



AN ANALYSIS OF INDIA'S MANUFACTURING SECTOR PERFORMANCE AND STRATEGIC INSIGHTS

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ABSTRACT

Over the past century, India's industrial sector has experienced a reflective transformative journey, evolving from its colonial origins to become a key player on the global platform. This change has been achieved by shifts in policy, the emergence of key sectors, and efforts to stabilize economic growth with sustainability. Encompassing manufacturing, construction, mining, and utilities, it constitutes a significant share of India's Gross Domestic Product (GDP) and serves as a prime contributor to employment, particularly for the expanding labor force.

The main objective of this paper is to analyze the performance of India's manufacturing sector, elucidating its economic significance, impact on employment, contribution to GVA and growth rate. In the case of India's industrial economy, the manufacturing sector is a key contributor to the country's economic growth, and it stands as an integral pillar, promoting employment opportunities, fostering innovation, and initiating necessary infrastructure development. It constitutes approximately 17% of India's GDP and employs around 12% of its workforce. The sector includes a series of industries such as textiles, pharmaceuticals, automobiles, heavy machinery, aircraft, and consumer durables. While focusing on the manufacturing sector, is pivotal to achieving the \$20 trillion GDP target by 2047, it is imperative to adopt a comprehensive approach that addresses infrastructure, skill development, regulatory reforms, and other factors to create an enabling environment for sustained growth in manufacturing.

KEY WORDS: Manufacturing, Sector, Strategy, Performance, Employment

1. INTRODUCTION

Over the past century, India's industrial sector has experienced a reflective transformative journey, evolving from its colonial origins to become a key player on the global platform. This change has been achieved by shifts in policy, the emergence of key sectors, and efforts to stabilize economic growth with sustainability. Encompassing manufacturing, construction, mining, and utilities, it constitutes a significant share of India's Gross Domestic Product (GDP) and serves as a prime contributor to employment, particularly for the expanding labor force. Overall, the industrial sector is considered a vital and positive force in India's economic development, offering several opportunities for growth and expansion.

The transformation from agriculture to the industrial sector in India did not occur as rapidly as the shift to the service sector for several fundamental reasons. Challenges like the lack of critical infrastructure for manufacturing, bureaucratic hurdles, and the capital intensive nature of industrial sector hindered its growth. In recent years, there have been initiatives like "Make in India". In contemporary era, industrial sector plays a key role in nurturing socio economic resilience and promoting country's prosperity. As mentioned in Sustainable development goals (SDGs), inclusive and sustainable industrialization will boost up its share of employment, entrepreneurship and GDP.

The main objective of this paper is to analyze the performance of India's manufacturing sector, elucidating its economic significance, impact on employment, and contribution to GVA and growth rate. In the case of India's industrial economy, the manufacturing sector is a key contributor to the country's economic growth, and it stands as an integral pillar, promoting employment opportunities, fostering innovation, and initiating necessary infrastructure development. It constitutes approximately 17% of India's GDP and employs around 12% of its workforce. The sector includes a series of industries such as textiles, pharmaceuticals, automobiles, heavy machinery, aircraft, and consumer durables. While focusing on the manufacturing sector, is pivotal to achieving the \$20 trillion GDP target by 2047, it



is imperative to adopt a comprehensive approach that addresses infrastructure, skill development, regulatory reforms, and other factors to create an enabling environment for sustained growth in manufacturing.

The nation possesses substantial untapped potential for emerging as a global manufacturing center; however, its economic expansion has predominantly relied on the service sector's advancement over the past few decades. In contrast, the manufacturing sector has experienced uninspiring growth, despite the presence of abundant resources and cost-effective labor. This study aims to understand the performance of the manufacturing sector in India.

2. REVIEW OF LITERATURE

Kapoor (2018) examines India's manufacturing sector's slow employment performance and identifies factors affecting firm growth. The prevalence of numerous small, aging firms in the manufacturing landscape signals a feeble growth process. Protective policies aimed at small firms, such as subsidized credit and tax exemptions, have not eased constraints but instead encouraged them to remain small. Interestingly, younger firms exhibit swifter employment growth compared to older counterparts, challenging the effectiveness of interventions solely targeting small firms. The study also identifies that firms relying heavily on infrastructure and external finance experience slower employment growth, while large firms with high import input intensity witness faster growth. The study underscores the significance of comprehending firm life cycle dynamics for crafting effective policies.

Mehta & Rajan (2017) focused on measuring the elasticity of substitution between capital and labor in Indian manufacturing industries and the rate of technological progress in these industries. The research also examined the relationship between capital intensity and value performance in Indian manufacturing industries. The study found that capital intensity does not significantly affect performance, raising the question of whether increasing capital intensity is necessary. It also revealed that unorganized manufacturing units have great potential for job creation. The findings have implications for economists in framing policies and addressing the long-standing research gap in the manufacturing sector.

Anjum and Tiwari (2012) examined the role of labor reforms and the manufacturing sector in India as avenues for leveraging globalization to achieve inclusive growth. Despite India's impressive economic growth over the past decade, the author highlighted concerns about the inclusivity of this development, pointing out the stark contrast between growth rates and persisting issues like poverty and lack of electricity access. The author identified outdated labor regulations and a keen risk of labor unrest as significant challenges. To address these challenges, the study proposed streamlining exposure and assessment requirements, simplifying labor welfare regulations without compromising objectives, and introducing third-party certification as potential solutions.

3. OBJECTIVES OF THE STUDY

1. To examine the growth trends and performance of India's manufacturing sector.
2. To identify the significant challenges of obstructing sector's growth.
3. To propose actionable strategies and policy recommendations

4. RESEARCH METHODOLOGY

The present study is based on secondary data collected from various sources like CSO reports, IPI Report, Ministry of Commerce and Industry, and Annual Survey Report of Industries. Studies and investigations by other researchers have been considered as supplementary sources. The study is used the suitable statistical tools such as Percentage, average, and growth rate, CAGR that has been used for the analysis of the data.

5. RESULT AND DISCUSSION

Manufacturing in India has become a thriving and high-growth sector. The contribution of the manufacturing sector to India's GDP and overall employment has remained largely unchanged over time.

5.1 Contribution of manufacturing sector to GVA

Table 5.1 provided data that shows the contribution of manufacturing sector to India's Gross-value added in lakh crores at constant price and its growth rate from 2011-12 to 2021-22. The Gross Value has steadily increased from 14.1 lakh crores to 19.04 lakh crores in 2015-16. Remarkably, there was a substantial growth rate of 13.06% in 2015-



16. The growth momentum continued, with the GVA reaching 22.09 lakh crores in 2017-18 to 23.29 lakh crores in 2018-19. There was a decline in GVA in 2019-20, amounting 22.09 lakh crores, reflecting a negative growth rate of -2.96%. The most recent data for 2021-22 indicates a recovery, with the GVA reaching with the 25.82 lakh crores and a growth rate of 11.05%. The Compound Annual Growth Rate (CAGR) of 6.29 indicates the smoothed annual growth rate over the entire period in manufacturing sector.

Manufacturing sector in India experienced robust growth from 2011-12 to 2018-19, marked by positive growth rates and significant increases in GVA. The country faced economic challenges in 2019-20 evident in negative growth rate. The rebound in 2021-22 with growth rate of 11.05% indicates a recovery in manufacturing growth. As can be seen from the table 1 and fig. 1 the GVA and growth rate of manufacturing sector in 2019-20 is showing down trend.

Table 5.1: Distribution of growth rate of manufacturing sector to GVA in India

Year	GVA(in lakh crores)	Growth Rate (%)
2011-12	14.1	-
2012-13	14.87	5.46
2013-14	15.61	4.98
2014-15	16.84	7.88
2015-16	19.04	13.06
2016-17	20.55	7.93
2017-18	22.09	7.49
2018-19	23.29	5.43
2019-20	22.6	-2.96
2020-21	23.25	2.88
2021-22	25.82	11.05
LOGEST	1.062	
CAGR	6.29	

Source: National Account Statistics, MoSPI, Authors Calculations

The table 5.2 provides a comprehensive overview of sectoral wise industrial production in India, using 2011-12 as the base year (index 100). From 2012-13 to 2021-22, notable trends can be observed in the mining, manufacturing, and electricity sectors, along with the general index of industrial production.

The mining sector shows a gradual increase over the decade, starting at 94.7 in 2012-13 and reaching 113.3 in 2021-22. Despite slight fluctuations, particularly a dip to 93.3 in 2014-15 and another decline in 2020-21 to 101.0, the overall trend is upward, indicating steady growth in mining activities. Manufacturing, a crucial sector for industrial production, exhibits a more dynamic growth trajectory. Beginning at 104.8 in 2012-13, it peaks at 131.5 in 2018-19. However, it experiences a slight decline to 129.6 in 2019-20 and a more significant drop to 117.2 in 2020-21, likely due to the pandemic's impact. Recovery is evident in 2021-22 with an index of 131.0, reflecting resilience and recovery in the manufacturing sector.

The electricity sector demonstrates robust growth, outperforming other sectors significantly. Starting at 104.0 in 2012-13, it steadily increases each year, peaking at 170.1 in 2021-22. This continuous rise underscores the expanding electricity production capacity and demand in India. The general index, which aggregates these sectors, reflects the overall industrial production trends. It starts at 103.3 in 2012-13 and shows consistent growth, reaching 131.6 in 2021-22. Notable is the drop to 118.1 in 2020-21, attributable to the pandemic's impact, followed by a strong recovery in 2021-22.

The data highlights steady growth across all sectors with some disruptions, particularly in 2020-21. The mining sector shows a gradual but consistent rise, manufacturing reveals resilience with a strong recovery post-pandemic, and the electricity sector indicates continuous expansion, collectively contributing to the overall growth in industrial production in India.

**Table 5.2 Distribution of Sectoral wise Industrial Production in India (Base: 2011-12=100)**

Year	Mining	Manufacturing	Electricity	General Index
2012-13	94.7	104.8	104.0	103.3
2013-14	94.6	108.6	110.3	106.7
2014-15	93.3	112.7	126.6	110.0
2015-16	97.3	115.9	133.8	114.7
2016-17	102.5	121.0	141.6	120.0
2017-18	104.9	126.6	149.2	125.3
2018-19	107.6	131.5	159.9	130.1
2019-20	109.6	129.6	158.4	129.0
2020-21	101.0	117.2	157.6	118.1
2021-22	113.3	131.0	170.1	131.6

Source: Government of India, MoSPI Annual Report -2023

The table 5.3 outlines the percentage distribution of industry-wise workers in India from 2017-18 to 2021-22, showcasing shifts in employment across various sectors over these five years. Agriculture remains the largest employment sector, though it exhibits fluctuations. Starting at 44.1% in 2017-18, the share of workers decreases to 42.5% in 2018-19, before rising significantly to 45.6% in 2019-20 and peaking at 46.5% in 2020-21. This increase may reflect a shift back to agricultural work due to economic uncertainties, such as those caused by the COVID-19 pandemic. By 2021-22, it slightly drops to 45.5%, indicating some normalization.

The trade, hotel, and restaurant sector shows a consistent, albeit modest, share of the workforce, increasing from 12.0% in 2017-18 to 13.2% in 2019-20. However, it declines to 12.2% in 2020-21 and further to 12.1% in 2021-22, likely impacted by pandemic-related restrictions and reduced consumer activity. Construction sees a slight upward trend, starting at 11.7% in 2017-18 and rising to 12.1% in 2018-19, with a minor dip to 11.6% in 2019-20. It then rebounds to 12.1% in 2020-21 and further to 12.4% in 2021-22, reflecting increased infrastructure development and construction activities.

Manufacturing employment decreases from 12.1% in 2017-18 to a low of 10.9% in 2020-21, indicating challenges faced by the sector, possibly due to economic slowdown and disruptions in supply chains during the pandemic. By 2021-22, there is a slight recovery to 11.6%, showing signs of resilience and recovery. The transport, storage, and communications sector remains relatively stable, fluctuating slightly from 5.9% in 2017-18 to 5.4% in 2020-21, before a slight increase to 5.6% in 2021-22. This sector's stability highlights its essential role in the economy, even during disruptions.

Employment in the electricity, water, and mining, quarrying sectors remains constant and minimal, with electricity and water consistently at 0.6%, and mining and quarrying declining marginally from 0.4% to 0.3% over the period, indicating limited employment opportunities in these sectors. Other services see a decline from 13.2% in 2017-18 to 11.9% in 2019-20, maintaining this level through to 2021-22, showing a slight dip in its share of the workforce possibly due to economic shifts and changing demand for various services.

Table 5.3: Distribution of Industry-Wise workers in India (%)

Broad Industries	2017-18	2018-19	2019-20	2020-21	2021-22
Agriculture	44.1	42.5	45.6	46.5	45.5
Trade, Hotel & restaurant	12.0	12.6	13.2	12.2	12.1
Construction	11.7	12.1	11.6	12.1	12.4
Manufacturing	12.1	12.1	11.2	10.9	11.6
Transport, storage & communications	5.9	5.9	5.6	5.4	5.6
Electricity, water	0.6	0.6	0.6	0.6	0.6
Mining, quarrying	0.4	0.4	0.3	0.3	0.3
Other Services	13.2	13.8	11.9	12.0	11.9

Source: Annual PLFS report



6. MAJOR FINDINGA AND SUGGESTIONS

6.1 Findings

- The manufacturing sector in India witnessed consistent growth from 2011-18, with a peak in 2015-16. However, it faced economic challenges in 2019-20 leading to a contraction. Despite of this, recent years shows a strong recovery with a notable increase in GVA. The CAGR indicates a moderate overall growth trend in manufacturing during entire period.
- The industrial production of manufacturing sector faced temporary declines in 2019-20 and 2020-21, but showed flexibility with consequent recovery. Despite sector- specific fluctuations, the general trend in Industrial production remained positive.
- Workforce distribution in the manufacturing sector experienced fluctuations with a decline followed by recovery. Meanwhile, the agriculture sector showed initial growth but later declined slightly.
- There is a fluctuation in the manufacturing sectors contribution to the overall workforce, influenced by economic factors, technological progress and shift in employment patterns over the years.
- Within the industrial sector manufacturing activities constitutes a major share in the country's GDP.

6.2 Suggestions for the progress of Manufacturing Sector in India

- Promoting increased technological adoption and innovation within the manufacturing sector which can increase its efficiency, productivity and global competitiveness.
- Implementing favorable tax reforms such as reduced corporate taxes and tax incentives for the manufacturing sector, this can attract more investment and stimulate growth.
- Strengthening the supply chain for both raw materials and finished goods to serve the market with full potential.
- Attaining sustainability in the manufacturing sector through adopting eco friendly practices, minimize environmental impact and ensuring long-term resource efficiency.
- Promoting foreign investments in the manufacturing sector and make the country a hub for domestic and international markets.

Adopting more inclusive approach by promoting an equitable policy environment entails extending supportive measures beyond large corporations. Customizing incentives, fostering innovation, and streamlining regulatory processes specifically for small and medium enterprises can enhance their competitiveness and contribute to a more balanced economic growth

7. CONCLUSION

In the next decade, India is on track to transform into a global manufacturing hub, with its capacity expected to reach \$ 1 trillion by 2030 and an incredible \$ 20 trillion by 2047. The World Economic Forum also highlighted to generate over 100 million jobs by 2030 with a focus on the manufacturing sector as a vision. So there is a need of technology led investments in this sector to reach the goal. The decreasing share of manufacturing sector in both economic output and employment raises concerns about the economy's long term growth prospects. A strong manufacturing sector is crucial for sustained and inclusive growth.

REFERENCES

1. Anjum, B., Tiwari, R. (2012). *Role of Manufacturing Industries in India for Inclusive Growth*, ZENITH International Journal of Business Economics & Management Research, 2(1), 97-104.
2. Mehta, Y., & Rajan, A. J. (2017). *Manufacturing sectors in India: Outlook and challenges*. *Procedia Engineering*, 174, 90-104. doi:10.1016/j.proeng.2017.01.173
3. Gupta, H. a. S. J. (2017, February 1). *Performance of manufacturing sector in India: an empirical analysis*. <http://hdl.handle.net/10603/125715>
4. <https://dge.gov.in>
5. <https://mospi.gov.in>
6. <https://www.rbi.org.in/>
7. *Government of India, MoSPI Annual Report -2023*.