International Journal of Academic Research and Development (IJAR&D)
ISSN : 2395-1737 (Print), Special Issue, April, 2026

MSMEs, Start-Ups and their Role in Global Value Chains: Opportunities and Challenges to the Indian Economy

Brajesh Kumar[1], Dr. Manoj Kumar Mandal[2]

[1]*Research scholar, University Department of Economics, Munger University, Munger, Bihar*

[2]*Assistant Professor, University Department of Economics, Munger University, Munger, Bihar*

ABSTRACT

Global Value Chains (GVCs) have become a central feature of international trade and production in the contemporary globalized economy. Instead of producing goods within a single country, production processes are now fragmented across multiple countries where each stage of production is performed in the most efficient location. In this evolving global economic environment, Micro, Small, and Medium Enterprises (MSMEs) and start-ups play a crucial role in strengthening national participation in global production networks. In India, MSMEs contribute significantly to employment generation, industrial output, and export performance. They represent nearly one of the most dynamic sectors of the economy and serve as important suppliers and service providers within domestic and international value chains.

In recent years, the emergence of start-ups has further strengthened India's entrepreneurial ecosystem by introducing innovation, digital solutions, and new business models. Government initiatives such as Make in India, Startup India, Digital India, and Atmanirbhar Bharat have created a supportive environment for MSMEs and start-ups to integrate into global markets. These initiatives focus on improving access to finance, promoting technological innovation, and facilitating export-oriented growth.

However, despite their significant potential, MSMEs and start-ups face numerous challenges in integrating into global value chains. These include limited access to technology, inadequate infrastructure, financial constraints, and difficulties in meeting international quality standards. Addressing these challenges requires targeted policy support, improved institutional frameworks, and stronger collaboration between government, industry, and financial institutions.

Keywords: *MSMEs, Start-Ups, Global Value Chains, Entrepreneurship, Indian Economy*

Introduction

Globalization and technological advancements have transformed the structure of international trade and production. One of the most significant developments in the modern global economy is the emergence of **Global Value Chains (GVCs)**. In these production networks, different stages of production—such as research, design, manufacturing, assembly, and marketing—are distributed across different countries depending on their comparative advantages. Participation in global value chains allows countries to specialize in specific stages of production and benefit from increased trade, investment, and technological exchange.

For developing economies like India, integration into global value chains offers significant opportunities for industrial development, employment generation, and export expansion. Among the various economic actors participating in these networks, **Micro, Small, and Medium Enterprises (MSMEs)** and **start-ups** play a particularly important role. MSMEs form the backbone of the Indian economy by contributing substantially to manufacturing output, exports, and job creation. They provide flexible production systems, support large industries as suppliers, and promote regional economic development.

Start-ups, on the other hand, represent a new wave of entrepreneurial innovation driven by digital technologies, knowledge-based industries, and creative business models. India has emerged as one of the largest start-up ecosystems in the world, with thousands of new enterprises operating in sectors such as technology, fintech, e-commerce, biotechnology, and renewable energy.

The integration of MSMEs and start-ups into global value chains is crucial for enhancing productivity, innovation, and competitiveness. However, achieving this integration requires supportive policies, technological capability, financial access, and efficient infrastructure. Government initiatives such as **Startup India, Digital India, and Make in India** aim to create a conducive environment for entrepreneurship and industrial growth.

In this context, understanding the role of MSMEs and start-ups in global value chains becomes essential for analysing India's future economic development and global competitiveness.

Review of Literature

- **Gereffi, G. (2018). Global value chains and development. Cambridge University Press.** Gereffi explains how global value chains provide opportunities for developing economies to integrate into international production systems. The study emphasizes the role of small and medium enterprises as suppliers and subcontractors in global production networks.
- **Kaplinsky, R., & Morris, M. (2001). A handbook for value chain research. Institute of Development Studies.** This work provides a comprehensive framework for analyzing value chains and the participation of small firms in global markets. It highlights the importance of upgrading, innovation, and institutional support for strengthening SME participation in global value chains.
- **World Bank. (2020). World development report: Trading for development in the age of global value chains.** The report discusses how participation in global value chains can accelerate economic growth and productivity in developing countries. It also emphasizes the importance of infrastructure, technology, and trade facilitation policies.
- **OECD. (2018). Enhancing the contributions of SMEs in a global and digitalised economy.** The OECD report focuses on the role of SMEs in international trade and digital economies. It highlights the challenges faced by SMEs in accessing finance, technology, and global markets.
- **Government of India. (2022). Annual report of the Ministry of MSME.** The report provides detailed information about the contribution of MSMEs to India's economy and the policy measures taken to support their development and global integration.

Role of MSMEs in the Indian Economy

- MSMEs play a crucial role in India's economic development. The sector contributes significantly to GDP, employment, and industrial output. MSMEs are often referred to as the backbone of the Indian economy because of their widespread presence across different sectors and regions.
- The MSME sector is particularly important for promoting **inclusive and balanced regional development**. Many MSMEs operate in rural and semi-urban areas where large industries are not present. These enterprises provide employment opportunities for local populations and support traditional industries such as handicrafts, textiles, food processing, and small-scale manufacturing.
- MSMEs also play an important role in supporting large industries by acting as suppliers of components, intermediate goods, and specialized services. Through these linkages, MSMEs become integrated into larger industrial value chains.

Table 1: Contribution of MSMEs to the Indian Economy

Indicator	Contribution
Share in GDP	Around 30%
Share in exports	Around 45%
Employment generation	Over 110 million people
Number of enterprises	More than 63 million

Role of Start-ups in Global Value Chains

Start-ups have emerged as important drivers of innovation and economic transformation. These enterprises introduce new technologies, products, and services that can significantly improve productivity and competitiveness.

In India, the start-up ecosystem has grown rapidly in recent years, supported by government initiatives such as **Startup India, Digital India, and Skill India**. Start-ups are particularly active in sectors such as information technology, financial technology, artificial intelligence, biotechnology, and e-commerce.

Start-ups contribute to global value chains by:

- Developing innovative technologies
- Providing digital platforms for global trade
- Enhancing supply chain efficiency
- Supporting industrial automation and digitalization

Opportunities for MSMEs and Start-ups in Global Value Chains

- **Digitalization**- Digitalization has significantly expanded opportunities for MSMEs and start-ups to participate in global markets. Digital platforms, e-commerce networks, and online payment systems allow small firms to reach international customers without large investments. Technologies such as cloud computing, artificial intelligence, and digital marketing help improve efficiency, reduce operational costs, and enhance global connectivity.
- **Supply Chain Diversification**- In recent years, global companies have been diversifying their supply chains to reduce dependence on a single country and improve resilience. This shift creates new opportunities for Indian MSMEs and start-ups to become suppliers of components, services, and intermediate goods within international production networks and value chains.
- **Government Policy Support**- The Government of India has introduced several initiatives such as **Make in India, Atmanirbhar Bharat, Startup India, and Production Linked Incentive (PLI) schemes** to promote industrial growth and entrepreneurship. These policies aim to improve infrastructure, provide financial support, encourage innovation, and facilitate the integration of MSMEs into global markets.
- **Innovation and Technology**- Start-ups are important sources of innovation and technological advancement in modern economies. By developing new products, digital solutions, and advanced manufacturing techniques, start-ups can improve productivity and efficiency within supply chains. Their ability to adopt emerging technologies strengthens India's competitiveness in global value chains and international trade.

Table 2: Policy Initiatives Supporting MSMEs and Start-ups

Policy Initiative	Objective
Startup India	Promote entrepreneurship
Digital India	Strengthen digital infrastructure
Make in India	Promote manufacturing
Atmanirbhar Bharat	Strengthen domestic industries
PLI Scheme	Encourage production and exports

Challenges Faced by MSMEs and Start-ups

Despite their significant potential, **MSMEs and start-ups** face several structural and institutional challenges that limit their effective participation in global value chains.

- **Limited Access to Finance**- Many MSMEs and start-ups struggle to obtain adequate financial resources for expanding production, adopting new technologies, or entering international markets. Limited collateral, high borrowing costs, and complex loan procedures restrict their ability to access credit from formal financial institutions.
- **Lack of Advanced Technology**- Technological capability is essential for competing in global markets. However, many small enterprises lack access to modern machinery, digital tools, and research facilities. This technological gap reduces productivity and makes it difficult for them to meet global production standards.

- **Inadequate Infrastructure**- Poor transportation networks, inefficient logistics systems, and limited access to reliable power supply create operational difficulties for small enterprises. Infrastructure constraints increase production and transportation costs, reducing the competitiveness of MSMEs in international markets.
- **Difficulty in Meeting International Quality Standards**- Global markets require strict compliance with quality, safety, and environmental standards. Many MSMEs lack the technical knowledge, certification systems, and quality control mechanisms necessary to meet these standards, limiting their ability to export goods and services.
- **Limited Global Market Access**-Small enterprises often lack information about international markets, export regulations, and global demand patterns. Limited marketing capabilities and weak international networks prevent them from accessing foreign markets and participating effectively in global supply chains.

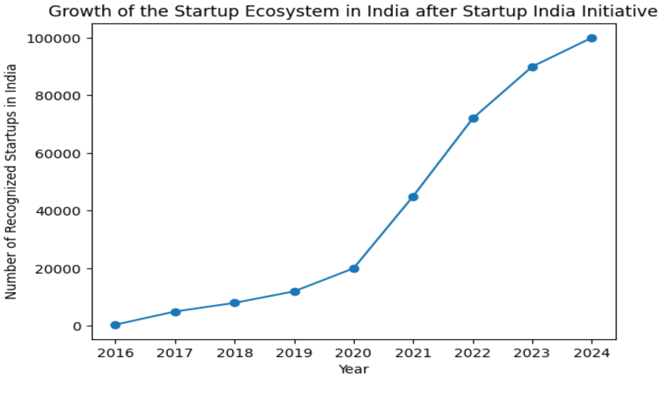
Overall Impact- These challenges restrict the ability of MSMEs and start-ups to compete effectively in international markets and reduce their participation in global value chains. Addressing these constraints through policy support, technological assistance, and improved infrastructure is essential for strengthening India's global economic integration.

Policy Recommendations

To enhance the participation of **MSMEs and start-ups** in global value chains, a comprehensive policy framework and institutional support system are necessary. The following policy measures can help strengthen their global integration and competitiveness.

- **Improve Access to Credit and Financial Support**- Access to adequate and affordable finance is essential for the growth of MSMEs and start-ups. Governments and financial institutions should expand credit facilities, provide low-interest loans, venture capital support, and strengthen schemes such as credit guarantee programs to enable small enterprises to invest in technology, production, and export activities.
- **Promote Technological Innovation and Research**- Encouraging research and technological innovation is crucial for enhancing productivity and competitiveness. Policy initiatives should support research and development, technology incubation centers, and innovation hubs. Collaboration between universities, research institutions, and industries can help MSMEs adopt modern technologies and improve product quality.
- **Strengthen Infrastructure and Logistics**- Efficient infrastructure and logistics systems are essential for reducing production and transportation costs. Investment in modern transportation networks, digital infrastructure, ports, and warehousing facilities can improve supply chain efficiency and facilitate the smooth movement of goods in international trade.
- **Provide Skill Development and Training Programs**- Human capital development is vital for industrial growth. Governments should promote vocational training programs, technical education, and entrepreneurship development initiatives. Skill development programs should focus on advanced manufacturing, digital technologies, and management capabilities to prepare the workforce for participation in global production networks.
- **Encourage Collaboration Between Large Firms and MSMEs**- Strengthening linkages between large corporations and MSMEs can help small enterprises integrate into global value chains. Large firms can provide technical guidance, quality standards, and market access, while MSMEs can supply specialized components and services. Such partnerships enhance productivity, innovation, and export potential.

Graph: Growth of Start-up Ecosystem in India



Graph: Growth of Start-up Ecosystem in India

The graph illustrates the rapid expansion of the Indian start-up ecosystem following the launch of the **Startup India initiative in 2016**. The number of recognized startups increased from only a few hundred in 2016 to nearly **100,000 by 2024**, reflecting a strong entrepreneurial environment, improved access to venture capital, government support, and the growth of digital technologies. This expansion demonstrates how start-ups are becoming key contributors to innovation, employment generation, and India's integration into **global value chains**, particularly in sectors such as fintech, e-commerce, artificial intelligence, and digital services.

Conclusion

Micro, Small, and Medium Enterprises and start-ups play a vital role in strengthening India's participation in global value chains. These enterprises contribute significantly to employment generation, innovation, and export growth. By acting as suppliers, service providers, and innovators, MSMEs and start-ups help integrate the domestic economy with international production networks.

Government initiatives such as **Startup India, Make in India, Digital India, and Atmanirbhar Bharat** have created new opportunities for entrepreneurship and industrial development. However, several structural challenges—such as financial constraints, technological limitations, and infrastructural gaps—continue to hinder deeper integration into global value chains.

Addressing these challenges requires coordinated policy efforts, improved institutional support, and stronger linkages between small firms and global markets. With the right policy framework and investment in innovation and infrastructure, MSMEs and start-ups can play a transformative role in enhancing India's competitiveness in the global economy.

References

1. Gereffi, G. (2018). *Global value chains and development: Redefining the contours of 21st century capitalism*. Cambridge University Press, pp. 72–85.
2. Kaplinsky, R., & Morris, M. (2001). *A handbook for value chain research*. Institute of Development Studies, pp. 23–31.
3. World Bank. (2020). *World development report 2020: Trading for development in the age of global value chains*. World Bank Publications, pp. 45–58.
4. OECD. (2018). *Enhancing the contributions of SMEs in a global and digitalised economy*. OECD Publishing, pp. 61–75.
5. Government of India. (2022). *Annual report 2021–22*. Ministry of Micro, Small and Medium Enterprises, pp. 14–22.
6. NITI Aayog. (2021). *Strategy for New India @75*. Government of India, pp. 210–218.
7. Asian Development Bank. (2020). *Asian economic integration report 2020: What drives innovation in Asia?* ADB Publications, pp. 88–96.
8. International Monetary Fund. (2021). *World economic outlook: Managing divergent recoveries*. IMF Publications, pp. 105–112.
9. UNCTAD. (2021). *World investment report 2021: Investing in sustainable recovery*. United Nations, pp. 97–110.
10. Ministry of Commerce and Industry. (2023). *Startup India: Status report on the Indian startup ecosystem*. Government of India, pp. 12–19.
11. Baldwin, R. (2016). *The great convergence: Information technology and the new globalization*. Harvard University Press, pp. 115–124.
12. Rodrik, D. (2018). *New technologies, global value chains, and developing economies*. National Bureau of Economic Research, pp. 17–26.
13. World Trade Organization. (2021). *Global value chain development report*. WTO Publications, pp. 53–66.
14. Ministry of Finance. (2023). *Economic survey of India 2022–23*. Government of India, pp. 245–252.
15. OECD & WTO. (2019). *Aid for trade at a glance: Economic diversification and empowerment*. OECD Publishing, pp. 73–82.