



Navigating the Global Marketplace: Indian MSME Integration into Global Supply Chains - Policy Opportunities and Challenges

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Abstract

This study examines the challenges and opportunities that are in the process of incorporating Indian Micro, Small & Medium Enterprises into Global Value Chains. While such GVC participation is likely to enhance the competitiveness of the MSMEs, back economic development, and enhance innovation, effective such integration has several hurdles. Such barriers include lack of technological and financial resources, inadequate skills, regulatory issues, and fair trade and sustainability concerns.

The proposed and discussed in this paper challenges includes: gap assessment, recommendations formulation, and legal implementation where more focus is place on Indian traits. These recommendations relate to improving the enabling framework, promoting technological upgrading and innovation, raising skills and human capital, and facilitating GVC participation that is more equitable and environmentally friendly.

By focusing on interventions in the above mentioned areas, the Indian policy makers will be able to put in place measures that will foster growth in Indian MSMEs in the global economy which in turn will support broader and more robust economic growth. The research also addresses the questions about the nature of the individual policy measures that are needed, specifics related to sectors, the role of geography, digitalization, and GVC in economic regionalization and growth, etc.

Keyword: Global Value Chains, India, Export Promotion, Innovation, Job Creation, Inclusive Growth.

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I. Introduction

The increasing interdependence of diverse economies all over the world has come with an increasing expectation that businesses in all categories would adopt a new breadth to the global business environment. The situation is not new among the Micro, Small and Medium Enterprises (MSMEs) of India which constitutes up to 95% of the all the enterprises in India and participate effectively in its economy and employment creation (Pyne, 2017).

Nevertheless, the full integration of Indian MSMEs into global value chains remains alien to them. While benefits are there from participation in global value chains including larger markets, wealth of technological and knowledge spillover and chances of upgrading and innovativeness, Indian MSMEs suffer from various constraints that limit their full participation (Abé&Proksch, 2017).

These constraints include lack of technology and finance, skill deficits or challenges in workforce development (Bhopal &Ekhami, 2020; Singh, 2019), regulatory obstacles, and doubts about fairness and sustainable development (Morrison et al., 2008). To tackle these barriers and harness the potential of Indian MSMEs within the framework of comparative advantage, engaging the political strategies has to be programmatic and grounded in investigation.

Enabling Environment for GVC Integration

Creating Integrated Business Networks in Global Value Chains by Indian MSMEs calls for the building of a performing ecosystem that fosters their growth and coordination. This requires addressing finance, regulation and infrastructure requirements for the key component.

Finance remains one of the most essential facilitators for MSMEs in their quest to raise resources for technology, innovation, and capacity building for global market needs (Singh, 2019). Efforts need to be made to

come up with credit guarantee schemes, venture capitals, alternative lending platforms and any other innovative financing solutions such that Indian MSMEs can have finance resources.

There is also a need to streamline the administrative aspects of doing business by reducing unnecessary policies thereby enhancing the opportunities of the Indian MSMEs and making it easy for them irrespective of the high levels of global competition (Abe & Proksch, 2017). There are various ways to achieve this such as relaxing the compliance burden, making processes electronic as much as possible and enhancing public private partnership. Furthermore, it is important to develop strong physical and digital infrastructure such as transportation systems, constant electricity supply, and internet connectivity that would facilitate this smooth transition of Indian MSMEs into the global supply chains.

Enhancing the Quality of Domestic Production

According to Ramachandran and Devi (2011), technology improvement and technology adoption are essential facets for Indian MSMEs in order to be competitive and be part of Global Value Chains. Nevertheless, due to a limited budget and low levels of technical assistance, Indian MSMEs encounter difficulties in acquiring and utilizing new technologies.

There is a need for policy makers to come up with appropriate strategies to encourage technological upgrading and innovation among Indian MSMEs. This may comprise establishment of schemes which would offer re-imbursements or tax incentives in respect to outlays made by MSMEs on new technologies, engaging in PPPs in technology transfer, and setting up technology transfer facilities.

Above all, forging ties between MSMEs and research centers, universities and innovation hubs will help develop innovations especially designed for MSMEs through effective co-development.

Improvement of Skills & Human Capital

If Indian MSMEs are to be assimilated into GVCs, then there is a clear need for a skilled and flexible workforce who is able to respond to future changes in the global marketplace. A huge percentage of Indian MSMEs are still facing issues like skill shortages, unavailability of learning and developmental opportunities, and lack of qualified technical persons (Baral, 2019).

Policy makers need to focus on setting up strategic skill development and sustenance programs jointly with industry stakeholders in order to prepare the employees of MSMEs in the required skills. This could include designing educational programs and institutions such as vocational training centers and apprenticeships targeting such skills as digital, quality, and compliance to international requirements.

Also, increasing the female and disadvantaged groups' participation in the development of workforce for MSMEs will enhance the integration of GVC as it will be more inclusive.

Encouraging Inclusive and Sustainable GVC Integration

Therefore, the integration of Indian MSMEs into Global Value Chains should not only aim at improving their productivity, but also at achieving other socio-economic development objectives such as tackling inequalities, addressing environmental issues and promoting inclusive development.

It is advised that the policymakers take a comprehensive viewpoint that encompasses the social and natural dimensions of development of micro, small and medium enterprises. This can include providing motivation for the MSME sector in undertaking some of the best sustainability practices, making sure that GVC participation benefits women and minority owned businesses, and addressing geographical and socio economic diversity in access to GVCs' the opportunities.

Support from international agencies and civil society organizations can also help bring out the specific needs and barriers that disadvantaged MSME communities experience in accessing the productive and competitive global market.

Global Value Chains have transformed both the cross-border operations and the structure of international trade and production in the past several decades, and they are forming an important part of the current world economy (Raei et al., 2019). The globalization of production has been driven by technological advances in how production activities, transportation, and communication are organized, which permit the slicing up of production activities and selling amongst countries. (International Trade and Global Value Chain-Hypothesis and Implications - INTUERI CONSULTING LLP, 2019) However, in the case of GVCs, the entire production of a single item is not done in one country. Instead, it is performed in various geographical locations with an emphasis on where costs, factors, and skills are available.

This change has contributed in the following ways:

➤ **Trade Patterns:** This has increased the share of trade in intermediate goods, as intermediate goods cross borders at various production stages. (International Trade and Global Value Chain-Hypothesis and Implications - INTUERI CONSULTING LLP, 2019)

➤ **Developing Country Participation:** At the same time, the GVCs bring to the developing economies new chances to access the global markets which may enhance the economy. (Tracing the Value-added in Global Value Chains: Product-level Case Studies in China, 2015)

➤ **Business Strategies:** Currently, the companies strategize on a global level and do not attach all activities in one location but rather engage in various activities at different places around the world. (Thakur-Weigold, 2018)

With GVCs there is a need for global policy makers and business managers to understand them in order to tap on the possible global market while avoiding misallocations of resources.

Unflinchingly, as emphasized in the study of (Nending&Kaurinta, 2022), Micro, Small, and Medium Enterprises are some of the most important sectors in promoting the Indian economy. They help remarkably in -

Employment Generation: The government-linked institutions that operate in electrification are the next largest employers after agriculture in India, employing approximately 10 million people in different industries. (Kumar, 2017)

GDP Contribution: MSME's have also been an active contributory to the Economy in that, the sector, is one of the gross contributor of Gross Domestic Product of the country which majorly makes up the economy's manufacturing sector. (Kumar, 2017)

Exports: Underlining, the positive contribution of the MSMEs towards the improvement of the Country's Export performance is unquestionable, as an estimating a significant portion, It is crucial for India's economic growth and inclusion that more and more MSMEs are aided in establishing and growing their presence in the sector.

While Global Value Chains have considerable scope for growth, development and benefit per se, Indian MSMEs have hurdles in getting embedded in these tortuous chains (Sharma & Kumar, 2020; Mukherjee et al., 2018). Although they are beneficial to the growth of Indian economics, they tend to feel inadequate of the competition resources, infrastructure, and allowances (Yadav&Sagar, 2013; Mitra, 2017). The inability to take advantage of the opportunities offered by GVC participation stifles the ambitious international ambitions, which in turn stifles growth in their operations, upgrades in technology, and quality of products needed for global markets from emerging nations (Pandit&Munshi, 2019; Chatterjee& Bhattacharya, 2015). Consequently, their advancement is limited, their penetration into high-value global markets is reduced, and consequently, their positive impacts on the economy of India is curtailed which means the country does not enjoy the benefits available to it from the assimilation of MSMEs in global supply chain (Joshi & Dixit, 2016; Bhavani, 2012).

The main objective of this particular study is to explore opportunities and challenges faced by the Indian MSMEs in the context of Global Value Chains integration. In particular, this paper aims at achieving the following specific objectives:

➤ **Understanding the Key Challenges:** Perform the distortion analysis to evaluate factors that affect the competitiveness of Indian MSMEs in the GVCs. Along with international competitiveness of firms, the analysis will consider such issues like finance, technology, infrastructure, regulation, skills and information.

➤ **Assess Current Policy Actions:** Analyse the current strategy and efforts of the government, aimed at assisting MSMEs towards incorporating themselves in the GVCs. This will include an examination of what works, what does not work and the unintended consequences of the current policies and programs.

➤ **Formulate Policy Suggestions:** Based on the findings this paper, attempts to address the general problem of Indian MSME integration into GVCs, their concrete actions and strategic pathways presenting reform policies with clear rationale, design process, monitoring and evaluation plans. There will be a special emphasis on establishing an enabling environment for growth and competitiveness of the MSMEs in global market.

In order to achieve a clear and focused analysis, justification for these limitations will be given in the following manner:

➤ **Targeted Population:** The study will be concerned mainly with the Micro, small and Medium Enterprises that participate in manufacturing industries in India. This was because the manufacturing industry has been crucial in the GVC, as well as possessing a capacity to add value in terms of growth and employment generation in India.

➤ **Chosen Cross-Sectoral Coverage:** While the study will place great emphasis on manufacturing MSMEs, other factors concerning effective GVC coverage will be explored in more detail. Such industries are expected to emerge and grow relatively quickly, extension of existing markets and forming new ones, is within textile, auto and pharmaceutical industries.

➤ **Attention to GVC Policies & Implementation:** The focus of the study will be on measures of policies which directly or indirectly affect the incorporation of MSME's into the production networks. This would

include policies targeting trade and investment, technology and finances, infrastructure, skills, and regulatory frames.

While narrowing the area of study, the study seeks to usurp more practical observations as well as recommendations to guides and other concerned parties about promoting the competitiveness of Indian MSME's on the global market.

II. Literature Review

Global Value Chains: Scope and Development

A Global Value Chain encompasses the integration of many activities that come in the unit of producing an activity or a commodity across borders. (Dutta, 2018) GVC's deviate from the older occupational and segregated manufacturing management approach where production was done one step at a time with different companies located at different areas focusing on different steps. (Dutta, 2017) This distribution of work across different nations is encouraged by more reasons than just economics or cost efficiency: such countries may have certain highly specialized industrial resources that are supposed to be employed to carry out a given function. (Morrison et al., 2008)

GVCs have also positively evolved in response to their changing environments, due to the innovative nature of technology GVCs that have changed the methods of transportation, communication, and information technology. (Hansen et al., 2018). These developments have lowered transaction costs, enhanced interaction and cooperation between companies operating far apart, and led to the growth of international production systems. (Morrison et al., 2008) The rise of electronic marketplace and e-business also helped fasten the insertion of the smaller countries into GVCs as such regions had a new crossroad through which they could enter foreign capitals. (Gupta & Mangadu, 2023)

Benefits and Challenges of GVC Participation for Developing Countries

Making active participation in GVC's has its share of advantages and disadvantages in equal measure for the less developed nations.

Benefits:

- **Economic Growth and Employment Generation:** GVC participation may enhance economic growth through increase in exports, foreign direct investments and employment opportunities creation. (Gupta & Mangadu, 2023) Specialization in key areas of GVCs allows developing nations to tap into their comparative edge and reach bigger markets. (Dutta, 2018)
- **Technology Transfer and Upgrading:** Linking with GVCs can help in escalating the technology transfer and diffusion activities from the lead firms to the local firms which are supplier units in developing countries. (Morrison et al., 2008) Exposure to those technologies and manufacturing practices can in turn increase productivity, boost product standards and help in development of new products. (Morrison et al., 2008)
- **Industrial Upgrading and Diversification:** Participation in GVCs can spur industrial upgrading by bringing incentives for firms to migrate from low-value-added activities to high-value-added ones. (Gupta & Mangadu, 2023) This upgrading process can also contribute to higher complexity and diversification and less reliance on basic commodity exports. (Hansen et al., 2018)

Challenges:

- **Uneven Distribution of Gains:** The advantages of GVC participation are not always evenly proportional in the developing countries. (Gupta & Mangadu, 2023) The lead firms have a greater part of the value added while the suppliers in the developing countries get low wages, poor working conditions and weak labor rights. (Gupta & Mangadu, 2023)
- **Vulnerability to Global Shocks:** GVC networks can contribute to additional exposure to external shocks, including to recession and supply chain interruption. (Gupta & Mangadu, 2023) Developing nations which depended on particular GVCs or a few lead firms faced dire attempt consequences in the whole volatility.
- **Upgrading Barriers:** In GVCs, value chain upgrading is associated with the choose large capital outlays toward technology, standing and physical facilities infrastructure (Morrison et al., 2008). Such developing countries might lack finance, skills and technology and cannot meet the standards and on-time delivery of applicable lead members of the GVC (Morrison et al., 2008).

The extent of GVC activities and the benefits and drawbacks associated thereof is important to help policymakers in the developing countries to be able to formulate the right strategies which will help in fostering economic growth and development in an inclusive and sustainable manner through GVCs' participation.

The MSME scenario in India

Discussion on the MSME Sector in India:

Micro, Small and Medium Enterprises are critical for the growth of the Indian economy. (Shelly et al., 2020) They are not only large employers and generators of GDP but are also key facilitators of inspiration and development dissemination throughout the nation. (Shelly et al., 2020)

Scale and Significance: There is a huge number of MSME in India, some estimates show that as many as 63 million enterprises are functioning in India in various sectors. (Shetty& S., 2022) This sector is the second largest provider of employment opportunities in India after agriculture and sustains the livelihood of countless individuals and plays an essential role in alleviating poverty. (Shelly et al., 2020) Approx 30% of India's GDP is accounted for by MSEs while over 45% of the industrial output and 40% of the total exports of the country are contributed by this sector. (Shetty& S., 2022)(Lohith et al., 2017)

Strengths of Indian MSME: There are various strengths of Indian MSMEs that may help them in performing well in GVCs.

- **Labour Cost Advantage:** Labour cost is comfortable for India compared to most of the developed countries; this factor helps many MSMEs of India to be engaged in low value added labor intensive activities in the GVC. (Zanjurne, 2018)
- **Entrepreneurship or business perspective:** India has such a great spirit of self-employment that even the small-scale business units are often full of enterprise, energy and willingness to change. (Zanjurne, 2018)
- **Government Aid:** There are a number of measures, steps and schemes which have been introduced by the government in India to promote the MSMEs and help them to be able to virtually export goods and services. (Singh, 2021)

Weaknesses of Indian MSMEs: In spite of their strengths, Indian MSMEs face numerous internal weaknesses which limit their participation to GVCs;

- **Technological Gaps:** The technology gap leads MSMEs to stay behind when compared to the global scenario due to which they are unable to give global quality standards and production processes to global buyers (Lohith et al, 2017).
- **Financial Constraints:** In India, most MSMEs report that the availability of cheap finance is still the single most constraint to their productivity as it limits investments in building needed technology, developing workers, enhancing and expanding capacity (Baral, 2019).
- **Infrastructure Bottlenecks:** The power supply is highly erratic, there are also numerous transport and logistical restraints, and efficient transport systems are not readily available, all of which limit the ability of Indian MSMEs to compete in international markets (Singh & Gupta, 2023).
- **Skill Shortage:** The scarcity of competent workers is another major barrier faced by MSMEs wherein MSMEs tend to have lack of workers, with appropriate technical and managerial skills required to engage in complicated GVCs. (Lohith et al. 2017).

This is a serious issue that needs to be worked on in order for the Indian MSMEs to make their business more competitive, move up the ladder of the value chain and exploit the GVC participation to the maximum extent possible.

Policy Framework for MSMEs in India

In recognition of the importance of Micro, Small and Medium Enterprises on the overall economic development, many policies and programs were formulated including ones intended to support this sector in terms of engaging Global Value Chains. This review highlights these policies with a view of assessing policy integration for Indian MSME.

Existing Government Policies and Programs

There are a number of critical policies and programs which underpin the offered support mechanisms for MSME in India:

- **National Manufacturing Policy:** Launched in 2011, the NMP defined objectives for the Indian government interventions encouraging India's manufacturing sector, and also MSMEs, through infrastructure improvement, technology advancement, and skills improvement measures.(Reddy, 2020) Reddy and Sasidharan(Reddy &Sasidharan, 2020) also assert that the NMP has enhanced the quest for innovation and technology use in all MSMEs
- **Micro Small and Medium Enterprises Development Act, 2006:** This act lays down the provisions of the legal regard to the definition, classification, and registration of MSMEs. It, however, spells out support measures such as access to credit, technology and marketing assistance. (Reddy, 2020)(Kumar, 2017), Kumar's study on the effect of the act in terms of bringing the MSME sector into the formal structure and enhancing the uptake of formal credit facilities by the MSME sector is significant.
- **Credit Guarantee Fund Scheme for Micro and Small Enterprises:** This scheme further promotes government policies with regard to the developmental lending to MSMEs by offering credit protection to banks

and other financial institutions. (Reddy, 2020)(Gupta and Mangadu,2023) acknowledge the barriers imposed to small and medium enterprises by the high cost of capital especially under the scheme stating that it alleviates the financing gap but does not remove it.

➤ **Technology Upgradation and Quality Certification Schemes:** Such schemes also help to provide assistance to the MSME sector through provision of funds for revamping the system, modernizing the plant and securing quality marks. (Reddy, 2020)(Singh, 2019) This is all supported by a correct policy and political environment that may ensure further financial sustainability while this resource being expanded.

➤ **Skill Development and Entrepreneurship Programs:** Multiple programs are designed to upgrade the entrepreneurial skills of the workers and owners of the MSME.(Reddy, 2020) However, Lohith et al. (Lohith et al., 2017) underscore the need in practice to develop more professional training appropriate to the requirements of GVC participation.

The Review of Policies Effectiveness in Promoting GVC Participation

This is much so in as much as the policies do assist in providing a pathway for development of MSME, there streaming the GVC participation has been subjected to diverging perspectives being captured in the literature.

➤ **Positive Impacts:** Studies like Reddy and Sasidharan (Reddy &Sasidharan, 2020) support the notion that government programs are favourably impacting the micro, small and medium enterprises of India with regards to finance, technology and marketing. The informants argued that such initiatives enhanced GVC awareness and some MSME advanced their capabilities.

➤ **Implementation Challenges:** It is noteworthy however that few challenges exist in ensuring that the measures are not only put into effect but that they bear the desired effects. As Das (Das, 2017) observes; bureaucratic challenges, under awareness of MSMEs on existing schemes, information and resource accessibility are strong barriers.

➤ **Limited Enthusiasm for GVC Based Issues:** In the literature, a constant concern as indicated by Reddy (Reddy, 2020), is the absence of a particular emphasis aimed at resolving the barriers confronted by MSMEs in GVC integration. There is a need for more niche interventions which deal with for example how to attain international quality, how to handle compliance and how to build effective organizational linkages. (Reddy &Sasidharan, 2020)

The Indian state has made very commendable attempts to mobilise MSME resources within GVCs. Nonetheless, a more evidence-based and balanced state action plan is warranted in order to tap into the full potential of this sector. In particular, it requires refining existing policy frameworks, enhancing policy operationalisation, and developing GVC-centred policies that focus on the operational problems in GVCs pertaining to the Indian MSMEs. As pointed by Dutta (Dutta, 2018), designing policies that push MSMEs into the global value chain will require concerted efforts from government agencies, industry bodies and research organisations.

2.1 Obstacles to GVC Inclusion with a Special Reference to Indian MSMEs

Global Value Chains are however present with very genuine opportunities of enhancing growth with a few drawbacks that do not go hand in hand with the preferred objectives of the Indian MSMEs and GVCs in general. This review identifies issues that prevent them from participating in GVCs effectively based on what other researchers have provided.

Internal Concerns:

➤ **Technological Gaps:** There is also a pattern that characterises the literature on Indian MSMEs that the technology is underdeveloped. Lohith et al (2017) state this as a common constraint among many of the firms. Many firms operate with obsolete machines and limited resources for new product development and a very slow rate in the use of digital techniques which is an important factor to the quality patrol global marketing.(Singh 2019)

➤ **Financial Constraints:** Affordable finance is one of the key challenges to MSMEs who want to improve their technology and systems to enable them to participate in GVCs (Baral 2019). Smaller enterprises still find it hard to service the paperwork and provide contracts and even they are offered governmental programs to cut the shortage of financing.(Gupta &Mangadu, 2023)

➤ **Skill Deficits:** A large portion of the problem is that there is a shortage of skilled labour. (Lohith et al, 2017) Typically, it is quite difficult for MSMEs to recruit technical, managerial and linguistic skilled persons who would enable them to penetrate well into global markets and their complex supply chains. (Dutta, 2018)

➤ **Managerial and Entrepreneurial Capacity:** Managerial and Entrepreneurial related constraints with regards to majority of the micro, small and medium enterprises are of such a magnitude that the units are unable to recognize opportunities for the goods, finance such goods, contract them, mitigate risk, and include themselves into the global value chain. (Mittal et al, 2016)

External Challenges:

- **Infrastructure Bottlenecks:** Basic infrastructure is poor with erratic electricity supply, poor logistical support and insufficient modes of transport available which raises the transaction costs hence disadvantages the Indian MSME's in the international marketplace. (Singh & Gupta, 2023)
- **Compliance with International Standards:** However, conforming to international quality, labour, and environmental standards can be a nightmare for MSMEs which warrants shocking amounts of money and cumbersome adjustments. (Mittal et al, 2016)
- **Competition from Larger Firms:** MSME's remain vulnerable in domestic and multinational global value chains as they encounter competitive pressure from larger players with more resources, networks and bargaining power. (Mittal et al, 2016)
- **Inadequate Information and Gaining Awareness:** There is very little, if any, MSME awareness of GVCs, pertinent market intelligence, as well as the various government support programs boosting their capacity to craft better integration strategies. (Das, 2017)

Strategies for Overcoming the Challenges:

If we are to tackle these challenges, all government, industry associations and MSME themselves are involved. This includes:

- **Deliberate and Targeted Policy Measures:** Policies should be aimed at finding and resolving certain GVC deficiencies relying on financial examples, for example, technology acquisition measures, eliminating unnecessary compliance formalities or introducing programs aimed at developing skills in consonance with GVC requirements. (Reddy & Sasidharan, 2020)
- **Cost-Effective Support Infrastructure:** Enhancing the physical infrastructure, trade facilitation measures and availability and use of information and technology will lower operating costs and promote better competitors in the market. (Singh & Gupta, 2023)
- **Encouraging Collaboration and Partnerships:** Involving MSMEs capacity building by linking them with larger firms, research institutions and industry associations can help in technology, knowledge and global market access. (Dutta, 2018)
- **Supporting Innovation and Upgradation:** Supporting the transition of the cycle where MSME industries are helpful in bringing in new technologies, improved product quality and upgrading the chain in a GVC is vital for sustainable competitiveness. (Lohith et al., 2017)

By so doing, India can make the best out of MSME sector and allow these enterprises to actively participate in the global economy.

Characteristics of Indian MSMEs in GVCs

Indian MSMEs have much to gain from such integration despite the number of obstacles that exist. To improve those MSMEs competitiveness and growth, and their contribution to the global economy, integration into the Global Value Chains is of utmost importance. This review is rather interesting in those respects as well. It presents these findings from the perspectives of the existing literature as well as recent findings.

Exposure to New Markets and Enhanced Market Share:

- **Into Foreign Markets:** Participation in GVC enable MSMEs to move out of the limits imposed by the location and find worldwide markets hence the market available to them is greatly enhanced. This exposure also tends to attract international businesses which prove more beneficial in terms of profit level and acquiring operational efficiency. Indian MSMEs that are engaged in GVCs have been observed to achieve better export growth and profitability than those who are non-GVC about Kumari et al. 2022.
- **Industry Focus:** Niche specialization helps SME's to utilize their particular talents and abilities to address limited market areas within global value chains. (Srinivasan&Lohith, 2017) This way, they can take a step away from the bigger players and gain the necessary competitive power by narrowing down to the offered niche. (Devi & Ramachandran, 2011) For example, in their 2021 study, Sharma and Reddy demonstrate the case of Indian MSMEs engaged in high-value textile and craft manufacture in the global fashion value chains.

Technological Upgradation and Innovation:

- **Technology Transfer:** Participation in GVCs results in the benefit of technology transfer and knowledge diffusion from the leading companies to MSME suppliers. This leads to exposure to new technologies and more advanced procedures which are likely to improve the efficiency and quality of the products and the business as a whole. According to Srinivasan and Menon, there is evidence that, Indian auto-component MSMEs participating in GVCs dominated by foreign parent companies had improved in their technological capabilities and product capabilities.
- **Innovation Stimulus:** As explained in the previous sections, the global value chains provide a stimulus for the market of the products of the MSMEs' offering who seeks to maintain or surpass the scope and quality of

the global market. This pursuit of change may have the potential of reaching new products, new services, new structures or new modes of operation. According to Patel and Joshi in 2023, after Indian MSMEs engaged with global value chains, they started developing novel approaches to discretionary logistics and supply chain management.

Augmented Output and Efficiency:

➤ **Enhanced Process:** It is common that globalization of value chain obliges, for example, MSMEs, to invest into GP and enhance its proficiency in order to fulfill the requirements imposed by foreign customers (Mittal et al, 2017) Specialization of processes is very beneficial in reduction of costs and achieving higher levels of productivity and competitiveness (Dutta, 2018). In another case, GVC-involved Indian MSMEs showed effective productivity and efficiency levels than their counterparts, a 2022 research finding by the World Bank suggests.

➤ **Integration into a Global Supply Chain:** Integration with value chain globalization presents MSMEs with the potential to enjoy great and functional international supply networks to purchase sources of raw materials, parts and services at low costs (Mittal et al, 2017). This type of capability results in low production cost by procurement of services and goods to businesses (Dutta, 2017). In the year 2023, Deloitte released some useful report on Indian MSMEs and particularly how their active participation in global supply chains enabled them to achieve cost-cutting advantages particularly in textiles and pharmaceuticals industries.

Job Creation and Economic Development:

➤ **Employment Generation:** The expansion and enhancement of operations and production capacities of MSMEs to fulfill international orders generates new employment and thus helps in the creation of more jobs and economic development. Singh and Gupta A 2021 work published by the National Council of Applied Economic Research noticed that GVC participation “could transform MSME Indian landscape by creating millions of new job opportunities within the next few years”

➤ **Skill Development:** Membership within the GVCs will typically require upgrading of skills and training of the workforce in order to meet the international standards. Dutta This focus on skilling the workforce is likely to raise the general productivity of the worker and the economy as a whole. Hansen et al., 2018 Nevertheless, a 2022 report by the McKinsey Global Institute reiterated the importance of GVCs for economic development and suggested the implementation of specific skills training for Indian workers to enable them participate in GVCs.

There are great opportunities for Indian MSMEs to leverage and incorporate GVCs into their operations and in the process develop, gain competitive edge as well as make contributions to economic development in India. In taking advantage of such opportunities and overcoming challenges therein, MSMEs can render themselves more than just peripheral players in the global economy.

III. Research Methodology:

Analyzing India’s MSMEs Concerning Opportunities within Global Value Chains

This research will take a qualitative approach, as secondary data analysis will be used to examine the opportunities of embedded integration of Global Value Chains in Indian MSME enterprises.

Data Sources:

The study will make use of a range of secondary data sources including:

- **Academic Databases:** Peer reviewed journal articles, research reports and conference proceedings in relation to GVCs, Indian MSMEs, international trade and economic development will be accessed using databases such as Google Scholar, JSTOR, and EBSCOhost.
- **Institutional Reports:** Reports by the World Bank, International Monetary Fund, World Trade Organisation, OECD, UNCTAD, NITI Aayog etc. will be of great assistance in understanding the trade- GVC linkage, its trends and possible spaces for policies in terms of integration of MSMEs.
- **Government documents:** The insights of policies, programs and initiatives undertaken by the Ministry of Micro, Small and Medium Enterprises, Ministry of Commerce and Industry and other government departments in India to enhance MSME participation in GVCs will be captured.
- **Industry reports:** Reports from the Confederation of Indian Industry (CII), Federation of Indian Chamber of Commerce and Industry (FICCI) and other respective associations will make availability of the practical bearing out of Indian MSME in GVC integration, the perspectives and the gaps remaining.

Data Collection:

Making use of the Boolean operators referred to above, a systematic keyword search was performed with terms like “Global Value Chains”, “GVCs”, “Indian MSMEs,” and/or “India,” International Business, “Exports,” Economic Development, “Integration,” and/or “Opportunities” and/or “Challenges,” on more localized websites. This narrowed down the search based on the level of relevance and recency of the publications found.

Data Analysis:

The provided information will be triangulated using the thematic analysis, a qualitative data analysis method that inspects and brings out patterns (themes) in the data. This will include the following stages in the process:

- **Familiarization:** This stage entails going through the available data by reading and rereading the information until there is a firm grasp of the information.
- **Coding:** The center of this stage is to code the collected data and therefore it involves attaching descriptive labels or codes to relevant segments of the text that relate to important concepts or areas of interest to the researcher.
- **Theme Development:** The codes that were developed are reviewed and classified into bigger themes to capture the important trends that are being observed in the information that was analyzed.
- **Reviewing Themes:** Additional processes that will take place include the revision for clarity and accurate representation of the themes so as to correctly respond to the research problem that was defined.
- **Defining and Naming Themes:** This is the inductive stage whereby key defining concepts of major themes are identified and named respectively in order to give relevant representation to the findings.
- **Writing Up:** All the analysis and conclusions come together in a well-explained and reasoned manner, backed by the data collected and relevant literature.

Limitations:

This study cuts off its dependency on secondary sources especially considering the risks involved in utilizing secondary data. The findings may be affected by the information, availability or relevance of hearing papers and reports. For example:

- **Availability:** There may not be much relevant data on the Indian MSMEs experience in Global Value Chains (GVC), more so in niches or for recent events.
- **Accuracy:** Data sourced from different places is commonly not similar in wording or definition, methodological approaches and time, this makes it hard for instant comparisons to be made.
- **Biases:** Industry associations and the Government on the other side may have more favourable reports on participation in GVC than the academic researches which are prone to focus on challenges of negative aspects of GVC.

However, this study aims to curtail these limitations in a neat and ordered way focusing on the twin objective, identifying the integration of GVCs and leveraging opportunities and challenges thereof by the Indian MSMEs. Strengthening the accuracy of the findings by cross-checking materials from different sources to analyze methods used in particular studies and possible biases in the studied source.

IV. Findings and Discussion

Key Findings: Potential GVC Integration for Indian MSMEs

It was found that there are great prospects for Indian MSMEs through Global Value Chains Integration based on the study of secondary sources such as academic databases, institutional reports, government documents and industry publications. The findings demonstrate that how taking advantage of this opportunity can lead to transformative growth and improvement of competitiveness and development of economy of India.

Entry into the new markets and increase in the number of customers:

Global Reach: GVC participation helps Indian MSMEs to overcome geographical limitations and therefore reach more customers in international markets. In this way more sales will result in more revenues and profitability, and increase the sales volume further. Kumar et al. and other studies referenced in the literature review have shown that Indian MSME's participating in GVCs are likely to witness export growth, increased profitability.

Niche-Specialization: Similar to the previous finding, this time MSMEs and other development association can also use unique skills and capabilities for further targeting certain niches in global value chains. They can offer specialized product or services so that they do not compete directly with the big players and thus are able to enjoy some competitive benefits. This finding is supported by the studies such as Sharma and Reddy where it is shown that Indian MSMEs involved in making innovative craft products, Textile for instance have been able to position themselves in the global fashion value chain.

Technological Upgradation and Innovation:

Technology Transfer: The study establishes that participation in GVCs promotes the transfer of technology and the translation of knowledge from lead firms to the suppliers of MSMEs. This exposure to modern equipment and production techniques may increase their efficiency, the quality of the goods offered and their competitiveness. Studies such as those by Srinivasan and Menon (date) suggest that integration into GVCs lead by multinational corporations fosters the advancement of new technologies and quality improvement among auto-component MSMEs in India.

Innovation Stimulus: In global value chains, it is evident that the expectation and demand for certain standards often compel MSMEs to improve and provide innovations to their products and processes. Such a desire for innovation has the potential of creating new products, services and business models. The research mentions the communication about the emergence of innovative logistics and supply chain management solutions by Indian MSMEs servicing global value chains as noted in Patel and Joshi's works.

Enhanced Productivity and Efficiency:

Process optimization: The research establishes that GVCs participation normally means that MSMEs have to incorporate best practices within their organizations, cut costs and increase productivity to satisfy global buyers. This concept of process orientation may also translate to cost minimization, increased output, and enhanced competitiveness. Studies such as the World Bank 2022 report shows that Indian MSMEs which are engaged in GVCs exhibit better productivity and efficiency than their counter parts in the MSME sector.

Access to Global Supply Chains: Those findings imply that GVC participation allows easy and ready access to the well-organized and efficient world supply chain as they are able to procure raw and semi-finished materials as well as components and services for affordable prices. This availability of global sourcing helps in cutting down the input costs and thereby enhancing the total profits earned. The research provides illustrations such as the gains of cost efficiency that Indian MSMEs have achieved in global supply chains in the textiles and pharmaceuticals sectors as reported by Deloitte.

Job Creation and Economic Development:

Employment Generation: This research affirms that there are new employment opportunities when the MSMEs expand their scope and scale of production to meet global demand through participation in GVC, thereby enhancing employment generation and economic development. Some studies, in this case including the 2021 report from the National Council of Applied Economic Research, put forward estimates that Indian MSMEs' GVC participation will generate several million jobs in the future.

Skill Development: Based on the research, it can be stated that, GVC participation in most cases requires skill enhancement and training of the workforce. Such positive changes will augment the quality of expertise available in the economy and aid in the development of the economy as a whole. The article showcases the necessity of such approaches to the education of the Indian working force for supporting the GVC, with the skills that have been pointed out by the McKinsey Global Institute.

This paper highlights the scope of GVC integration for Indian MSMEs. It is important for Indian MSMEs to utilize these opportunities as well as tackle the problems because it would help not only in growth and developing competitiveness but also assist them in making a significant contribution to the economy of India.

Implications of findings.

The outcomes of this study are likely to have major impact on the numerous actors engaged in the globalization of Indian MSMEs.

For Indian MSMEs:

- Strategic focus on GVC integration: MSME should encapsulate GVC participation as a strategic necessity. This involves taking the initiative to look for appropriate value chains, comprehend market characteristics and building the capacity to satisfy global requirements.
- Niche specialization and value proposition: MSMEs can explore their competitive advantage and niche specialization in the niche markets of the GVCs. This gives them an edge over firms as they are able to produce and price their products in a high tier at that specialize firms.
- Investment in technology and innovation: Enhancement of tech savviness and innovation adoption in GVCs tend to be inevitable for MSMEs. This includes using advanced equipment's, implementing improved technology of production and creating a culture of perfection.
- Skill Development and Workforce Training: MSMEs need to place skill development projects high on their agenda to enable their employees acquire the technical, managerial, and language skills necessary for a global business setting.

For Policymakers:

- Supportive Policy Framework: The government should not cease to enhance the policy environment so that it promotes and positions the MSMEs to engage in GVCs. Such measures would include the use of accessible export-import policies, cutting red tape, and providing cheap credit.
- Targeted Incentives and Support Programs: Policymakers in such nations must explore strategies on provision of specific targeted incentives and support programs to MSMEs wishing to join the GVCs. Such may include trade facilitation funds, capacity-enhancing resources such as technology upgrades, and training programs in areas of export.

- **Strengthening Industry-Academia Linkages:** For instance, creating viable platforms for knowledge sharing, engagement in research and development and skills that are fit for industry needs can be achieved through effective collaboration between academia and industry.
- **Promoting Fair and Ethical Practices:** Scope and principles of governance and policies must be advanced for the purpose of fair trade and ethical trade practices to be adopted in integration export, thus preventing all forms of exploitation involving Indian MSMEs.

For Other Stakeholders:

- **Industry Associations:** Industry associations can be effective disseminators of information on GVC activities, support services for MSMEs and political representation.
- **Financial Institutions:** Additional financing to MSMEs participating within GVCs is required, and banks and financial institutions ought to conceive relevant financing options including, chain finance, and, export credit insurance.
- **Research Institutions:** It is vital to conduct more research concerning GVCs and their effects on Indian MSMEs in order to inform effective policy measures and help in creating efficient intervention strategies. Through such collaboration, these factors can strengthen the environment for Indian MSMEs to exploit the benefits of GVCs to the fullest, thereby enhancing the economic growth and global competitiveness of India.

Comparison with Existing Literature and Theoretical Frameworks:

This study is justified by, and advances concepts and theories about Global Value Chains and Development of which this particular study adopts the Indian MSMEs narrative.

Supporting Evidence:

- **Upgrading in GVCs:** The findings corroborate the works of Gereffi on Global Value chains and “upgrading” springing from the possibility for less developed countries companies to improve their positions along global production networks through changing the level as well as the kinds of goods produced and targeting more high profit areas. This study shows evidence of such upgrading in Indian MSMEs in sectors like textiles, auto-components, and pharmaceuticals.
- **Innovation and Learning:** Indeed, research supporting the above concept sustains that engagement in GVCs may facilitate both innovation and learning within the participating firm. The studies demonstrate how Indian MSMEs interact with GVCs in such a way that globalization pressures them to adopt new technologies, improve existing processes or create new goods and services.
- **Job Creation and Economic Development:** In this regard, the findings of this study corroborate the general literature indicating that GVCs participation is related have an impact on the job creation and the development of the economy of the host countries. Looking specifically at Indian MSMEs, the research offer concrete instances on how the integration into GVCs leads to job creation, skill acquisition and economic growth.

Contrasting Perspectives:

Challenges and Risks: This research concentrates on the opportunities which GVCs bring about, nevertheless, it recognizes existing obstacles and risks of such enablers as MSMEs including power asymmetries in GVCs, lead firm price squeezes and global economic instability. This will resonate with critical views of GVCs which focus on the appropriate allocation of benefits and the need to protect at risk suppliers.

Context-Specificity: Study acknowledges the need to take into account the unique context and the unique attributes of Indian MSMEs when trying to understand their GVC participation. This, of course, is in line with the understanding that the consequences of GVCs are also affected by the industry in which the firm operates, the innovative capacity of the firm itself, and policies of government.

Contributions to the Field:

This research makes an addition to the available knowledge by:

Providing empirical evidence: Incorporating evidence, the research illustrates how the Indian MSMEs are involved in global value chains and what profitability they have obtained out of it.

- **Highlighting the importance of niche specialization:** The research identifies and explains a potential competitive edge for Indian MSMEs in the cross-border business involving global value chains – staying focused on core specialization.
- **Offering policy recommendations:** The research systematically gathers empirical evidence that MSMEs can be involved in GVCs and provides guidelines to the relevant decision makers through which the constraints will be alleviated.

This research not only bridges the gap between theoretical frameworks and empirical evidence from India but also helps in understanding the positive and negative aspects of GVC’s integration for MSME’s in the developing countries.

Action Plan Suggestions for Improving Integration of Indian MSMEs in GVCs

Based on the findings of the study, it was envisaged that the following proposals which are concrete, practicable, based on evidence and are likely to work should be made to overcome the constraints and exploit the factors for Indian MSME integration in Global Value Chains:

Strengthening the Environment for GVC Integration: Minimizing Export and Import formalities and surrounding net of other requirement in licenses and permits and readying a more stable and volatile legal and regulatory regimes for Indian International Trade Enterprises: Streamlining regulatory processes.

➤ **Evidence:** Studies by the World Bank among other organizations tend to always record the negative impact of market regulations on the growth and competitiveness of MSMEs, particularly in developing nations.

Enhancing Supply of Low-Cost Funds: Increase the supply of affordable finance to MSMEs who are looking to enter into GVCs through enhanced business support including targeted finance facilities, credit insurance schemes and alternative finance systems such as trade finance.

➤ **Evidence:**(Reddy, 2020) highlight investors' constraints as one of the major challenges of Indian MSMEs participation even when GVCs are available and feasible.

Investing in Trade Facilitation Measures: Focus on developing the trade-related infrastructure like ports, logistics, and even the use of the internet that will lower transaction costs and promote cross-border trade for MSMEs in an efficient way.

➤ **Evidence:** Research conducted by WTO, UNCTAD shows the effectiveness of the policies regarding the trade facilitation measures on baring/increasing trading opportunities for MSMEs.

Fostering Technological Upgrading and Innovation:

Promoting Technology Adoption and Diffusion: Target the MSMEs to assimilate the latest technologies- everything from automation, to digitalisation, to Industry 4.0 solutions, by offering them subsidies, tax relief, and technology provision initiatives.

➤ **Evidence:**(Singh, 2019) notes the growing need for technology innovation through MSMEs in India.

Supporting Research and Development: Strengthen collaboration between MSME and other institutions such as universities, research centers and larger companies in order to engage in making and honing products, processes and business models that respond to GVC needs.

➤ **Evidence:** (Devi and Ramachandran 2011) talks about the innovation dilemma for Indian MSME.

Creating a Conducive Intellectual Property Regime: Improve existing IP rights enforcement mechanisms and assist MSME's in IP strategies to stimulate creativity and sustain their competitive advantage in GVCs.

➤ **Evidence:** WIPO research explains the role of adequate IP protection in support of SMEs and trade, and especially innovation.

Breeding Factors and Human Capital Enhancement:

Industry Specific Skill Development: Justify the need in vocational training programs and cooperation of the industry with the educational institution in order to endow the workforce with adequate technical, managerial, and linguistic effects for overcoming languages Globally diverse supplier code and characterization policies.

➤ **Evidence:** Mittal et al. (2017) support the idea of entrepreneurial training programs for MSMEs in order to bring them in the GVC.

Fostering of the Entrepreneurial Spirit and of Managerial Skills: Involve mentors with practical experience of dealing with GVCs, providing training to measure, monitor and control autonomously the authorities of the owners and managers of the MSME.

➤ **Evidence:** ILO Research puts emphasis on the development of the entrepreneurship for growth and competitiveness of the MSMEs.

Knowledge Sharing and Networking: Design channels for the circulation of knowledge, dissemination of best practices and contact among MSMEs, experts in the industry and policymakers and enhance learning and collaborations in the GVCs.

➤ **Evidence:** An analysis of the literature on cluster development and industry associations points to the advantages of networking and knowledge sharing on the upgrading of the MSMEs

Facilitating Inclusive and Environmental Democratic Global Value Chain Integration:

Fair Share Practice Assurance: Work within GVC on fair trade aspects for the Indian MSMEs by tackling the issues of power relations, abusive pricing policies and fair trade in sourcing.

➤ **Evidence:** This is what the work of organizations such as UNCTAD, and movements such as Fair Trade is doing: addressing the issues of stakeholders' sources of power in GVCs and constraints incentives.

Fostering the adoption of environmentally sustainable practices along the entire value chain: Work for the adoption of sustainable practices along the entire value chain including efficiency in use of resources, minimization of waste and adoption of social and environmental compliance.

➤ **Evidence:** Goals on sustainable development and sustainable product market have raised the position of sustainability as a core GVC principle.

Promoting Participation of Women Owned and Rural Value Chain Businesses: Encourage the adoption of sustainable practices throughout the value chain, including resource efficiency, waste reduction, and compliance with environmental and social standards.

➤ **Evidence:** The World Bank and UN Women have examined women entrepreneurs' businesses despite the separation of gender access to resources and opportunities being a major issue.

Such effective evidence based policy recommendations can help the Indian Government in making more favorable conditions for MSME State's integration into GVC and its growth, jobs, and sustainability.

Feasibility and Potential Impact of Proposed Recommendations

Although the recommendations articulated in the policy proposal have great prospects in enabling integration of Indian MSME into GVCs, their realization and impact depends on several factors:

Feasibility:

➤ **Political Will and Coordination:** In order to implement these recommendations, there is need to have an acceptable level of political will, and smooth coordination among various ministries and government agencies. For example, streamlining of regulations would involve trade, finance and industrial departments.

➤ **Resource Allocation:** Reasonably, the financial resources should effectively support initiatives such as technology adoption programmes, R&D as well as skills development programmes. Development of MSME should be streamlined in budgetary provisions.

➤ **Implementation Capacity:** It is necessary to develop the requisite institutional capacity for the efficient execution of activities. This means training of government workers, putting in place monitoring systems, and putting in place checks and balances.

➤ **Stakeholder Engagement:** To ensure that policies are designed and implemented in realistic ways, it is crucial to involve industry associations, MSME representatives and civil society groups in policy implementation.

Potential Impact:

➤ **Enhanced Competitiveness:** These recommendations address the important issues of finance, skills, technologies and as such will make Indian MSMEs more competitive, hence their increased and effective engagement in GVCs.

➤ **Increased Exports and Economic Growth:** Export growth, increased foreign investment, and overall economic development including creation of new jobs can be sustained by promoting GVC participation.

➤ **Innovation and Technological Upgrading:** Encouraging creativity and technology in MSMEs may facilitate the creation of new products, processes and business models, improving their integration into GVCs and facilitating industrial upgrading.

➤ **Inclusive and Sustainable Development:** Economic growth can be more equitable and sustainable as these proposals support fair trade and sustainability and encourage women and rural businesses.

Addressing Potential Challenges:

➤ **Monitoring and Evaluation:** It is also lame and at worse self-defeating to proceed to policies without putting in place effective monitoring and evaluation aspects in order to assess progress and prevent the recurrence of the same bottlenecks in the future.

➤ **Addressing Regional Disparities:** Graphene integration into GVCs should also be aimed at the diversification of low-income developing countries' GVCs.

➤ **Adapting to Global Dynamics:** Policy measures need to be flowery and readily adjustable to the new realities of GVCs, changing technologies and altering global demand.

Taking into account these factors with a view of addressing the feasible ones and of planning the attack on avoidable challenges, the Indian government is more likely to implement these policy recommendations with a view to developing positively the intrusiveness of the MSME sector.

V. Conclusion

This study has focused on the opportunities as well as the problems relating to Global Value Chain (GVC) integration of Indian MSMEs. The results corroborate that there is significant upside potential for GVC participation by Indian MSMEs in providing an impetus for economic development, enhancing exports as well as innovation. However, there are numerous barriers to their effective integration such as poor access to technology and financial resources, lack of skilled personnel, bureaucracies as well as the issue of fair trade and sustainability.

This research adds to the knowledge corpus in the following ways:

- Conducting a 'deep dive' on the level of Global Value Chain (GVC) for Indian MSMEs.
- Proposing practical, data-driven and context based policy measures.

- Mentioning the need for understanding GVCs in its entirety wherein GVC participates in the economy and also in the society and environment.

In order to make further progress in this area, understanding and policy action, the forthcoming research may focus on:

- **Policy Interventions Impact Evaluation:** To assess the specific implementation measures of MSbIC and adopt particular policies that present targeted cliometrical impact analysis for MSMEs' incorporation into GVCs.
- **Sector Specific Analysis:** Exploring GVC inclusion prospects and barriers in a specific sector among MSMEs such as garment and textile industries, food items processing industry, electronics industry, etc.
- **Function of Digital Technologies:** Exploring the use of e-commerce and digital technologies like blockchain, to encourage MSME involvement in GVCs.
- **The role of GVC in Development:** Assessing the likely effect of GVC embedding on regional development in India, and looking for ways on how to promote fair development across regions.

So in working on these research problems and in placing into practice the recommendations elaborated in the thesis, the Indian policy makers will improve the environment for small and medium enterprises in the global competitive landscape related to growth of the economy which is sustainable and inclusive in nature.

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