

MAKE IN INDIA: IMPACT ON MACRO ECONOMIC INDICATORS OF INDIAN ECONOMY

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ABSTRACT

India is one of the fastest-growing economies in the world. India needs to concentrate more on strategies that increase investment and emphasizes manufacturing, thereby opening the economy globally. 'Make in India' is a movement launched by the Government of India to encourage companies around the world to invest and manufacture their products in India. The present paper analyses the effect of the 'Make in India' initiative on various macroeconomic indicators of the Indian economy. The study also reviews the victory of the 'Make in India' strategy in its initial period. The study is solely based on secondary sources of data. In order to support the findings of the literature assembled, mathematical and appropriate statistical tools have been applied. Results of the paper show that the effect of the 'Make in India' campaign in building best-class manufacturing infrastructure, facilitating investment, and protecting intellectual property is increasing.

Keywords: Make in India, Gross Domestic Product (GDP), Manufacturing, Investment, Intellectual Property Rights (IPRs).

INTRODUCTION

India has appeared as the fastest-growing major economy in the world and is supposed to be one of the leading three economies of the world in the near future. India has retained its position as the third-largest start-up base in the world. The first and supreme objective for the development of any economy is to attain a higher rate of Gross Domestic Product (GDP) growth to raise people's living standards. In the case of India, a contribution from the manufacturing sector to Gross Domestic Product must be enhanced for the economy's overall growth. The Government of India promotes manufacturing in India to enhance exports and for providing employment to low-skilled workers. It will attract investments from foreign economies and result in a declining unemployment rate in India. Even today, India's global manufacturing share stands slightly above 2 percent. In order to strengthen the manufacturing sector and provide jobs to unemployed youth, extensive investment, including contributions from foreign investors, is essential. By understanding this situation, the Government of India launched 'Make in India' as a marketing campaign on 25 September 2014.

The fundamental aim behind the 'Make in India' initiative is to attract investments from foreign countries and to flourish India's manufacturing sector. This programme is vital for

India's development as it aims to create employment opportunities and empower significant sections of the economy. The initiative also aims at skill development and fostering innovation in India.

Pillars of Make in India initiative

The 'Make in India' initiative is based on four pillars (PM INDIA, n.d.), and they are;

- New Processes – New reforms are introduced to boost investments, and ease of doing business is recognized for promoting entrepreneurship in India.
- New Infrastructure – By initiating the Make in India scheme, the Government of India planned to upgrade the weakened existing infrastructure, and new industrial passages had to be established.
- New Sectors – Make in India campaign has identified 25 new sectors and promotes the development of such sectors, which is necessary for the growth of the Indian economy.
- New Mindset – Make in India initiative intends to shift the role of the Government from regulator to facilitator of the industries.

Various sectors identified under the Make in India programme

Table 1

Automobile	Construction	IT and BPM	Pharmaceuticals	Space
Automobile Components	Defense Manufacturing	Leather	Ports and Shipping	Textiles and Garments
Aviation	Electrical Machinery	Media and Entertainment	Railways	Thermal Power
Biotechnology	Electronic Systems	Mining	Renewable Energy	Tourism and Hospitality
Chemicals	Food processing	Oil and Gas	Roads and Highways	Wellness

Source: makeinindia.com

LITERATURE REVIEW

The make in India campaign was introduced in the financial year 2014, and thus, in-depth studies are not much. Some researchers used secondary data analysis to review the impact of the Make in India campaign on various fields. The research works related to the Make in India initiative are reviewed, and the summarised results of the review are given.

(Rishabh Bhatia, 2018) made a quantitative approach to 'Make in India,' a flagship project of the Government of India. The study forecasts macro-economic indicators based on pre and

post-launch trends. This paper concludes that the Government has been successful to a great extent in positioning India as a global manufacturing economy.

(Ahmad, 2017) discussed the strategic importance of the 'Make in India' campaign to empower the Indian economy. The study attempts to exhibit a sector-wise analysis of the 'Make in India' policy. It is concluded that 'Make in India' helped the Government to encourage more investments by offering specific fiscal incentives to investors.

(Bhusan, 2018) attempts to analyze the effect of 'Make in India' on the Indian economy. The study concluded that the campaign would help increase the share of the manufacturing sector in Gross Domestic Product. It is proved that the policy measures and incentives by Government are directed to open new sectors of Foreign Direct Investment, and it is meant to provide ease of doing business in the country.

(Rajeswari, 2017) covers an overview of the 'Make in India' campaign, sectors covered, initiatives taken by companies, and foreign investment in Indian manufacturing. The study could conclude that the 'Make in India' initiative creates excellent awareness about the growing technology. It is also observed that the Indian economy is developing through continuous foreign investments.

From the literature reviewed, it can be concluded that researchers made a general analysis of the effect of Make in India. However, the studies on the analysis of the Make in India project in satisfying its objectives are not momentous in number. The present study analyses the role of the Make in India initiative in promoting various critical economic indicators of India.

SIGNIFICANCE AND IMPORTANCE OF THE STUDY

'Make in India' was launched as a campaign to ease foreign investment and business and management of intellectual property. Such an initiative helps to bring powerful knowledge about manufacturing and production to the Indian population. The project is inviting wealthy and semi-wealthy countries to set up their companies in India and manufacture in the territory of India. It will have a direct effect on the Gross Domestic Product (GDP) of India. Moreover, foreign investment will bring technical proficiency, creative efficiency, and foreign capital. 'Make in India' initiative will make India an export-oriented economy and boost India's Balance of Payment (BOP) and help in gathering foreign exchange reserves.

STATEMENT OF THE PROBLEM

India is growing very fast and developing intensively. Nevertheless, the economy needs employment as well as human resources. Considering this situation, the Government of India launched 'Make in India.' The project is initiated to attract capital and technological investments and to commence product manufacturing in India. The initiative's main aim is to make India a developed nation from a developing one. For that, the economic, social, and technological conditions of the economy are to be improved. Hence, the economic and social development of the Indian economy through the 'Make in India' campaign needed to be

examined more thoroughly in order to ensure whether the initiative was successful in its initial years.

OBJECTIVES OF THE STUDY

1. To study the effect of the 'Make in India' campaign on the manufacturing sector in India.
2. To study the promotion of investment through the 'Make in India' campaign.
3. To analyze the influence of the 'Make in India' initiative in protecting intellectual property rights.

HYPOTHESES OF THE STUDY

- The difference between Gross Domestic Product (GDP) before and after the launch of the 'Make in India' initiative is equal to zero.
- India's total investment and Gross Domestic Product (GDP) are not statistically significantly correlated.
- There is no statistically significant correlation between Gross Domestic Product (GDP) and Intellectual Property Rights (IPRs) registered in India.

METHODOLOGY OF THE STUDY

The study is descriptive and based purely on secondary data. Secondary data required for the study have been collected mainly from the annual reports of the National Statistical Office (NSO). Data from World Development Indicators, theses, reports, and journals have also been used to analyze the study. Collected data have been examined with the help of mathematical tools like Compounded Annual Growth Rate, percentage analysis, and some parametric tests using SPSS software.

DATA ANALYSIS AND INTERPRETATIONS

i) *Effect on the Manufacturing sector in India*

Table 2 Contribution of the Manufacturing sector in Gross Value Added (Rupees in Crores)

Item	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Manufacturing value-added	1903850	2054764	2209428	2326067	2269424
Total GVA at a basic price	10491870	11328285	12034171	12744203	13271471
Percentage contribution	18.15	18.14	18.36	18.25	17.1

Source: National Statistical Office (NSO)

From Table 2, it is understandable that the manufacturing sector contributes significantly to the total Gross Value Added. The contribution to GVA had a constant change trend for the initial five years of the Make in India campaign.

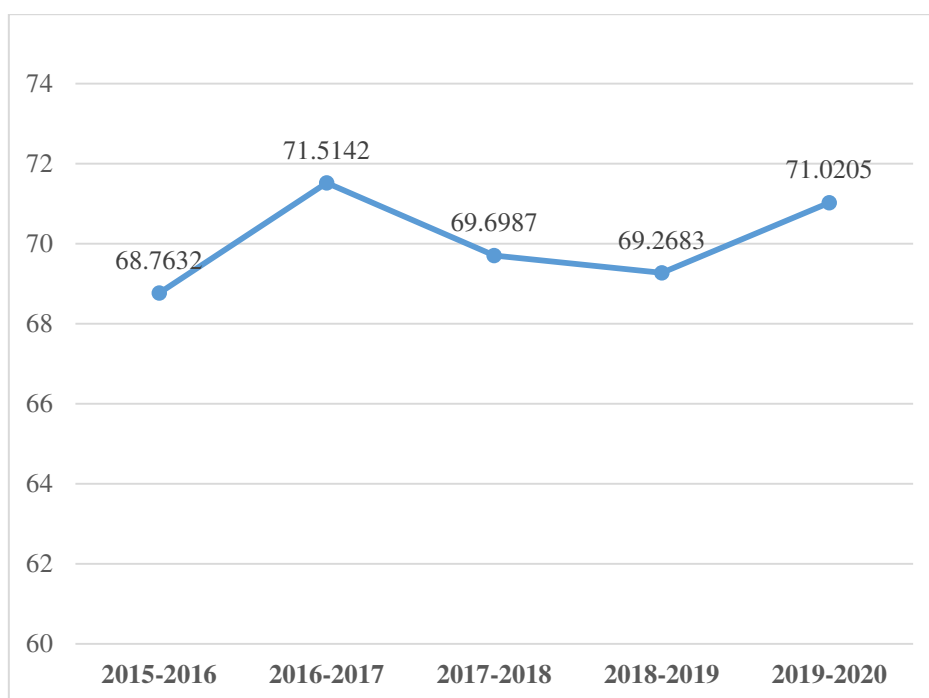


Figure 1 Contribution of the manufacturing sector to India's exports

In the second year of the launch of the Make in India initiative, the contribution of the manufacturing sector to the total merchandise exports of India shows a remarkable increase. After that, it decreased slightly and then increased in 2019-2020. Thus, it is clear that the manufacturing sector of the Indian economy has an influential role in the growth of India’s merchandise exports, even though India is an import-driven country having negative net export.

Table 3 Growth of employment in the manufacturing sector in India

Item	2015-2016	2019-2020	CAGR*
Number of people employed in the manufacturing sector	12317000	40084496	34.31

*CAGR – Compounded Annual Growth Rate

Source: Centre for Economic Data and Analysis

Table 3 expresses the growth of employment in the manufacturing sector in India during the initial five years by exercising Compounded Annual Growth Rate (CAGR). CAGR is the inter-annual average growth rate between two or more years, presuming growth happened at an exponentially compounded rate. The formula for computing CAGR is: [End value/

Beginning Value]^{1/n} – 1. The CAGR shows a significant growth in the number of people employed in the manufacturing sector in India.

Table 4 Gross Domestic Product post-launch of 'Make in India' initiative

Indicator	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Gross Domestic Product	11369493	12308193	13144582	14003316	14569268

Source: RBI annual reports

Table 4 reveals India's Gross Domestic Product for five years after the launch of the 'Make in India' initiative. It can be seen that India's Gross Domestic Product has been increasing for five years. As Gross Domestic Product is a measurement of a country's economic output, the table reveals the effect of the 'Make in India' initiative in promoting manufacturing within the borders of the Indian economy.

SIGNED RANK TEST

The descriptive statistics related to Gross Domestic Product before and after the launch of the 'Make in India' initiative was conducted. It is found that the distribution of data is not normal as the p-value for the Shapiro Wilk Test of normality is less than the significance level, Skewness = -1.355 and Kurtosis = 2.314. To test whether the 'Make in India' initiative affected India's Gross Domestic Product, the Wilcoxon Signed Rank Test was performed and has been reported in Table 5.

H₀: There is no significant difference between the median Gross Domestic Product (GDP) before and after the launch of the 'Make in India' initiative.

Table 5

	GDP after launch – GDP before launch
Z	-2.023
Asymp. Sig. (2-tailed)	.043

Source: Computed in SPSS

The Wilcoxon Signed-Rank test indicates a statistically significant difference in the GDP before and after launching the 'Make in India' campaign with Median (before launch) = 9213017 and Median (after launch) = 13144582.

ii) Promotion of investment

Table 6 Total Investments in India (Rupees in Crores)

Indicators		2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Domestic	Public	4113209	4559118	5214387	5639731	6160476

Investment	Private	169050	265996	266353	137229	225504
Foreign Investment	FDI*	235782	238913	195052	214036	304820
	FPI**	27203	50482	142632	1857	7395
Total Investment		4490838	5114509	5818424	5989139	6698195

Source: RBI annual reports *FDI – Foreign Direct Investment **FPI – Foreign Portfolio Investment

Table 6 depicts the different types of investments by and to India. The total investment had been increasing from the year of the Make in India campaign launch till 2019-2020.

CORRELATION

H₀: There is no significant relationship between India's Gross Domestic Product (GDP) and total investment.

Table 7

	Gross Domestic Product	Total investment
Gross Domestic Product	Pearson Correlation	.984
	Sig. (2-tailed)	.002
	N	5
Total investment	Pearson Correlation	.984
	Sig. (2-tailed)	.002
	N	5

Source: Computed in SPSS

A Pearson product-moment correlation was run to establish the relationship between the Gross Domestic Product (GDP) of India and Total investment after the launch of the 'Make in India' initiative. There was a valid, positive correlation between GDP and total investment, which was statistically significant, and total investment explains 96.8 percent (R²) of the variation in GDP.

iii) Protection of Intellectual Property Rights

Table 8 Registration of Important Intellectual Property Rights (IPRs)

Intellectual Property Rights	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Patents	6326	9847	13045	15283	24936
Designs	7904	8276	10020	9483	12256
Trademarks	65045	250070	300913	316798	294172
Geographical Indications	26	34	25	23	22

Total IPRs registered	79301	268227	324003	341587	331386
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Source: Annual reports of CGPDTM

The fundamental intellectual property rights are patents, designs, trademarks, and geographical indications. The table shows an upward trend in the total number of Intellectual Property Rights (IPRs) registered in India during the initial four years of the 'Make in India' campaign. Even though the financial year 2019-2020 had a slight downward movement, overall, it can be viewed as the triumph of the 'Make in India' campaign in protecting Intellectual Property Rights.

CORRELATION

H₀: There is no significant relationship between Gross Domestic Product (GDP) and IPRs registered in India.

Table 9

		Gross Domestic Product	IPRs registered
Gross Domestic Product	Pearson Correlation	1	.867
	Sig. (2-tailed)		.057
	N	5	5
IPRs registered	Pearson Correlation	.867	1
	Sig. (2-tailed)	.057	
	N	5	5

Source: Computed in SPSS

A Pearson product-moment correlation was run to establish the relationship between India's Gross Domestic Product (GDP) and Total Intellectual Property Rights (IPRs) registered in India after the launch of the 'Make in India' initiative. The result exhibits that the correlation between GDP and IPRs registered was not statistically significant as the significant value is greater than 0.05.

FINDINGS OF THE STUDY

'Make in India' is a movement that mainly focuses on boosting the manufacturing sector in India (Veenu Kumar, 2020). It can be viewed that the employment generation in the manufacturing sector after the launch of the 'Make in India' campaign is extraordinary. By analyzing the manufacturing sector's contribution to India's merchandise exports, it can be inferred that the manufacturing sector shares a substantial part of India's exports for the five years after the launch of the 'Make in India' initiative. The part of the manufacturing sector in the total Gross Value Added has been considered satisfactory, not exceptionally remarkable.

The Wilcoxon Signed-Rank Test result shows that the 'Make in India' initiative is effective in the growth of India's Gross Domestic Product (GDP).

After introducing the 'Make in India' drive, both the domestic and foreign investments in India have been sufficiently improving. The research produced evidence that the Gross Domestic Product of India and Total investment after the launch of the 'Make in India' project have a unique mutual relationship. Hence, the 'Make in India' project had a predominant role in boosting the total investment by and to India.

Intellectual Property Rights (IPRs) like patents, designs, trademarks, and geographical indications registered after the launch of the 'Make in India' initiative are increasing at an increasing rate. It shows the success of the 'Make in India' campaign in promoting innovations in the economy. However, while running a correlation test, it is proved that Gross Domestic Product and total Intellectual Property Rights registered in India after initiating the 'Make in India' campaign are not significantly linearly correlated even though both show an increasing trend.

CONCLUSION

With various initiatives being executed by the Government to facilitate the ease of doing business, the manufacturing sector in India is likely to pick up the pace. It will provide vast opportunities to domestic and global investors to come and make in India in the future. One such initiative already launched is the 'Make in India' campaign. This campaign can promote innovations by protecting intellectual properties and encouraging investments inside and outside the economy. 'Make in India' is one of the initiatives taken by the Government of India, which has the potential to 'Make India' a developed economy with rapid speed.

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