisis/>
31. Swaminathan J: MSMEs - bridging the credit gap through improving confidence in lending, <https://www.bis.org/review/r241126v.htm>
32. The Growth of MSMEs in India Post Covid - Invest India, <https://www.investindia.gov.in/blogs/growth-msmes-india-post-covid>
33. The role of MSMEs in post-pandemic economic recovery in India, <https://www.theeconomicsjournal.com/article/view/521/8-1-94>
34. Top 10 MSME Sector Challenges & Impacts - Lendingkart, <https://www.lendingkart.com/blog/major-challenges-faced-by-the-msme-sector-their-impacts/>
35. UNDERSTANDING INDIAN MSME SECTOR – Sidbi https://www.sidbi.in/uploads/Understanding_Indian_MSME_sector_Progress_and_Challenges_13_05_25_Final.pdf
36. Understanding the CGTMSE Scheme for MSMEs' Growth - Lendingkart, <https://www.lendingkart.com/blog/cgtmse-scheme/>
37. Understanding the Impact of Covid-19 on MSMEs in India, <https://jsbs.scholasticahq.com/article/72698-understanding-the-impact-of-covid-19-on-msmes-in-india-lessons-for-resilient-and-sustained-growth-of-small-firms>
38. Untitled - NITI Aayog , https://www.niti.gov.in/sites/default/files/2024-03/Boosting%20Exports%20from%20MSMEs_March%202024_compressed.pdf
39. Why India's MSMEs Struggle While China's Thrive - YouTube, <https://www.youtube.com/watch?v=LLI-2y79-G4>