



## **India's Industrial And Trade Policies And Its Impact On The Structure And Composition Of Manufacturing Sector**

Arunabh Jyoti Malakar<sup>1</sup>, Manash Pratim Sarma<sup>2</sup>

<sup>1</sup>Research Scholar, Dept. of Economics, Gauhati University, Email Id: arunabhjyotimalakar18@gmail.com,  
Orcid Id: 0009-0009-4260-608X

<sup>2</sup>Assistant Professor, Dept. of Economics, PDUAM Dalgaoon, Email Id: manashpratimsarma23@gmail.com,  
Orcid Id: 0009-0006-1282-9643

### **ABSTRACT**

This article sheds light on how the industrial sector in India is changing. India's economy is significantly influenced by its industrial sector. India has enacted a number of trade and industrial policies throughout the years to aid in the expansion and advancement of the manufacturing industry. Over the years, India's industrial and trade policies have also changed significantly; in the 1990s, the nation moved from import substitution to liberalisation.

This paper tries to examine the impact of India's trade and industrial policies on the structure and composition of its manufacturing sector. It traces the evolution of these policies from the pre-independence era to the present day, and analyses how they have influenced the growth, competitiveness, and diversification of the sector. The paper also assesses the challenges and drawbacks of the policies, and suggests some policy recommendations for the future. The paper argues that trade and industrial policies have been crucial in shaping the manufacturing sector, but they also need to be coherent, consistent, and flexible to adapt to the changing market conditions and global standards. The paper contributes to the literature on India's economic development and industrialization by providing a comprehensive and historical perspective on the role of trade and industrial policies.

An overview of these policies' effects on the makeup and organisation of India's industrial sector is given in this study. The paper emphasises how policies that promote exports, diversify product lines, draw in foreign investment, and boost competition have a good effect on manufacturing. The piece does, however, also draw attention to issues like inadequate infrastructure. The article's conclusion is that while India's trade and industrial policies have been instrumental in reforming the manufacturing sector, there is still more that can be done to improve the industry's competitiveness and long-term growth prospects.

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## 1. Introduction

Since obtaining independence in 1947, India, a diversified and vibrant country, has seen enormous economic upheavals. One of the most important aspects of this journey has been the development of its manufacturing sector, which has been influenced by various trade and industrial policies throughout the years. These regulations have had a significant impact on the manufacturing sector's growth, competitiveness, and global integration by defining its structure and makeup. The area of the economy that creates things using diverse production techniques is known as the manufacturing sector. This involves converting components or raw resources into final items that are usable by customers or other businesses. The development and expansion of India's economy depend heavily on this industrial sector. In addition to boosting GDP, exports, employment, and innovation, it also aids sustainable development. India can boost social and economic development as well as its economic competitiveness by fostering the expansion of the manufacturing sector. (Ahluwalia, 1991; Nagaraj, 2021)

The industrial and trade policies of India significantly influence the makeup and structure of the country's manufacturing sector. The manufacturing sector is significantly shaped by industrial and trade policies, which provide new laws, rules, regulations, incentives, and subsidies to support trade and industrial development. Firm decisions on investment, manufacturing procedures, and location are also influenced by these policies. (Bhagwati & Desai, 1970)

The term "industrial policies" refers to the numerous plans, initiatives, and tactics that the Indian government use to encourage and assist the nation's industrial development. In an effort to boost exports, draw in foreign investment, and support domestic manufacturing, India has implemented a number of industrial policies over the years. The rules, initiatives, and plans put in place by the Indian government to oversee and encourage commerce with other nations and areas are referred to as trade policy. India's trade policies are designed to safeguard national interests, stimulate foreign investment, and advance exports. (Bhagwati & Desai, 1970; Joshi & Little, 1994)

Over the past few decades, India's industrial and trade policies have changed significantly, gradually moving in the direction of globalisation and liberalisation. The manufacturing sector's makeup and structure have been significantly impacted by these changes in policy. The purpose of this article is to examine how India's trade and industrial policies affect the country's manufacturing industry. We'll look at how the policies have changed throughout time and how they've affected the industry. This article seeks to provide light on how India's manufacturing sector is evolving by examining changes in the country's trade and industrial policy. (Krishna & Mitra, 1998; Goldar & Kumari, 2003; Nagaraj, 2021)

## Rationale of the Study

India pursued a model of economic growth in the early decades following its independence in 1947 that was marked by significant governmental involvement and protectionist restrictions. The notorious "Licence Raj" placed severe restrictions on enterprises, limiting foreign investment and forcing them to obtain industrial licences. The governmental sector dominated important sectors during this time, leaving little room for private industry. Inefficiencies, red tape, and a slow rate of industrial expansion were the results. The pivotal moment occurred in 1991 when India's economic policies were reevaluated due to a serious balance of payments problem. A number of reforms were implemented by Dr. Manmohan Singh, the finance minister at the time, which liberalised the economy, eliminated many elements of the Licence Raj, and allowed for foreign investment. The goal of this paradigm change was to promote an industrial sector that was internationally interconnected and competitive. (Bhagwati & Desai, 1970; Joshi & Little, 1994)

The study's justification is that, in order to understand the dynamics of India's economic growth, one must first understand the evolution of the country's trade and industrial policies. Following the liberalisation process, there was a notable upsurge in economic activity, enhanced competitiveness, and a rise in foreign investments. It did, however, also present issues with inequality, sustainability of the environment, and the requirement for equitable growth. Examining the past development and present state of these policies offers important perspectives on the country's economic path. (Ahluwalia, 1991; Nagaraj, 2021)

## Overview of India's Industrial Policies

The industrial policies of India can be broadly divided into the following periods:

## 1. The Nehruvian era (Pre- liberalization era) (1947-1991)

India's industrial policy throughout the Nehruvian era, which began with the country's independence in 1947 and ended with the liberalisation of the Indian economy in 1991. During this time, a statist paradigm of industrialization and economic growth emerged, emphasising import substitution, public sector businesses, and government intervention in the economy. (Bhagwati & Desai, 1970; Ahluwalia, 1991)

India's industrial strategy during this period was established by the Industrial strategy Resolution of 1948. It stressed the necessity of quick industrialization, especially in the public sector, in order to create jobs, lessen reliance on imports, and become economically independent. The programme was centred on growing key industries, which were seen to be necessary for the nation's industrialization and included iron and steel, coal, electricity, and transportation. (Bhagwati & Desai, 1970; Ahluwalia, 1991)

The state's involvement in the growth of industries, especially in the core sectors, was highlighted in the 1956 Industrial Policy Resolution. It resulted in the creation of public sector businesses in important sectors including chemicals, heavy equipment, and steel. The state's involvement in industrial growth was emphasised in later plans, such as the Industrial plans of 1977 and 1980, and private sector engagement was discouraged. A culture of rent-seeking and corruption resulted from the introduction of industrial licencing, which regulated the admission and exit of businesses in the industrial sector. India's industrial policies have been designed with a state-led strategy in mind, which has limited the involvement of the private sector. They contend that in order to draw in foreign capital and make local businesses competitive on a global scale, a market-oriented strategy is required. (Bhagwati & Desai, 1970; Joshi & Little, 1994)

India's industrial strategy under the Nehruvian era has several important components, including:

**Public Sector Dominance:** With an emphasis on creating and overseeing public sector businesses, the government was a major player in the industrial sector. This strategy was motivated by the idea that, in order to guarantee planned growth and fair resource allocation, some industries—especially those considered strategically significant—should be governed by the state. (Ahluwalia, 1991)

**Five-Year Plans:** India has a number of Five-Year Plans to delineate its objectives for economic development. These plans placed a strong emphasis on industrialization and included growth objectives for important industries. It was anticipated that the public sector would take the lead in accomplishing these objectives. (Ahluwalia, 1991)

**Import Substitution:** Import substitution industrialization (ISI) was the main focus of Nehruvian industrial strategy. The goal was to encourage the expansion of indigenous industry in order to lessen reliance on imported commodities. The goal of this strategy was to safeguard and develop emerging sectors of the economy until they were able to compete globally. (Bhagwati & Desai, 1970; Bhagwati & Srinivasan, 1975)

**Licence Raj:** During this time, the industrial licencing system was a prominent aspect. The granting of licences for the development and growth of industries was under government supervision. Although this was done with the intention of controlling and guiding industrial progress, it also resulted in bureaucratic complications and, occasionally, inefficiencies. (Ramakrishna, 1978; Joshi & Little, 1994)

## 2. The post-liberalization era (after 1991)

Following 1991, India's industrial policies were designed to liberalise, de-regulate, and boost the industrial sector's competitiveness. The main goals were to boost productivity, encourage private sector investment, and link the Indian economy with the world economy. (Krishna & Mitra, 1998; Ahluwalia, 1991)

A dramatic transition in policy towards a market-oriented approach was initiated with the New Industrial Policy of 1991. Foreign direct investment was permitted in the majority of industries, tariffs were lowered, and industrial licencing was eliminated. It also highlighted how important the private sector is to the expansion of industry. (Bhagwati & Srinivasan, 1993; Joshi & Little, 1994)

The significance of the private sector was emphasised in later programmes, such as the Industrial Policy of 1997 and the National Manufacturing Policy of 2011, which also supported the creation of special economic zones, technological advancement, and skill development. In an effort to position India as a centre for manufacturing and draw in foreign capital for the industrial sector, the Made in India project was introduced in 2014. Policies that encourage innovation and entrepreneurship are also necessary particularly for the small- and medium-sized business sector. They recommended that governments should concentrate on establishing an atmosphere that is favourable to start-ups and facilitating their access to markets,

technology, and funding. (Nagaraj, 2021; Srivastava, 2019)

The goal of the most recent industrial strategy, Atmanirbhar Bharat, which was introduced in 2020, is to encourage independence and domestic manufacturing in the industrial sector. It places a strong emphasis on creating local supply chains, adding value domestically, and replacing imports. According to Montek Singh Ahluwalia (2020), policy changes are essential in order to tackle the structural impediments that impede India's industrialization and economic expansion. He said that policy should prioritise innovation, infrastructural development, and resolving the issues that small enterprises and the unorganised sector confront. (Ahluwalia, 2020)

The objectives of the globalisation, privatisation, and liberalisation reforms were to boost competitiveness, promote foreign investment, and open up the Indian economy. During this time, India's economy changed to become more globally linked and focused on the market. These are some salient characteristics of post-liberalization India's industrial strategy. (Nagaraj, 2021)

**Economic Reforms and Liberalisation:** The most significant development of the post-liberalization era was the deconstruction of the Licence Raj and the opening up of several industries. Significantly fewer industries required industrial licences, and many of them were made more accessible to competition and private investment. (Joshi & Little, 1994; Sivadasan, 2004)

**Privatisation:** The government sold its shares in several public sector companies as part of its privatisation agenda. This action was taken to increase competitiveness, productivity, and efficiency in sectors of the economy that were previously controlled by the public sector. (Nagaraj, 2021)

**Globalisation:** By promoting foreign direct investment (FDI) and liberalising commerce, India enthusiastically embraced globalisation. As a result, the Indian economy became more integrated with the world economy, posing both new possibilities and difficulties for home firms. (Panagariya, 2019)

**Technology and Innovation:** During the post-liberalization era, these two areas received more attention. Particularly, the software and information technology (IT) sectors grew quickly, making a substantial economic contribution to India. (Balakrishnan & Babu, 2000)

**Deregulation:** The government implemented policies to streamline regulatory procedures and lower administrative barriers. This was done in an effort to encourage entrepreneurship and make the atmosphere more business-friendly. (Sivadasan, 2004)

## **Brief review of India's trade policies**

**Trade policies of India can be broadly divided into three periods:**

### **1.Pre-liberalization era (1947-1991)**

Huge restriction and protectionism characterised India's trade policy pre-liberalization era (1947–1991). During this time, India's trade policy promoted self-reliance and import substitution. To safeguard home industries, the government put import prohibitions and hefty tariffs in place. (Bhagwati & Desai, 1970; Panchamukhi, 1978)

During this time, India's trade policy had the following primary goals: a. To encourage domestic industries and lessen reliance on imports for growth.

b. To keep the outflow of foreign currency to a minimum in order to preserve a positive balance of payments.

c. To foster industry and local production in order to generate job possibilities.

To accomplish these goals, the Indian government employed a variety of strategies, such as high import tariffs, quantitative limitations, licencing requirements, export subsidies, and state control of important businesses. (Nayyar, 1976; Nambiar, 1983)

Import substitution was a strategy used to boost homegrown industries and lessen reliance on imports. The government placed a high tax on some commodities and prohibited or restricted the import of others. Although the programme was successful in building a robust domestic manufacturing sector, it also resulted in the growth of an extremely regulated and ineffective economy. (Bhagwati & Desai, 1970; Bhagwati & Srinivasan, 1975)

Export-oriented sectors were given subsidies and tax breaks as part of the export promotion programme. To promote exports, the government also established export processing zones, or EPZs. The 1970s and 1980s saw a sharp increase in India's exports because to this approach, which was mostly effective. (Nayyar, 1976)

During this time, India's trade policy was characterised by the following:

**Import Substitution Industrialization (ISI):** Prior to trade liberalisation, ISI served as the cornerstone of Indian trade strategy. This strategy replaced imported items with those made domestically in an effort to support homegrown enterprises. The goal was to become self-sufficient and less dependent on imports. (Bhagwati & Desai, 1970; Panchamukhi, 1978)

**High Tariffs and Import Restrictions:** India levied high tariffs on imports in order to safeguard its own industries. Restrictions on imports, licencing needs, and quotas were implemented to manage the flow of imported commodities and promote the use of domestically produced items. (Nouroz, 2001; Nambiar, 1983)

**Dominance of the Public Sector:** The public sector was heavily involved in trade-related operations. Important industries, organisations that promote commerce, and foreign exchange reserves were all actively regulated and controlled by the government. (Ahluwalia, 1991)

**Bilateral Trade Agreements:** India participated in bilateral trade agreements to promote economic cooperation with other developing countries, frequently within the framework of the Non-Aligned Movement (NAM). These accords were a component of India's larger economic and foreign policy plan. (Nayyar, 1976)

**Foreign Exchange Controls:** To maintain economic stability and manage the balance of payments, strict controls were placed on foreign exchange. Foreign exchange operations, particularly import and export related ones, were governed by the government. (Panchamukhi, 1978)

**Organisations for Trade Promotion:** The Directorate General of Foreign Trade (DGFT) was instrumental in developing and carrying out trade policy. It was in charge of administering and granting licences for import and export. (Ramakrishna, 1978)

**Concerns about the Balance of Payments:** Keeping the Balance of Payments favourable was a major factor. Preventing a depletion of foreign exchange reserves and controlling trade imbalances were the main concerns. (Bhagwati & Srinivasan, 1975)

## 2. Liberalization era (1991-2000):

There was a major change in India's trade policy framework during the liberalisation phase of trade policies (1991–2000). During this time, India's trade strategy was centred on lowering tariffs, liberalising imports, and fostering exports. The goal of the strategy was to level the playing field for both indigenous and international businesses and integrate India into the global economy. (Bhagwati & Srinivasan, 1993; Krishna & Mitra, 1998)

India's trade strategy during this time had the following main goals: a. Increasing exports and improving the country's domestic economy's efficiency and competitiveness.

b. To lower import taxes and provide Indian businesses more access to outside markets in order to boost exports.

c. To encourage technology transfer to India and foreign direct investment (FDI) inflows.

The government liberalised foreign investment policy, eliminated quantitative trade barriers, and lowered import taxes as part of its economic liberalisation initiatives. In addition, the government instituted policies focused on the market and broke up its monopolies in a number of industries. In his 2019 article, Arvind Panagariya (2019) argues in favour of free trade and emphasises the advantages trade liberalisation might have on the Indian economy. He contends that regional and international commercial integration should be encouraged and protectionism should be eliminated. Exports and foreign investment increased as trade policy became freer. India's exports increased dramatically during this time, accounting for 14.8% of GDP in 2000–01 compared to 4.8% in 1991–92 for goods exports. Service exports from India increased significantly as well, especially in the IT sector. (Krishna & Mitra, 1998; Balakrishnan & Babu, 2000)

But there were drawbacks to the trade policy liberalisation as well. It raised the level of competition, which had an impact on the less competitive domestic industries. In the near term, the rise in imports created a trade deficit, for which the government had to make remedial measures. (Goldar & Kumari, 2003)

A move towards a more open and globalised economy, a lowering of trade barriers, the promotion of foreign direct investment (FDI), and the implementation of export-oriented initiatives are some of the main components of India's trade policy during this time. The following are some salient characteristics of India's liberalised trade policies: (Panagariya, 2019)

**Trade Liberalisation:** Lowering trade barriers was a key component of liberalisation. India eliminated

quantitative limits, streamlined the import licencing process, and gradually reduced import taxes. This action was taken in an effort to increase competition, boost productivity, and offer customers more options. (Krishna & Mitra, 1998; Balakrishnan & Babu, 2000)

**Export Promotion:** During the liberalisation era, export-led growth received more attention. Incentives, subsidies, and the creation of export processing zones (EPZs) and subsequently special economic zones (SEZs) were among the measures used to increase exports. The aim was to increase the competitiveness of Indian products in the international market. (Nagaraj, 2021)

**international Direct Investment (FDI):** India launched measures to liberalise FDI in an effort to draw in international capital and technology. Foreign investors were allowed access to industries like manufacturing, information technology, and telecommunications. In order to streamline the approval procedures and raise the maximum amounts of foreign ownership that are allowed in different industries, the government implemented changes. (Sivadasan, 2004)

**Elimination of Exchange Controls:** As part of the liberalisation process, certain limitations on foreign exchange transactions were lifted. This made it easier for firms to conduct cross-border transactions by facilitating more seamless international commerce and investment. (Bhagwati & Srinivasan, 1993)

**WTO Commitments:** India implemented trade policy changes to bring it in line with global trade standards as part of its commitment to the World Trade Organisation (WTO). Tariff reductions and the removal of non-tariff obstacles were part of this.

**Trade Accords and Economic Alliances:** In an effort to strengthen its economic ties with other nations, India has signed both bilateral and regional trade accords. India's attempts to become more integrated into the world economy are reflected in the South Asian Free Trade Area (SAFTA) and other bilateral accords. (Panagariya, 2019)

**Economic Liberalisation Reforms:** Trade was significantly impacted by the larger economic liberalisation initiatives, which also included revisions to industrial policy. An atmosphere that was more open and competitive to business was created by the demolition of the Licence Raj and the decrease in government participation in several areas. (Nagaraj, 2021)

**Trade Facilitation Measures:** To promote easier commerce, the government implemented policies that streamlined and streamlined trade procedures, lowered administrative barriers, and improved infrastructure and logistics. (WTO, 2007)

### 3. Globalization era (2000-present):

India's trade policy has undergone significant liberalisation and greater integration with the global economy throughout the globalisation period (2000-present). During this time, the government has focused its trade strategy on expanding India's involvement in international commerce and reaping the rewards of a more open and integrated world economy. (Panagariya, 2019; Nagaraj, 2021)

During this time, India's trade policy had as its main goals: a. To encourage the export of products and services and raise India's market share in international commerce.

b. To draw in foreign capital and create a manufacturing industry that is competitive on a global scale.

c. To ensure equitable and sustainable development while simultaneously boosting the value-added and competitiveness of the Indian economy.

To achieve these goals, the government has put in place a number of initiatives. India is in the process of finalising Free Trade Agreements (FTAs) with other nations. India has already signed a number of bilateral and regional trade agreements, including ones with the US, Japan, South Korea, and ASEAN. (Panagariya, 2019)

The government has kept lowering import tariffs and getting rid of non-tariff trade restrictions such export limits, quotas, and licencing procedures. Significant policy changes have also been made by India, including the implementation of the Make in India programme, the Goods and Services Tax (GST), and the Insolvency and Bankruptcy Code. (Nagaraj, 2021)

India's trade policy must be coherent and consistent. It is recommended by various reports that policies should be flexible enough to adjust to shifting international conditions and founded on a thorough grasp of India's comparative advantages and market potential. India has been a significant actor in the world economy throughout the period of globalisation. India's goods exports have grown, reaching USD 313.36 billion in 2019–20 from USD 43.5 billion in 2000–01. The percentage of India's GDP that comes from services exports increased from 8.3% in 2000–01 to 6.1% in 2019–20. The country's services exports have

also expanded quickly. (Panagariya, 2019; Nagaraj, 2021)

The era of globalisation has not been without difficulties. Due to its growing economic integration, India is now more susceptible to outside shocks like shifts in the world economy or geopolitical unrest. Furthermore, India's trade balance has been impacted by its ongoing reliance on imported commodities and energy. In response, the government has created programmes to support sustainability, strengthen the agriculture industry, and increase local manufacturing. (Nagaraj, 2021)

The term "globalisation era" may be used to describe the time frame beginning in the late 20th century when nations began to become more linked and dependent on one another, a major characteristic of the global economy. India furthered its integration into the global economy throughout this age by actively participating in it. Continuing trade liberalisation, joining global value chains, and tackling issues with competition and international standards are important facets of India's trade policy in the age of globalisation. The following characteristics and sources pertain to India's trade policy throughout the globalisation era:

**Trade Liberalisation Continues to exist:** India has persisted in lowering trade obstacles, streamlining customs processes, and improving trade facilitation. This includes the elimination of non-tariff barriers and additional tariff reductions. (WTO, 2007)

**Engagement in Global Value Chains (GVCs):** India made a concerted effort to get integrated into global value chains during the globalisation period. This included engaging in several manufacturing and assembly phases within the global industrial network in addition to exporting final items. (Nagaraj, 2021)

**Trade in Services and Information Technology:** India has become a significant participant in the global services industry, specialising in business process outsourcing (BPO) and information technology (IT). Modified policies that encouraged the export of services made a major impact on India's balance of payments. (Nagaraj, 2021)

**Trade Facilitation and E-Government:** The government put policies into place to further expedite trade procedures, cut down on paperwork, and boost productivity. Initiatives for e-governance were implemented to digitise and streamline customs processes. (Organization, 2007)

**Regional and Bilateral Trade Agreements:** In an effort to strengthen its economic connections with important allies, India entered into discussions for regional and bilateral trade agreements. One such important multilateral deal that was being considered was the Regional Comprehensive Economic Partnership (RCEP). (Panagariya, 2019)

**Standards and Intellectual Property Rights (IPR):** India encountered issues with respect to international standards compliance and IPR as part of the globalisation process. The goal of policy debates and changes was to achieve a balance between promoting innovation and adhering to international trade regulations. (WTO, 2007)

**Investment Policies and Bilateral Treaties:** In order to create an environment that is favourable to international investors, India signed a number of bilateral investment treaties (BITs) and modified its policies to attract foreign direct investment (FDI). (Panagariya, 2019)

**Commitments made to the World Trade Organisation (WTO):** India stayed a member of the WTO and fulfilled its obligations while advocating for its interests in a number of international trade forums.

## **Evolution of India's Manufacturing Sector**

India's manufacturing industry has developed in a very noteworthy way. Over time, India's manufacturing sector has experienced substantial transformations that are indicative of the nation's overall economic shifts. Under British colonial control, the pre-independence era was marked by a mostly agricultural economy and a limited degree of industrialization. The demands of the British colonial government were the primary focus of the industrial sector. (Ahluwalia, 1991; Nagaraj, 2021)

The textile and jute industries made up the majority of India's manufacturing sector before to the country's independence. But as part of a larger development plan, India set out to strengthen its industrial capacities after gaining independence. (Nayyar, 1976)

India used an import substitution strategy after gaining independence with the goal of lowering reliance on imports by growing indigenous industry. To encourage domestic production, the government enacted protectionist laws, import prohibitions, and licence requirements. The expansion of several sizable public sector businesses in industries like steel, electricity, and heavy machinery was facilitated by these policies. Numerous small-scale businesses emerged as a result of the government's substantial support for the small-

scale industry. The goal was to reduce imports by increasing home output and establishing self-reliance. But because these measures did not provide the expected outcomes, the economy was liberalised in 1991. (Bhagwati & Desai, 1970; Ahluwalia, 1991)

Early 1990s economic changes allowed for increased foreign investment and international commerce in India. Industrial licencing procedures were expedited, tariff barriers were lowered, and both private and foreign direct investment were welcomed. The manufacturing sector changed to focus more on export-oriented sectors including information technology, autos, textiles, and pharmaceuticals. The manufacturing scene in the years between 1990 and the early 2000s was also impacted by the emergence of multinational firms and the expansion of the services sector. (Krishna & Mitra, 1998; Balakrishnan & Babu, 2000)

Beginning in the early 2000s, the manufacturing sector saw a great deal of technical improvement as well as the introduction of digital technology and automation. The establishment of Special Economic Zones (SEZs) aimed to draw in investments and encourage industry focused on exports. The introduction of programmes like "Make in India" and "Atma Nirbhar Bharat" aims to boost homegrown manufacturing, encourage excellence in manufacturing, and provide job opportunities. India's manufacturing industry is very diverse these days. Advanced manufacturing, electronics, defence, and renewable energy have become more and more important industries. There have been initiatives to increase infrastructure development, worker skilling, and ease of doing business. Consequently, the industry is also seeing an increase in small and medium-sized businesses, which are anticipated to be vital in generating jobs and bolstering the nation's economic expansion. (Nagaraj, 2021; Srivastava, 2019)

### **Impact of Industrial Policies on the Structure and Composition of India's Manufacturing Sector**

The manufacturing industry in India has been significantly impacted by industrial policy. The following are some significant ways that industrial policy has impacted the manufacturing sector's structure:

1. India implemented an import substitution industrialization programme in the 1950s, limiting imports and emphasising the growth of large-scale, self-sufficient enterprises in order to encourage homegrown manufacture. Large-scale enterprises were developed in the nation as a result of this strategy, which shielded them from outside competition. The strategy was effective in spurring the expansion of a number of sectors, including heavy engineering, steel, and textiles, but it ignored small-scale businesses, which received less assistance and protection. (Bhagwati & Desai, 1970; Ahluwalia, 1991)
2. Rise in Private Sector Participation: The rise in private sector involvement in the manufacturing sector has been one of the most notable effects of industrial policy. A change from public sector domination to private sector-led development has resulted from liberalisation measures that have stimulated private sector investments in a number of areas. (Krishna & Mitra, 1998; Sivadasan, 2004)
3. Technological Developments: Industrial policies have been a major factor in the industrial sector's adoption and advancement of technology. Modern manufacturing has benefited from the introduction of cutting-edge technology brought about by partnerships between Indian and international companies, which have also increased efficiency. (Balakrishnan & Babu, 2000)
4. Change in Resource Allocation: The manufacturing sector's resource allocation has changed as a result of industrial policy. The ability to distribute resources to the most productive businesses has been made feasible by the elimination of licencing restrictions and the cutting back of bureaucratic processes. In the industrial sector, resource allocation has become increasingly market-determined, ensuring that resources go to the most productive places. (Sivadasan, 2004)
5. Growth in Exports: The composition of India's manufacturing sector has been greatly influenced by industrial policies meant to encourage exports. Efficiency and high-quality products are now receiving more attention thanks to export-oriented strategies. As a result, manufacturing has shifted from creating items for the home market to ones that can withstand competition on a worldwide scale. (Nagaraj, 2021; Panagariya, 2019)
6. The government has also put measures into place to encourage and formalise the growth of small-scale businesses, which has boosted their production contribution. The government has launched a number of initiatives in recent years, including the Micro, Small, and Medium Enterprises Development Act, which offers small-scale enterprises financial and technical help. (Ahluwalia, 1991)

Industrial policies, which support certain industries, SMEs, technical innovation, import substitution, export promotion, and regional development throughout the nation, have also been essential in determining the makeup of India's manufacturing sector. A diverse industrial sector has emerged as a result of these

measures, greatly advancing India's economic development. (Nagaraj, 2021)

1. The government prioritised the development of large-scale manufacturing sectors in the early years of India's independence. Self-sufficiency and import substitution were prioritised, which meant that manufacturing things that could be produced domestically as opposed to imported was the main goal. As a result, a number of heavy industries that needed large capital investments were developed, including steel, chemicals, and fertilisers. (Bhagwati & Desai, 1970)
2. Sectoral Focus: By concentrating on particular economic sectors, industrial strategies have been crucial in shaping the makeup of India's manufacturing sector. For instance, by providing tax breaks, subsidies, and other advantages to businesses engaged in these industries, the government has supported the pharmaceutical, textile, and automobile sectors. (Nagaraj, 2021)
3. The creation of new industries, the reorganisation of established industries, and the emergence of small-scale industries are the results of the policy changes from import substitution industrialization strategy to liberalisation policies. Foreign businesses were able to invest in the nation and establish manufacturing facilities thanks to the liberalisation measures that opened up the economy to them. Due to international businesses like Suzuki and Hyundai entering the market in joint ventures with local manufacturers to create automobiles locally to fulfil the increased demand, the Indian automotive sector witnessed a huge boost as a result. Alongside this boom, the electronics sector saw the establishment of production facilities by companies like Samsung and LG, who produced items for both local and foreign markets. Particularly in the pharmaceutical sector, the nation's inexpensive and talented worker pool and reduced R&D expenses allowed for fast industrial growth. National pharmaceutical firms like Dr. Reddy's Laboratories, Sun Pharma, and Lupin developed became significant exporters to international markets. (Krishna & Mitra, 1998; Panagariya, 2019)
4. Government initiatives that support particular industries have also influenced the makeup of the manufacturing sector. The 'Make in India' project of the Indian government, for instance, aims to stimulate the development of high-tech sectors including biotechnology, telecom equipment, and electric cars. Additionally, the government has given growing smaller, more specialised businesses like the production of leather products, food processing, and clothing manufacturing a lot of attention. (Srivastava, 2019)
5. Transition from traditional to modern industries: India's industrial policies have aided in the development of contemporary, high-tech sectors like biotechnology, aerospace, and information technology by using government assistance and incentives. This change has lessened the nation's reliance on customary industries, which historically served as the foundation of the manufacturing sector and included the production of textiles, leather goods, and handicrafts. Industries lacking in technical innovation, like textiles, have seen a decline in their respective manufacturing sector shares. (Nagaraj, 2021)

### **Role of Trade Policies on the Structure and Composition of India's Manufacturing Sector**

Over the years, trade policies have been essential in determining the makeup and structure of India's manufacturing sector. The sector has been greatly impacted by the policies that the Indian government has put in place to support trade and production. (Panagariya, 2019; Nagaraj, 2021)

1. India's economy was heavily controlled in the early post-independence period, with trade policies mostly focused on import substitution and protectionism. As a result, the industrial sector became more specialised and limited in scope, with a small number of sectors controlling the home market and few exports. Heavy industries like steel, chemicals, and equipment benefited from this approach, which fuelled their expansion. (Bhagwati & Desai, 1970; Panchamukhi, 1978)
2. To boost competitiveness, draw in foreign capital and technology, and integrate the Indian economy into the world economy, India implemented a freer trade policy in the 1980s. A number of businesses, including the automotive, electronics, and pharmaceutical sectors, grew as a result of this strategy and were able to compete on a worldwide scale. Some of the older, less competitive industries, such the manufacturing of steel and textiles, were also restructured as a result of the programme. (Nayyar, 1976; Krishna & Mitra, 1998)
3. Following the 1991 economic liberalisation changes, trade policies were reoriented to reflect the government's new emphasis on export promotion. To promote foreign investment, lower trade barriers, and boost competitiveness in the global market, a number of policies were established. The emphasis on export promotion resulted in the diversification of the industrial sector and the rise of new industries, particularly

in the high-tech and knowledge-intensive sectors. India's exports and international competitiveness have increased as a result of the expansion of export-oriented businesses including software, pharmaceuticals, and auto components. (Krishna & Mitra, 1998; Balakrishnan & Babu, 2000)

4. The liberalisation of trade laws made it possible for Indian businesses to expand their exports and reach outside markets, which in turn spurred the pharmaceutical sector's expansion. The generic medicine industry began to flourish and contribute to the Indian economy when Indian businesses began producing and shipping these medications to the US and European markets. (Panagariya, 2019)

5. Trade policy liberalisation also made it possible for international businesses to enter the Indian market, boosting competition and fostering the formation of joint ventures with Indian businesses. The car industry grew and employment were created when businesses like Hyundai and Suzuki established manufacturing units in India through joint ventures with Indian enterprises. (Krishna & Mitra, 1998)

#### Assessment of the progress of the manufacturing sector

The manufacturing sector may be greatly impacted by a variety of policies implemented by the government. As we have read in the previous sections, two major policies that might have an effect on the manufacturing sector are trade and industrial policy. We now examine certain trends in India's manufacturing industry.



Figure 1

**Source :** World Bank

The growth of India's manufacturing industry is seen in the image. The first graph displays India's industrial production trend over time. Since gaining its independence in 1947, India's economy has transformed from one based primarily on agriculture to one of the world's major industrial hubs. India's manufacturing output was valued at around \$4.2 billion in 1950. poor technical progress, a lack of trained labour, and a lack of infrastructure and capital were the causes of the poor manufacturing output. (Nagaraj, 2021; Nagaraj, 1999)

The public sector saw significant investments starting in the 1960s, which fueled India's manufacturing industry's explosive rise. Consequently, the output of manufacturing rose to almost \$8.9 billion. Steel, heavy engineering, and textiles were the three main industries of the time. (Ahluwalia, 1991)

India's manufacturing output increased further in the 1970s, reaching almost \$20.5 billion. The government prioritised import substitution policies throughout this decade, primarily via the manufacturing of intermediate products. As a result, several public sector businesses in heavy sectors like steel, oil, and autos were established. (Bhagwati & Desai, 1970; Nagaraj, 1989)

India's manufacturing output reached over \$44 billion by the 1980s. The government turned its attention to export-oriented industry and technological development throughout this decade. The development of both small and large-scale sectors, including the automotive, consumer electronics, textile, and chemical industries, was aided by the policy of opening up to international investment and trade. (Nagaraj, 1990)

Following the implementation of liberalisation laws, there was an increase in investment and knowledge transfer as the Indian manufacturing sector became more accessible to global competition. During this time, the manufacturing sector grew strongly, with annual growth rates ranging from 7% to 14%. Between 1991 and 2010, India's industrial output more than quadrupled, reaching over \$300 billion. (Krishna & Mitra, 1998; Ray, 2002)

The manufacturing sector grew throughout the period of 2011–2014, albeit at a slower rate than before because of the depreciation of the Indian rupee, an increase in inflation, and a slowdown in global economy. Between 2015 and 2018, the manufacturing sector saw a resurgence, with growth rates ranging from 7-8%. Made in India, a government project, increased manufacturing output via promoting homegrown production, generating job opportunities, and drawing in international investment. (Srivastava, 2019)

A worldwide recession and the COVID-19 epidemic presented problems for the industrial industry in 2019–2021. Nonetheless, the industry's resurgence was supported by the government's Atma Nirbhar Bharat Policy, which promotes homegrown manufacturing, and the relaxation of lockdown regulations. India's industrial production in 2020 was \$365.03 billion, while in 2021 it was \$443.91 billion. (Ahluwalia, 2020; Nagaraj, 2021)

India's manufacturing production as a proportion of GDP is displayed in the second graph. Even though it has risen over time with slight swings, it has remained mostly between 13 and 18% since independence. India's GDP was not significantly influenced by the manufacturing sector in the early post-independence years. However, in the next decades, the sector's GDP share increased thanks to the emphasis on industrialization and the execution of several programmes and initiatives. In the 1990s, the growth rate decreased, but it resumed in the 2000s, mostly due to the influence of foreign investment and government efforts. The manufacturing sector has had difficulties recently, including the COVID epidemic and a recession in the world economy, but the government's initiatives to formalise and support domestic manufacturing have kept the industry's GDP share mostly steady. (Nagaraj, 2021)

### **Challenges and Drawbacks**

1. Poor execution - Although many policies have been passed, there have been problems with how they have been put into practise. As a result, there has been little progress made towards reaching the objectives pertaining to the manufacturing sector. (Ramakrishna, 1978; Nagaraj, 2021)
2. Inadequate Planning: A number of government-initiated programmes aimed at the industrial sector were unable to account for shifting market dynamics. There have been cases where state or federal governments have made large investments in sectors of the economy that were not profitable or were experiencing severe challenges. (Nagaraj, 2021)
3. Inadequate infrastructure - High transportation costs, delays, and other logistical issues have been brought on by India's industrial sector's poor infrastructure. This has reduced the sector's ability to compete, making it more difficult to meet the targeted growth rates. (Ahluwalia, 2008)
4. In past years, high tariffs shielded home producers against lower-priced imports, but they also made it more difficult for them to compete internationally because of higher input costs, which prevented them from being as cost-competitive outside and prevented them from taking advantage of international markets. (Nambiar, 1983; Nouroz, 2001)
5. Regulatory obstacles - One of the main obstacles to industrial expansion has been the ambiguity and complexity of the rules regulating the manufacturing sector. Issues such as delays in getting permissions and licences have impeded the expansion of India's manufacturing industry. (Sivadasan, 2004)
6. limits on Foreign Investment: By imposing limits on foreign investment, some trade laws in India have hampered the expansion of the manufacturing sector. Absence of foreign investment may restrict access to

new business ventures and technological advancements that might boost competitiveness and promote growth. (Panagariya, 2019)

7. Difficulties in Negotiation: India has had difficulties in reaching advantageous trade deals with its international competitors. (Panagariya, 2019)

### Conclusion

India's manufacturing sector makeup and structure have been greatly influenced by its trade and industrial policies. The potential for growth and competitiveness of the sector, both locally and globally, has been impacted by government policies.

While the majority of the policies have been beneficial, some have had unfavourable consequences as well, such as excessive regulation and improper planning. The sector's potential for expansion has also been constrained by high tariffs, erratic regulations, limitations on foreign investment, inadequate quality control, and challenges in establishing advantageous trade agreements.

In order to foster sustainable growth and competitiveness within the manufacturing industry, politicians must establish and uphold industrial and trade policies that are clear, consistent, and predictable. Additionally, they must prioritise quality controls that adhere to international standards. The Indian government must prioritise encouraging innovation, free commerce, and resolving inconsistent regulatory frameworks, particularly removing red tape that deters international investment.

India's trade and industrial policies have seen both successes and setbacks in accomplishing the sector's objectives in the manufacturing industry. Though there have been problems with their implementation, a lack of suitable infrastructure, regulatory obstacles, a reliance on imports, and a lack of investment in research and development, the policies have been successful in encouraging domestic production, increasing exports, creating job opportunities, and encouraging strategic investment in infrastructure. In order for the manufacturing industry to have sustainable growth, these issues must be resolved. Effective policy execution may support the expansion of the manufacturing sector, boosting economic growth, increasing exports, and providing more employment opportunities, especially given India's huge potential in terms of its demographic dividend and large domestic market.

### References

1. Aghion, P., Burgess, R., Redding, S., & Zilibotti, F. (2005). Entry liberalization and inequity in industrial performance. *Journal of European Economic Association*, 2(2-3), 291-302.
2. Ahluwalia, I. J. (1991). *Productivity and growth in Indian manufacturing*. Delhi: Oxford University Press.
3. Ahluwalia, M. S. (2020). *Backstage: the story behind India's high growth years*.
4. Bala, M. (2020). *Role of Manufacturing Sector towards a Five Trillion Dollar Indian Economy by 2024. Economic Slowdown in India: Causes and Consequences*. Holy Cross College, Tamil Nadu.
5. Balakrishnan, K. P., & Babu, M. (2000). Trade Liberalization and Productivity Growth in Manufacturing: Evidence from firm-level panel data. *Economic and Political Weekly*, 3679-3682.
6. Bhagwati, J. N., & Desai, P. (1970). *India: Planning for Industrialisation and Trade Policies since 1951*. Delhi: Oxford University Press.
7. Bhagwati, J., & Srinivasan, T. N. (1975). *Foreign trade regimes and economic development: India*. National Bureau of Economic Research.
8. Bhagwati, J., & Srinivasan, T. N. (1993). *India's Economic Reforms*. New Delhi: Ministry of Finance, Government of India.
9. Chadha, R. R., Deardorff, A., Pohit, S., & Stern, R. (1998). *The impact of trade and domestic policy reforms in India: A CGE modeling approach*. University of Michigan Press.
10. Goldar, B., & Kumari, A. (2003). Import liberalization and productivity growth in Indian manufacturing industries in the 1990s. *Development Economics*, 41, 436-460.
11. Joshi, V., & Little, I. (1994). *India: Macroeconomics and Political Economy 1964-1991*. New Delhi: Oxford University Press.
12. Krishna, P., & Mitra, D. (1998). Trade Liberalization, Market Discipline and Productivity Growth: New Evidence from India. *Journal of Development Economics*, 56, 391-409.
13. Nagaraj, R. (1989). Growth in Manufacturing Output since 1980: Some Preliminary Findings. *Economic and Political Weekly*.
14. Nagaraj, R. (1990). *Industrial Growth: Further Evidence and Towards an Explanation and Issues*.

Economic and Political Weekly.

15. Nagaraj, R. (1999). How Good are India's Industrial Statistics? An Exploratory Note. *Economic and Political Weekly*.
16. Nagaraj, R. (2021). Economic Reforms and Manufacturing Sector Growth: Need to reconfigure the industrialisation model? *The Routledge Handbook of Post Reform Indian Economy*, 119-134.
17. Nagaraj, R. (2003). Industrial Policy and Performance: Which Way Now? 38(35).
18. Nambiar, R. G. (1983). Protection to Domestic Industry, Fact and Theory. *Economic and Political Weekly*, 27-32. .
19. Nayyar, D. (1976). *India's Export and Export Policies in the 1960s*. Cambridge University Press.
20. Nouroz, H. (2001). *Protection in Indian Manufacturing: An Empirical Study*. Delhi: MacMillan India Ltd.
21. Organization, W. T. (2007). Trade Policy Review. Report by the Secretariat. India.
22. Panagariya, A. (1994b). Liberalize Consumer Goods Import. *Times of India*.
23. Panagariya, A. (1998a). Is India Returning to Protectionism? *The Economic Times*.
24. Panagariya, A. (2019). *Free Trade and Prosperity: How openness helps the developing countries grow richer and combat poverty*. Oxford University Press.
25. Panagariya, A. (2022). The Indian economy at 75. *The Round Table*.
26. Panchamukhi, V. R. (1978). *Trade Policies in India: A Quantitative Analysis*. . New Delhi, : Concept Publishing.
27. Raj, A., Dwivedi, G., Sharma, A., Jabbour, A. B., & Rajak, S. (2020). Barriers to the adoption of industry 4.0 technologies in the manufacturing sector: An inter-country comparative perspective. *International Journal of Production Economics*.
28. Ramakrishna, G. (1978). Study Group on Industrial Regulation and Procedures. Department of Industrial Development, Ministry of Industry, Government of India.
29. Ray, S. C. (2002). Did India's economic reforms improve efficiency and productivity? A nonparametric analysis of the initial evidence from manufacturing. *Indian Economic Review*, 37(1), 23-57.
30. Sivadasan, J. (2004). Barriers to Entry and Productivity: Micro-Evidence from Indian Manufacturing Sector Reforms. Graduate School of Business, . University of Chicago.
31. Srivastava, R. (2019). Impact of "Make in India" in Indian economy. *International Journal of Trend in Scientific Research and Development*. 3(4), 429-432.