India's Industrial Quest

Shifting Away from Services-led Path Dependency to Path Plasticity

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Summary

India's emergence as one of the world's fastest-growing major economies is marked by a growth trajectory differing from the traditional path of structural transformation. It has bypassed a significant phase of industrialization and leapfrogged directly from agriculture to services driven by information and communication technology (ICT). Since 1990, its economic growth has been predominantly services-led.

The services-led growth path in India has primarily been shaped by three factors. Institutionally, a risk-averse mindset, regulatory inefficiencies, and a cautious stance toward free trade have constrained industrialization, whereas the service sector has advanced due to its limited reliance on legacy institutions. Technologically, insufficient R&D investment, a shortage of skilled workers, and dependence on external sources for complex technologies have held back manufacturing. The higher wages in the information technology (IT) sector continue to attract the workforce. In terms of intersectoral linkages, a cumulative cycle of development centered on manufacturing has yet to take shape, and globalization has further weakened the connections among the three sectors of agriculture, industry and services.

Amid its services-led growth trajectory, India's manufacturing sector has seen an increase in its global share and domestic economic contribution, achieved export product diversification, witnessed a gradual shift of leading industries from labor-intensive to knowledge-intensive sectors, and fostered strong international competitiveness in pharmaceutical and automobile industries. However, the scale of manufacturing lags behind that of leading countries, the capacity to attract foreign investment needs to be enhanced, informality remains a pronounced issue, and the employment growth is relatively limited.

Currently, India's industrialization presents both opportunities and potentials. India could leverage the advantages in IT and services to promote industrial development. Digital breakthroughs could generate new momentum for India's manufacturing sector, while India's diversified industrial base can provide a structural foundation for scaling up manufacturing. Looking ahead, path plasticity should be at the center of re-energizing industrialization efforts in India. First, propel existing competitive industries such as pharmaceuticals, automobiles, and IT to move up the value chain. Second, consider building

capabilities in high-value-added emerging industries such as precision engineering, semiconductors, aerospace, national defense, and green technologies. Third, leverage advanced services and digital technologies to empower manufacturing development. Fourth, restructure its industrial base for sustainable and inclusive growth. Fifth, boost domestic demand through measures such as public procurement and strengthening rural infrastructure development. Sixth, enhance international collaboration. Collaborations with multilateral institutions remain critical. India and China can jointly build a framework for regional prosperity and value chains to drive green and inclusive growth.

CONTENTS

Acronyms and Abbreviations

ADB	Asian Development Bank
AI	Artificial Intelligence
ESG	Environmental, Social and Governance
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act
GCC	Global Capability Centre
GDP	Gross Domestic Product
GoI	Government of India
GST	Goods and Services Tax
GVC	Global Value Chain
ICT	Information and Communication Technology
IoT	Internet of Things
IT	Information Technology
KPO	Knowledge Processing Outsoucing
MSME	Micro, Small and Medium Enterprises
PLI	Production-Linked Incentive
UNCTAD	United Nations Trade and Development
UNIDO	United Nations Industrial Development Organization

India's Industrial Quest: Shifting Away from Services-led Path Dependency to Path Plasticity

India's emergence as one of the world's fastest-growing major economies is marked by a non-classical development path. Historically, the development trajectories of advanced economies have followed a sequential shift in output and employment—from agriculture to manufacturing and then to services (Kuznets 1966; Szirmai 2009). India, however, has leapfrogged directly from agriculture to high-productivity services driven by information and communication technology (ICT), bypassing a robust phase of industrialization. India's growth pattern that deviates from conventional structural transformation path has achieved an impressive record in terms of gross domestic product (GDP), but it faces challenges in employment creation, productivity improvement, and inclusiveness (Fan et al. 2023; Talreja & Dasgupta 2022; Aggarwal & Kumar 2015; among others).

This report explains the formation and persistence of India's services-led growth trajectory through the lens of path dependency as understood in institutional economics theory. It addresses five central questions: (i) How did India diverge from the classical path of structural transformation and create its distinct growth path? (ii) Within India's services-led growth model, what industrial achievements has India made? What are the potentials and constrains? (iii) How have institutional and technological dependencies driven services-led growth? (iv) What are the opportunities and potentials for industrialization in India? (v) How can India harness its advantages, potentials, and emerging global opportunities to stimulate industrial growth within its current services-led model?

1.

INDUSTRIALIZATION AND ECONOMIC GROWTH IN INDIA: A HISTORICAL PERSPECTIVE ON SERVICES-LED PATH FORMATION AND PATH DEPENDENCY

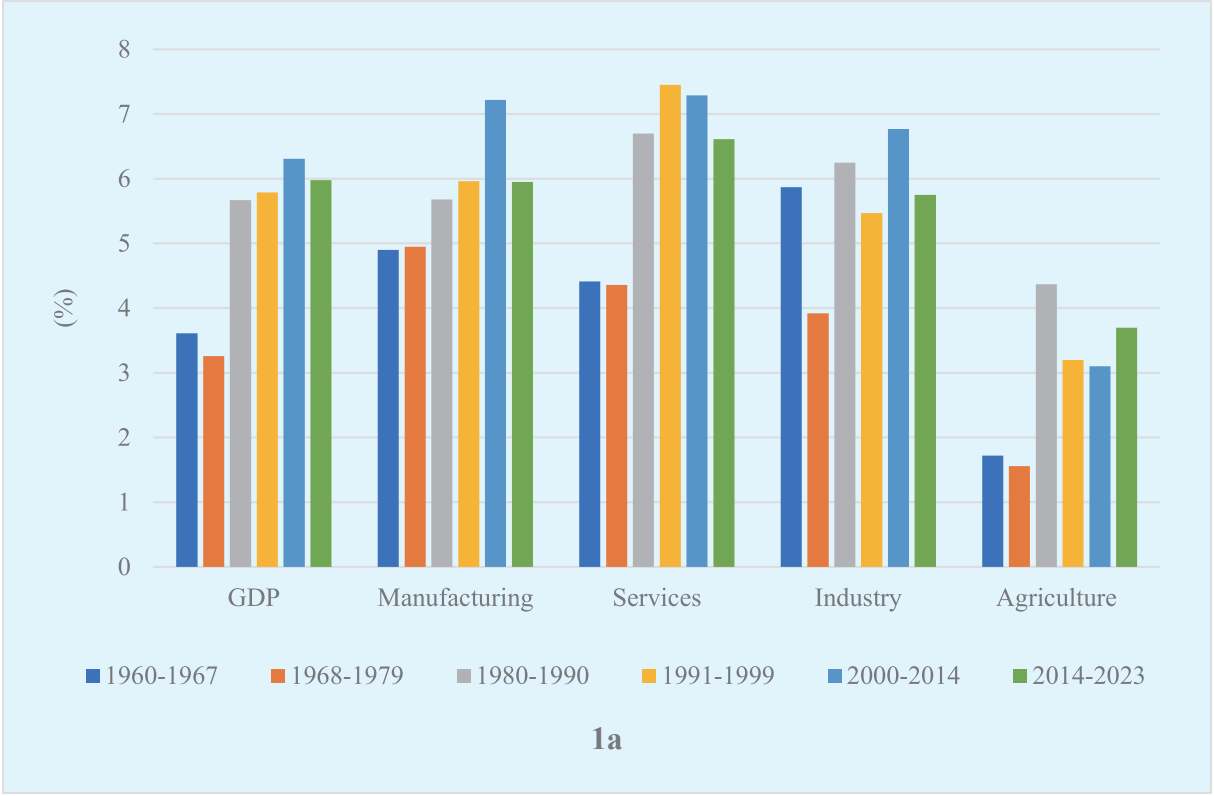
Since independence, India's industrialization has evolved through two broad policy regimes: the state-led phase (1948–1991) and the market-oriented phase (1991–present). Each has been shaped by shifts in global dynamics, domestic priorities, and the state's evolving stance on the role of the market and private sector (Aggarwal 2024, 2001; Virmani 2005).

1.1
State-led Phase (1948–1991)

Initial phase (1948–1968): After independence, India adopted a planned economy (Prebisch 1950). The state controlled the "commanding heights" of the economy, with heavy industrialization as its strategic focus coordinated through centralized planning under the Five-Year Plans. The government allowed foreign technological collaborations and initiated efforts to build a national scientific base (Aggarwal 2001). Significant public investment in higher education was used to strengthen its scientific base. This state-led, capital-intensive strategy produced India's first industrial growth surge, with GDP rising 3.6% and industry over 5.8% annually between 1960 and 1967 (Figure 1a). By the mid-1960s, import-substitution goals had largely been achieved, but growth stalled as capital-intensive industries failed to absorb labor.

Highly restrictive regime (1968–1980): During this phase, key industries—coal, steel, oil, and banking—were nationalized. The Foreign Exchange Regulation Act (FERA) restricted foreign collaborations and technology inflows, and trade and foreign direct investment (FDI) policies tightened. The Indian Patents Act encouraged imitation-based innovation, particularly in pharmaceuticals and engineering. However, without foreign competition or technological exchange, industrial upgrading remained modest. Industrial growth declined to around 4%, manufacturing's share of GDP stagnated around 11%, and chronic capacity underutilization undermined efficiency. The oil shocks of the 1970s further strained the balance of payments, leading to an International Monetary Fund (IMF)-supported shift from "growth with self-reliance" to "growth with efficiency" by 1980.

Deregulation (1980–1990): The 1980 Industrial Policy Statement marked a move towards deregulation. Export promotion gained momentum through the 100% Export-Oriented Units Scheme and the expansion of Export Processing Zones. During this period, India experienced a second growth inflection point, with GDP growth accelerating from 3.6% to 5.6% annually. However, manufacturing gains were modest, averaging only



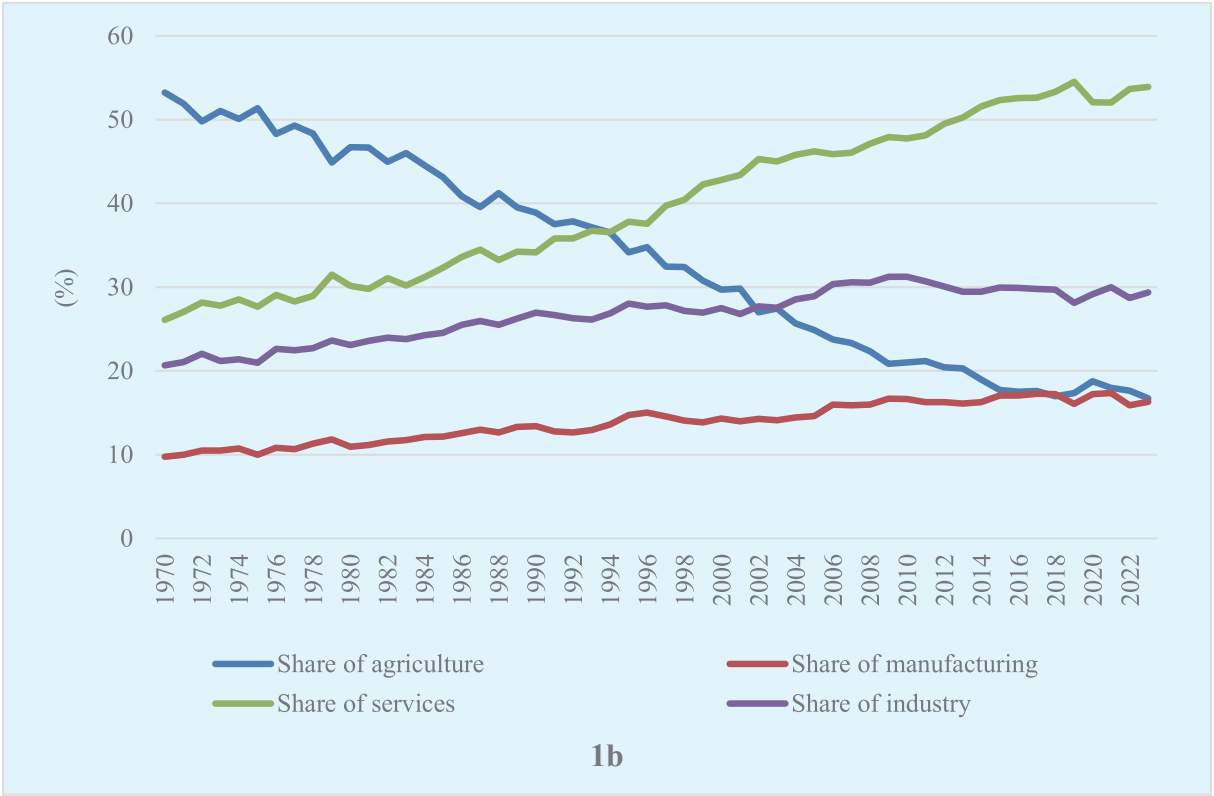


FIGURE 1

Sectoral Growth Rates and Shares of GDP in India, 1960–2023

Source: Based on World Development Indicators and United Nations Statistics Division database.

5.8%. The emergence of the software industry opened new opportunities for offshore services. India's large pool of technically skilled, English-speaking graduates facilitated rapid entry into global software markets. Policy interventions, including the Computer Software Policy and fiscal incentives, fostered a supportive ecosystem that expanded software firms from just 35 in 1984 to over 700 by 1990 (Dossani, 2006). This decade marked the beginning of India's services-led growth trajectory, as services outpaced manufacturing in growth for the first time. Nonetheless, inadequate communication infrastructure and a tightly regulated telecom sector constrained scalability and growth.

1.2 Market-oriented Phase (1991–Present)

Liberalization (1991–2000): The third oil shock and growing geopolitical tensions of the late 1980s compelled India to abandon its state-centric model. The government significantly reduced tariffs and advanced parallel reforms in finance, infrastructure, and ICT (Aggarwal & Kumar 2015). Manufacturing growth remained modest, moving in line with GDP at about 6%. Services surged from 32% to 42% of GDP, propelled by the IT revolution (Figure 1b). This period laid the institutional foundation for India's services-led growth model.

Deeper reforms (2000–2014): The 2000s saw the commanding heights of the economy assigned to the private sector (GoI 2002). In 2011, the National Manufacturing Policy was introduced aiming to increase manufacturing's share of GDP to 25% and had created 100 million jobs by 2022 by promoting private investment. Private developers were encouraged to establish special economic zones, alongside other mega industrial parks, supported by fiscal incentives (Aggarwal 2024). This period marked India's third major growth inflection point, with GDP expanding 7–8%. Manufacturing growth improved, peaking at 16% of output during 2003–2010. The service sector expanded rapidly as it became further integrated into global value chains, with the rise of knowledge process outsourcing (KPO) in fields such as engineering, healthcare, and finance, pushing the sector's GDP share beyond 50% and reinforcing the structural shift toward a services-led growth trajectory.

Policy dynamism (2014–Present): Recognizing the limits of a services-led model, India has pursued a more coordinated, incentive-based strategy to revitalize manufacturing since 2014. Flagship initiatives such as Make in India and Atmanirbhar Bharat (Self-Reliant India) aimed to enhance competitiveness, attract FDI, and integrate Indian industries into global value chains. The Production Linked Incentive (PLI) scheme was introduced, supplemented by large-scale public investments in logistics development, industrial corridors, and digital infrastructure. Complementary programs—Skill India, Startup India, and Digital India—focus on skills training and the promotion of innovation and entrepreneurship. Green industrialization also gained momentum with policy support for renewable energy, electric mobility, and green hydrogen. Despite these advances, the service sector has remained the main driver of GDP growth while manufacturing's share in output and employment remains modest.

2. FACTORS DRIVING SERVICES-LED PATH DEPENDENCY

Over time, this services-led trajectory has been entrenched, primarily due to the following drivers of path dependence.

2.1 Institutional Dependence

India's institutional framework—established during the state-led phase and highly restrictive regime—has produced compliance-oriented, risk-averse institutions. While liberalization since the 1980s has driven reforms in formal institutions, informal institutions have shown strong path dependence. Overlapping mandates among government agencies have caused regulatory inefficiencies. In addition, India's cautious stance toward comprehensive free trade agreements has significantly constrained the development of manufacturing, as investment decisions require coordination across land, labor, logistics, and infrastructure. In contrast, the service sector, especially IT and finance, which is less reliant on legacy institutions, has leveraged skilled human capital and digital infrastructure to expand rapidly and integrate with the global economy, bypassing many of these structural constraints.

2.2 Technological Dependence

Import substitution has achieved basic self-reliance but left complex and high-value production dependent on foreign technology. Private research and development (R&D) has remained minimal—focusing primarily on adapting foreign technologies to protected markets—leading to weak global value chain integration (Aggarwal 2000; Kumar & Siddharthan 1997; Lall 1987). Industrial R&D has stagnated at around 1% of GDP. While India's demand for skilled labor in manufacturing has been increasing, young workers continue to move toward the IT industry due to wage differentials. Export-oriented IT jobs pay over 30% more than comparable manufacturing ICT roles on a daily average (Sarkar & Mehta 2020). Manufacturers—especially small and medium-sized enterprises (SMEs)—face serious skill shortages, with over 90% reporting production bottlenecks (CII 2023). Thus, India's comparative advantage has increasingly shifted toward services, further reinforcing a path-dependent growth pattern.

2.3
Weak Intersectoral Dependence

In India, a cumulative cycle of development centered on manufacturing has not taken shape. The state-led heavy industrialization implemented after independence fails to generate sufficient labor demand to absorb workers moving out of agriculture, while inadequate public investment in the agricultural sector impedes productivity growth and labor mobility. The Green Revolution from the late 1960s to the 1970s has raised yields but benefited large landowners in irrigated areas due to the absence of agrarian reforms. The vast rural population has been excluded from the gains, thereby weakening agriculture–industry linkages and constraining aggregate domestic demand. Globalization has further accentuated these weaknesses. Rising wages in the globally integrated service sector has raised manufacturing costs, reducing industrial competitiveness. Globalization, instead of strengthening industrialization, has promoted a shift toward a services-led path dependency.

3.
INDUSTRIAL SECTOR'S PERFORMANCE AND CONSTRAINTS AMIDST THE SERVICES-LED GROWTH TRAJECTORY

Although India's post-1990 growth has been largely services-led, manufacturing has achieved notable gains, albeit within persistent structural constraints.

3.1
Industrial Progress: Successes and Structural Limits

Global share: India is now the world's fifth-largest manufacturing economy, accounting for 3.3% of global manufacturing value added (MVA) in 2024—up from 0.7% in 1970. However, the scale remains limited compared with leaders such as China (31.9%) and the United States (17%) (Figure 2).

Share of manufacturing in industry: India's MVA share in GDP has stagnated around 15% (Figure 2). Within India's industrial sector, manufacturing remains dominant, but its relative weight has declined—from over 70% of industrial output in the early 1950s to around 55–60% today (Figure 3).

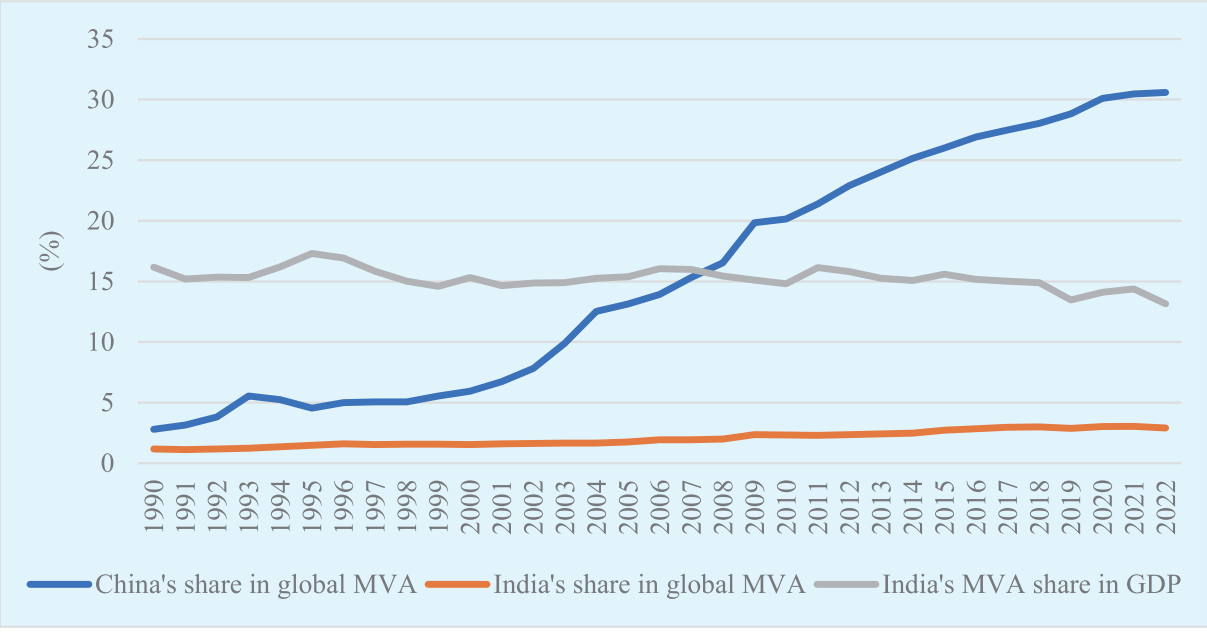


FIGURE 2

Manufacturing Trends in India and China, 1990–2022

Source: UNIDO database.

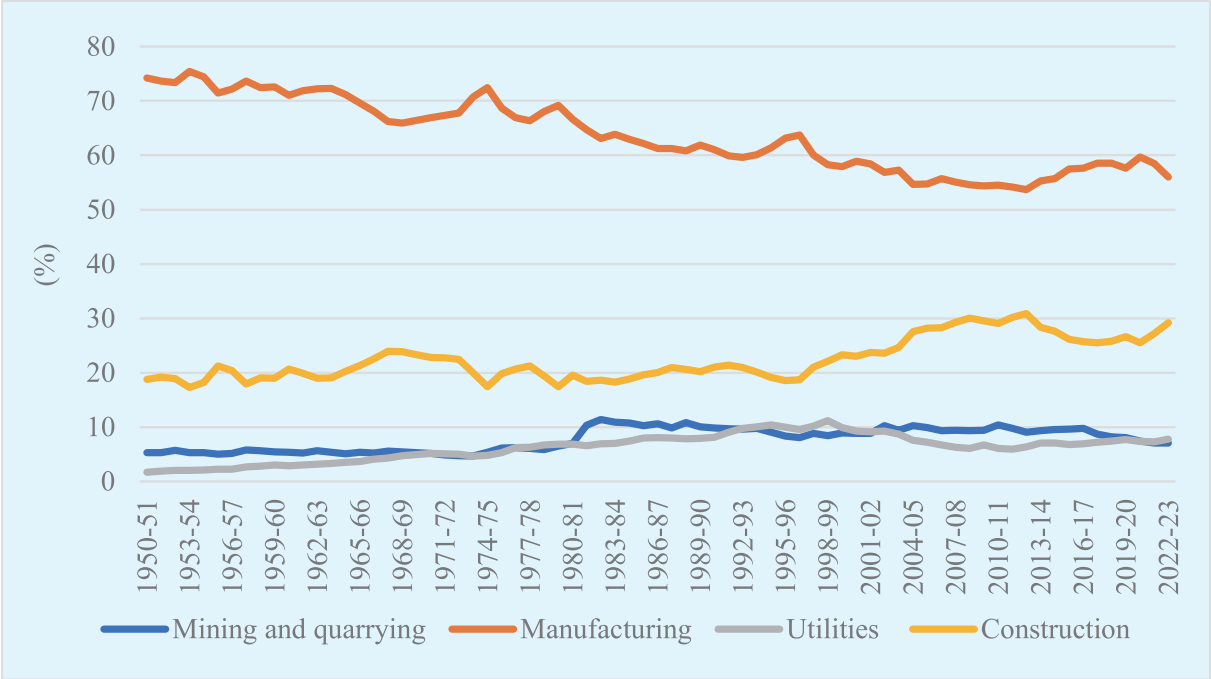


FIGURE 3

Industrial Sector Composition in India, 1950–2023

Source: Ministry of Planning and Statistical Implementation, India.

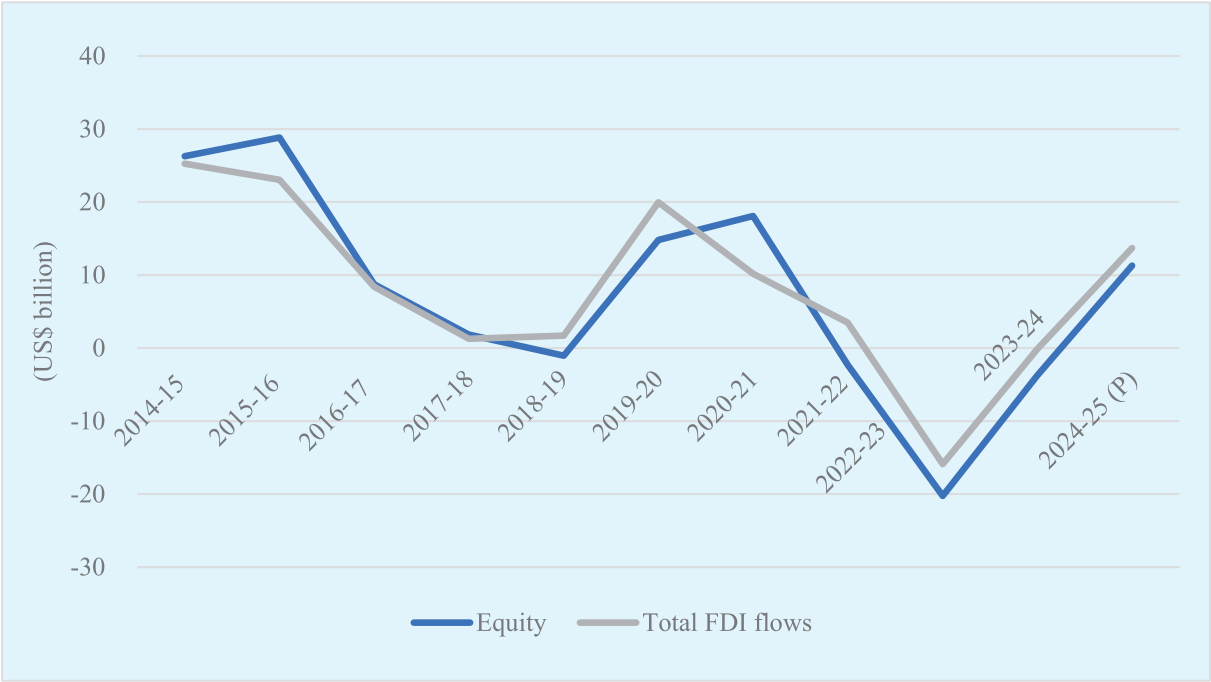


FIGURE 4

India's Annual Growth in Gross FDI Inflows, 2011–2025

Source: Based on the Ministry of Statistical Planning and Implementation, India.

Investment: FDI has grown rapidly, exceeding US$ 1 trillion in cumulative inflows over 2000-2024, but remains modest as a share of GDP—averaging 1.8% between 2015 and 2023, down from 2.1% in the previous decade. Moreover, FDI inflows are volatile (Figure 4) and concentrated in services, which have received about 58% of total inflows since 2000 (GoI 2025a).

Segment: The informal segment accounts for one-quarter of MVA. Around 70% of employment and 69% of enterprises remain informal (Goldar 2023; Mehrotra & Giri 2023). Such informality constrains productivity, technological upgrading, and industrial transformation (Djidonou & Foster-McGregor, 2022).

Industrial upgrading: Labor-intensive industries, such as textiles and food processing, gradually give way to knowledge-intensive industries like pharmaceuticals, motor vehicles, refined petroleum, and electrical equipment (Table 1). In 2023, India's Competitive Industrial Performance (CIP) Index score was 0.074, above the global average of 0.061. This demonstrates that the industrial transformation has made progress, though remaining uneven.

Exports: India maintains a broadly diversified manufacturing base, exporting over 4,400 products by 2019 (Felipe et al. 2013; Aggarwal 2022). However, relative to GDP, India ranked in the bottom second decile worldwide in 2019, illustrating limited export competitiveness. Its export structure has gradually shifted from traditional labor-intensive goods such as textiles and jewelry towards skill- and technology-intensive industries like chemicals, automobiles, and pharmaceuticals (Figure 5).

Employment: Between 2011–12 and 2017–18,

TABLE 1

India's Top 6 Industries and Their Shares of Gross Industry Value Added, 1973–2022

Industries	1973-74 (%)	1980-81 (%)	industries	1990-91 (%)	2000-01 (%)	industries	2013-14 (%)	2021-22 (%)
Textiles	20.2	16	Basic Metals	11.6	10.2	Coke and Refined Petroleum	12.9	11.6
Basic Metals	10.5	11.1	Chemicals and Chemical Products	10.4	16.4	Basic Metals	10.8	9.8
Chemicals And Chemical Products	9.7	10.5	Textiles	10.1	8.8	Chemicals and Chemical Products	8.2	8.7
Food Products	7.0	6.2	Food Products	7.3	9.3	Motor Vehicles, Trailers and Semi-Trailers	7.4	8.1
Electrical Equipment	5.3	5.3	Machinery and Equipment N.E.C.	5.6	6.1	Pharmaceuticals	7	7.1
Machinery and Equipment N.E.C.	5.1	6.3	Electrical equipment	4.7	4.1	Food products	6.7	7.1

Source: Based on Annual Survey of Industries database.

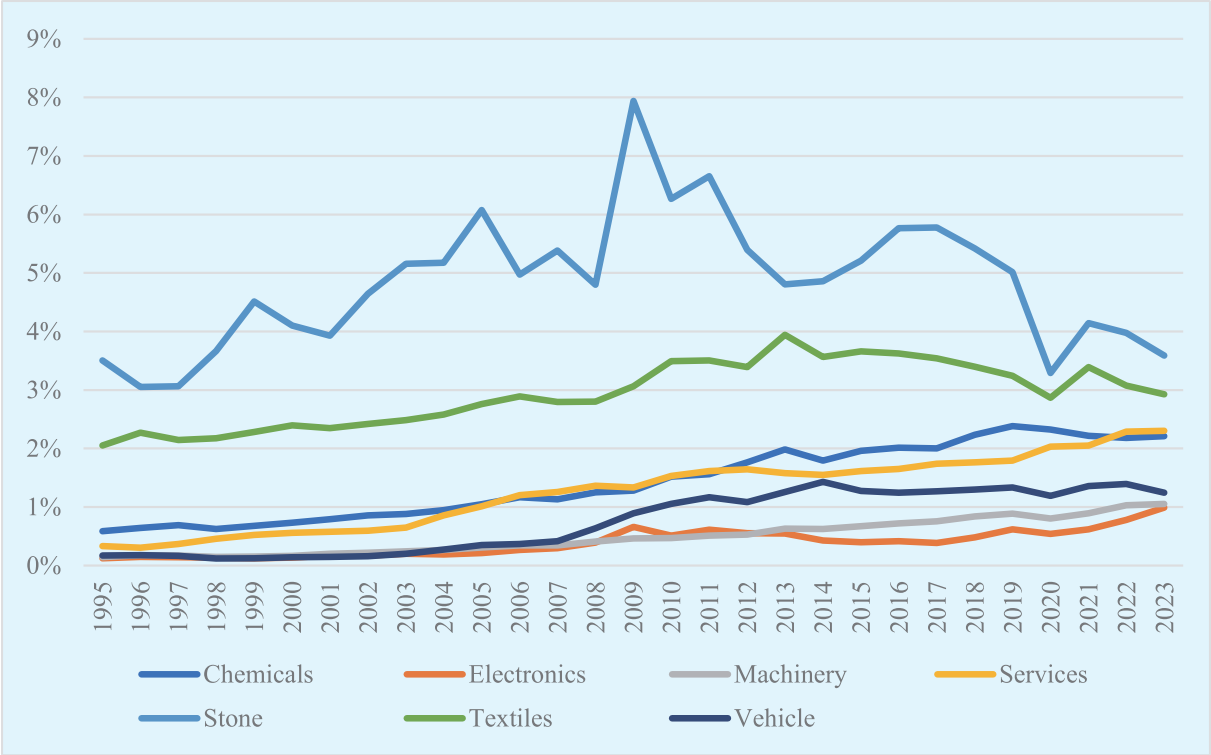


FIGURE 5

India's Share in Global Export, 1995–2023

Source: Growth Lab, Harvard University.

manufacturing jobs declined by 0.8% annually before recovering, but still remained below overall employment growth (Mohanan 2024; GoI 2024). Consequently, industry's share in total employment fell from 12% in 2013-14 to about 11% in 2022-23, indicating the insufficiency of manufacturing growth to counterbalance the employment effects of structural shifts from labor- to skill-intensive production.

3.2

Pharmaceutical and Automobile Industries: Twin Engines of Industrial Growth

Pharmaceutical industry: India's pharmaceutical industry—third worldwide by volume (10%) and 14th by value (1.5%)—is one of the most promising manufacturing industries in India. With over 10,000 manufacturing firms, India's pharmaceutical industry accounts for 7% of domestic manufacturing value added, 5.5% of total exports, and 3% of global pharmaceutical trade (Figure 6a).

In the early days after independence, India depended on imports and foreign subsidiaries that invested little in local production. State enterprises, such as Hindustan Antibiotics (1954) and Indian Drugs and Pharmaceuticals Ltd. (1961), began to build technical capacity. The Indian Patents Act (1970) enabled Indian firms to reverse-engineer medicines and build competitive strength in generics. Liberalization in the 1990s, combined with the U.S. Hatch-Waxman Act[1] (1984), integrated India into the expanding global generics market. Indian firms leveraged process innovation, cost efficiency, and skilled human capital to achieve scale. By the early 2000s, India met 85%

of domestic drug demand, supplied 60% of global vaccine requirements, and produced 20% of world generics, exporting to nearly 200 countries (GoI 2025b). Export growth has slowed since 2013, and structural bottlenecks such as continued reliance on imported raw materials, complex regulatory processes, periodic quality-control concerns, and low R&D intensity constrain innovation and global competitiveness. India's export composition remains narrow, drug formulations and biologicals accounting for 73.5%, bulk drugs for 17%, and vaccines and herbal products for only marginal shares (Figure 6b).

Automobile industry: The automobile industry is a pillar of India's economy, with strong backward

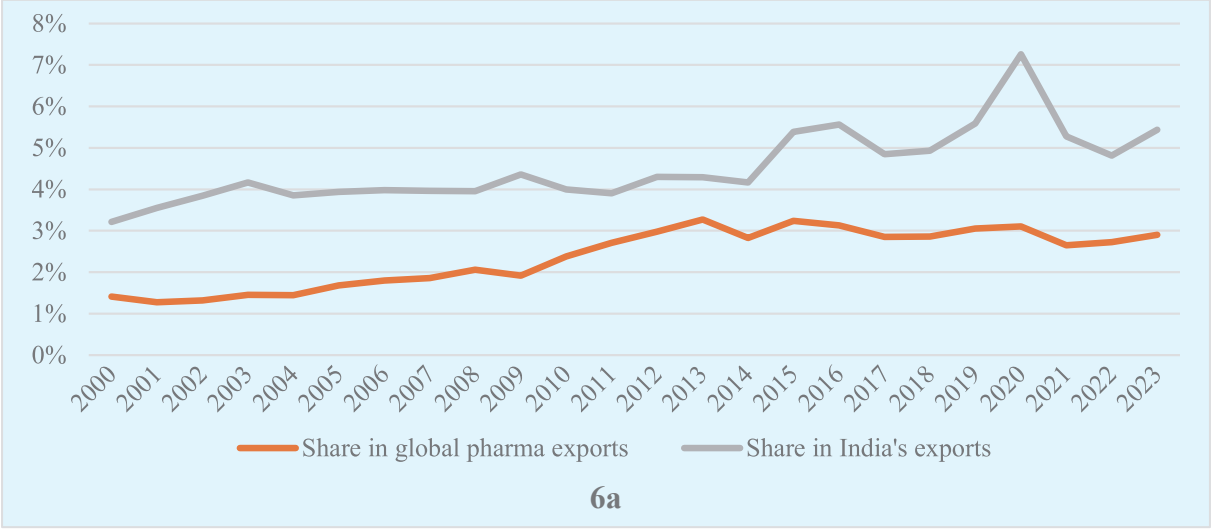


FIGURE 6

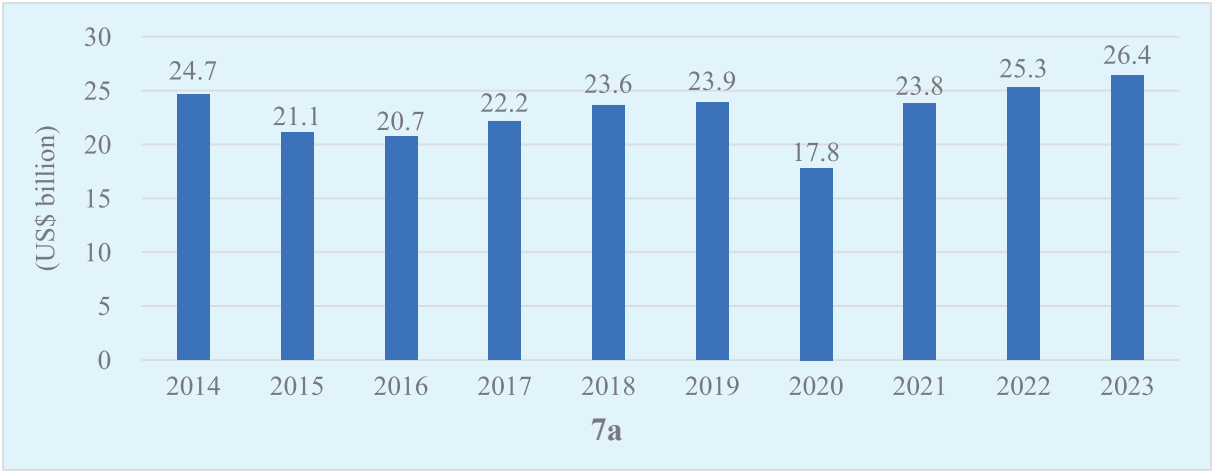
India's Pharmaceutical Exports, 2000–2022

Source: Growth Lab, Harvard University.

1 The Act was enacted in the United States to balance the interests between the innovative drug industry and the generics industry. It aims to encourage innovative pharmaceutical enterprises to continue developing new drugs, while also enabling generics manufacturers to take advantage of relevant regulatory provisions to accelerate the market entry, lower the prices, and enhance consumer welfare.

and forward linkages that make it a key driver of growth. India is now the fourth-largest global producer, after China, the United States, and Japan, with an annual output of around 6 million vehicles (6% of global production) (NITI Aayog 2025). The automotive industry accounts for about 8% of India's manufacturing value added.

Automobile assembly began under colonial rule in the 1940s and evolved under post-independence industrial policies that placed the industry within a protected, license-based regime. Through the 1950s to the 1970s, limited competition and technological stagnation prevailed. In the 1980s, India introduced modern technology, quality standards, and vendor development, which spurred localization and the rise of the domestic component industry. Post-1991 liberalization deepened transformation by easing entry barriers, promoting FDI, and integrating India into global production networks. From 2014 to 2023, India's annual exports fluctuated between US$18–26 billion—well below the government's 2030 target of US$60 billion in auto-component exports (Figure 7a). India's global export share has stagnated at around 1.3% since 2013 (Figure 7b). The expanding component industry offers strong potential, but persistent institutional and technological path dependencies, global competition, and economic slowdown continue to constrain India's competitiveness and integration into segments of higher added value.



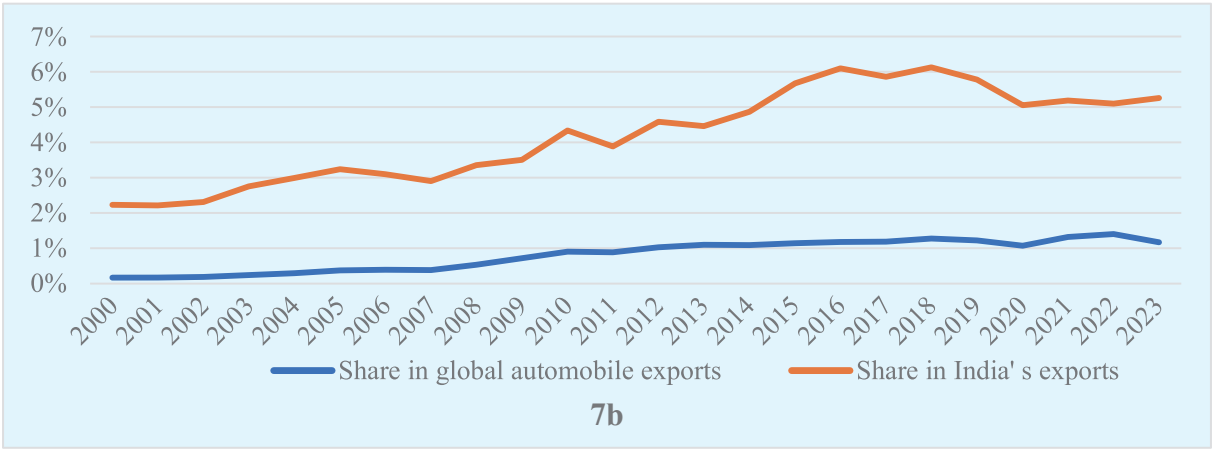


FIGURE 7

India's Automobile Exports, 2000–2023

Source: Growth Lab, Harvard University.

4.
OPPORTUNITIES AND POTENTIALS FOR INDUSTRIALIZATION

India's current stage of industrialization presents the following opportunities and potentials.

4.1
Leveraging Digital Breakthroughs for Services-led Manufacturing Growth

With its strong capabilities in IT and IT-enabled services, India is well positioned to harness digital breakthroughs—particularly in artificial intelligence (AI) and digitalization—to generate new industrial momentum.

Smart manufacturing: India is strategically positioned to advance smart manufacturing by integrating digital services, AI, engineering skills, and IT capabilities. The growing servicification of production aligns with India's comparative strengths. This offers opportunities to leapfrog traditional industrialization, enhancing productivity across electronics, automobiles, pharmaceuticals and precision engineering.

Servicification and global value chain (GVC) upgrading: Driven by digital technologies, manufacturing has evolved into a complex system that incorporates knowledge-intensive, high-productivity tradable services, covering the entire value chain from design and R&D to logistics, branding, and after-sales support. For India, leveraging the complementarity between manufacturing and services can expand entry points into global value chains and achieve industrial upgrading.

4.2
Building on a Diversified Industrial Base to Accelerate Manufacturing

India's diversified industrial base provides a structural foundation for scaling up manufacturing, supported by a range of enablers. These advantages can be strategically translated into sustained and tangible manufacturing growth.

Institutional reforms: India has streamlined its regulatory framework, cutting 39,000 compliances (GoI 2021). Reforms such as the Insolvency and Bankruptcy Code, corporate tax cuts, the PLI, and goods and services tax (GST) have simplified procedures and improved transparency. Digitization of land records, commercial courts, and single-window systems have boosted efficiency.

Infrastructure development: Capital expenditure rose from 4.4% to 7.3% of GDP, and infrastructure investment nearly doubled between 2013–14 and 2019–20. Power, transport, digital, and urban sectors accounted for 85% of investment (GoI 2020). The Gati Shakti Master Plan integrates projects to reduce delays, while new clusters—

textile parks and electronic hubs are being created to attract private capital.

Demographic advantage: India has a population of 1.4 billion, of which 68% are of working age. If productively employed, such a labor force could boost GDP from US$ 3 trillion to US$ 9 trillion by 2030 and US$ 40 trillion by 2047 (CII 2022).

Human skills: Programs such as Skill India and the National Apprenticeship Scheme expand vocational training, while Future Skills PRIME Program develops expertise in AI, cloud, and cybersecurity. PLI-linked workforce initiatives align training with emerging manufacturing industries.

Green transition: India aims for 500 GW of clean energy by 2030 and net-zero emissions by 2070. The 48% rise in renewable allocations and initiatives such as the Green Hydrogen Mission and Green Energy Corridor highlight this shift.

Macroeconomic stability: Improved current accounts, rising FDI, and strong reserves have reinforced stability. Inflation targeting, healthy capital buffers, and low non-performing loan ratio of its banks enhanced monetary credibility (Reserve Bank of India 2025).

Economic diplomacy: Through its policies Neighborhood First and Act East, and participation in international cooperation mechanisms such as the G20 and BRICS, India leverages diplomacy to attract investment, deepen technology partnerships, and advance inclusive industrial transformation.

5.

POLICY RECOMMENDATION: DE-LOCKING PATH DEPENDENCE THROUGH PATH PLASTICITY

Path plasticity needs to be at the center of re-energizing industrialization efforts in India, i.e., strategies could leverage existing strengths and gradually reshape the industrial sector through targeted policy measures, institutional adaptations, and sectoral diversification.

5.1

Moving up the Value Chains in Industries with Existing Competitiveness

India has established global competitiveness in pharmaceuticals, automotive, and IT services and can promote these industries toward higher value-added, innovation-driven domains. The focus of pharmaceuticals can evolve from generics and contract manufacturing to biologics, biosimilars, and personalized medicine. The automotive industry can accelerate its transition to EVs, hydrogen fuel cells, and circular economy solutions. IT and digital services can advance the development of cybersecurity, automation, and analytics, expand Global Capability Centres (GCCs), and invest in artificial intelligence (AI) research and workforce upskilling.

5.2

Developing High Value-added Emerging Industries

Building on its existing strengths, India can build capabilities in high value-added industries such as precision engineering, semiconductors, aerospace, national defense, and green technologies, including renewable energy. These emerging industries promise higher returns, greater strategic leverage, and more technological spillovers.

5.3

Shifting to Digitally Empowered Manufacturing

Indian manufacturing firms can enhance productivity and competitiveness through the integration of advanced services such as R&D, predictive maintenance, digital twin simulations, and remote monitoring. By leveraging digital technologies like AI and IoT, firms can enhance product complexity and climb up the value chain by harnessing their digital expertise and human capital. The deep integration of digital technologies and machine learning will pave the way for the development of smart factories.

5.4
Restructuring India's Industrial Sector for Sustainable and Inclusive Growth

Long-term growth and integration into global markets demand a restructuring of India's industrial base to meet evolving global standards focused on carbon footprints, digital readiness, supply-chain traceability, and ethical labor. India may consider transition from a cost-based model to one anchored in technological sophistication, product quality, environmental responsibility, and inclusiveness.

5.5
Augmenting Domestic Demand

It is important to leverage public procurement as a driving force, moving beyond lowest-cost bidding to quality, sustainability, and lifecycle value. India can adopt global best practices, which promote innovation and micro, small, and medium-sized enterprise (MSME) participation. By strengthening infrastructure development in rural areas, particularly in transport, energy, and housing, India can create jobs, raise incomes, and stimulate local demand. Enhancing strategic investments in mechanization, irrigation, R&D, and market access can boost agricultural productivity.

5.6
Enhancing International Collaboration

Strategic engagement with major partners can facilitate trade, technology transfer, value-chain integration, green transition, workforce development, and institutional reform. Collaborations with multilateral institutions such as the World Bank, Asian Development Bank (ADB), United Nations Industrial Development Organization (UNIDO), and United Nations Trade and Development (UNCTAD) remain critical to building institutional capacities, advancing sustainability standards, and mobilizing investments aligned to environmental, social and governance (ESG). India and China have significant potential for economic cooperation. India excels in software, pharmaceuticals, and services, while China holds global leadership in hardware manufacturing, logistics, and infrastructure. Based on strategic autonomy and mutual benefit, the two countries can jointly build a pragmatic framework for regional prosperity, create regional value chains, and drive green and inclusive growth.

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