REVITALIZING THE INDIAN ECONOMY: A CASE STUDY OF MAKE IN INDIA

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Abstract: India's consumer market positioning, youthful vitality, export potential, and technological improvements make it an attractive destination for manufacturing. To realize this potential, “Make in India” was introduced. Its main objectives are to promote foreign direct investment and position India as a global center for design and manufacturing. This study evaluates the campaign's impact on GDP (Gross Domestic Production), FDI inflows (Foreign Direct Investment), and the effectiveness of government initiatives associated with the program. The article highlights the challenges faced by the Make in India initiative. The aim of the study is to provide policymakers and stakeholders with insightful advice for a self-sufficient economy and delivering useful information to help India move closer to economic independence in order to influence future policy choices and promote economic growth.

Keywords: Self-Sufficient Economy, Foreign Direct Investment, Make in India, Gross Domestic Production, Economic Growth, Export Leverage

1.0 INTRODUCTION

India's economy has grown significantly in the last few years, but the manufacturing sector is not keeping up, making up only 16–17% of GDP, compared to the global average of 20%. This is significantly less than the GDPs of Thailand, China, and South Korea, where manufacturing makes up 31%, 35%, and 39% of the GDPs, respectively.\(^1\) India, which is well-known throughout the world for its potential as a global manufacturing powerhouse, is on track to become the nation's third-largest economy. India's economy will transition from bottom-of-the-pyramid to middle-class status by 2030. The percentage of middle-class households will rise from about 50% to nearly 80% in 2030. By 2030, 75% of consumer spending will come from the middle class.\(^2\) One of the consumer markets with the fastest growth rates. Seeing these opportunities, the Prime Minister introduced the Make in India program in September 2014 as a part of a larger series of national development projects. Achieving $1 trillion in value while boosting growth to 12–14 percent annually, raising GDP contribution from 16 percent to 25 percent by 2025, and adding 100 million new jobs are among the manufacturing sector targets under Make in India. The initiative's initial focus was on 25 sectors in an effort to raise the manufacturing sector's share of India's GDP. Make in India 2.0 later concentrated on 27 industries such as textiles, electronics, automotive, and defense.\(^3\)

\(^1\) statista.com
\(^2\) weforum.org
\(^3\) makeinindia.com
1.1 OBJECTIVES OF THE STUDY

1. To assess the impact of Make in India on key economic indicators such as GDP, export leverage, and FDI inflows.

2. Assessment of incentives under Make in India such as the PLI program and Ease of Doing Business.

3. A case study on the ESDM\textsuperscript{4} sector that highlights the industry's problems and success stories.

4. To compare the analysis of the Make in India strategy with a description of challenges and recommendations.

1.2 LITERATURE REVIEW

Srivastava, R. (2019). Impact of “Make in India” on the Indian economy. This paper demonstrates the potential of the initiative to boost industrial growth, improve employment opportunities, and strengthen the competitiveness of the Indian manufacturing sector on the global stage. The Make in India serves as an important case study on the complex interplay of political vision, regulatory frameworks, and market dynamics in shaping a country's economic development. However, the research also highlights the need to address existing challenges, including infrastructural bottlenecks, regulatory hurdles, and skills shortages, which could hamper full implementation. Furthermore, the study highlights the need for ongoing research and evaluation to fully assess the long-term impact of the initiative.

Sahoo, B. B. (2018). Make in India: impact on Indian economy. Through a comprehensive analysis of various dimensions including manufacturing output, foreign direct investment, job creation, and sectoral growth patterns. The results show a mixed picture, highlighting both successes and challenges associated with implementing such transformative policies. While Make in India has undeniably spurred growth in certain sectors and attracted foreign investment, its full potential is yet to be realized due to persistent structural obstacles and policy bottlenecks. Furthermore, the effectiveness of the initiative in promoting inclusive and sustainable development requires further examination, particularly regarding concerns related to labor rights, environmental sustainability, and fair distribution of benefits.

Bhatia, R., & Agrawal, S. (2018). Make in India: A quantitative approach. The paper provided valuable insights into the impact of the program on various economic indicators, including GDP growth, foreign direct investment (FDI), and job creation. By using rigorous statistical methods, this paper has effectively assessed the effectiveness of the Make in India initiative and shed light on its successes, challenges, and opportunities for improvement. Essentially, the research offers both theoretical contributions and practical implications for policymakers navigating the complex terrain of industrialization and economic reform.

1.3 RESEARCH GAP

Make in India holds the key to increasing productivity and raising living standards in underdeveloped nations. Since there isn't much research available and the project is still in its early stages, the literature evaluation mentioned above has identified some research gaps. As of now, no comprehensive research has been carried out that describes the concepts, initiatives, accomplishments, relevance, and bottlenecks in a single study. Prior research has mostly focused on the advantages and disadvantages of Make in India. As a result, the current study looks at how Make in India helps to revive the Indian economy.

1.4 HYPOTHESES OF THE STUDY

H1: Make in India will have a favorable impact on Exports, GDP, and Foreign Direct Investment.

H2: The Make in India is advantageous to India's growth of international trade.
1.5 METHODOLOGY

With the combination of quantitative and qualitative data analysis, the study offers a case study approach.

1.5.1 DATA COLLECTION

Based on secondary data, the study is descriptive. Policy analysis, industry papers, government reports, surveys, case studies, literature reviews, and statistical data from numerous sources listed are some of the materials available.

1.5.2 DATA ANALYSIS

1. Quantitative analysis of GDP growth and export, foreign direct investment (FDI).
2. Qualitative analysis of policy effectiveness by PLI Scheme and Ease of doing business.
3. The study will utilize an interdisciplinary approach through the application of the ESDM industrial case study method.

2.0 RESEARCH FACTORS

In this case, the research analyses economic indicators such as GDP growth rate, export leverage, foreign direct investment, production-related initiatives, ease of doing business, performance of certain industries (such as the EDSM sector), and the difficulties encountered by the initiative.

2.1 ECONOMIC INDICATORS

To determine whether Make in India influences various economic metrics, this research looks at the GDP, export leverage, and FDI inflow performance.

2.1.1 GDP GROWTH

India's GDP grew by an average of 6.21% between 2006 and 2023. COVID-19 caused the percentage to reach an all-time high of 9.10% in 2021-2022 and a low of minus 5.80% in 2020–21, when there was 3.5 percent growth in world trade.5

Source: Researchgate.net/figure

![GDP Growth Rate of India from 2012-2022](macrotrends.net)

Figure 1: GDP Growth Rate of India from 2012-2022
Following a robust 7.2% increase in 2022–2023, India's GDP expanded by 7.8% in the first quarter of 2024 and 7.6% in the second. This development was attributed to increased government investment in infrastructure, increased production, high productive capacity, and domestic demand. For the year ending in March 2023, the Indian economy is predicted to grow at a real rate of 7%, this follows a Growth of 8.7% in FY2022. In the financial year 2022-2023, there was an 11.9% increase in steel production, a 34.3% increase in commercial vehicle sales, and an increase in passenger car sales. Sales up 18.7%. These features illustrate the direct consequences of an increase in production output. Although the target of 25% GDP contribution by 2025 is unlikely to be achieved, the manufacturing sector recorded notable growth. India experienced one of the greatest global growth rates in its manufacturing sector in 2022, with a 13.4% increase. (World Bank). For a few years, India's GDP could rise by up to 8% annually as it concentrates on boosting its manufacturing capability. There was a significant improvement in manufacturing processes in all sectors of the economy.

### 2.1.2 EXPORTS LEVERAGE

Merchandise exports mean the shipment of material goods to other countries, indicating that a country’s factories have high levels of production and industrial facilities, as well as a larger number of people employed to keep those factories operating.

India exported a total value of $776 billion in 2022-23, almost double the export level of 2013-14. Goods exports accounted for a larger share at almost $450 billion, while services also contributed equally at around $326 billion. India is predicted to export more than $1 trillion worth of goods by 2028. India's textile and apparel exports, including handicrafts, reached a record $44.4 billion in 2022–2022. Biologics and formulations accounted for a
sizable 73.31% of total exports. FY2021–2022, toys were exported for US$ 326 million, a 61% increase over US$ 202 million in FY18–19.\(^{10}\)

### 2.1.3 FOREIGN DIRECT INVESTMENT (FDI)

Foreign direct investment in India has nearly doubled since the start of Make in India, with an estimated $83.57 billion in 2022–2023 being invested. In contrast to the eight years that passed between 2006 and 2014, the manufacturing sector's capital inflow of foreign direct investment grew by 57% between 2014 and 2022.\(^{11}\) This influx of capital has led to increased investment in infrastructure, technology, and skills development.

![Foreign Direct Investments Stay Robust](https://www.ijcrt.org)

Source: fortuneindia.com/budget-2023

**Figure 3:** FDI of India from FY2012 to FY2022 (in US$ billion)

India has also become an attractive location for multinational companies across a wide range of industries. Continued strong foreign direct investment inflows have helped reduce the vulnerability of India's external balance sheet and have helped India's foreign exchange reserves rise over the last decade. From FY15 to FY2022, India's foreign direct investment has been distributed throughout numerous areas, including telecommunications, brownfield and greenfield infrastructure, computer software and hardware, and the automotive sector.

### 2.2 POLICY FRAMEWORK AND INCENTIVES

Based on four key pillars new infrastructure, new sectors, new procedures, and a new mindset the Make in India project is constructed. It has been demonstrated that these factors boost entrepreneurship in India across several areas, not only manufacturing. Ease of doing business is the most crucial factor in encouraging entrepreneurship, claims Make in India. Other initiatives, such as the Production Linked Scheme, financial incentives, tax reforms, and subsidies, are being implemented in conjunction with Make in India.

#### 2.2.1 PRODUCTION LINKED INCENTIVES (PLI) SCHEMES

The PLI programme is boosting the manufacturing sector in India by creating global manufacturing champions and offering incentives for both international and indigenous investors. Currently, 14 vital sectors are the focus of the programme for India's economic development. According to the Economic Survey (up to September 2022), in addition to attracting 4,784 crore rupees in investment, the PLI plan for large-scale electronics manufacturing helped generate 2.04 lakh crore rupees in total production, including 80,769 crore rupees in exports. Similarly, a planned investment of 74,850 crore rupees over five years has been proposed for the automobile and auto

\(^{10}\) ibef.org  
\(^{11}\) pib.gov.in
component business. The revenue of Indian farmers and MSMEs is positively impacted by the PLI Scheme for Food Processing. PLI programmes support economic expansion, job creation, and increased productivity.

2.2.2 EASE OF DOING BUSINESS

India's ranking has improved drastically rising from 142nd in 2014 to 63rd in 2023 in the World Bank's Ease of Doing Business Index. This points to a more stringent regulatory framework for businesses. The National Single Window System (NSWS) and other single window clearance systems, along with simplifying rules and approvals and business process optimization, should lower red tape and draw in investment.

Source: World Bank

![Figure 4: Ease Of Doing Business Index of India from 2005 to 2019](image)

The Ease of Doing Business Score assesses an environment that is supportive of investment, a stable economy, access to economic opportunities, and digital competitiveness. Additionally, it aids in actively encouraging both international and domestic investment and reducing corruption.

2.3 A CASE STUDY ON THE ESDM SECTOR IN INDIA

The ESDM sector refers to the sector engaged in the design, development, manufacture, testing, and maintenance of electronic components, devices, systems, and equipment. This industry encompasses a wide range of products and services, including semiconductors, printed circuit boards, information technology, consumer electronics, solar photo-voltaic, industrial electronics, medical devices, automotive electronics, information technology, telecommunications equipment, and more. It covers various phases of product development, including conceptualization, design, prototyping, testing, and mass production. This also includes activities such as supply chain management, quality control, and customer service. The ESDM industry plays a critical role in driving technological innovation and economic growth in many countries. It is a highly dynamic and competitive field that requires expertise in areas such as electrical engineering, computer engineering, materials science, and manufacturing processes. For the digital economy to generate $1 trillion by 2025, as set forth by the government, this sector is essential.12

All economic sectors are using electronics more and more, making it the largest and fastest-growing industry in the world. A key component of the Indian government's Digital India and Make in India initiatives, the government places a high priority on the production of electronic devices. The government wants to level the playing field for local producers to take on imports in this market by reducing the complexity of regulations,

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expediting processes, offering financial incentives, and enhancing infrastructure. Embedded software developers and electrical chip designers are abundant in India.\textsuperscript{13}

By 2025, the Indian electronics sector is expected to generate $540 billion in revenue. With $120 billion in exports, the demand for electronic items is predicted to exceed $400 billion by 2025. The market saw 14% yearly growth from 2016 to 2019, growing from $145 billion in fiscal 2016 to $215 billion in fiscal 2019. IT/OA, at 54%, industrial electronics, at 38%, and automotive electronics, at 10%, are the top goods in the ESDM sector with the highest compound annual growth rate.\textsuperscript{14}

Three key aspects are driving this industry's expansion: low labour costs, skilled labour availability, and a sizable domestic market. The current electronics sector's compound annual growth rate (CAGR) is 15.3\%, 12\%, and 22.3\% for production, imports, and exports from FY16–17 to FY21–22.\textsuperscript{15}

2.3.1 A STORY OF MOBILE PHONE MANUFACTURING

India has emerged as the global leader in both smartphone sales and mobile phone manufacturing, ranking second in both categories. Apple, Xiaomi, Samsung, and others have established sizable manufacturing facilities in India. The Make in India campaign led to a notable expansion of the Indian mobile phone manufacturing sector. Before the program, mobile phone sales in India were mostly driven by imports. Between 2014 and 2022, almost 2 billion Make in India mobile phones were shipped as part of the Make in India project, indicating a 23\% compound annual growth rate. Surprisingly, in 2022, domestic manufacturers accounted for 98\% of all mobile phone shipments in the Indian market, with 16\% of production going outside. In 2023, it is anticipated that India will export almost 22\% of all assembled mobile phones. The three countries that produce the most smartphones are China, India, and Vietnam. India accounts for over 25\% of China's total smartphone output, producing roughly 1.8 times as many as Vietnam.

In recent years, the country has seen the opening of about 200 cell phone and component-producing facilities, resulting in the creation of almost 7 lakh employment opportunities both direct and indirect. To make their mobile phones, a large number of prominent companies, locally as well as internationally, have either built factories or partnered with companies that provide Electronic Manufacturing Services (EMS).

2.3.2 APPLE STORY: A CHALLENGING STORY BECOMES A SUCCESS STORY

India has emerged as an important strategic market for Apple in recent years. Apple's plans to create retail locations in India were hampered by the FDI laws and other corporate regulations in the nation. In single-brand retail, India permitted 100\% foreign direct investment, subject to the condition that 30\% of the acquisition be done locally. The Indian government relaxed this clause in 2018. The country's Ease of Doing Index has improved, indicating a better business environment. Finally, Apple opened its first store, Apple BKC, in Mumbai and another store in the capital Delhi in 2023.

The two biggest companies exporting mobile phones out of India were Apple and Samsung. In November 2022, Apple surpassed Samsung to become the leading exporter of mobile phones, and in December 2022, the company's shipments of mobile phones from India hit a record-breaking $1 billion. India's production capacity increased from less than 1\% of all iPhones in 2021 to 10–15\% at the end of 2022. By 2027, India is anticipated to have the same 45–50\% production capacity as China for Apple's iPhones. The 'Make in India', which comes after the government's PLI Plan, which got underway in 2021–2022, is being significantly pushed by this. As part of the Smartphone Production Linked Incentive programme, which was introduced in April 2020, Apple's contract manufacturers Foxconn and Pegatron, both based in Tamil Nadu and Wistron in Karnataka, have agreed

\textsuperscript{13} meity.gov.in
\textsuperscript{14} ibef.org
\textsuperscript{15} Directorate General of Commercial Intelligence and Statistics (DGCI&S)
to work together to produce iPhones valued at 3.6 million rupees over five years, of which 80 percent will be exported.\(^{16}\)

Apple uses India to make iPhones, although the majority of the parts are still imported. This emphasizes how important it is to have a more robust domestic electrical component supply chain. Now, 7% of Apple's smartphones are manufactured in India. By the 2025 fiscal year, Apple plans to relocate at least 18% of its iPhone production worldwide to India. Apple is anticipated to manufacture the iPhone 17 in India for the preliminary time, deviating from the tech giant's favored location of China for production. The iPhone 17 is anticipated to go on sale in 2025, and in 2024 the smartphone will start to be produced in India.\(^{17}\)

### 2.4 MARKET SIZE OF THE GLOBAL & INDIAN ESDM INDUSTRY (US $ BILLION)

From calendar year 2021 to 2026 (estimated), the global ESDM industry is predicted to increase at a CAGR of 5.4 percent, as opposed to a CAGR of 3.4 percent from calendar year 2017 to 2021.

The Indian ESDM industry is predicted to increase at a CAGR of 32.5% from FY22 to FY27, as opposed to a CAGR of 22.2% from FY17 to FY22. An industry analysis states that the Indian ESDM market is projected to contribute almost 7% of the worldwide market by FY2026, having accounted for 2.2% of the market in FY2021.\(^{18}\)

India will outpace the rest of the world with double-digit growth rates, while the global ESDM market is predicted to rise at a single-digit CAGR. The design and production of electronic goods are impacted by several factors, including tariffs and subsidies, shifting dynamics in the global supply chain due to geopolitical risk, domestic consumption, and policies that promote domestic manufacturing, such as the National Policy on Electronics 2019, the PLI scheme for IT Hardware, and many more.

### 2.5 OPPORTUNITY FOR INDIA UNDER ESDM INDUSTRY

The Indian electronics industry is currently experiencing outstanding growth in demand. Numerous causes contribute to this, including the rise in demand from households, people's changing lifestyles, the broadcast industry's required digitization, the disruption of the supply chain following COVID-19, easier credit availability, and increased disposable incomes. The US-China trade war has caused the world's players to shift their focus away from China in recent times.

### 2.6 HIGHLIGHTS OF ESDM INDUSTRY

There are two main industries within the ESDM sector, and they differ greatly in terms of output, investment, and technology complexity. One focuses on producing final products that are commercially viable and is known as electronic product design. The design and production of semiconductor components, which account for around 70% of the cost of an electronic product, is the other industry. Consequently, to introduce indigenous technology into this sector, both require distinct kinds of government activities and policies.

India's EDSM sector is now reliant on other nations, primarily China and Vietnam. Around seventy to eighty percent of the raw materials used by the appliance industry, including semiconductors and panels, are produced in China. The electronics industry in India has a lot of potential, but it will be hard for it to compete with foreign producers. Numerous difficulties have hindered the industry's expansion, including high component costs, limited raw material supplies, a lack of skilled labour, trade restrictions, insufficient power supplies, and problems with automation and digitization.

\(^{16}\) firstpost.com  
\(^{17}\) livemint.com  
\(^{18}\) niveshaya.com
2.7 ISSUES AND SOLUTIONS IN THE FIELD OF SEMICONDUCTOR DESIGN
The growth of the ecosystem is encouraged because the semiconductor design industry is mostly dependent on technology and requires less money.

◊ One of the main problems is the absence of laws including technocrats and business experts in the decision-making process. Startups and SMEs mostly outsource their services to larger international corporations in exchange for service contracts, rather than realizing their full intellectual potential. India therefore requires larger corporate companies that can help them.

◊ Another complex difficulty in the semiconductor industry is the mindset of technocrats. Many specialists in the sector are drawn towards service models for global players because of the belief that working for international corporations carries greater prestige and offers better working conditions, including bigger compensation packages. They need to be motivated to create medium-complexity items for the Indian market.

2.8 TROUBLES AND WAY FORWARD FOR THE ESDM INDUSTRY
1) IC manufacture requires the construction of a fab, which is extremely costly. Therefore, there needs to be a domestic ecosystem that is robust enough to make the most of the fab and get orders from well-established international markets.

2) Manufacturers are being restricted by the absence of testing and certification facilities in the nation and the exorbitant cost of getting certificates from outside sources. So manufacturers require testing and certification facilities within India.

3) Given that TV production has the highest market penetration, India could rank as the third-largest market globally. It should therefore be a part of the PLI scheme as well.

4) Due to the growing demand for raw materials for electronics, there have been sharp price increases, and the industry is currently 10% less competitive than its global competitors. The sector needs a plan that offers enough capital expenditure and other subsides to remedy this.

5) To advance the interests of the industry and develop an electronics ecosystem, events like the Semicon India Conference, Digital India Hackathon, Electronics Manufacturing Trade Fairs, and Electronics Design Hackathons must be held annually in collaboration with advisory boards, trade associations, and other stakeholders.

Here, the challenges and solutions particular to the ESDM industry are discussed. However, this paper addresses several prevalent issues and makes recommendations for other Make in India areas.

2.9 ESSENTIAL RECOMMENDATIONS WITH THE CHALLENGES FOR MAKE IN INDIA
1. Inadequate financial resources are a major obstacle for all industries. To solve this, a comprehensive plan is needed for efficient financial management and strategic planning. Inadequate financial resources can be dealt with by identifying areas of financial loss and conducting a financial assessment. In addition to this, the government should research and implement plans to diversify its sources of revenue, find joint venture and partnership opportunities, and implement affordable technologies.

2. Problems with skills shortages and the mismatch between skills supply and demand can be solved through skills training programs, vocational training, and career guidance. It is essential to establish connections between businesses and educational institutions, encourage flexible learning options like online courses, and collaborate with businesses to modify education and training policies to better meet the standards of the labour market both present and in the future. Automation and artificial intelligence should be used by the government to boost output and ensure that students acquire relevant experience and skills. Organize public awareness initiatives to highlight the advantages of skill improvement for professional advancement.

3. Infrastructure deficiencies require a comprehensive infrastructure assessment. Both short- and long-term goals are required, with consideration for resource availability, budgetary restrictions, land acquisition procedures, and onerous bureaucratic processes. The government should establish an environment that encourages infrastructure investment while making sure environmental and social considerations are considered. This includes not just
finding and putting into practice sustainable funding strategies, but also exploring options for public-private partnerships for funding and completing infrastructure projects.

4. While Make in India has helped a few large companies, small and medium-sized businesses should also be included in the initiative's reach because they have become crucial drivers of employment, growth, and innovation. India's economic landscape has been greatly impacted by the MSME sector, which also makes a substantial contribution to the GDP of the nation overall and to exports. Make in India should assist SMEs in increasing their production capacities by making investments in new infrastructure and technologies, investigating untapped domestic and foreign markets, and securing government support in the form of tax breaks and subsidies that can lessen the burden of operating costs on SMEs.

5. Some of the main challenges are the lack of technological innovation and R&D, China's manufacturing dominance, and cost competitiveness with other countries. Thus, it's necessary to continuously innovate, diversify the product line, and use efficient marketing techniques. Encouraging R&D can be achieved by directing CSR funding towards innovation, research, and startup support.

6. International corporations will be more confident in India's business climate and be more inclined to engage in manufacturing if new initiatives are implemented smoothly and prohibitive rules are removed. Sustainable growth can be achieved by shifting to high-value industrial sectors such as Aerospace, Biotechnology, Agro-Food Chemicals, and Electric Vehicles.

3.0 CONCLUSION

According to the analysis, Make in India has succeeded in bringing in investment and reviving several industries. The automobile, pharmaceutical, and mobile phone industries have resulted from success stories. There are still issues in other industries like leather, food processing, textiles and apparel, and defence manufacturing, which calls for more industry cooperation and policy attention. India can achieve equitable and sustainable economic growth by collaborating with industry, government, and academic institutions. Maintaining current knowledge of research findings and modifying programmes accordingly is essential to Make in India's long-term success.

REFERENCES

13. Varma, S. MAKE IN INDIA: IMPACT ON MACRO ECONOMIC INDICATORS OF INDIAN ECONOMY.