

## MANUFACTURING SECTOR OF INDIA

---

Chandresh Chundawat\*

### ABSTRACT

*The manufacturing sector of the Indian economy has been one of the key contributors to the nation's GDP and has been particularly burdened with overarching expectations of rapid growth which could change the fortunes of India, yet historically remains one that has not been able to deliver on those high expectations. In this paper, secondary research has been used to understand the structure of India's manufacturing sector, major contributing industries, regions, and other factors which have contributed to the growth or stagnation of the manufacturing sector in various regions. It also discusses the challenges and opportunities which lie ahead for the Indian manufacturing sector.*

---

**Keywords:** Manufacturing Sector, Growth, Industrialisation, Make in India.

---

### Introduction

The manufacturing sector of the Indian economy has been one of the key contributors to the nation's GDP and one that has been especially burdened with overarching expectations of rapid growth which could change the fortunes of India, yet historically remains one that has not been able to deliver on those high expectations. The manufacturing sector of the Indian economy has been at the centre of Indian economic planning since its independence and was viewed as an engine of growth which could take India from being a low-income developing country to being a high-income developed country. However, contrary to all expectations the service sector of India underwent a massive expansion, and the manufacturing sector remained a low job-generating industry contributing only 14.43% of the country's GDP whereas the service sector contributes over 50% of the country's GDP. Despite these seemingly humble statistics, the manufacturing sector forms the backbone of India's ability to be self-sufficient in certain capital-intensive, technology-driven and heavy industries which are key to the growth of any emerging economy. Considering this seemingly relative underperformance and the strategic importance associated with the manufacturing sector, it is worth taking a closer look into the present state of India's manufacturing sector. In this paper, we will try to understand the structure of India's manufacturing sector, major contributing industries, regions and other factors influencing Indian manufacturing. All the figures and data used in this paper have been collected from the public releases of the RBI, industrial organisations like the Confederation of Indian Industries (CII) and releases from other departments of the Government of India.

### Introduction to the Indian Manufacturing Sector

In 2020-21, the industrial sector contributed 25.92% of the gross value added to the economy calculated at constant prices. The manufacturing sector is the most significant contributor to the industrial sector accounting for 55.67% of the value produced by the industrial sector. The manufacturing sector employs around 12% of the Indian workforce and has traditionally been a low job-generating sector despite its sizeable output and capital-intensive outlays. However, it is essential to note that India's manufacturing sector displayed commendable resilience during the COVID-19 pandemic, and was a key industry driver of economic growth in the path of recovery from the pandemic. The manufacturing sector is also an important contributor to India's exports. The most important export commodities include Mineral fuels, oils, distillation products industry contributing \$56.4 billion; pearls, precious stones, metals

---

\* Ph.D. Student, IIS University, Jaipur, Rajasthan, India.

and coins industry contributing \$38.16 billion; machinery, nuclear reactors and boilers industry contributing \$24.17 billion; iron and steel industry contributing \$21.20 billion; organic chemicals industry contributing \$21.18 billion; pharmaceutical products contributing \$19.46 billion, automobile industry other than railway, tramway contributing \$18.90 billion; electrical and electronic equipment industry contributing \$18.84; and industries like textiles, and so on respectively. But these volumes are meagre when seen as a percentage of the total world export volumes, with Indian manufacturing exports accounting for around just 1.5% of the total world manufacturing exports. Even though the manufacturing sector had been growing at a healthy rate before the COVID-19 pandemic, the post-pandemic growth rates and output levels are still below the pre-pandemic levels. As the pent-up demand due to the pandemic is released into the economy, it produces an opportunity and a challenge for the Indian manufacturing sector to secure its place in the post-pandemic world economy. The primary driver of the manufacturing sector exports is based upon engineering industries such as automobiles, petroleum products, chemicals, and electronics. For each of these industries, as certain industry-specific challenges and constraints exist, they must be addressed effectively to put these industries back on a high growth trajectory. The lack of real growth in job creation in the manufacturing sector also raises a question about the kind of growth that has been taking place in the manufacturing sector. Another critical metric which deserves some attention is the distribution of manufacturing output produced from different states, and the possible underlying reasons for the same. An analysis of the pre-existing conditions and other factors which have contributed to the growth or stagnation of the manufacturing sector in various regions could give us critical insights into what could be done to overcome the present challenges faced by Indian manufacturing. Additionally, the contemporary situation of the manufacturing sector will be analysed in this paper in line with government schemes like Make in India, to understand the opportunities, and challenges which lie ahead for the sector.

#### **India's Manufacturing Growth: Key Drivers and Issues**

India's manufacturing sector since its inception had been primarily structured to cater to India's domestic demand as it was a pivotal point in India's quest to build a healthy and broad industrial base for the economy. The products of the manufacturing sector were used as capital goods and intermediary goods for other industries. The period between 1950 and 1980 was a period of slow industrialisation and laid out the groundwork required for sustaining a broad-based manufacturing sector. The key industrial reforms during the 1980s started off with the rapid growth of the manufacturing sector which attained a growth rate above 10% during this period. This growth was expected to increase exponentially following the economic liberalisation of the 1990s which opened up the Indian economy to the flow of foreign direct investments. But contrary to widespread expectations, the growth rate of the manufacturing sector remained around the same levels as before the liberalisation. Since then, the growth of the manufacturing sector has hovered around the same rate, with the employment growth rate associated with the manufacturing sector remaining very low. This could be attributed to the growth in the capital-intensive manufacturing industries post-1990s. The key drivers of this growth have been engineering goods, gems and precious metals, chemicals and related goods, and leather and textile goods.

By the 1990s, a fundamental change in the manufacturing industries' target market had occurred. The production from the manufacturing sector was to be increasingly aimed at boosting the exports, especially since the economic liberalisation broke down the high tariff regimes and import quotas which previously existed. This new export-oriented manufacturing paradigm mandated an export-centric growth strategy which could leverage India's comparative advantage of having a comparatively cheap and abundant labour force. Even though the manufacturing sector has been able to adapt to the export-based production requirement, the growth in the labour force being very low points to the fact that the sector hasn't been able to put this comparative advantage to good use. Adding to this, an important factor which has hindered the growth of the manufacturing sector is the lack of quality infrastructure in key sectors like power, transportation and telecom has affected the competitive edge of the Indian manufacturing sector. The lack of crucial infrastructural facilities affects the competitiveness and cost-effectiveness of Indian firms when pitted against highly competitive foreign goods. The low expenditures made by Indian companies and governments on research & development have hindered timely innovation and productivity growth associated with technological advancements. The expenditure on R&D by India is below 1% of the GDP whereas other countries like China spend around 2% of their GDP on R&D. This also robs the Indian manufactured goods of their competitiveness in the international market. Lower foreign direct investments are made to India compared to countries like China, which further slows down the technological progress that FDIs bring with them, inducing stagnant and lower growth rates.

In the Indian scenario, the public sector entities have traditionally been major players in the country's manufacturing sector and occupy a very crucial position in this sector with certain specific industries being reserved as monopoly industries for the PSUs. Public sector entities manufacture a wide range of products, from advanced military equipment to ordinary consumer goods. The presence of the public sector in India's manufacturing sector has long been seen as an overshadowing force impeding the growth and productivity of the private sector in particular and the manufacturing sector in general. The recent governments have decided to pursue a policy of strategic disinvestment in many industries and have allowed private investment in many vital industries which were earlier monopolies of the state, like space & defence expecting the private sector to grow faster and fill the gap left open by the PSUs. Now the private entities in the manufacturing sector are faced with the challenge of scaling up their businesses and addressing the supply gap left by the PSUs while simultaneously maintaining the cost-effectiveness of their production processes. Since the manufacturing industries are inherently capital intensive to set up, the private sector manufacturing entities are faced with the challenge of investing large amounts of money into expanding their capacities. At the same time, they have to maintain and improve upon the cost-effectiveness of the production simultaneously. As the cherry on the cake, India's tax regime has been traditionally a significant hurdle for the manufacturing sector's growth. Multiple layers of taxation on manufactured goods and import duties on the raw materials required for various manufacturing industries have systematically eaten into the profit margins, hindering the organic growth of the manufacturing industry. Though late, there has been a recognition of this issue by the Government of India and since, many steps have been taken to boost the manufacturing sector, including the latest Make in India initiative. Even though these measures are positive steps taken in the right direction, much more remains to be done to address the challenges that lay ahead for the industry.

#### **The Path Forward & Lessons from the Past**

The Make in India scheme which was introduced in 2014 was one of the largest schemes in the history of India which specifically aimed at enhancing the growth of the manufacturing sector by a slew of measures which focused on attracting more FDIs by lifting the bureaucratic and legal hurdles in setting up businesses in India and to allow foreign investment into all sectors except defence, space and media sectors. Under this scheme, the GoI decided to undertake a massive infrastructure construction drive to address the previous deficiencies faced by the industries and to simplify the regulatory and approval process to set up new businesses through internal reforms. These initiatives significantly impacted the manufacturing sector as they addressed some of the industry's critical issues, such as the lack of quality infrastructure, capital inflows, slow technological progress and complicated regulatory and tax laws. An example of the impact of these reforms can be seen in India's leap from 142nd to 63rd place in the Ease of Doing Business rankings. In addition, India was able to raise more than \$50 billion as FDIs which gave a significant boost to the country's manufacturing sector. Even with these figures, this can only be viewed as a starting point as the manufacturing sector still suffers from challenges like jobless growth and slow structural transformation. It is important to implement more policies that have shown to be effective in the past to capitalise on the opportunity presented in lieu of the Make in India scheme.

It will be particularly useful in the Indian context to look at the various policies implemented at the state level in regions that witnessed high industrial growth. Given the nature and structure of India's political system, the state governments have the autonomy to implement specific policies regionally to stimulate the growth of industries. The most significant contributors to India's manufacturing sector are Tamilnadu, Maharashtra, Gujrat, Uttar Pradesh and Andhra Pradesh. These 5 states account for over 50% of the entire number of factories in India. Out of these states, Gujrat houses the most number of manufacturing industries. Gujrat is a prime example of a state government leading industrial development, where the Government of Gujrat played a proactive role in facilitating the growth of manufacturing industries in sectors like automobiles, electronics and textiles. Gujarat has consistently maintained a GDP growth rate above the national average and is home to a host of manufacturing and other industries. Gujrat has achieved this by investing heavily in building basic infrastructural facilities such as roads, ports and airports, and providing tax concessions and subsidies on inputs like electricity and water. By emphasising infrastructural development and providing attractive subsidies, Gujrat has even become an electricity surplus state. Another example is Andhra Pradesh, which was a primarily agricultural state at the time of independence. Through careful planning and foresight, Andhra Pradesh became a vital manufacturing hub by concentrating on the electronics industry. Andhra Pradesh now houses major multinational electronics manufacturers like Foxconn, many pharmaceutical industries and many other major manufacturing sector giants like Bharat Heavy Electricals, Hindustan Aeronautics Limited etc. Andhra Pradesh focuses on providing incentives to electronic hardware industries to set up

their manufacturing hubs there, by providing them with subsidies and priority resolution of legal hurdles. The state also ensures the availability of sound infrastructural facilities like highways, ports, electricity and water to the industries. The persistent improvements made by the governments over time have transformed Andhra Pradesh into one of the important industrial regions in India.

The strategies and policies followed by states like Gujrat & Andhra Pradesh in creating a broad-based ecosystem for manufacturing industries can guide the policies that should be undertaken nationwide.

### **Conclusion**

The manufacturing sector of India, which had been previously overshadowed by the glorious growth of the service sector, has become of the fastest growing sectors in the country capitalising on the stimulus given by the policies of GoI like opening up more sectors of the economy to FDIs and simplifying the legal procedures required to set up production. The real challenge lies in maintaining this growth rate, which will only be possible by planning ahead to address the critical issues impeding the growth. Creating world-class infrastructural facilities is critical to retaining and attracting more FDIs. One of the most pressing issues lies in the power sector where the gap between the demand and supply for electricity is around 60 billion kWh. Another vital issue that needs to be addressed on a priority basis is creating high-quality human capital. This can only be made possible through extensive government investment in education, healthcare and poverty alleviation. Providing highly skilled and healthy human capital is essential for any industry and maintaining the sector's growth rate. Scaling up R&D investments is absolutely critical in the long run for the manufacturing sector to keep up with the global markets and maintain the cost-effectiveness of domestically produced goods. The Indian companies need to be provided with the technology they require through foreign technology exchanges and domestic research, and private R&D investments should be incentivised through subsidies. Ensuring timely maintenance and on-demand expansion of infrastructural facilities, including the regular supply of power and raw materials coupled with the relaxation of import duties on raw materials and provision of subsidies and tax relaxations for enterprises may be the golden formula for Indian manufacturing going ahead to maintain the growth rate of manufacturing. Jobless growth in the manufacturing sector should be addressed by diversification of industries which creates non-capital intensive industries which will create a growth in labour demand and economic growth. The effectiveness and the promptness of the policy measures undertaken to tackle these issues may determine the fortunes of Indian manufacturing. The time to act is here, and it is the government's turn to rise up to the situation and deliver.

### **References**

1. Dangayach, G.S., Deshmukh S.G, (2007), 'Manufacturing Flexibility: A Multi-Sector Study of Indian Companies', *International Journal of Manufacturing Research* 2007 - Vol. 2, No. 2, pp. 225 - 242.
2. Shettar, Rajeshwari M. (2017), 'Impact of Make in India Campaign: A Global Perspective', *Journal of Research in Business and Management* 2017, Volume 5, No. 2, pp. 1-6.
3. Kalirajan, Kaliappa (2014), 'Is the Manufacturing Sector in India an Engine of Growth', *Institute for Social & Economic Change*, W.P. No. 151.
4. Bhattacharya, Arindam. Srivastava, Ravi. Nimisha, Jain (2010), 'Indian Manufacturing: The Next Growth Orbit - Aspiration and Roadmap for Indian Manufacturing', *Confederation of Indian Industries - BCG Report*.
5. Morris, Sebastian (2012), 'Economic Growth in Gujarat in Relation to the Nation and other States in Recent Times - A Statistical Analysis', *Indian Institute Of Management Ahmedabad*, W.P. No. 2012-11-02.
6. Gupta, Poonam. Hasan, Rana. Kumar, Utsav. (2008), 'What Constrains Indian Manufacturing', *Asian Development Bank*, ERD W.P. Series No. 119.

