

# Make in India, Atmanirbhar Bharat, and Industrial Policy in the Global Value Chain Context

Gourav Kumar

Research Scholar, Dept. of Economics, Munger University, Munger, Bihar

## ABSTRACT

*The structure of global production has undergone significant transformation with the emergence of Global Value Chains (GVCs). Instead of producing goods entirely within national borders, production processes are fragmented across multiple countries where each stage of production is located in the most efficient region. In this evolving global economic landscape, India has launched several policy initiatives such as Make in India and Atmanirbhar Bharat to strengthen its manufacturing sector and enhance its participation in global value chains. These initiatives aim to increase domestic manufacturing capacity, attract foreign direct investment, promote innovation, and improve competitiveness in international markets.*

*The Make in India initiative, launched in 2014, focuses on transforming India into a global manufacturing hub by encouraging investment in key sectors such as electronics, automobiles, pharmaceuticals, textiles, and defense manufacturing. Similarly, the Atmanirbhar Bharat Abhiyan introduced in 2020 emphasizes self-reliance, technological capability, and domestic value addition while maintaining integration with global markets. These policies are closely linked to India's industrial policy framework, which includes production-linked incentives (PLI), infrastructure development, trade reforms, and logistics improvements.*

*However, India's deeper integration into GVCs faces challenges such as infrastructural bottlenecks, regulatory complexities, skill gaps, and dependence on imported intermediate goods. Addressing these challenges requires coordinated industrial strategies, technological upgrading, and improved institutional frameworks. This article examines the relationship between Make in India, Atmanirbhar Bharat, and India's industrial policy within the GVC framework. It analyses policy initiatives, sectoral opportunities, and structural challenges while highlighting the role of innovation, digitalization, and investment in strengthening India's position in global production networks.*

*The study concludes that a balanced approach combining self-reliance and global integration is essential for sustainable economic growth and for positioning India as a major participant in global value chains.*

**Keywords:** Global Value Chains, Make in India, Atmanirbhar Bharat, Industrial Policy, Manufacturing Competitiveness

## Introduction

Globalization has fundamentally transformed the organization of production and trade across the world. Over the past three decades, the emergence of **Global Value Chains (GVCs)** has reshaped international trade patterns by fragmenting production processes across multiple countries. In a typical GVC, different stages of production—such as research, design, manufacturing, assembly, and marketing—are carried out in different geographical locations depending on comparative advantage, technological capability, and cost efficiency.

For emerging economies, participation in GVCs provides opportunities for **industrial upgrading, export growth, employment generation, and technological learning**. Countries such as China, Vietnam, and South Korea have successfully leveraged GVC integration to accelerate economic growth and expand their manufacturing sectors. India, despite being one of the world's fastest-growing economies, has historically remained underrepresented in global manufacturing networks compared with East Asian economies.

Recognizing the importance of manufacturing-led growth, the Government of India introduced the **Make in India initiative in 2014** to encourage domestic and foreign investment in manufacturing sectors. The program aimed to increase manufacturing's contribution to GDP, create employment opportunities, and transform India into a global manufacturing hub. Subsequently, in response to global supply chain disruptions and economic challenges caused by the COVID-19 pandemic, the government launched the **Atmanirbhar Bharat (Self-Reliant India) initiative in 2020**. This initiative seeks to strengthen domestic production capabilities while maintaining integration with global markets.

Industrial policy plays a crucial role in supporting these initiatives by facilitating investment, improving infrastructure, promoting innovation, and enhancing the competitiveness of Indian industries. Policies such as **Production Linked Incentive (PLI) schemes, logistics reforms, digital infrastructure development, and trade facilitation measures** are designed to strengthen India's integration into global production networks.

In this context, analyzing the relationship between industrial policy, self-reliance strategies, and global value chain participation becomes essential for understanding India's future economic trajectory.

## Review of Literature

- **Baldwin, R. (2016).** *The Great Convergence: Information Technology and the New Globalization*. Harvard University Press. Baldwin explains how digital technologies enabled the fragmentation of production processes across countries, leading to the rise of global value chains. His work highlights how emerging economies can integrate into global production networks through technological capability, improved logistics, and supportive industrial policies.
- **Gereffi, G., Humphrey, J., & Sturgeon, T. (2005).** *The governance of global value chains*. *Review of International Political Economy*. This study provides a theoretical framework for understanding the governance structures of global value chains. It explains how multinational corporations coordinate production networks and how developing economies can upgrade their roles through skill development, innovation, and policy support.
- **Rodrik, D. (2018).** *New technologies, global value chains, and developing economies*. *National Bureau of Economic Research*. Rodrik argues that the changing nature of global production requires new industrial policies for developing countries. He emphasizes that strategic government interventions, technological upgrading, and innovation policies are essential for countries seeking greater participation in global value chains.
- **Government of India (2014).** *Make in India Initiative Policy Document*. The policy document outlines the government's strategy to promote manufacturing in India through investment facilitation, infrastructure development, and regulatory reforms. It highlights sectors with high growth potential and emphasizes the importance of integrating India into global production networks.
- **NITI Aayog (2021).** *Strategy for New India*. This report emphasizes industrial development, technological innovation, and manufacturing expansion as key drivers of economic growth. It stresses the importance of policy reforms, skill development, and digital infrastructure to enhance India's competitiveness in global value chains.

## Conceptual Framework: Global Value Chains and Industrial Policy

Global value chains represent the international fragmentation of production processes. In these networks, countries specialize in specific stages of production rather than producing entire goods domestically. Participation in GVCs allows countries to access international markets, technology, and investment.

Industrial policy refers to government strategies aimed at promoting industrial development and economic growth. In the context of GVCs, industrial policies focus on:

- Enhancing manufacturing competitiveness
- Promoting export-oriented industries
- Encouraging technological innovation
- Attracting foreign direct investment
- Improving logistics and infrastructure

India's industrial policy framework combines **trade liberalization, investment incentives, infrastructure development, and technological support** to improve its position in global production networks.

## Make in India Initiative and Global Value Chains

The Make in India initiative was launched in September 2014 to promote India as a global manufacturing destination. The program focuses on 25 key sectors, including automobiles, electronics, pharmaceuticals, textiles, defense manufacturing, and renewable energy.

### Key Objectives of Make in India and Industrial Policy in the Global Value Chain Context

- **Increase Manufacturing Share in GDP to 25%** - One of the primary objectives of the Make in India initiative is to increase the contribution of the manufacturing sector to India's Gross Domestic Product (GDP) to around 25 percent. Historically, India's manufacturing share has remained between 15–17 percent, which is significantly lower compared to manufacturing-driven economies such as China, South Korea, and Vietnam. Expanding manufacturing output is essential for achieving sustainable economic growth, reducing dependence on imports, and strengthening domestic production capabilities. A higher manufacturing share also helps diversify the economy and enhances resilience against global economic shocks.
- **Create Employment Opportunities**- The expansion of the manufacturing sector is expected to generate large-scale employment opportunities, particularly for India's growing young workforce. Manufacturing industries such as textiles, electronics, automobiles, and food processing are labour-intensive and can absorb millions of workers from rural and semi-urban areas. Employment generation not only reduces poverty and inequality but also strengthens domestic demand, which further stimulates industrial and economic growth.
- **Promote Innovation and Technology Transfer**- Technological advancement and innovation are essential for improving productivity and competitiveness in the global market. Through initiatives like Make in India and Production Linked Incentive (PLI) schemes, the government aims to attract foreign investment and encourage collaboration between domestic and international firms. Such collaborations facilitate technology transfer, research and development (R&D), and skill upgrading. The adoption of advanced technologies such as automation, artificial intelligence, and Industry 4.0 can significantly enhance the efficiency of Indian industries.
- **Enhance Export Competitiveness**- Improving export competitiveness is another crucial objective of India's industrial policy. By strengthening manufacturing capabilities and improving product quality, India aims to expand its presence in international markets. Export-oriented growth helps earn foreign exchange, improve the trade balance, and increase India's integration into global production networks. Policies such as trade facilitation, logistics improvement, and export incentives are designed to support this objective.
- **Strengthen India's Participation in Global Value Chains**- The ultimate objective of these initiatives is to increase India's participation in Global Value Chains (GVCs). Integration into GVCs allows countries to specialize in specific stages of production and benefit from international trade, investment, and technological exchange. By developing efficient manufacturing systems, improving infrastructure, and promoting industrial innovation, India aims to position itself as a key hub in global production and supply networks. Strengthening GVC participation will enable Indian industries to compete globally and contribute significantly to economic development.

### Policy Measures

- Simplification of business regulations
- Foreign Direct Investment (FDI) liberalization
- Development of industrial corridors
- Smart cities and logistics infrastructure
- Digital governance reforms

These initiatives aim to integrate Indian industries with global production networks by improving efficiency, productivity, and technological capability.

## Atmanirbhar Bharat and Strategic Self-Reliance

The **Atmanirbhar Bharat initiative** emphasizes self-reliance without isolating the economy from global trade. It focuses on strengthening domestic manufacturing capabilities while encouraging innovation and global competitiveness.

## Core Pillars of Atmanirbhar Bharat

1. Economy
2. Infrastructure
3. Technology-driven systems
4. Demographic advantage
5. Demand-driven growth

The initiative also promotes domestic manufacturing through **Production Linked Incentive (PLI) schemes**, which encourage companies to increase production in India.

**Table 1: Major Policy Initiatives Supporting Industrial Growth in India**

| Policy Initiative           | Year | Objective                          | Impact                                    |
|-----------------------------|------|------------------------------------|-------------------------------------------|
| Make in India               | 2014 | Promote manufacturing              | Increase investment and industrial growth |
| Digital India               | 2015 | Digital infrastructure development | Improved technological ecosystem          |
| Startup India               | 2016 | Encourage entrepreneurship         | Innovation and new industries             |
| Atmanirbhar Bharat          | 2020 | Promote self-reliant economy       | Strengthened domestic production          |
| Production Linked Incentive | 2020 | Encourage manufacturing expansion  | Boost exports and industrial investment   |

## Sectoral Opportunities in Global Value Chains

Global Value Chains (GVCs) have significantly transformed the structure of international production and trade by distributing various stages of production across different countries. For a developing economy like India, participation in these global production networks offers significant opportunities for industrial development, export expansion, employment generation, and technological advancement. Several sectors in India possess strong potential to integrate more deeply into global value chains due to their existing industrial base, skilled workforce, competitive costs, and supportive government policies. Among these sectors, electronics manufacturing, pharmaceuticals, automotive, and textiles stand out as key drivers of India's integration into global production networks.

### Electronics Manufacturing

The electronics manufacturing sector has emerged as one of the most promising industries for India's integration into global value chains. With the rapid growth of digital technologies and increasing global demand for electronic products, countries are competing to become manufacturing hubs for electronic goods. India has witnessed substantial growth in electronics manufacturing over the past decade, particularly in smartphone production. Global companies such as Apple, Samsung, and several contract manufacturers have expanded their production facilities in India under supportive government policies.

The government's **Production Linked Incentive (PLI) scheme for electronics manufacturing** has played a crucial role in attracting foreign direct investment and encouraging domestic production. India has rapidly become one of the world's largest smartphone manufacturing centers, with a significant share of production now taking place domestically. Additionally, the government has announced initiatives to promote **semiconductor manufacturing**, which is considered critical for strengthening technological capabilities and reducing dependence on imports.

Participation in global electronics value chains provides India with opportunities for technology transfer, skill development, and export growth. As multinational corporations diversify their supply chains away from concentrated production hubs, India has the potential to become a major alternative destination for electronics manufacturing in the coming decades.

### Pharmaceutical Industry

India's pharmaceutical industry plays a vital role in the global healthcare system and represents one of the strongest sectors in India's global value chain participation. The country is widely recognized as the **"pharmacy of the world"** due to its ability to produce affordable generic medicines at large scale. India supplies a significant share of the global demand for generic drugs and vaccines, making it an essential component of international pharmaceutical supply chains.

Indian pharmaceutical companies are involved in various stages of the global pharmaceutical value chain, including research and development, manufacturing of active pharmaceutical ingredients (APIs), formulation of medicines, and distribution to international markets. The industry benefits from a strong scientific workforce, advanced manufacturing facilities, and compliance with international regulatory standards.

However, India also faces certain challenges in this sector, particularly its dependence on imported active pharmaceutical ingredients from countries such as China. Recognizing this vulnerability, the government has introduced policy initiatives aimed at strengthening domestic API production and improving supply chain resilience. Increased investment in biotechnology, research and development, and pharmaceutical infrastructure will further enhance India's role in the global pharmaceutical value chain.

### Automotive Sector

The automotive industry represents another major sector where India has achieved significant integration into global value chains. India is one of the largest automobile markets in the world and serves as an important manufacturing base for vehicles and automotive components. Global automobile manufacturers such as Suzuki, Hyundai, Toyota, and Ford have established large production facilities in India, producing vehicles for both domestic consumption and export markets.

India's automotive component industry is particularly well integrated into international supply chains. Indian manufacturers export a wide range of auto components, including engines, transmission systems, electrical parts, and precision engineering products, to major automobile markets in North America, Europe, and Asia.

Government initiatives such as the **Automotive Mission Plan**, **Make in India**, and **PLI schemes for the automobile and auto component sector** aim to strengthen India's competitiveness in this industry. In addition, the transition toward **electric vehicles (EVs)** and sustainable mobility is opening new opportunities for India to participate in emerging global automotive value chains related to battery technology, electric mobility systems, and green transportation technologies.

### Textile and Apparel Sector

The textile and apparel sector has traditionally been one of the most important industries in India and continues to play a critical role in employment generation and export earnings. The sector employs millions of workers, particularly in rural and semi-urban areas, making it a key contributor to inclusive economic growth.

India possesses several competitive advantages in textile production, including abundant raw materials such as cotton, a large labour force, and a long tradition of textile manufacturing. The country exports a wide range of textile products including garments, fabrics, home textiles, and technical textiles to global markets such as the United States, European Union, and Middle Eastern countries.

Integration into global textile value chains allows Indian firms to participate in various stages of production, from raw material processing and yarn manufacturing to garment production and branding. Government initiatives such as the **Mega Textile Parks Scheme**, **PLI for textiles**, and export promotion policies are designed to enhance the competitiveness of Indian textile industries.

However, challenges such as outdated technology, infrastructure limitations, and competition from countries like Bangladesh and Vietnam need to be addressed in order to strengthen India's position in global textile supply chains.

**Table 2: India's Potential Sectors for Global Value Chain Integration**

| Sector           | Strengths                  | Opportunities              |
|------------------|----------------------------|----------------------------|
| Electronics      | Large market and workforce | Export-oriented production |
| Pharmaceuticals  | Strong research base       | Global healthcare demand   |
| Automotive       | Established manufacturing  | Component exports          |
| Textiles         | Large labor force          | Global apparel markets     |
| Renewable Energy | Policy support             | Green technology exports   |

## Challenges in Integrating India into Global Value Chains

- **Infrastructure Constraints-** Inadequate transport networks, congested ports, and high logistics costs reduce efficiency, delay exports, and weaken India's competitiveness in global supply chains.
- **Skill Gaps-** Lack of advanced technical skills and industrial training limits productivity, technological adoption, and the ability of industries to move up value chains.
- **Regulatory Complexity-** Multiple regulations, bureaucratic procedures, and policy inconsistencies increase compliance costs, discourage foreign investment, and slow industrial growth and trade.
- **Dependence on Imported Inputs-** Heavy reliance on imported components and raw materials exposes industries to supply disruptions, price volatility, and geopolitical risks.
- **Global Trade Uncertainties-** Trade conflicts, protectionist policies, geopolitical tensions, and global crises disrupt supply chains and create uncertainty for international trade and investment.

## Policy Recommendations

To strengthen India's position in global value chains, the following strategies are recommended:

- Improve logistics and transportation infrastructure
- Promote technological innovation and research
- Strengthen skill development programs
- Encourage foreign direct investment
- Simplify regulatory frameworks
- Support small and medium enterprises in export markets

## Conclusion

Global value chains represent a defining feature of the modern global economy. For India, strengthening participation in these networks is crucial for achieving sustainable economic growth, industrial development, and employment generation. The **Make in India** and **Atmanirbhar Bharat** initiatives represent important policy efforts to enhance manufacturing capabilities and promote industrial competitiveness.

While Make in India focuses on attracting investment and expanding manufacturing capacity, Atmanirbhar Bharat emphasizes technological capability, domestic value addition, and economic resilience. Together, these initiatives form the foundation of India's evolving industrial policy framework.

However, successful integration into global value chains requires addressing structural challenges such as infrastructure gaps, skill shortages, and regulatory inefficiencies. Strategic policy reforms, innovation-driven growth, and stronger global partnerships will be essential for enhancing India's role in global production networks.

In the coming decades, India has the potential to emerge as a major global manufacturing hub. Achieving this goal will depend on balancing **self-reliance with global integration**, ensuring that domestic industries remain competitive while actively participating in international value chains.

## Reference-

1. Baldwin, R. (2016). *The great convergence: Information technology and the new globalization*. Harvard University Press, pp. 112–118.
2. Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), pp. 78–104.
3. Rodrik, D. (2018). *New technologies, global value chains, and developing economies*. National Bureau of Economic Research, pp. 15–22.
4. World Bank. (2020). *World development report 2020: Trading for development in the age of global value chains*. World Bank Publications, pp. 43–55.
5. Government of India. (2014). *Make in India: National manufacturing policy and sectoral strategy*. Ministry of Commerce and Industry, pp. 6–12.
6. NITI Aayog. (2021). *Strategy for New India @75*. Government of India, pp. 147–155.

7. OECD. (2019). *Global value chains and international trade: The policy landscape*. OECD Publishing, pp. 64–72.
8. UNCTAD. (2020). *World investment report 2020: International production beyond the pandemic*. United Nations, pp. 91–104.
9. Ministry of Finance. (2022). *Economic survey of India 2021–22*. Government of India, pp. 211–219.
10. Ministry of Commerce and Industry. (2023). *Production linked incentive schemes for manufacturing sectors*. Government of India, pp. 18–25.
11. NITI Aayog. (2020). *Atmanirbhar Bharat: Self-reliant India initiative framework*. Government of India, pp. 33–40.
12. World Trade Organization. (2021). *Global value chain development report*. WTO Publications, pp. 56–67.
13. Kaplinsky, R., & Morris, M. (2001). *A handbook for value chain research*. Institute of Development Studies, pp. 23–31.