



Industry Report on Precision Engineering and Machined Components

3rd September 2026

Sunrise Middle East Turn Tech Limited



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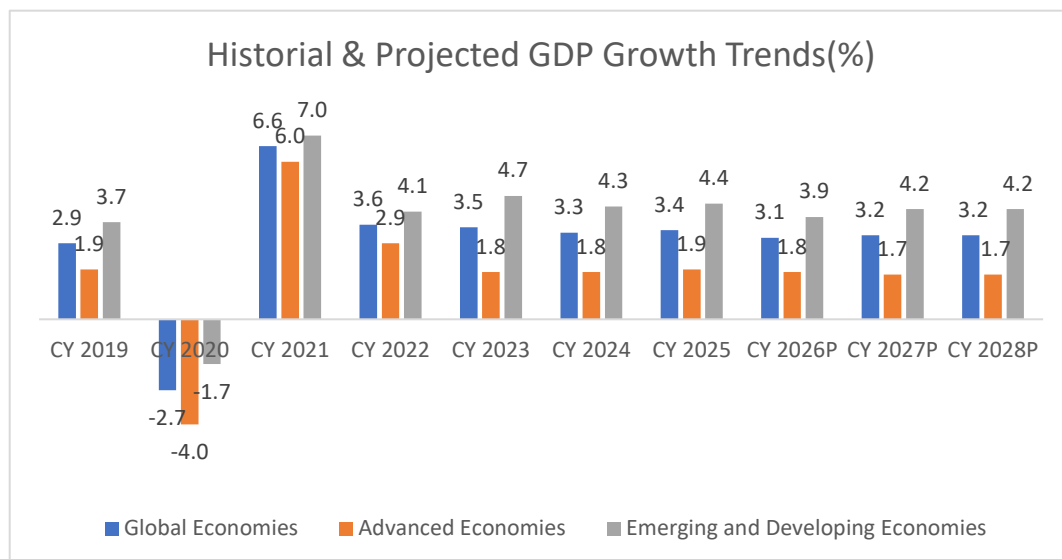


Global Macroeconomic Scenario

Global Economic Overview

According to World Economic Outlook, global growth is projected at 3.1% in 2026 and at 3.2% in 2027 and 2028, slower than the recent pace of about 3.4% in CY 2024–25 and is expected to settle at approximately that rate over the medium term, below the historical average of 3.7% during 2000–19. The forecast for 2026 has been revised downward by 0.2 percentage point, while the forecast for 2027 and 2028 remains unchanged compared with the January 2026 WEO Update. Global headline inflation is expected to rise to 4.4% in 2026 and decline to 3.7% in 2027, reflecting upward revisions for both years.

The conflict involving US, Israel and Iran is increasingly functioning as a global supply and confidence shock. The International Energy Agency (IEA) describes the current situation as the largest oil supply disruption on record, with flows through the Strait of Hormuz reduced to a trickle and the resulting effects spreading across refined fuels and liquefied natural gas (LNG). At the same time, aviation disruptions and elevated risk premia are weakening services activity and increasing uncertainty around investment decisions. A significant share of global energy flows through the Strait of Hormuz, and shipping disruptions and insurance constraints are therefore translating directly into higher landed costs, supply chain delays, and greater output risks for energy-intensive manufacturing. As a result, the policy environment has increasingly become challenging, while growth support is required but renewed cost-push inflation across energy, freight, and eventually food inputs is limiting the scope for faster monetary easing.



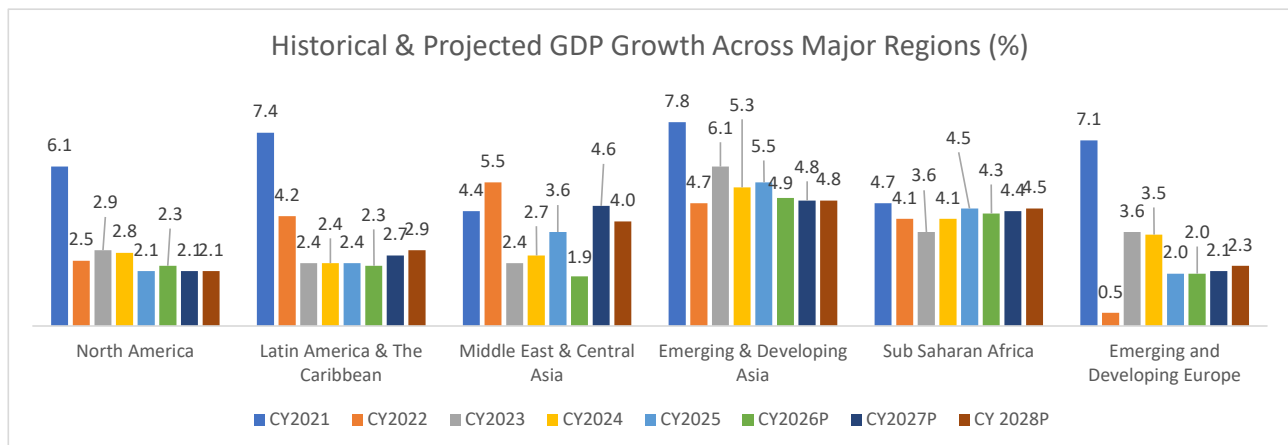
Note: Advanced Economies and Emerging & Developing Economies are as per the classification of the World Economic Outlook (WEO). This classification is not based on strict economic criteria and has evolved over time. It comprises 40 countries in the Advanced Economies category, including the G7 (the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada) and selected Eurozone members (Germany, Italy, France, etc.). The group of emerging and developing economies (156) comprises all economies not classified as Advanced Economies (e.g., India, China, Brazil, Malaysia).

Historical and Projected GDP Growth

GDP growth across major regions showed a mixed trend during 2024–25. While growth in several regions—including Middle East & Central Asia, Emerging and Developing Asia, Sub-Saharan Africa as well as Latin America and the Caribbean—is expected to slow further in 2026, performance remains uneven across geographies.

In the Middle East and Central Asia, economic growth is projected to decline from **3.6% in 2025** to **1.9% in 2026**, before recovering to **4.6% in 2027** and **4.0% in 2028**, reflecting the region's direct exposure to the conflict and the anticipated rebound thereafter. For commodity-exporting economies directly affected by the conflict, reduced production and export activity are expected to result in a significant downward revision to 2026 GDP growth projections.

Growth in emerging and developing Asia is projected to moderate from **5.5% in 2025** to **4.9% in 2026** and is further estimated to grow at **4.8% in 2027 and 2028**. Within the region, China's 2026 growth forecast has been revised upward by **0.2 percentage point** relative to the October estimate, to **4.4%**, despite a **0.1 percentage point downward revision** from January. This upward adjustment reflects the impact of lower effective U.S. tariff rates on Chinese goods, along with stimulus measures that are expected to offset the negative effects of the shock arising from the Middle East conflict. However, China's growth is projected to slow to **4.0% in 2027**, as structural headwinds continue to weigh on the economy, including the prolonged slowdown in the housing sector, a shrinking labor force, declining returns on investment, and weaker productivity growth.



Source- IMF World Economic Outlook, April 2026

In Latin America and the Caribbean, economic growth is projected to remain broadly stable at 2.3% in 2026 before strengthening to 2.7% in 2027 and 2.9% in 2028. The effects of the Middle East conflict across the region are expected to be uneven, with smaller economies likely to experience a more pronounced negative impact due to their relatively greater vulnerability to external shocks.

Growth in sub-Saharan Africa is projected to remain relatively stable at 4.3% in 2026 and 4.4% in 2027 and 4.5% in 2028. However, this regional outlook masks significant variation across countries, with some economies expected to face more pronounced challenges than others. In particular, oil-importing and non-resource-intensive economies are likely to be adversely affected by the conflict in the Middle East, as

heightened external pressures may weigh on economic activity and weaken growth prospects. In emerging and developing Europe, economic growth is expected to slow sharply to 2.0% in 2025 and recover only marginally thereafter, with the region projected to expand at an average rate of 2.0% in 2026, 2.1% in 2027 and 2.3% in 2028.

Global Economic Outlook

The conflict between Israel/the United States and Iran, which began in February, has developed into a global shock to transport, trade, and security planning. As a result, periodic airspace closures across Israel and parts of the Gulf, together with severe disruption to shipping through the Strait of Hormuz, have affected the movement of oil, oil products, and LNG. Consequently, businesses have faced longer and less reliable supply lines, higher freight and insurance costs, and more frequent “stop-go” operating conditions.

The near-term growth outlook has softened as the conflict is affecting both demand and costs. Disruption to the oil channel is coinciding with pressure on the non-oil outlook as travel and services weaken and risk premia rise. Airspace disruption has increased operating costs and reduced travel reliability, while higher jet fuel costs have added to pressure on carriers and freight forwarders.

Investment conditions have also tightened as higher regional risk premia have increased insurance, shipping, hedging, and working capital costs. At the same time, logistics disruption and higher input costs are raising inflation risks. Fertilizer and related input disruption is also creating a lagged risk to food prices.

Asia-Pacific: In Asia-Pacific, the conflict has created sustained stress for business continuity. Even with fighting paused, energy availability, shipping disruption, and insurance costs are expected to continue weighing on operations over the next quarter. Oil prices remain well above January levels despite easing from March peaks, while war-risk insurance, tighter tanker availability, and rerouting costs remain elevated. As a result, several fuel-importing economies—including Japan, South Korea, India, and parts of Southeast Asia—have faced power-conservation measures and fuel rationing, increasing the risk of operational downtime in energy-intensive sectors.

Shipping and supply chains are also facing second-round effects. Many Asia–Europe shipments have been diverted via the Cape of Good Hope, thereby extending lead times by 10–14 days. Although some routes have reopened, schedules remain compressed and insurers remain cautious, which has increased delivery deadline risk across manufacturing, particularly in chemicals, electronics, and pharmaceuticals. Input volatility and fertilizer disruption are also adding to inflation risks and thereby complicating the policy outlook.

Latin America: In Latin America, the U.S.-Israel-Iran conflict has increased energy market pressures, with higher Brent crude prices raising input costs and inflation risks across the region. Consequently, net hydrocarbon exporters such as Brazil, Colombia, and Ecuador are benefiting from stronger external balances, while net energy importers—including Panama, Chile, and much of Central America—are facing higher import costs. Elevated fertilizer prices are also weighing on agricultural output and margins, including in Brazil and Argentina. In response, governments have introduced fuel subsidies and price controls.



Middle East & North Africa: In the Middle East and North Africa, the conflict continues to affect the region directly, with many countries facing missile and drone attacks from Iran in response to attacks by the United States and Israel on Iran. In the short term, economic growth is expected to slow sharply as exports decline, uncertainty constrains spending, and governments delay investment initiatives. The reduction in food imports is also expected to significantly affect countries with limited domestic production capacity. Bahrain, Qatar, and Kuwait remain highly dependent on imports through the Strait of Hormuz and therefore face risks of food shortages and concerns regarding social stability if disruption persists.

Sub-Saharan Africa: In Sub-Saharan Africa, the conflict continues to disrupt energy and fertilizer supply chains, thereby keeping the region under significant external pressure. Higher global oil prices are sharply rising fuel and transport costs for import-dependent economies such as Kenya, Uganda, Ethiopia, and Ghana. Policy responses have varied across the region. Ethiopia introduced emergency fuel subsidies in mid-March to contain domestic price increases, while Kenya is experiencing stronger pass-through from higher fuel costs, which is weighing on aviation, logistics, and export activity.

Global Growth Projection

Growth in advanced economies is projected at 1.8% in 2026 and 1.7% in 2027 and 2028, while the overall impact of the Middle East conflict is expected to remain modest, lowering 2026 growth by 0.2 percentage point relative to the pre-conflict forecast. This limited effect reflects positive terms-of-trade gains in the United States and stronger growth momentum, supported by government measures, in Japan, whereas more significant negative effects are expected mainly in net energy-importing economies, including the euro area and the United Kingdom. In the United States, growth is projected at 2.3% in 2026 and 2.1% in 2027 and 2028, with fiscal policy and the lagged effects of monetary easing in 2025 continuing to support activity, even as higher trade barriers since April 2025 weigh on growth. The 0.1 percentage point downward revision from the January 2026 WEO Update reflects a small negative effect from the war, but this is partly offset by a rebound following the end of the 2025 federal government shutdown, along with stronger productivity growth and positive carryover effects. Although the International Emergency Economic Powers Act (IEEPA) ruling may reduce tariff-related fiscal revenues, its impact on the fiscal balance and activity is expected to remain limited and spread over the forecast horizon. Growth in 2027 is expected to remain solid, supported by tax incentives, including those for corporate investment under the One, Big, Beautiful Bill Act (OBBBA), while technology-driven momentum is projected to moderate and productivity growth is expected to gradually converge toward historical norms.

Growth in emerging market and developing economies is projected to slow to 3.9% in 2026 before recovering to 4.2% in 2027 and 2028, while the Middle East conflict is expected to have a greater impact on this group than on advanced economies, reducing 2026 growth by 0.3 percentage point relative to the pre-conflict forecast. In emerging and developing Asia, growth is expected to moderate from 5.5% in 2025 to 4.9% in 2026 and 4.8% in 2027 and 2028. Within the region, China's 2026 growth forecast has been revised upward to 4.4%, as lower effective U.S. tariffs and stimulus measures offset the impact of the conflict, although growth is projected to slow to 4.0% in 2027 as structural headwinds intensify. India's growth outlook has also improved, with growth revised upward to 7.6% in 2025 and projected to remain at 6.5% in 2026, 2027 and 2028, supported by strong carryover effects and lower additional U.S. tariffs on Indian goods. Meanwhile, several South and Southeast Asian economies are expected to face weaker domestic demand due to lower tourism and remittance inflows, while the Philippines has seen a sharp downward revision for 2026.

In the Middle East and Central Asia, growth is projected to decline from 3.6% in 2025 to 1.9% in 2026, before rebounding to 4.6% in 2027 and 4.0% in 2028, reflecting the region's direct exposure to the conflict. The downturn is expected to be most severe among affected commodity exporters, particularly Bahrain, Iran, Iraq, Kuwait, and Qatar, while the impact is expected to be less severe in other economies. Accordingly, Iran's economy is projected to contract by (-) 6.1% in 2026, before rebounding to 3.2% in 2027 and moderating to 1.5% in 2028. By contrast, Saudi Arabia's growth is projected at 3.1% in 2026, rising to 4.5% in 2027 before easing to 3.6% in 2028. In sub-Saharan Africa, growth is expected to remain broadly stable at 4.3% in 2026, 4.4% in 2027, and 4.5% in 2028, although oil-importing economies are likely to face greater pressure, while Nigeria and South Africa are expected to record moderate but gradually improving growth



profiles. In Latin America and the Caribbean, growth is projected at 2.3% in 2026, 2.7% in 2027, and 2.9% in 2028, with Brazil expected to benefit modestly in the near term from its position as a net energy exporter, while Mexico is projected to recover gradually to 1.6% in 2026, 2.2% in 2027, and 2.1% in 2028.

In emerging and developing Europe, the sharp slowdown in growth to 2.0% in 2025 is expected to reverse only marginally, with the region projected to expand at an average rate of 2.0% in 2026, 2.1% in 2027, and 2.3% in 2028. Within the region, Russia's 2026 growth forecast has been revised upward by 0.3 percentage point relative to January, to 1.1%, as higher commodity prices are expected to support activity. This momentum is projected to continue, with growth remaining at 1.1% in 2027 before moderating slightly to 1.0% in 2028. By contrast, Türkiye's 2026 growth forecast has been revised downward by 0.8 percentage point relative to the January 2026 WEO to 3.4%, as weaker-than-expected growth in 2025 and higher oil and gas prices are expected to weigh on activity.

Key factors impacting Global Macroeconomic landscape

- Geopolitics continues to constitute a major source of global macroeconomic and business risk. The Russia–Ukraine war remains a persistent driver of instability, as Russia has intensified large-scale missile and drone attacks on Ukrainian cities and infrastructure, while Ukraine has stepped up strikes on Russian ports, refineries, and export infrastructure, reportedly contributing to a reduction in Russian oil output in April. The Israel–Iran–U.S. confrontation has emerged as the most significant near-term external shock to the global economy, with the IMF warning that disruptions to the Strait of Hormuz and regional energy infrastructure could materially weaken global growth and raise inflation; under its April 2026 reference forecast, global growth has been lowered to 3.1% and inflation raised to 4.4%, with materially worse outcomes under prolonged disruption scenarios. In parallel, the Pakistan–Afghanistan border conflict remains a significant regional flashpoint, although China-mediated talks are seeking to secure a ceasefire and reopen border crossings after months of cross-border attacks and trade disruption. At the same time, U.S. strategic activism continues to influence regional risk perceptions: Washington has removed sanctions on Venezuela's interim leadership and deepened engagement with Caracas, tensions over Greenland have re-emerged amid renewed U.S. rhetoric and ongoing diplomatic discussions with Denmark and Greenland, and U.S.–Nigeria security cooperation has continued to deepen in response to regional instability and counterterrorism concerns. In addition, resource nationalism and strategic competition over rare earths and other critical minerals have become increasingly operational concerns rather than distant strategic risks. The IEA's April 2026 assessment notes that demand for magnet rare earths has doubled since 2015 and is projected to increase by more than 30% by 2030, while supply chains remain highly concentrated, with China accounting for around 60% of mined output, more than 90% of refining, and nearly 95% of permanent magnet production, thereby heightening global exposure to export controls, supply concentration, and industrial policy interventions
- The period of relatively frictionless trade supported by multilateral liberalisation and free trade agreements is increasingly giving way to regionalisation, nearshoring, friend-shoring, and

diversification of production networks. Rising tariffs, policy uncertainty, and strategic realignment are creating a more fragmented trade environment and raising the premium on resilience over pure efficiency

- Technology adoption and sustainability have become core strategic priorities. Organizations are advancing digital transformation by embedding AI, automation, and cybersecurity into their operations to enhance productivity and safeguard critical assets. AI adoption is emerging as a visible driver of optimism, particularly within the information and communications sectors. Growth in cloud computing, streaming, IoT, and AI and Advancements in hardware and cooling technologies aim to reduce energy consumption and improve performance is driving the need for more powerful and scalable data centres.

India Macroeconomic Analysis

India's economic growth outlook for 2025 has been revised upward by 1.0 percentage point from the October estimate to 7.6%, supported by stronger-than-expected performance in the second and third quarters of the fiscal year and sustained momentum in the fourth quarter. For 2026, the growth projection has been moderately increased by 0.3 percentage point (including a 0.1 percentage point upward revision from January) to 6.5%, primarily driven by the carryover effect of the strong 2025 performance and the reduction in additional U.S. tariffs on Indian goods from 50% to 10%, which more than offsets the adverse impact of the Middle East conflict. Growth is expected to remain steady at 6.5% in 2027. Across several South and Southeast Asian economies, disruptions linked to the Middle East conflict are anticipated to reduce tourism activity and remittance inflows, thereby weakening domestic demand and moderating overall economic performance.

Country	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025	CY 2026 P	CY 2027 P	CY 2028P
India ¹	-5.8%	9.7%	7.6%	9.2%	6.5%	7.6%	6.5%	6.5%	6.5%
China	2.3%	8.6%	3.1%	5.4%	5.0%	5.0%	4.4%	4.0%	4.0%
United States	-2.2%	6.1%	2.5%	2.9%	2.8%	2.1%	2.3%	2.1%	2.1%
Japan	-4.2%	2.7%	0.9%	1.4%	-0.2%	1.2%	0.7%	0.6%	0.6%
United Kingdom	-10.3%	8.6%	4.8%	0.4%	1.1%	1.3%	0.8%	1.3%	1.6%
Russia	-2.7%	5.9%	-1.4%	4.1%	4.3%	1.0%	1.1%	1.1%	1.0%
Germany	-4.1%	3.9%	1.8%	-0.9%	-0.5%	0.2%	0.8%	1.2%	1.2%

Source: World Economic Outlook, April 2026

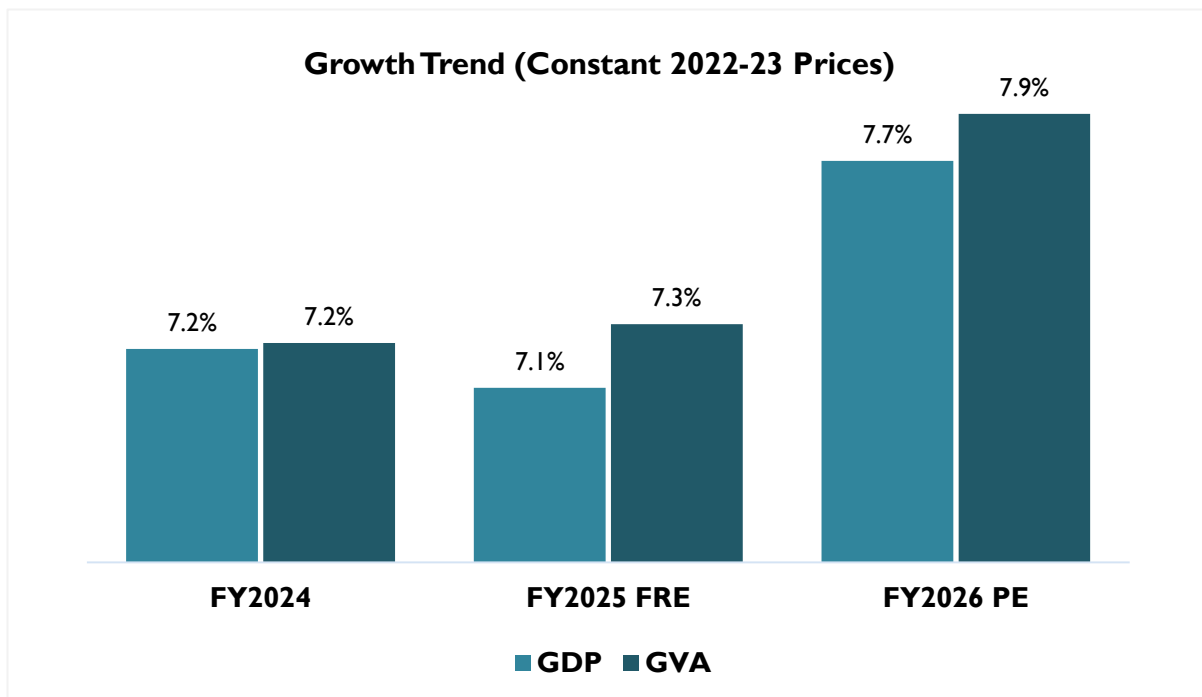
Historical GDP and GVA Growth Trend

As per Provisional Estimates, India Real GDP (GDP at constant prices) for FY 2025–26 is estimated to reach INR 323.12 lakh crore, compared to the First Revised Estimate (FRE) of INR 299.89 lakh crore for FY 2024–25. This represents a growth rate of 7.7% in 2025–26, higher than the 7.1% growth recorded in 2024–25.

Similarly, Real GVA for FY 2025–26 is estimated to reach INR 294.91 lakh crore, up from INR 273.36 lakh crore in FY 2024–25. This indicates a growth rate of 7.9%, compared with the 7.3% growth achieved in the previous year.

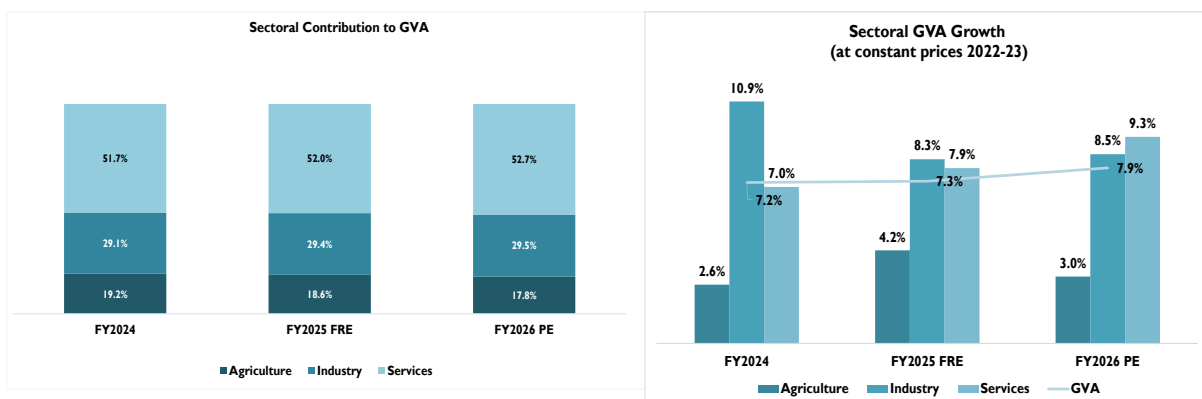
¹ For India, data and forecasts are presented on a fiscal year basis, and GDP from 2022 onward is based on GDP at market prices with fiscal year 2022/23 as a base year





Source: Ministry of Statistics & Programme Implementation (MOSPI), National Account Statistics: FY2025, FRE is First Revised Estimate; PE is Provisional Estimates

Sectoral Contribution to GVA and Annual Growth Trend



Source: Ministry of Statistics & Programme Implementation (MOSPI), CMIE Economics Outlook
FRE is First Revised Estimate; PE is Provisional Estimates²

Sectoral analysis of GVA reveals that the industrial sector experienced steady growth momentum in FY 2026, recording a 7.9% y-o-y growth against 7.3% year-on-year growth in FY 2025. Within the industrial sector, growth moderated across sub-sectors with mining, and construction activities growing by 5.15%, and 7.36%, respectively in FY 2026, compared to 11.69%, and 7.30% in FY 2025. Growth in the utilities sector too moderated to 1.74% in FY 2026 from 2.87% in the previous year. The industrial sector's contribution to GVA increased marginally from 29.4% in FY 2025 to 29.5% in FY 2026.

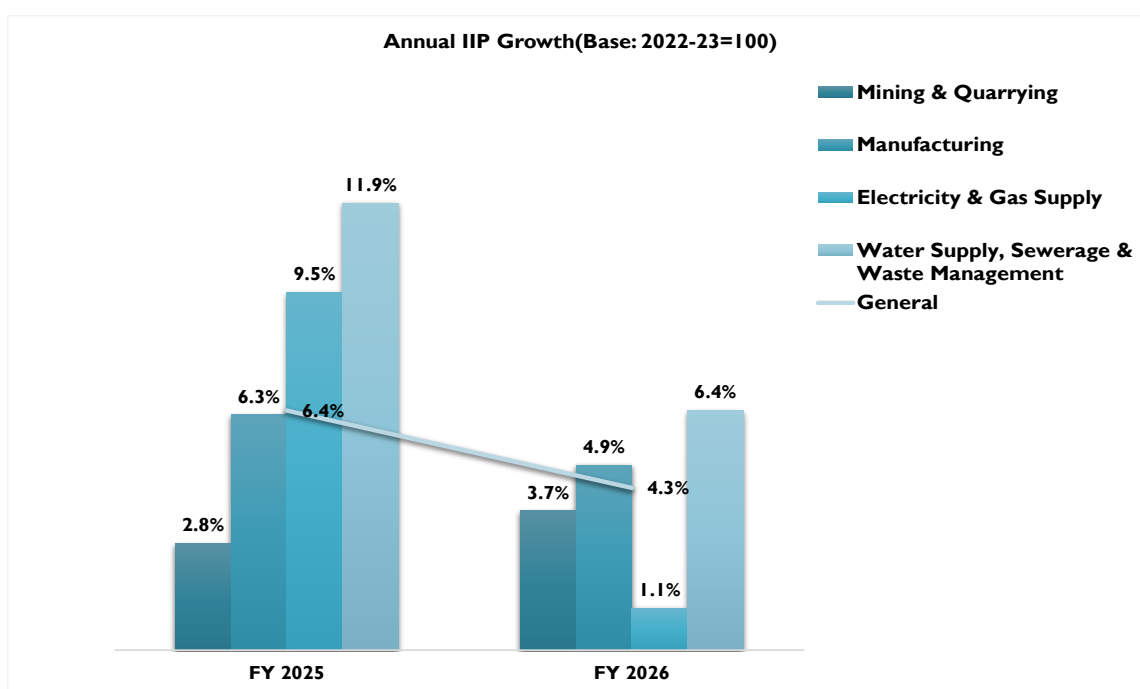
² https://www.mospi.gov.in/uploads/latestReleases/latest_release_1780655857536_5ac01869-ca4a-422d-b7a7-57b81da60932_Press_Note_on_GDP_Estimates_for_Q4_2025-26_and_PE_FY_2025-26_F.pdf

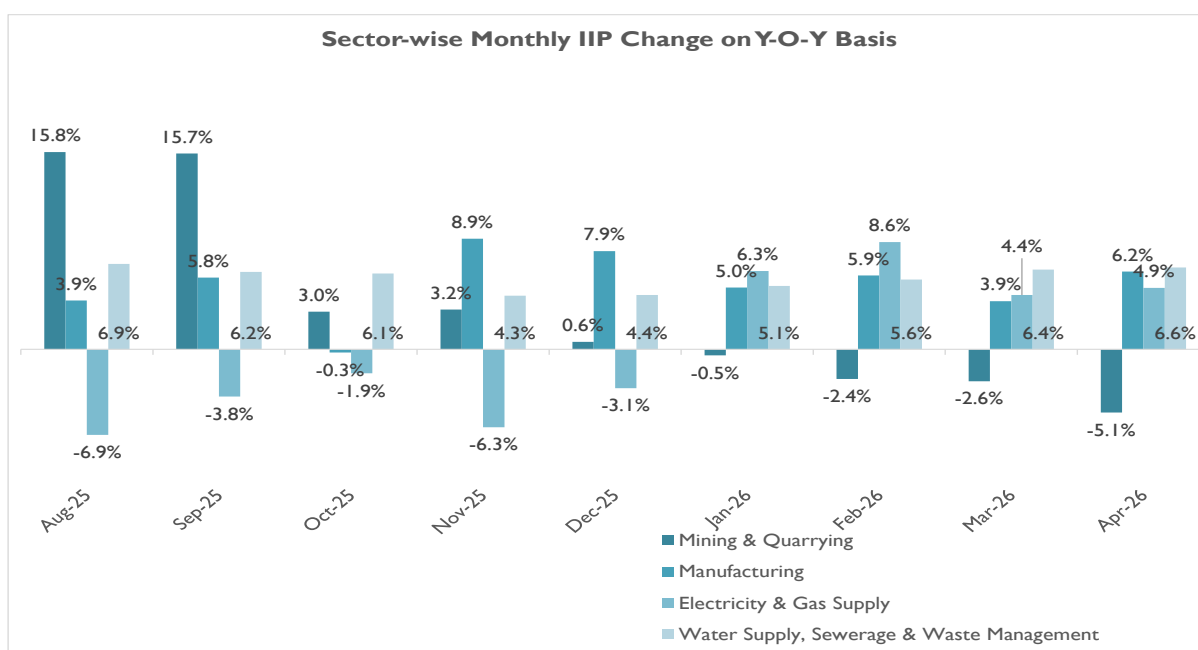
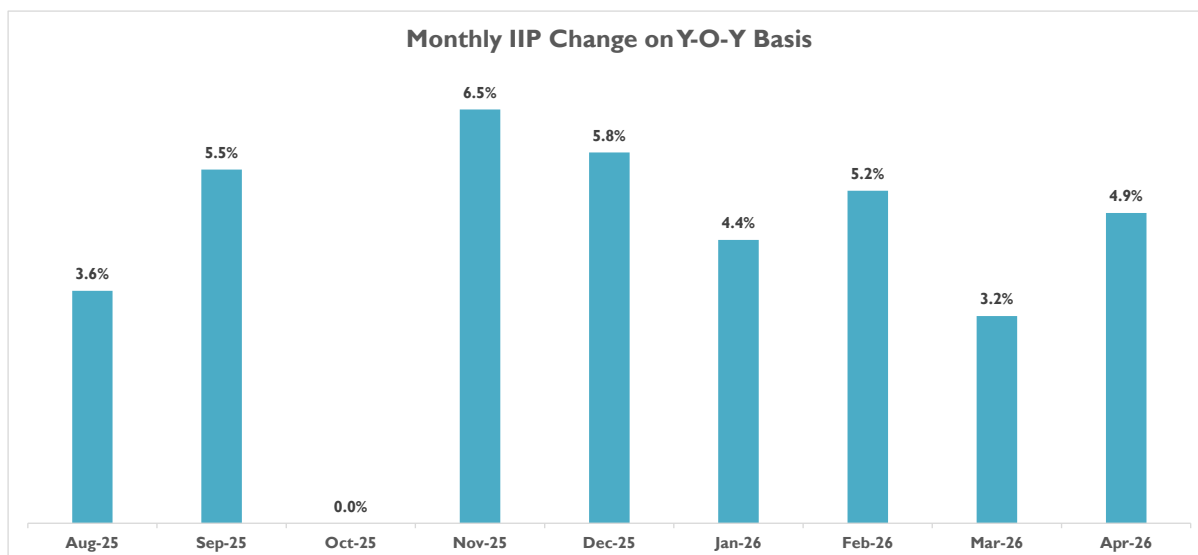
The services sector continued to be the main driver of economic growth. It expanded by 9.3% in FY 2026 from 7.9% in FY 2025. The services sector retained its position as the largest contributor to GVA, rising from 51.7% in FY 2024 to 52.0% in FY 2025, with a further increase to 52.7% in FY 2026.

The agriculture sector saw an acceleration in growth, increasing from 2.66% in FY 2024 to 4.18% in FY 2025, before moderating to 3.0% in FY 2026. However, its contribution to GVA declined marginally from 19.2% in FY 2024 to 17.8% in FY 2026. Overall, Gross Value Added (GVA) growth rose to 7.9% in FY 2026 from 7.3% in FY 2025.

Annual & Monthly IIP Growth

Industrial sector performance as measured by the IIP index exhibited moderation in FY 2026, recording a 4.3% y-o-y growth against 6.4% increase in the previous year. The manufacturing index showed moderation, increasing by 4.9% in FY 2026 compared with 6.3% in FY 2025. The Electricity & Gas Supply sector index also moderated, growing 1.1% in FY 2026 compared with 9.5% in the previous year. Water Supply, Sewerage & Waste Management also moderated by 6.4% in FY 2026 compared with 11.9% in the previous year, while the mining sector index grows by 3.7% in FY 2026 compared with 2.8% in the previous year.



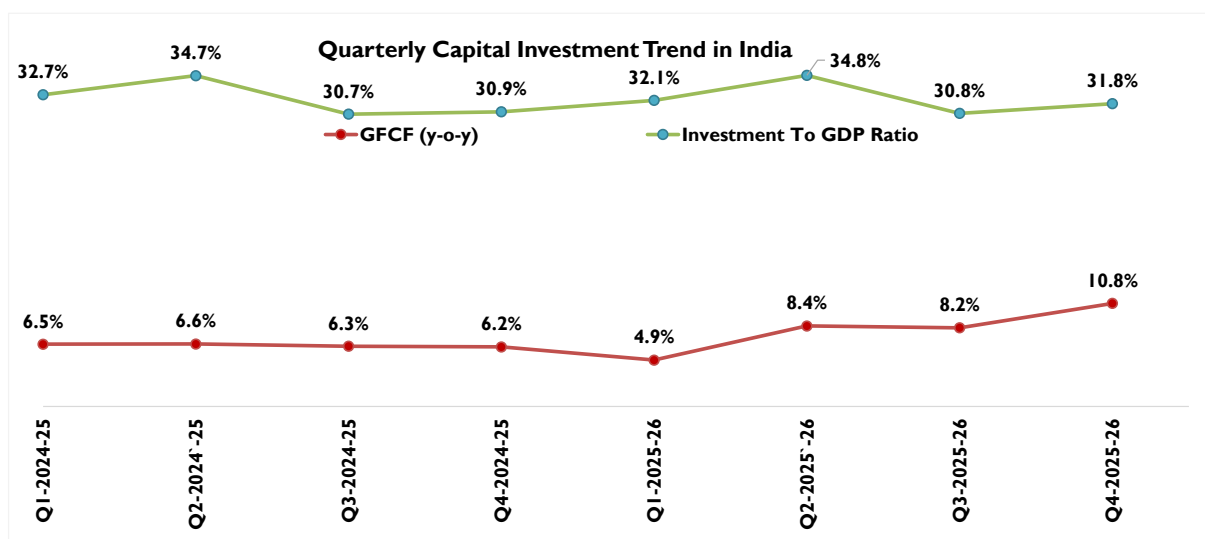
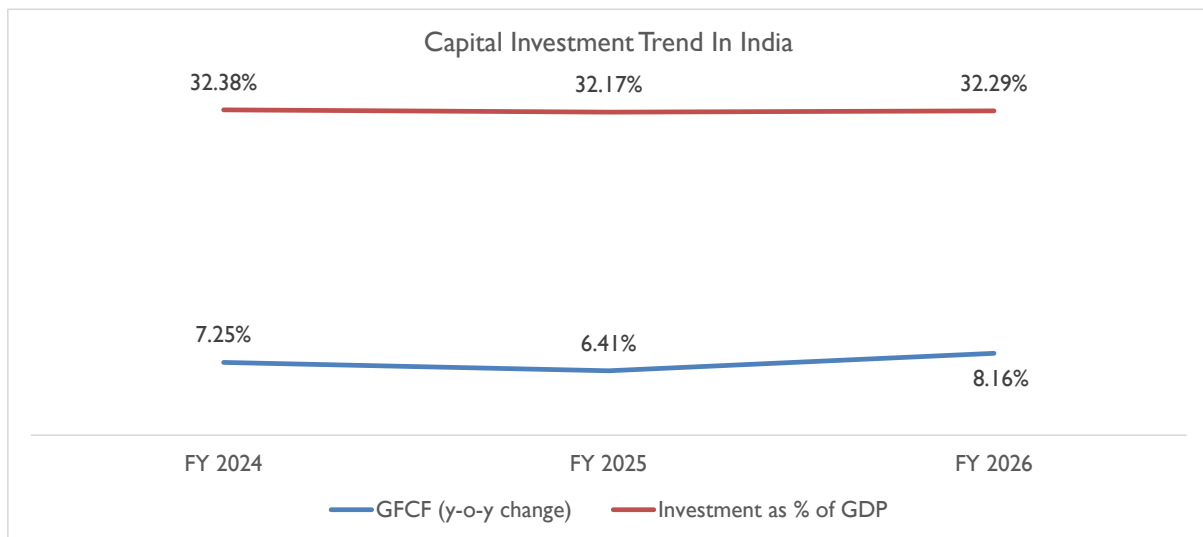


Source: Ministry of Statistics & Programme Implementation (MOSPI)

The IIP growth rate for the month of April 2026 is 4.9 percent as compared to April 2025. The growth rates of the Four sectors, Mining & Quarrying, Manufacturing, Electricity & Gas Supply and Water Supply, Sewerage & Waste Management for the month of April 2026 are (-)5.1 percent, 6.2 percent, 4.9 percent and 6.6 percent respectively

Annual and Quarterly: Investment & Consumption Scenario

Other major indicators, such as Gross Fixed Capital Formation (GFCF), a measure of investment, increased during FY 2026, registering 8.16% year-on-year growth compared with 6.41% in FY 2025, bringing the GFCF-to-GDP ratio to 32.29%.



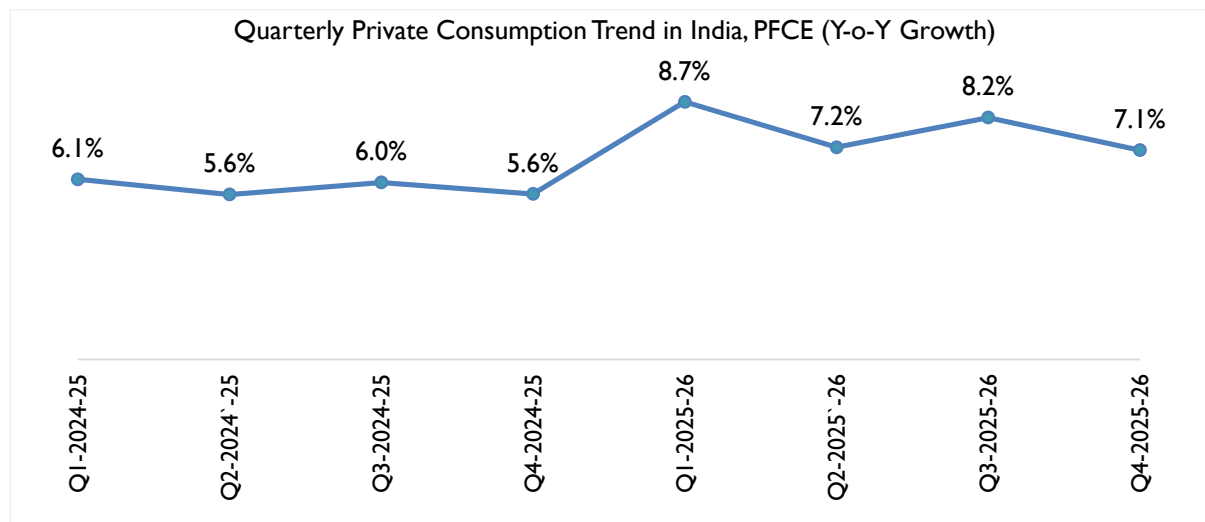
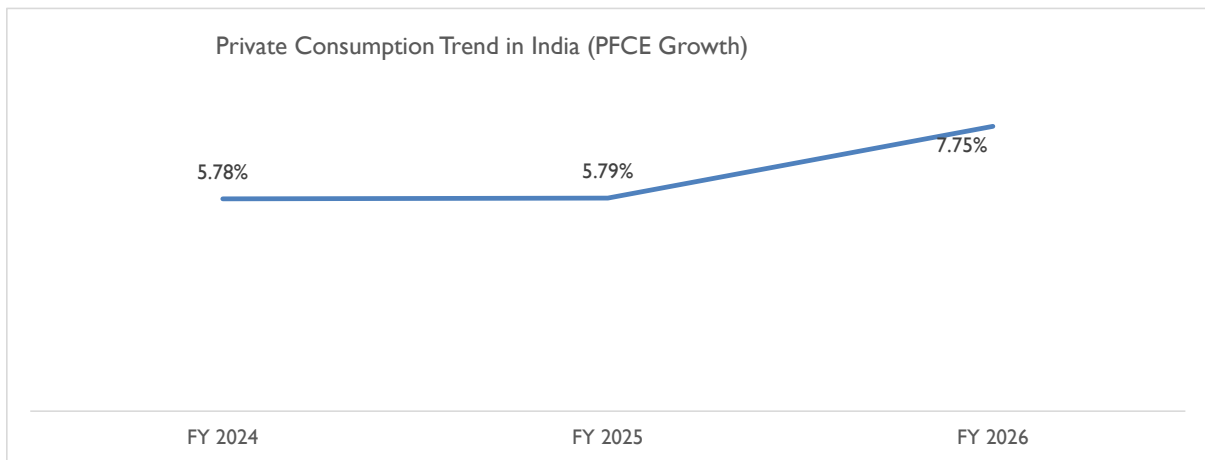
Source: Ministry of Statistics & Programme Implementation (MOSPI), CMIE Economics Outlook

On a quarterly basis, India's capital investment indicators reflect a healthy and improving investment environment, supported by sustained investment intensity and stronger capital formation in recent quarters. The Investment to GDP ratio remained consistently above 30% throughout the period, highlighting continued resilience in capital deployment. The ratio increased from 32.7% in Q1 FY 2024-25 to 34.7% in Q2, before moderating to 30.7% in Q3 and 30.9% in Q4. In FY 2025-26, the ratio improved again to 32.1% in Q1 and further strengthened to 34.8% in Q2, the highest level during the period, before remaining healthy at 30.8% in Q3 and 31.8% in Q4. This indicates that investment activity continued to remain robust despite normal quarterly variations.

GFCF (y-o-y) growth also points toward a positive investment trend, particularly in FY 2025-26. After remaining broadly stable during FY 2024-25, with growth ranging between 6.2% and 6.6%, GFCF growth accelerated meaningfully from 4.9% in Q1 FY 2025-26 to 8.4% in Q2 and 8.2% in Q3, before rising further to 10.8% in Q4. This strong improvement in the second half of FY 2025-26 suggests strengthening fixed capital formation and a revival in investment momentum. Overall, the data indicates that India's capital investment landscape remains on a positive trajectory, with sustained investment levels and improving GFCF growth

reflecting stronger capital spending, better investment confidence, and continued support for economic growth.

Private Consumption Scenario



Sources: MOSPI, CMIE Economics Outlook

Private Final Consumption Expenditure (PFCE), a practical proxy for household spending, recorded growth in FY 2026 relative to FY 2025. PFCE recorded healthy growth in FY 2025-26 relative to FY 2024-25. However, quarterly PFCE growth moderated sequentially to 7.1% in Q4 FY 2025-26 from 8.2% in Q3 FY 2025-26

Inflation Scenario

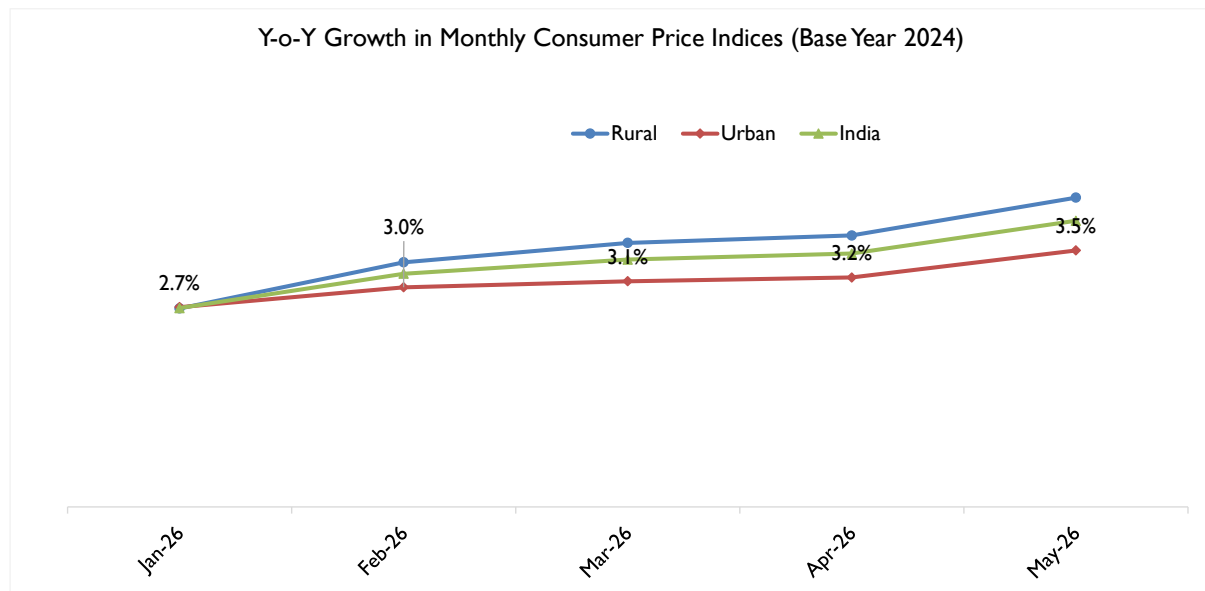
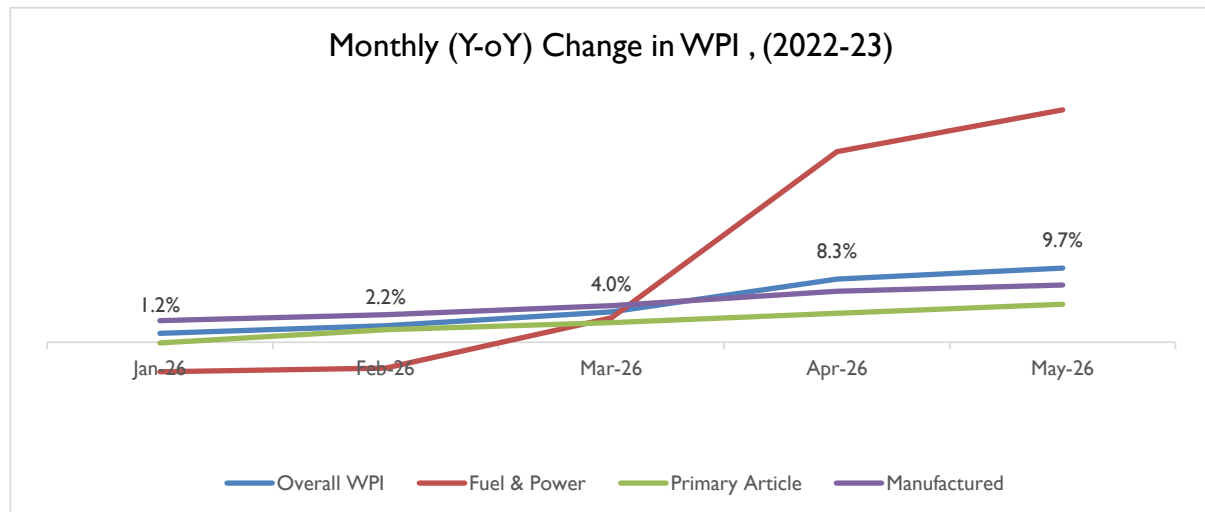
The annual rate of inflation based on All India Wholesale Price Index (WPI) number is 3.88% (provisional) for the month of March 2026 (over March 2025). Positive rate of inflation in March 2026 is primarily due to increase in prices of crude petroleum & natural gas, other manufacturing, non-food articles, manufacture of basic metals and food articles etc.

All India Wholesale Price Index (WPI) inflation for May 2026 is 9.68 per cent on year-on-year (YoY) basis, compared to 8.26 per cent in April 2026. The index for All Commodities for May 2026 stands at 109.9, whereas it was 108.8 in April 2026. Across Groups, 'Mineral Oils (containing Petroleum Products)', 'Crude



Petroleum and Natural Gas', 'Manufacture of Chemicals and Chemical Products', and 'Manufacture of Basic Metals', have been major drivers of WPI inflation in April and May 2026.

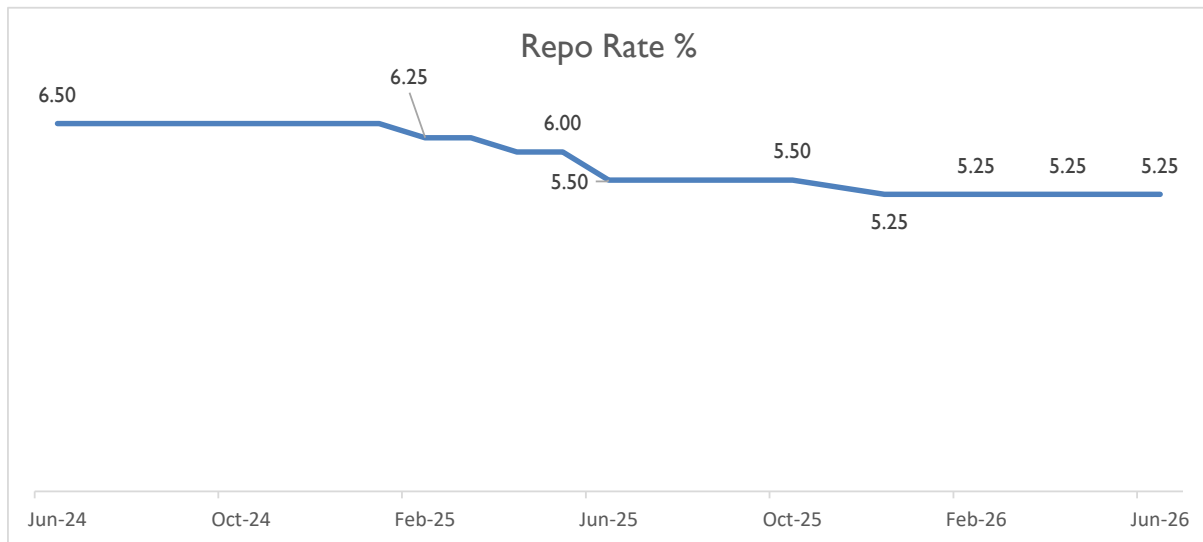
Across Major Groups, YoY inflation for Primary Articles, Fuel and Power, and Manufactured Products is 4.99 per cent, 30.33 per cent, and 7.48 per cent, respectively in May 2026, whereas it was 3.78 per cent, 24.89 per cent, and 6.68 per cent, respectively, in April 2026. The indices for Primary Articles, Fuel and Power, and Manufactured Products are 113.7, 113, and 107.8, respectively, in May 2026, whereas they were 112.6, 110.9, and 107, respectively, in April 2026.



Source: MOSPI, Office of Economic Advisor

With effect from January 2026, the National Statistics Office (NSO) introduced a revised CPI series with base year 2024=100, drawing revised item weights from the Household Consumption Expenditure Survey (HCES) 2023-24. Year-on-year inflation rate based on All India Consumer Price Index (CPI) with base year 2024 for the month of May, 2026 over May, 2025 is 3.93%(Provisional). Corresponding inflation rates for rural and

urban are 4.25% and 3.53%, respectively. On the monetary policy front, the RBI had cumulatively raised the repo rate by 250 basis points between May 2022 and February 2023, bringing it to 6.50%, where it was held steady through January 2025 to anchor inflationary expectations. With inflation moderating below target and growth requiring support, the RBI's Monetary Policy Committee (MPC) commenced an easing cycle in February 2025, delivering a cumulative 125 basis points of rate cuts through four reductions — 25 bps each in February 2025, April 2025, and December 2025, and a larger 50 bps cut in June 2025 — interspersed with pauses in August and October 2025. The repo rate currently stands at 5.25%, in June 2026.



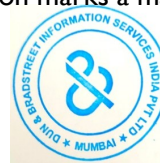
Sources: CMIE Economic Outlook

Growth Outlook

The Union Budget 2026–27 sets out a quantitatively strong push to build resilient supply chains and develop next-generation industrial capacity. The record ₹12.2 trillion capital expenditure outlay is aimed at easing logistics bottlenecks and enhancing India's cost competitiveness. Employment measures extend across both urban and rural India in one sweep. In cities and large towns, capex is channelled into “connectors” such as the seven proposed high-speed rail corridors and upgraded Tier-2 and Tier-3 infrastructure, thereby creating construction, logistics, and service jobs while cutting commute times. In smaller towns and villages, job creation is expected to be supported by mega textile parks, the Mahatma Gandhi Gram Swaraj Initiative's push for khadi and handloom, training for tourist guides, and new waterways and coastal shipping. Together, these steps broaden the wage base instead of providing a short-term bump.

This domestic push is complemented by targeted measures to strengthen strategic supply chains. Dedicated rare earth corridors in Odisha, Kerala, Andhra Pradesh, and Tamil Nadu; customs exemptions for capital goods used in critical mineral processing and battery cells; and the India Semiconductor Mission 2.0 aim to pull manufacturing deeper into components and materials. If executed well, these measures could reduce import dependence in magnets, batteries, and chip inputs and lift the share of higher-productivity manufacturing jobs — thereby raising household incomes durably.

Alongside these domestic measures, India is also seeking to strengthen its external trade architecture through major trade agreements. The conclusion of the India–EU FTA negotiation marks a major strategic milestone,



as it offers near-universal market access for 99.5% of India's exports by value and integrates India more deeply into a USD 24 trillion economic bloc. By providing duty-free entry for key labour-intensive sectors, expanding services access, and establishing a mobility framework for Indian professionals, the deal is expected to improve market access, support export competitiveness and high-value job creation. It is likely to promote a predictable, rules-based environment for long-term trade and investment flows.

In a similar vein, India–Oman Comprehensive Economic Partnership Agreement (CEPA)³ has been framed as a comprehensive arrangement covering trade in goods and services, investment, professional mobility, and regulatory cooperation, with the objective of strengthening bilateral economic integration between India and Oman. Bilateral trade between the two countries stood at USD 10.61 billion in FY 2024–25, providing the economic basis for the agreement. Under the CEPA, India has secured 100% duty-free market access in Oman across 98.08% of tariff lines, covering 99.38% of India's export value, thereby improving export competitiveness across sectors such as engineering goods, pharmaceuticals, agriculture and processed food, electronics, textiles, plastics, and gems and jewellery. At the same time, India has adopted a calibrated liberalisation approach by offering tariff concessions on 77.79% of its tariff lines, covering 94.81% of imports from Oman by value, while retaining safeguards for sensitive domestic sectors. The agreement also provides gains in services, with Oman undertaking commitments across 127 services sub-sectors, alongside improved provisions for professional mobility, including an increase in the Intra-Corporate Transferee ceiling from 20% to 50% and commitments for a defined category of Indian professionals. Overall, the CEPA is presented as a framework intended to support trade expansion, improve market access, and strengthen long-term economic cooperation between India and Oman.

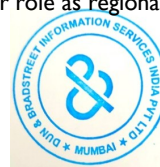
However, these gains remain exposed to external geopolitical risks. The escalation of the Middle East crisis represents an external shock for India, transmitted primarily through energy markets, logistics, and trade-linked business exposure. The Gulf–Levant 11⁴ (GL 11) economies account for around 15% of India's merchandise exports and 21% of its imports, with trade concentrated in high-value categories such as mineral fuels, precious metals, and electronics; disruptions in this region therefore have an outsized impact despite its modest share of global GDP.

Export exposure is unevenly distributed across India, with risks concentrated in specific districts that serve as production hubs. Discretionary exporters, such as gems and jewellery firms in the districts of Surat, Jaipur, and Mumbai; apparel manufacturers in Tiruppur; automotive producers in Ahmedabad; and electronics assemblers in Kanchipuram and Kolar, are vulnerable to demand slowdown and order deferrals in Gulf markets.

³ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2213203®=3&lang=1>

The Comprehensive Economic Partnership Agreement (CEPA) between India and Oman marks a meaningful step forward in the economic relationship between the two countries. The agreement brings together trade in goods and services, investment, professional mobility, and regulatory cooperation under a single, coherent framework aimed at deepening bilateral economic integration.

⁴ For the purposes of this report, the analysis is confined to a defined group of countries referred to as the Gulf–Levant 11 (GL-11). This group comprises Bahrain, Iran, Iraq, Israel Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. These economies are treated collectively because they are either directly involved in, or immediately exposed to, the current crisis through geographic proximity, security linkages, energy production and transit, or their role as regional trade and financial hubs



At the same time, Perishable agricultural exporters, including grapes from Nashik, bananas from Solapur, and bovine meat from Ghaziabad, face acute risks from shipping delays and logistics disruptions. Dun & Bradstreet data show that over 4,500 Indian exporters and around 1,800 importers relied on the Strait of Hormuz trade route in 2025, exposing them to working capital stress, payment delays, and production interruptions, while, for import-dependent industries, delays in critical inputs raise the risk of temporary shutdowns and sustained energy price volatility amplifies margin pressure across manufacturing and services.

Key Growth/Demographic Drivers for Economic Growth

Government focus on infrastructure development

The infrastructure sector has received a strong boost in Budget FY'27, marked by a record INR 12.2 trn⁵ public capital expenditure allocation, reinforcing the government's focus on making assets more efficient and sustainable. The introduction of the landmark Infrastructure Risk Guarantee Fund aims to provide partial credit guarantees to lenders and revitalise private sector participation in large-scale projects. By lowering project risk premiums and easing borrowing costs, this mechanism is likely to help crowd in private capital and accelerate construction phase financing across the sector. The transport and logistics sector, in particular, will buoy infrastructure growth. Railways have received a substantial boost in allocation, which will help support the planned development of seven new high-speed rail corridors and a Dankuni-Surat DFC⁶, which aims to cut logistics costs and improve national connectivity. Moreover, the rollout of 20 new National Waterways, new ship repair hubs and a scheme to double the share of coastal and inland water transport from 6.0% to 12.0% by 2047⁷ will together build a greener, more efficient multimodal freight network. Urban transformation continues through targeted development of Tier-2 and Tier-3 cities – with populations over 0.5mn – alongside the creation of City Economic Regions, each supported by multi-year, challenge-based financing to establish new growth hubs and reduce pressure on metros. A broader ecosystem of reforms strengthens medium-term sector prospects. The government aims to scale domestic construction and infrastructure equipment manufacturing, reducing import dependence and improving execution capability in tunnelling, metro construction and road building machinery. The monetisation of CPSE assets will be accelerated through dedicated REIT⁸ structures, helping unlock liquidity for redevelopment and new project pipelines. Additional support flows through region-specific initiatives, such as industrial corridor expansion, and tourism development in cultural and Buddhist heritage zones will further reinforce construction demand. Together, these measures will strengthen India's infrastructure ecosystem through higher public investment, improved risk mitigation tools and wider multimodal connectivity – creating a constructive environment for sustained growth in construction, logistics and urban development.

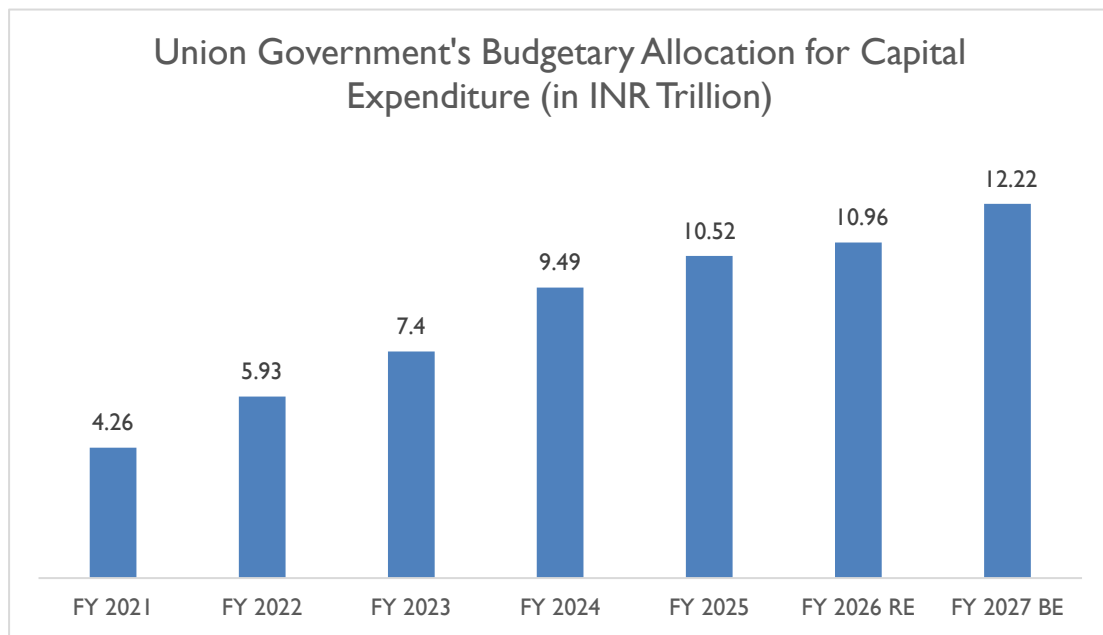
⁵<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2222521®=3&lang=1#:~:text=Reinforcing%20the%20role%20of%20public,productive%20capacity%20across%20the%20economy.>

⁶ <https://prsindia.org/budgets/parliament/demand-for-grants-2026-27-analysis-railways>

⁷ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2221817®=3&lang=1>

⁸ https://www.hindustantimes.com/real-estate/budget-2026-eyes-dedicated-reits-for-cpse-asset-monetisation-what-it-means-for-investors-101769942312710.html#google_vignette





Union Budget, Government of India

Note: BE (Budget Estimates) and RE (Revised Estimates)

Development of Domestic Manufacturing Capability

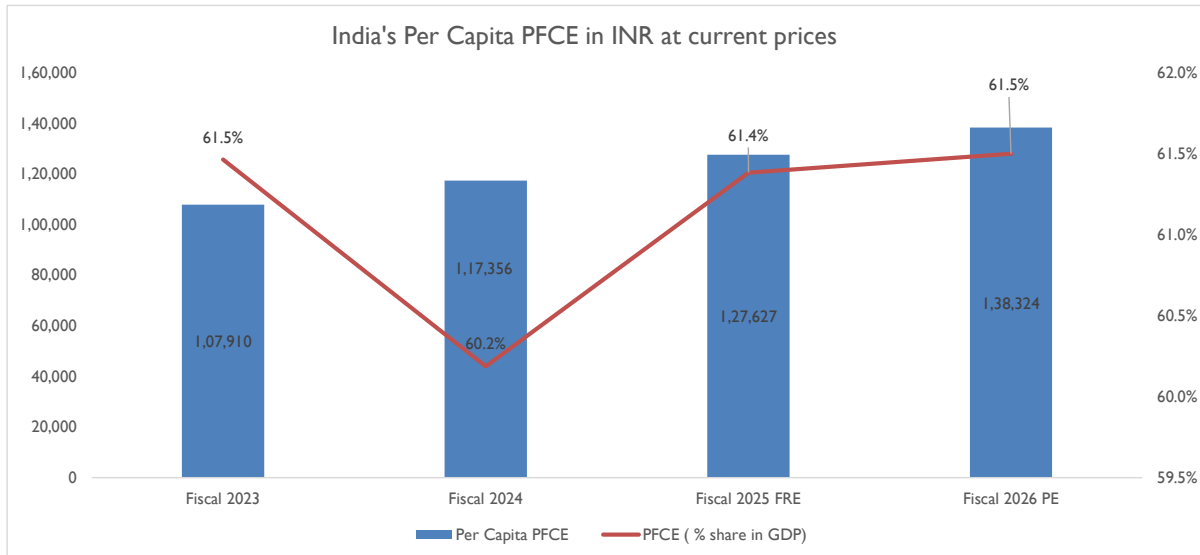
The Government launched the Production Linked Incentive (PLI) scheme in early 2020, initially aimed at improving domestic manufacturing capability in large-scale electronic manufacturing and gradually extended to other sectors. At present it covers 14 sectors, ranging from medical devices to solar PV modules. The PLI scheme provides incentives to companies on incremental sales of products manufactured in India. This incentive structure is aimed at attracting private investment into setting up manufacturing units and thereby strengthening domestic production capabilities. The overall incentive outlay earmarked for the PLI scheme is estimated to be INR 2 trillion. If fully realised, the PLI scheme could add nearly 4% to annual GDP growth, by way of incremental revenue generated from the newly formed manufacturing units.

Strong Domestic Demand

Domestic demand has traditionally been one of the key drivers of the Indian economy. After a brief lull caused by the Covid-19, domestic demand is recovering. Consumer Confidence surveys by the Reserve Bank and other institutions point to an improvement in the Consumer Confidence Index, which is a precursor of improving demand. India has a strong middle-class segment, which has been the major driver of domestic demand. Factors like fast paced urbanization and improving income scenario in rural markets are expected to accelerate domestic demand further. This revival is reflecting in the private final consumption expenditure (PFCE) metric.

India's per capita Private Final Consumption Expenditure (PFCE) at current prices has shown a consistent upward trend, indicating steady improvement in household consumption levels over the years. Per capita PFCE increased from INR 1,07,910 in Fiscal 2023 to INR 1,17,356 in Fiscal 2024, and further rose to INR 1,27,627 in Fiscal 2025 FRE. It is estimated to increase further to INR 1,38,324 in Fiscal 2026 FE, reflecting continued growth in consumer spending and improving consumption capacity.

PFCE as a share of GDP also remained healthy during the period, broadly staying above 60%. The share stood at 61.5% in Fiscal 2023, moderated to 60.2% in Fiscal 2024, before recovering to 61.4% in Fiscal 2025 FRE and further improving to 61.5% in Fiscal 2026 PE. This indicates that private consumption continues to remain a key driver of India's economic growth. Overall, the steady increase in per capita PFCE, along with a stable PFCE share in GDP, reflects resilient household demand and sustained consumption momentum in the economy.



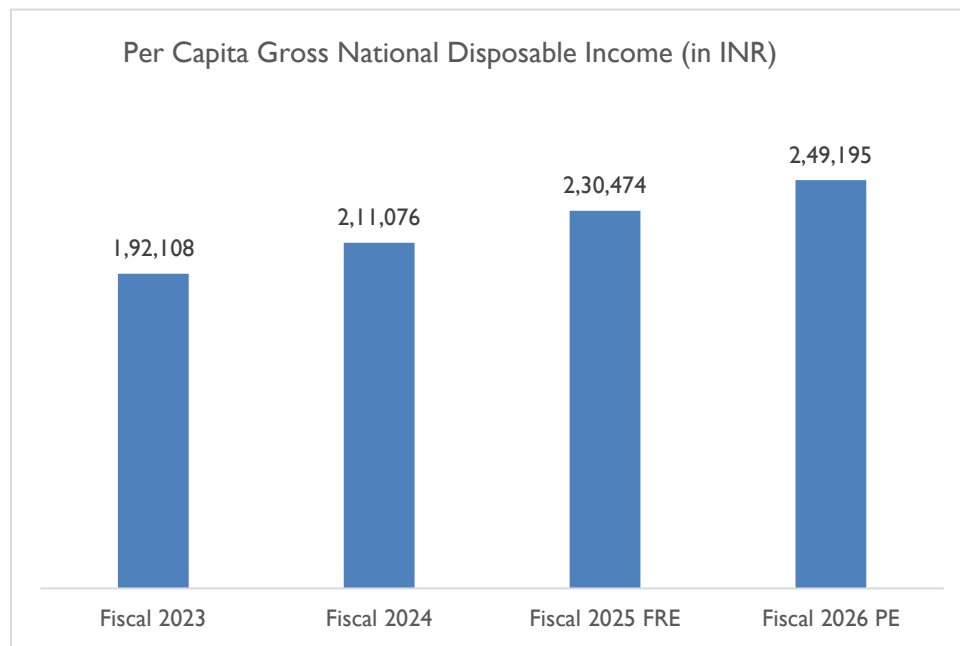
Source: Ministry of Statistics & Programme Implementation (MOSPI)

FRE is First Revised Estimate; PE is Provisional Estimates

There are two factors driving this domestic demand: first, the large pool of consumers; and second, the improvement in purchasing power.

- The share of middle class increased from nearly 14% in 2005 to nearly 30% in 2021 and is expected to cross 60% by 2047⁹. This expanding middle class household segment is fuelling India's growth story and would continue to play a key role in propelling India's economic growth.
- Consumer-driven domestic demand is majorly fuelled by this growth in per capita income. As per National Statistics Office (NSO), India's per capita Gross National Disposable Income (GNDI) has shown a steady upward trend, reflecting improvement in overall income levels and disposable income capacity. Per capita GNDI increased from INR 1,92,108 in Fiscal 2023 to INR 2,11,076 in Fiscal 2024 and further rose to INR 2,30,474 in Fiscal 2025 FRE. It is estimated to increase further to INR 2,49,195 in Fiscal 2026 PE, indicating continued growth in income levels across the economy. The consistent rise in per capita GNDI highlights strengthening purchasing power and improving household income conditions, which can support consumption demand going forward. Overall, the trend reflects a positive income environment, with rising disposable income expected to contribute to sustained private consumption and broader economic growth.

⁹ As per the survey conducted by People Research on India's Consumer Economy. Households with annual income in the range of INR 5 – 30 lakh are considered as middle-class households.



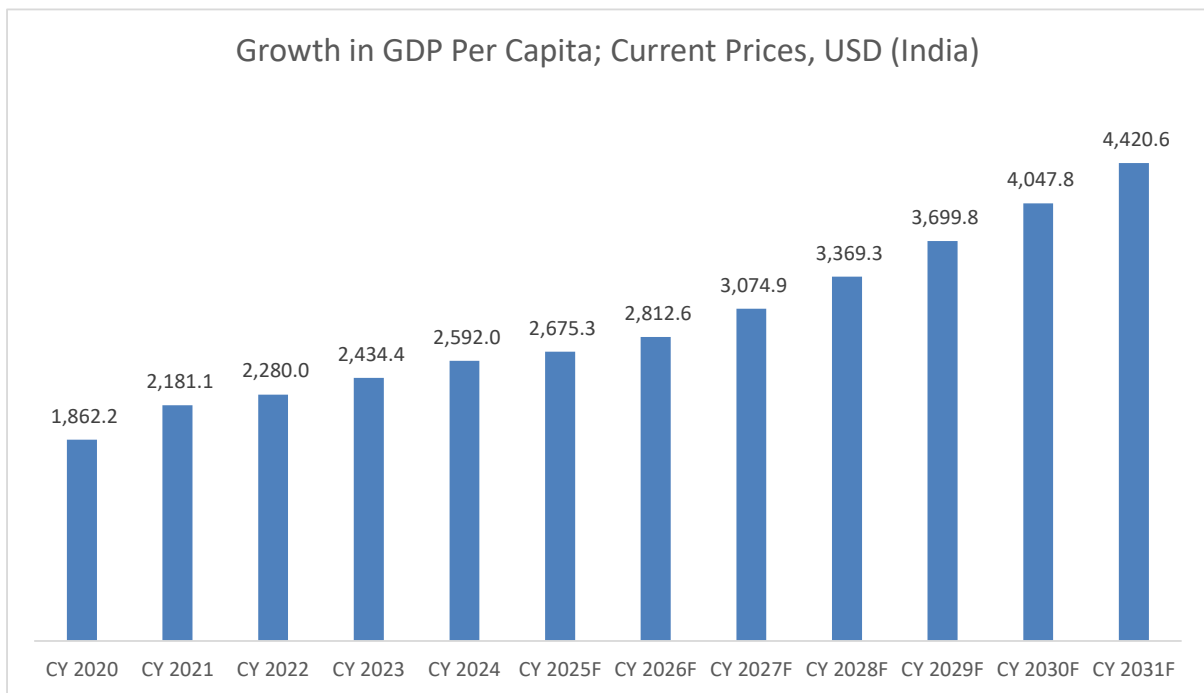
Source: Ministry of Statistics & Programme Implementation (MOSPI)

FRE is First Revised Estimate; PE is Provisional Estimates

India's Per Capita GDP Trends

India is poised to become the world's third-largest economy with a projected GDP of USD 5 trillion within the next three years, driven by ongoing reforms. As one of the fastest-growing major economies, India currently holds the position of the fifth-largest economy globally, following the US, China, Japan, and Germany. By 2027-28, it is anticipated that India will surpass both Germany and Japan, reaching the third-largest spot. This growth is bolstered by a surge in foreign investments and a wave of new trade agreements with India's burgeoning market of 1.4 billion people. The aviation industry is witnessing unprecedented orders, global electronics manufacturers are expanding their production capabilities, and suppliers traditionally concentrated in southern China's manufacturing hubs are now shifting towards India.

To achieve its vision of becoming the world's third-largest economy by 2027-28, India will need to implement transformative industrial and governmental policies. These policies will be crucial for sustaining the consistent growth of the nation's per capita GDP over the long term.

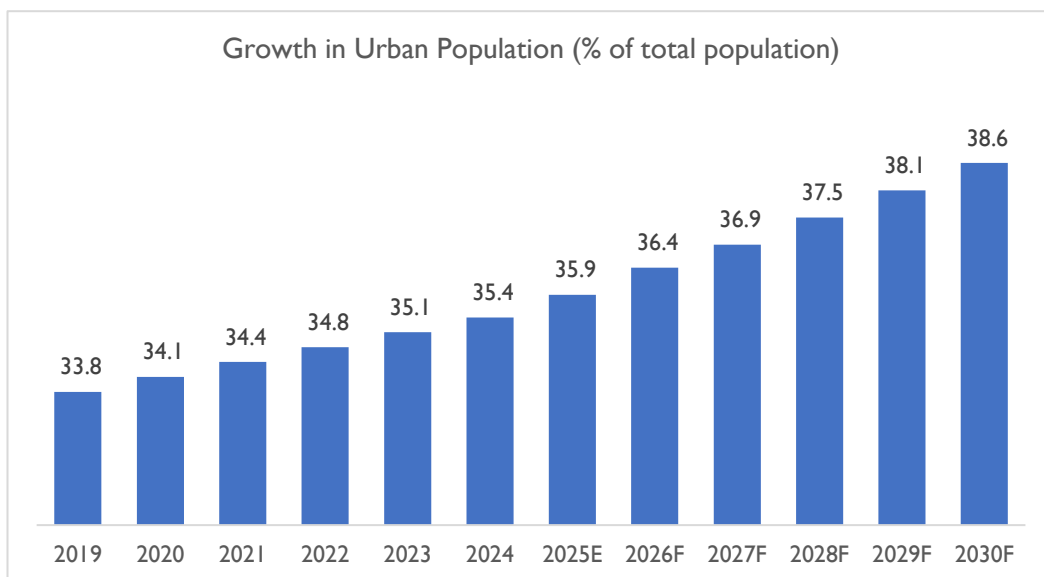


Source: IMF

From CY 2024 to CY 2031, India's per capita GDP is projected to grow at a compound annual growth rate of 7.9%. This growth will be driven by the service sector, which now accounts for over 50% of India's GDP, marking a significant shift from agriculture to services.

Increasing Urbanization

As per the Handbook of Urban Statistics 2022, India's urban population has been on a steady rise. Urban dwellers accounted for over 469 million in 2021 and are projected to rise to over 558 million by 2031 and further exceed 600 million by 2036.



Source: World Bank, ¹⁰ Dun & Bradstreet Research and Estimates

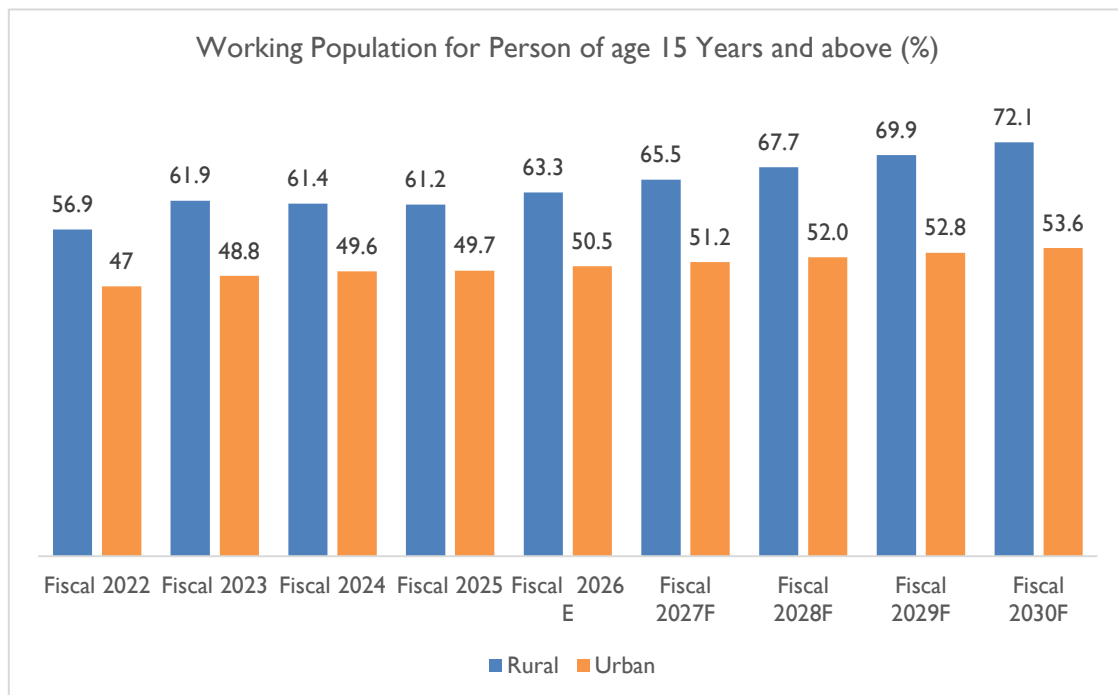
¹⁰ <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?end=2022&locations=IN&skipRedirection=true&start=1960&view=chart>

The share of urban population in total population has been rising steadily. In 2019, 33.81% of the total population was urban. By 2025, it had reached 35.9%, showing an increase over a span of five years of about 2.10%. The share of urban population is further forecasted to cross 38.6% by 2030. This increase in urban population is set to demand drastic changes in infrastructure development. Cities are a major driver for the construction industry. With cities expanding rapidly, there will be an increased need for improved housing, water supply, sewage systems, and electricity. Urban planning will need to account for higher population densities, necessitating the development of smart cities with integrated technology for efficient management of resources and services. The Smart Cities Mission targeted at 100 cities is aimed at improving the quality of life through modernised, technology-driven urban planning. This transformation will also require significant investment in public health, education, and recreational facilities to enhance the quality of urban living. The surge in urban population will also propel demand for improvement in multimodal transport infrastructure for freight and passenger travel requirements.

Rural vs. Urban Working Population by Age Group

As India continues to experience economic growth and development, the working population in both rural and urban areas is increasing. In the case of the urban population, this growth is reflected in the increase from a share of 47% in FY22 to 49.7% in FY25, whereas in rural areas, it grew from 56.9% in FY22 to 61.2% in FY25.

This growth is driven by a combination of factors, including demographic changes, economic policies, and the expansion of various industries. The rise in employment opportunities across sectors such as agriculture, manufacturing, services, and information technology has contributed to the overall increase in the working population, thereby fostering economic stability and enhancing the standard of living for many Indians.



Source: Periodic Labour Force Survey (PLFS) Annual Report, Dun & Bradstreet Research and Estimates

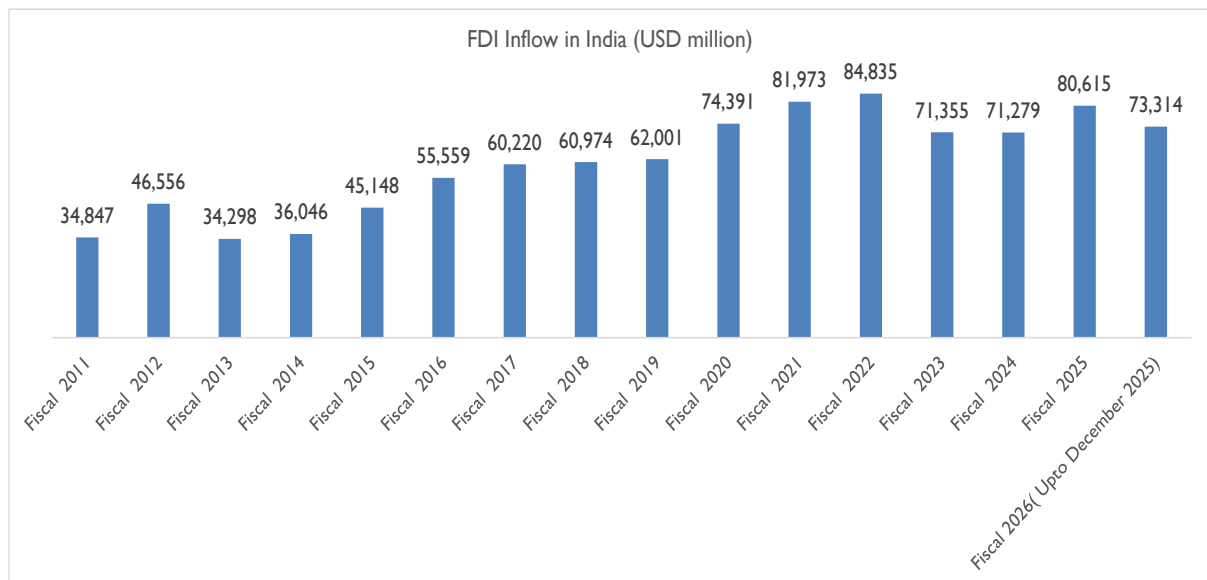
Note: 2025 refers to the period January 2025 – December 2025 and likewise for 2024, 2023 and 2022

In urban areas, the working population is growing rapidly due to the proliferation of jobs in sectors like IT, finance, retail, and healthcare. Additionally, the development of infrastructure, such as improved transportation networks and housing, has made urban centers more accessible and desirable for the working population. In rural areas, the working population remains substantial, primarily due to the dominance of the agricultural sector. Government initiatives aimed at rural development, such as improved access to education and skill development programs, have also played a crucial role in enhancing employment prospects in these regions.

The dominance of the rural working population over its urban counterpart can be attributed to the labour-intensive nature of the agricultural sector, which ensures a consistent demand for human labor despite advancements in mechanization, sustaining employment rates in rural areas.

Foreign Direct Investment Trend in India

FDI inflows in India observed a steady increase from FY 2013 to FY 2022 while it witnessed a decline of 15% in FY 2023 and a decline of 0.1% in FY 2024 due to several factors, including the ongoing conflict between Russia and Ukraine, changes in US monetary policy, and other global uncertainties. However, the country has received substantial FDI inflows from April 2000 to December 2024. This increasing FDI can be attributed to the new investment facilitation measures like the National Single-Window System (NSWS), which streamlines the approval and clearance process for investors, entrepreneurs, and businesses, along with sectoral measures and PLI schemes, supporting growth prospects in tier-2 and tier-3 cities. Further, tax compliance for startups and foreign investors has been simplified and the Income Tax Act, 1961, was amended in 2024 to abolish angel tax and to reduce income tax rate chargeable on income of a foreign company.



Sources: Department for Promotion of Industry and Internal Trade

Precision Engineering and Machined component

Overview pm India's Precision Engineering Industry

Precision engineering is a specialised branch of engineering that focuses on designing and manufacturing components with high levels of accuracy, dimensional consistency, and tight tolerances. It plays a significant role in the broader engineering sector, as it enables industries to manufacture complex components that deliver reliable performance under demanding operating conditions.

In India, engineering is the largest industrial sector, accounting for 3.53% of the country's gross domestic product (GDP). Moreover, India's engineering exports reached a historic milestone in fiscal year 2025–26, recording their highest-ever annual value of USD 122.43 billion, thereby surpassing the previous record of USD 116.75 billion in 2024–25. Consequently, the continued growth of the engineering sector supports demand for specialised manufacturing activities, including precision engineering and machined-component production.

Within the precision engineering segment, precision-machined component manufacturing involves producing highly engineered parts from materials such as steel, other ferrous and non-ferrous metals, alloys, and composites. Since these components often have complex geometries and stringent quality requirements, they are manufactured using advanced machinery, specialised tooling, and carefully controlled production processes. Furthermore, precision-machined components are generally manufactured according to customer-specific drawings, designs, and technical requirements, primarily on a contract basis. Therefore, manufacturers must maintain strict control over material selection, dimensional accuracy, surface finish, and product quality throughout the production cycle.

Compared with conventional metalworking activities such as forging, casting, sheet-metal fabrication, and general machining, precision-component manufacturing requires greater technical expertise, advanced equipment, and rigorous inspection procedures. Accordingly, technologies such as computer numerical control (CNC) machining, computer-aided design and manufacturing, automated production systems, and precision measurement equipment are commonly used to meet the required specifications.

As a result, precision-machined components are widely used across industries such as automotive, aerospace, defence, medical equipment, industrial machinery, electronics, and energy. Their accuracy and quality directly contribute to the performance, operational efficiency, safety, and service life of the final products in which they are incorporated.



Key Attributes and Features of Precision-Engineered and Machined Components

Precision-engineered and machined components are characterised by their ability to meet stringent dimensional, functional, and quality requirements. Since these components are often incorporated into critical mechanical systems and assemblies, their accuracy, consistency, and reliability directly influence the performance and service life of the final product. Their key attributes and features are described below.

- **Dimensional and geometric precision:** These components are manufactured with high dimensional accuracy and tight tolerances to ensure proper fit and alignment within an assembly. They may also require precise control of geometric characteristics such as flatness, roundness, straightness, concentricity, parallelism, and perpendicular.
- **Complex and customised designs:** CNC machining enables the production of complex shapes and intricate features, including threads, grooves, slots, tapers, contours, and multi-axis profiles. Components are generally manufactured according to customer-specific drawings, samples, and technical specifications.
- **Consistency and repeatability:** Once a CNC program and production process have been validated, manufacturers can produce multiple components with consistent dimensions and quality. This repeatability makes CNC machining suitable for prototypes, customised batches, and large-scale production.
- **Superior surface finish:** The surface finish of a component affects its friction, wear resistance, sealing ability, appearance, and service life. Depending on the application, machining may be supplemented by grinding, honing, polishing, deburring, plating, coating, or other finishing processes.
- **Wide material compatibility:** Precision-machined components can be produced from carbon and alloy steel, stainless steel, aluminium, brass, bronze, copper, titanium, engineering plastics, composites, and specialised alloys. Material selection depends on factors such as strength, weight, corrosion resistance, operating temperature, machinability, and cost.
- **Strength and operational reliability:** These components may be designed to withstand mechanical loads, pressure, vibration, friction, temperature variations, corrosion, and repeated movement. Therefore, appropriate material selection, machining parameters, heat treatment, and finishing processes are essential for achieving the required durability and performance.
- **Advanced manufacturing capabilities:** Production generally involves CNC turning centres, milling machines, vertical machining centres, Swiss-type machines, and multi-axis machining systems. Such equipment can perform complex operations with limited manual intervention, thereby improving accuracy, productivity, and process control.



Key End-Use Applications

Precision-engineered and machined components are primarily used in the following applications:

- **Engines and power-transmission systems:** Components such as shafts, gears, couplings, sleeves, and bearing housings are used to generate, transfer, and control mechanical power in engines, transmissions, and gearboxes.
- **Pumps, valves, and flow-control systems:** Pump shafts, impellers, valve bodies, stems, fittings, and manifolds are used to regulate the movement, pressure, and direction of liquids and gases.
- **Hydraulic and pneumatic systems:** Precision-machined pistons, cylinders, actuators, manifolds, and pressure-control components enable controlled movement using hydraulic fluid or compressed air.
- **Industrial machinery and automation systems:** Spindles, rollers, tool holders, robotic joints, fixtures, and motion-control parts support accurate, repeatable, and efficient machinery operations.
- **Electrical and electronic assemblies:** Connectors, terminals, pins, sensor housings, switchgear parts, and heat sinks provide electrical connectivity, equipment protection, and thermal management.
- **Medical and precision equipment:** Machined instrument parts, shafts, housings, handles, and connectors are used in surgical instruments, diagnostic systems, laboratory equipment, and other precision devices.

Major End-Use Industries

The major industries using precision-engineered and machined components include:

- **Automotive and auto components:** Uses machined parts in engines, transmissions, steering, braking, suspension, fuel systems, and electric-vehicle assemblies.
- **Industrial machinery and capital goods:** Uses precision components in machine tools, packaging machinery, textile equipment, food-processing systems, and material-handling equipment.
- **Aerospace and defence:** Requires high-precision components for aircraft systems, engines, actuators, structural assemblies, control mechanisms, and specialised defence equipment.
- **Oil and gas:** Uses machined components in drilling, extraction, refining, pipelines, pumps, valves, fittings, and high-pressure flow-control equipment.
- **Energy and power generation:** Uses precision parts in turbines, generators, gearboxes, wind-energy equipment, solar systems, and power-transmission assemblies.
- **Electrical and electronics:** Uses machined connectors, terminals, switchgear parts, sensor housings, heat sinks, and equipment enclosures.
- **Medical equipment:** Requires accurately machined components for surgical instruments, diagnostic systems, dental devices, laboratory instruments, and healthcare equipment.



- **Automation and robotics:** Uses machined parts in industrial robots, automated production lines, actuators, robotic joints, grippers, and motion-control systems.

Indian Market Scenario

Estimated market size & historical growth trend

The Indian precision engineering and machined components industry is witnessing sustained growth, supported by the expansion of the country's manufacturing sector, increasing localization, export opportunities, and rising demand from automotive, aerospace, defence, railways, industrial machinery, electronics, and medical devices. As manufacturing activity accelerates under initiatives such as **Make in India** and the **Production Linked Incentive (PLI)** schemes, demand for high-precision machined components, tooling, castings, forgings, and engineered parts continues to rise across multiple industries.

Manufacturing remains a foundational pillar of the Indian economy, contributing **around 16–17% of India's GDP** and employing **over 27 million workers**.¹¹ The Government aims to increase manufacturing's share to **at least 25% of GDP** as India progresses towards its **Viksit Bharat 2047** vision. India's **Real Gross Value Added (GVA)** is estimated to grow by **7.9% in FY 2025–26**, while **Nominal GVA** is estimated at **INR 314.87 lakh crore**,¹² reflecting continued expansion in industrial and manufacturing activities. This growth is expected to support higher investments in precision manufacturing technologies, CNC machining, industrial automation, and advanced engineering capabilities.

The automotive sector, the largest consumer of precision-engineered and machined components, continues to provide significant growth opportunities for the industry. According to the **Society of Indian Automobile Manufacturers (SIAM)**, India's automobile production reached **34.71 million units in FY 2025–26**,¹³ including **5.58 million passenger vehicles, 1.28 million commercial vehicles, 0.92 million three-wheelers, and 26.94 million two-wheelers**. Rising vehicle production is driving demand for precision components such as engine and transmission parts, gears, shafts, bearings, forgings, castings, braking systems, steering assemblies, and electric vehicle (EV) components. Simultaneously, increasing localisation by automotive OEMs and Tier-I suppliers is strengthening domestic precision manufacturing capabilities and creating new opportunities for component manufacturers.

According to the **Automotive Component Manufacturers Association of India (ACMA)**, the Indian auto component industry recorded a turnover of **INR 7.60 lakh crore (USD 85.9 billion) in FY 2026**,¹⁴ registering **12.7% growth over the previous year**, reflecting sustained demand for precision-engineered components from both domestic and export markets. The industry's continued investments in advanced manufacturing technologies, automation, and quality enhancement are further reinforcing the growth outlook for India's precision engineering and machined components sector.

Overall, the outlook for India's precision engineering and machined components industry remains positive, supported by sustained growth in manufacturing, increasing vehicle production, expanding engineering

¹¹ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2256126&lang=1®=3&utm>

¹² <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2269286&lang=1®=48&utm>

¹³ <https://www.siam.in/pressrelease-details.aspx?mpgid=53&pgidtrail=50&pid=605&utm>

¹⁴ https://www.linkedin.com/posts/acma-india_acma-pressrelease-autocomponents-activity-7480192417204199424-HZZU?utm



exports, and rising investments across aerospace, defence, railways, electronics, renewable energy, and industrial machinery. The industry's growing adoption of advanced manufacturing technologies, including CNC machining, robotics, automation, digital manufacturing, and precision metrology, is enhancing productivity, product quality, and global competitiveness. As OEMs continue to localize supply chains and diversify sourcing under the China+I strategy, Indian precision engineering companies are well positioned to benefit from higher domestic demand, increased export opportunities, and long-term capacity expansion, reinforcing the sector's role as a critical enabler of India's manufacturing ecosystem.

Demand Scenario

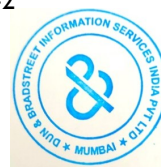
1. Production Linked Incentive (PLI) Scheme Accelerating Manufacturing Investments and Strengthening Demand for Precision Engineering & Machined Component.

The Government of India's Production Linked Incentive (PLI) Scheme has emerged as a major catalyst for the Precision Engineering & Machined Components Industry by promoting domestic manufacturing and localization across 14 strategic sectors, including automobiles & auto components, electronics, telecom, medical devices, specialty steel, white goods, renewable energy, aerospace, and railway equipment. The expansion of manufacturing capacities across these industries is significantly increasing the demand for high-precision machined components such as gears, shafts, bearings, housings, valves, fasteners, dies & moulds, tooling, and customized engineering parts used in production machinery as well as finished products. This is creating substantial business opportunities for precision engineering companies supplying OEMs and Tier-I manufacturers across multiple industrial value chains.

The strong manufacturing momentum under the PLI scheme is reflected in the cumulative investment of over INR 2.16 lakh crore made by participating companies as of December 2025, resulting in incremental production and sales exceeding INR 20.41 lakh crore, while exports generated under the scheme have crossed INR 8.3 lakh crore. The scheme has also driven capacity expansion across several sectors, including 59 companies under the Electronics PLI Scheme, which recorded incremental production of around INR 2.45 lakh crore, and 72 companies under the Automobile & Auto Components PLI Scheme, which generated incremental production of approximately INR 13,126 crore. The continued localization of manufacturing and increasing investments in advanced production technologies are expected to accelerate the consumption of precision-engineered and machined components, thereby supporting the long-term growth of India's Precision Engineering & Machined Components Industry.¹⁵

2. Expansion of India's aerospace and defence manufacturing ecosystem driving demand for precision engineering service in India.

¹⁵ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2246089®=3&lang=2>



The rapid expansion of India's aerospace and defence (A&D) manufacturing ecosystem is emerging as a key demand driver for the precision engineering & machined components industry. Aerospace and defence equipment require highly specialized, precision-engineered components such as turbine blades, structural components, gears, shafts, bearings, fasteners, hydraulic systems, and complex machined parts that must meet stringent dimensional accuracy, quality, and reliability standards. The government's continued focus on defence modernization, indigenous manufacturing under the '**Make in India**' initiative, and increasing investments in defence production are expected to significantly boost the demand for high-precision machined components across the value chain.

Reflecting this momentum, the **Indian aerospace and defence market** is projected to reach approximately **USD 70 billion by 2030**¹⁶, supported by rising defence expenditure, infrastructure development, and growing domestic manufacturing capabilities. Further strengthening the sector, the **Union Budget 2026–27** allocated **INR 7.85 lakh crore** to the **Ministry of Defence**¹⁷, the highest allocation among all ministries, highlighting the government's sustained commitment towards defence preparedness and manufacturing expansion. The increasing production of aircraft, defence equipment, missiles, naval systems, and aerospace components is expected to drive substantial demand for precision-engineered and machined components, thereby supporting the long-term growth of India's precision engineering & machined components industry.

3. Medical devices manufacturing emerging as a key end-use market for precision engineering & machined components industry.

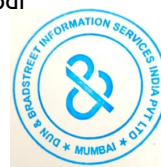
India's medical devices industry is emerging as one of the fastest-growing end-use sectors for the precision engineering & machined components industry, supported by increasing domestic manufacturing, technology adoption, and localization of high-value medical equipment. The industry is projected to grow at a **CAGR of around 15%**¹⁸, making it one of the fastest-growing medical device markets globally. The production of medical devices such as surgical instruments, orthopedic implants, diagnostic equipment, imaging systems, patient monitoring devices, and robotic surgical systems requires highly precise machined components with tight dimensional tolerances, superior surface finish, and high-quality material specifications. Consequently, the expansion of medical device manufacturing is creating sustained demand for precision-engineered parts, including miniature shafts, titanium and stainless-steel components, housings, valves, fasteners, and customized precision assemblies.

India is currently the **fourth-largest medical devices market in Asia**, after Japan, China, and South Korea, and ranks among the **top 20 medical devices markets globally**, highlighting the country's growing manufacturing capabilities. Reflecting this positive momentum, **medical device exports reached approximately USD 4,014 million in FY2025**, while **FDI inflows into the medical devices sector**

¹⁶ <https://aiaaiindia.com/aerospace/>

¹⁷ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2222601®=48&lang=2>

¹⁸ <https://pharma-dept.gov.in/sites/default/files/Annual%20Report%202025-26.pdf>



stood at INR 2,245 crore during FY2025–26 (up to September 2025)¹⁹. Rising exports, increasing foreign investments, and continued capacity expansion are expected to strengthen domestic production, thereby driving higher demand for precision-engineered and machined components across the medical devices value chain.

4. Expansion of the Automotive Components Value Chain Boosting the Precision Engineering & Machined Components Industry

The automotive industry is one of the largest end-user segments for precision engineering and machined components, utilizing a wide range of high-precision parts such as engine components, transmission systems, gears, shafts, bearings, braking systems, suspension components, and steering assemblies. The continued expansion of vehicle production, increasing localization of manufacturing, and rising demand for technologically advanced vehicles are driving the consumption of precision-engineered components across the automotive value chain. As OEMs and Tier-I suppliers enhance manufacturing capabilities and adopt advanced production technologies, the need for high-quality machined components with stringent dimensional accuracy and performance standards continues to grow.

Reflecting this positive industry momentum, the **Indian auto components industry recorded a turnover of INR 3.56 trillion in H1 FY2026**, compared with **INR 3.33 trillion in H1 FY2025**, registering a **year-on-year growth of 6.8%**²⁰. The growth was supported by steady vehicle production, resilient aftermarket demand, and sustained export performance. As the automotive sector continues to expand, demand for precision-engineered and machined components is expected to increase further, driven by higher production volumes, greater localization, and rising adoption of electric vehicles and advanced automotive technologies, thereby supporting the long-term growth of India's Precision Engineering & Machined Components Industry.

5. Railway Infrastructure Modernization Creating Significant Demand for Precision Engineering & Machined Components

The continued modernization and expansion of India's railway infrastructure is creating substantial growth opportunities for the **precision engineering & machined components industry**. Railway manufacturing and infrastructure projects require a wide range of precision-engineered components, including gears, shafts, bearings, braking systems, couplers, axle components, suspension systems, precision fasteners, valves, and machined assemblies used in rolling stock, locomotives, metro coaches, signalling systems, and railway maintenance equipment. The government's sustained investment in railway infrastructure and indigenous manufacturing is expected to drive higher procurement of high-precision machined components across the railway value chain.

Reflecting this strong policy focus, **Indian Railways received a capital expenditure allocation of approximately INR 2.65 lakh crore in FY2026**, which was further increased to a **record INR 2.93**

¹⁹ <https://pharma-dept.gov.in/sites/default/files/Annual%20Report%202025-26.pdf>

²⁰ https://www.acma.in/uploads/press-release/FINAL%20-%20Press%20Release%20-%20ACMA_HI_FY26.pdf



lakh crore in the Union Budget 2026–27²¹. The allocation is directed towards the development of new railway lines, high-speed rail corridors, rolling stock modernization, gauge conversion, network electrification, advanced signalling and safety systems, and station redevelopment projects. The large-scale expansion of railway infrastructure and manufacturing activities is expected to significantly increase the demand for precision-engineered and machined components, thereby supporting the long-term growth of India's precision engineering & machined components Industry.

6. Rapid Expansion of Air Conditioner Manufacturing Driving Demand for Precision Engineering & Machined Components

The rapid growth of India's air conditioning industry is creating significant opportunities for the **Precision Engineering & Machined Components Industry**. The manufacturing of room air conditioners requires a wide range of precision-engineered components, including compressor parts, shafts, bearings, valves, heat exchanger components, precision fasteners, motor assemblies, copper fittings, and CNC-machined housings. Rising urbanization, increasing disposable incomes, expanding commercial infrastructure, and growing adoption of energy-efficient cooling solutions are driving domestic production of air conditioners, thereby increasing the demand for high-precision machined components across the HVAC manufacturing value chain.

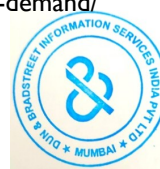
According to the India Energy Climate Centre (IECC) and the Collaborative Labelling and Appliance Standards Program (CLASP), approximately 110 million room air conditioners were operational across India as of CY2025, and the country is expected to add nearly 130–150 million additional room AC units by CY2035, making India one of the fastest-growing cooling markets globally²². The significant expansion of the installed AC base, coupled with increasing manufacturing capacity and localization of HVAC components, is expected to drive sustained demand for precision-engineered and machined components, thereby supporting the long-term growth of India's Precision Engineering & Machined Components Industry.

7. Rising Production Across Machine Tools and Industrial Equipment Manufacturing Segments

The continued expansion of India's capital goods industry is creating significant growth opportunities for the precision engineering & machined components industry. Capital goods segments such as machine tools, dies & moulds, earthmoving & mining machinery, and process plant equipment extensively utilize precision-engineered components including gears, shafts, bearings, housings, valves, tooling, dies, fixtures, and customized machined parts. Rising investments in industrial manufacturing, infrastructure development, mining activities, and factory automation are driving the demand for high-precision components with superior dimensional accuracy and performance.

²¹ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2221838®=48&lang=2>

²² <https://www.clasp.ngo/about/insights/india-raises-ac-efficiency-amid-growing-demand/>



The production value of key capital goods sub-sectors has witnessed robust growth over the last five years. **Machine Tools** production increased from **INR 6,602 crore in FY2021** to **INR 14,286 crore in FY2025**, while **Dies, Moulds & Press Tools** production grew from **INR 12,294 crore** to **INR 18,400 crore** during the same period. Similarly, **Earthmoving & Mining Machinery** recorded a substantial increase from **INR 29,021 crore in FY2021** to **INR 80,750 crore in FY2025**, reflecting strong demand from infrastructure and mining projects. Meanwhile, **process plant equipment** production expanded from **INR 21,938 crore** to **INR 31,505 crore**, supported by capacity additions across the process industries.²³

The sustained growth across these capital goods segments is expected to drive higher procurement of precision-machined components for both original equipment manufacturing and replacement applications. As manufacturers continue to invest in advanced machinery, automation, and localized production capabilities, demand for high-quality CNC-machined components, industrial tooling, precision assemblies, and engineered metal parts is anticipated to strengthen further, thereby supporting the long-term growth of India's precision engineering & machined components industry.

8. Accelerating Vehicle Production and Automotive Manufacturing Expansion

The automotive industry is one of the largest end-user industries for precision engineering and machined components, requiring high-precision parts such as gears, shafts, bearings, transmission components, braking systems, suspension parts, engine components, and electric vehicle powertrain assemblies. The expansion of vehicle production, increasing localization of component manufacturing, and growing adoption of advanced automotive technologies are significantly boosting the demand for precision-engineered components. As OEMs and Tier-I suppliers continue to expand production capacities, the requirement for CNC-machined components with high dimensional accuracy and superior performance is expected to increase steadily.

Reflecting this positive momentum, India's automotive industry recorded strong double-digit growth across all vehicle segments during Q1 FY2026-27 compared to the corresponding quarter of the previous financial year. Passenger vehicle sales increased by 25.9% to 1.27 million units, while two-wheeler sales grew by 20.3% to 5.63 million units. Three-wheeler sales registered the highest growth of 29.7%, reaching 2.14 lakh units, whereas commercial vehicle sales expanded by 18.3% to 2.65 lakh units²⁴. The broad-based growth across all vehicle categories is expected to drive higher consumption of precision-engineered components, including machined parts, precision forgings, castings, fasteners, bearings, and assemblies, thereby supporting the long-term growth of India's Precision Engineering & Machined Components Industry.

9. Accelerating Electric Vehicle Manufacturing and Component Localization

The rapid expansion of India's electric vehicle (EV) market is emerging as a key demand driver for the Precision Engineering & Machined Components Industry. Electric vehicles require a wide range of high-

²³ https://heavyindustries.gov.in/sites/default/files/2026-03/final_heavy_annual_report_2025-26_hindi_english_28_march_2026.pdf

²⁴ <https://www.siam.in/news-&-updates/press-releases/auto-industry-sales-performance-of-june-2026-and-q1-apriljune-2026/610>



precision machined components, including motor shafts, gear assemblies, battery housings, transmission components, cooling system parts, aluminium casings, connectors, fasteners, and structural components. As EV manufacturers continue to expand production capacities and localize component sourcing, the demand for precision-engineered components manufactured using advanced CNC machining and automation technologies is expected to increase significantly.

India's EV market has witnessed remarkable growth in recent years, with sales increasing from 1.74 lakh units in **FY2020 to 16.81 lakh units in FY2024, further rising to 19.68 lakh units in FY2025 and 21.7 lakh units in FY2026²⁵**. The sustained growth has been driven by favourable government policies, expanding charging infrastructure, increasing product availability, and rising consumer awareness regarding clean transportation. The continued adoption of electric mobility is expected to accelerate the consumption of high-precision machined components across the EV value chain, thereby creating long-term growth opportunities for India's Precision Engineering & Machined Components Industry.

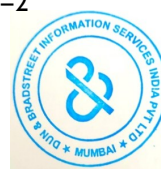
Regulatory Landscape

India's Precision Engineering & Machined Components Industry operates within a comprehensive regulatory framework aimed at promoting advanced manufacturing, technology upgradation, product quality, MSME competitiveness, and localization of industrial supply chains. The regulatory ecosystem is governed by key government bodies, including the Ministry of Heavy Industries (MHI), Ministry of Micro, Small and Medium Enterprises (MSME), Ministry of Commerce & Industry, Department for Promotion of Industry and Internal Trade (DPIIT), Bureau of Indian Standards (BIS), and the Quality Council of India (QCI). These institutions formulate policies and standards to strengthen domestic manufacturing capabilities, encourage technology adoption, improve product quality, and enhance India's competitiveness in global engineering and manufacturing value chains.

The industry's regulatory landscape is further supported by policy initiatives such as the Production Linked Incentive (PLI) Scheme, Automotive Mission Plan (AMP) 2016–2026, National Electric Mobility Mission Plan (NEMMP), PM E-DRIVE Scheme, SAMARTH Udyog Bharat 4.0, and the Credit Linked Capital Subsidy Scheme (CLCSS), which encourage investments in advanced CNC machining, automation, robotics, Industry 4.0 technologies, and precision manufacturing. In addition, quality certification programmes and technical standards prescribed by BIS and QCI ensure compliance with domestic and international quality requirements. Collectively, these regulatory measures are fostering technology upgradation, manufacturing excellence, export competitiveness, and the development of a globally competitive precision engineering ecosystem in India.

Regulatory Bodies and Responsibilities

²⁵ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2237556®=48&lang=2>



Regulatory Body	Mandate / Responsibilities Relevant to Precision Engineering & Machined Components	Industry Impact
Ministry of Heavy Industries (MHI)	Formulates policies for automotive, capital goods and advanced manufacturing sectors. Administers PLI schemes and industrial modernization initiatives.	Drives demand through manufacturing expansion, localization and technology adoption.
Ministry of MSME	Implements MSME development programs, CLCSS, ZED Certification, cluster development and technology upgradation schemes.	Supports modernization of precision engineering MSMEs through financial assistance and technology adoption.
Department for Promotion of Industry and Internal Trade (DPIIT)	Promotes industrial development, Make in India, investment facilitation and manufacturing competitiveness.	Encourages domestic manufacturing and attracts investments into engineering industries.
Bureau of Indian Standards (BIS)	Develops Indian Standards (IS), Quality Control Orders (QCOs) and product certification.	Ensures quality, dimensional accuracy and standardization of engineering products.
Quality Council of India (QCI)	Promotes quality management systems, ZED Certification and manufacturing excellence.	Improves product quality, productivity and export competitiveness.
Ministry of Commerce & Industry	Develops export promotion policies, FTAs and manufacturing competitiveness programs.	Enhances export opportunities for precision engineering manufacturers.
Department of Heavy Industry (DHI)	Supports capital goods, machine tools and industrial automation initiatives.	Encourages investment in advanced manufacturing technologies.
Automotive Research Association of India (ARAI)	Provides testing, certification and technical validation for automotive components.	Supports quality compliance for automotive precision components.

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Regulatory Policies & Scheme

1. Automotive Mission Plan 2016–2026 (AMP 2026)²⁶

The Automotive Mission Plan (AMP) 2016–2026, unveiled by the Government of India on 2 September 2015, serves as a strategic policy framework to strengthen the country's automotive manufacturing ecosystem. The plan aims to expand the Indian automotive industry's turnover by 3.5–4 times, from INR 4,640 billion to approximately INR 16,160–18,885 billion by 2026, while enhancing global competitiveness through increased domestic manufacturing, technology adoption, and localization. It also seeks to boost net exports and position the automotive sector as a key driver of the 'Make in India' initiative and a significant contributor to the 'Skill India' programme.

For the Precision Engineering & Machined Components Industry, the implementation of AMP 2026 has created a favourable policy environment by supporting the expansion of automotive production and component manufacturing. As vehicle manufacturers and auto component suppliers increase production capacities and localize their supply chains, the demand for high-precision machined components, including gears, shafts, bearings, transmission parts, engine components, fasteners, and precision assemblies, is expected to rise. Consequently, AMP 2026 has played an important role in strengthening the domestic precision engineering ecosystem by encouraging investments in advanced manufacturing technologies, automation, and high-quality component production.

2. National Electric Mobility Mission Plan (NEMMP) 2020 and PM E-DRIVE Scheme²⁷

The National Electric Mobility Mission Plan (NEMMP) 2020, launched by the Government of India on 10 March 2015, was introduced to enhance national fuel security, reduce vehicular emissions, and establish India as a global hub for electric and hybrid vehicle (xEV) manufacturing. The policy has laid the foundation for the country's electric mobility ecosystem by promoting the adoption of electric vehicles, encouraging domestic manufacturing, and supporting the localization of critical EV components. The NEMMP framework has subsequently evolved into the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme, which replaced the FAME scheme in late 2024.

With a financial outlay of INR 10,900 crore, the PM E-DRIVE Scheme remains operational through March 2026 and aims to support the deployment of approximately 2.47 million electric two-wheelers, 3.16 lakh electric three-wheelers, and over 14,000 electric buses. The expansion of electric vehicle manufacturing and localization under the scheme is expected to significantly increase the demand for precision-engineered and machined components such as motor shafts, gear assemblies, battery housings, transmission components, aluminium casings, fasteners, and thermal management components. Consequently, the policy serves as a key regulatory initiative supporting the long-term growth of India's Precision Engineering & Machined

²⁶ <https://www.siam.in/uploads/filemanager/47AUTOMOTIVEMISSIONPLAN.pdf>

²⁷ https://heavyindustries.gov.in/sites/default/files/2024-10/press_release_press_information_bureau.pdf



Components Industry by promoting investments in advanced manufacturing technologies and strengthening the domestic EV supply chain.

3. Production Linked Incentive (PLI) Scheme²⁸

The Production Linked Incentive (PLI) Scheme for the Automobile and Auto Components Industry, launched by the Government of India with a financial outlay of INR 25,938 crore for FY2022-23 to FY2026-27, aims to boost domestic manufacturing of Advanced Automotive Technology (AAT) products, strengthen automotive supply chains, and attract investments into the sector. The scheme comprises two key components, Component Champion, which promotes the manufacturing of high-value and technology-intensive automotive components, and Champion OEM, which supports the production of electric and hydrogen-powered vehicles. By encouraging localization, innovation, and technology upgradation, the scheme is expected to increase the demand for precision-engineered and machined components such as gears, shafts, bearings, transmission parts, motor housings, fasteners, and other critical engineering components, thereby supporting the long-term growth and global competitiveness of India's Precision Engineering & Machined Components Industry.

4. Credit Linked Capital Subsidy Scheme (CLCSS)

The Credit Linked Capital Subsidy Scheme (CLCSS), implemented by the Ministry of Micro, Small and Medium Enterprises (MSME), supports the technology upgradation of micro and small enterprises by providing an upfront capital subsidy of 15%, subject to a maximum of INR 15 lakh, for investments in approved plant and machinery.²⁹ The scheme encourages MSMEs to replace obsolete manufacturing equipment with advanced technologies such as CNC machines, precision machining centres, automated production systems, and other modern manufacturing equipment, thereby enhancing productivity, product quality, and operational efficiency. For the Precision Engineering & Machined Components Industry, the scheme facilitates the adoption of advanced machining technologies, enabling manufacturers to produce high-precision components that meet stringent quality standards while improving competitiveness in both domestic and international markets.

5. Zero Defect Zero Effect (ZED) Certification Scheme

The **MSME Sustainable (ZED) Certification Scheme**, implemented by the **Ministry of MSME**, promotes the adoption of world-class manufacturing practices by encouraging micro, small, and medium enterprises to improve product quality, process efficiency, resource utilization, and environmental sustainability³⁰. The scheme supports manufacturers through financial assistance for certification and quality improvement initiatives, enabling them to adopt standardized production processes and advanced quality management systems. For the **Precision Engineering & Machined Components Industry**, the ZED scheme facilitates the production of high-quality, reliable, and precision-engineered components while

²⁸ <https://heavyindustries.gov.in/en/pli-scheme-automobile-and-auto-component-industry>

²⁹ <https://msme.gov.in/sites/default/files/CreditLinkCapitalSubsidyScheme.pdf>

³⁰ https://dcmsme.gov.in/schemes/clcs-tus/Operational_Guidelines_ZED.pdf



enhancing operational efficiency, export competitiveness, and integration into global manufacturing supply chains.

6. Bureau of Indian Standards (BIS) Standards & Quality Control Orders (QCOs)

The **Bureau of Indian Standards (BIS)** establishes **Indian Standards (IS)** and implements **Quality Control Orders (QCOs)** to ensure the quality, safety, and performance of engineering products manufactured and sold in India. BIS standards cover engineering materials, steel products, fasteners, bearings, industrial machinery, and mechanical components, while QCOs mandate certification for specified products to ensure compliance with prescribed technical specifications. For the **Precision Engineering & Machined Components Industry**, adherence to BIS standards improves dimensional accuracy, material quality, and product reliability, enabling manufacturers to meet domestic and international quality requirements, participate in government procurement, and strengthen their competitiveness in global supply chains.

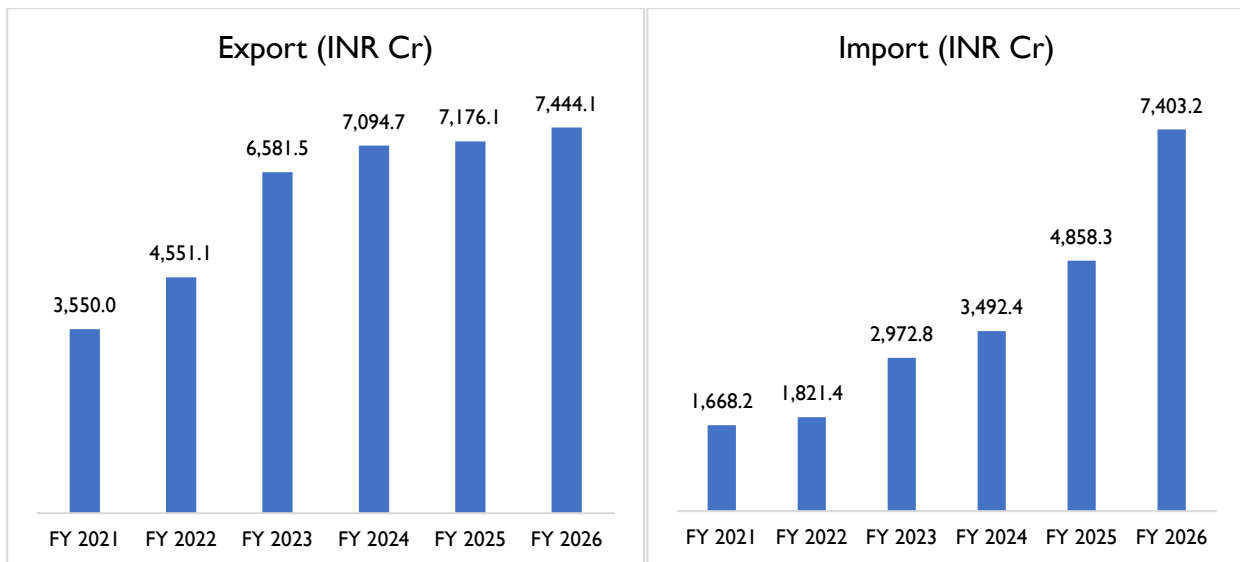
Trade Scenario

India is a net exporter of precision engineering and machined components, reflecting the country's growing competitiveness in global manufacturing and engineering supply chains. Both exports and imports have recorded steady growth during the review period, supported by rising demand from automotive, aerospace, industrial machinery, electronics, medical devices, and defense industries. While exports have been driven by improving manufacturing capabilities and adherence to international quality standards, imports continue to meet the domestic requirement for technologically advanced and specialized engineering components. Government initiatives such as Make in India, increasing investments in advanced manufacturing, and expanding export-oriented production capacities are expected to further strengthen India's trade performance in the precision engineering sector.

India Precision Engineering & Machined Components Trade Analysis³¹

³¹ The trade analysis presented in this section is based on the combined trade data of **HS Codes 74198030, 73259930, 76169990, and 73181190**, as these codes collectively represent the trade of precision engineering and machined components.



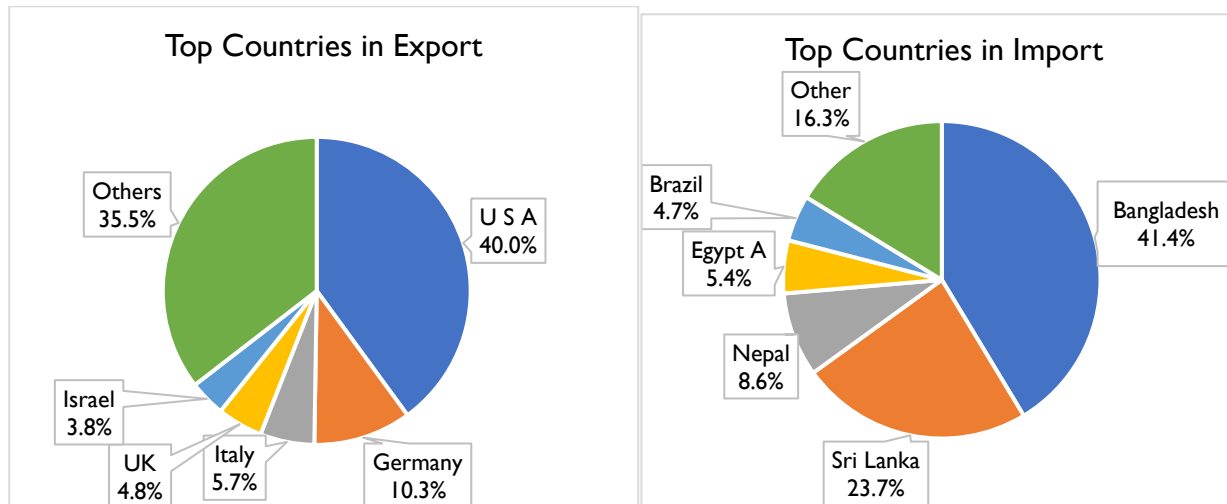


Source: Directorate General of Foreign Trade (DGFT)

India's exports of precision engineering and machined components registered strong and consistent growth during the review period, reflecting the country's expanding manufacturing capabilities and increasing integration into global industrial supply chains. Export value increased from INR 3,550.0 crore in FY2021 to INR 4,551.1 crore in FY2022, followed by a sharp rise to INR 6,581.5 crore in FY2023. Export growth continued in subsequent years, reaching INR 7,094.7 crore in FY2024, INR 7,176.1 crore in FY2025, and further increasing to INR 7,444.1 crore in FY2026, the highest level during the review period. The sustained growth in exports reflects rising global demand for high-precision machined components across automotive, aerospace, industrial machinery, medical devices, and electronics sectors. India's growing manufacturing competitiveness, adoption of advanced CNC machining and precision manufacturing technologies, expanding export-oriented production facilities, and adherence to international quality standards have significantly enhanced its position in global markets. Going forward, increasing localization under the Make in India initiative, higher investments in advanced manufacturing, and growing demand for precision-engineered components from developed and emerging economies are expected to further strengthen India's export performance.

India's imports of precision engineering and machined components recorded a significant upward trend during the review period, highlighting the growing domestic requirement for high-precision, technologically advanced components used across multiple manufacturing industries. Import value increased from INR 1,668.2 crore in FY2021 to INR 1,821.4 crore in FY2022 before rising sharply to INR 2,972.8 crore in FY2023. Imports continued to grow substantially, reaching INR 3,492.4 crore in FY2024 and INR 4,858.3 crore in FY2025. In FY2026, imports surged to INR 7,403.2 crore, the highest level during the review period. The continued increase in imports reflects rising demand for specialized machined components, high-precision tools, and technologically sophisticated engineering parts that are either produced in limited quantities domestically or require advanced manufacturing capabilities. Expanding investments in automotive, aerospace, semiconductor, defense, medical equipment, and industrial automation sectors, coupled with increasing adoption of high-precision manufacturing technologies, have supported import growth.

Top Countries in Export & Import



Source: Directorate General of Foreign Trade (DGFT)

India's exports of precision engineering and machined components in FY2026 were primarily directed towards advanced industrial economies with strong demand from automotive, aerospace, industrial machinery, and high-technology sectors. The U.S.A. emerged as the largest export destination, accounting for 40.0% of total exports with an export value of INR 2,974.95 crore. Germany ranked second with exports valued at INR 763.23 crore (10.3%), followed by Italy (5.7%), the U.K. (4.8%), and Israel (3.8%). The remaining 35.5% of exports were distributed across several other countries, indicating a diversified export base. The strong presence in developed markets reflects India's growing competitiveness in manufacturing high-precision engineering products, supported by advanced machining capabilities, stringent quality standards, and increasing participation in global supply chains.

India's imports of precision engineering and machined components in FY2026 were largely concentrated among leading Asian manufacturing hubs, reflecting the country's growing requirement for technologically advanced engineering products. China was the largest import source, accounting for 41.4% of total imports with an import value of INR 3,065.11 crore, followed by Vietnam at 23.7% (INR 1,753.78 crore). Malaysia contributed 8.6%, while Thailand and Taiwan accounted for 5.4% and 4.7%, respectively. The remaining 16.3% of imports originated from other countries. The concentration of imports from East and Southeast Asia highlights India's reliance on these regions for high-precision components, specialized engineering products, and advanced manufacturing inputs used across automotive, electronics, industrial equipment, and other high-value manufacturing sectors.

Growth Forecast

The India precision engineering & machined components industry is expected to witness strong growth over the coming years, supported by rising demand from key end-user industries such as automotive, defence, aerospace, medical devices, electronics, and industrial machinery. The increasing focus on domestic manufacturing, supply chain localisation, import substitution, and the adoption of advanced manufacturing technologies is expected to drive demand for high-precision components, complex machined parts, and engineered assemblies. Government initiatives such as Make in India, Atmanirbhar Bharat, defence indigenisation programmes, and sector-specific production-linked incentives are further expected to strengthen the domestic manufacturing ecosystem and create new opportunities for precision engineering companies.

The growth outlook for industry remains positive as major consuming sectors continue to expand. Rising automotive component demand, increasing defence production targets, the expansion of India's medical device sector, and growing aerospace and industrial manufacturing activities are expected to accelerate the requirement for precision machining, CNC components, castings, and specialised engineering solutions. With Indian manufacturers increasingly integrating into global value chains and catering to both domestic and export markets, the precision engineering & machined components industry is positioned for sustained growth during the forecast period.

Among the major growth drivers, the expansion of India's automotive component industry is expected to significantly boost demand for precision engineering and machined components. The Indian auto component sector recorded a market size of approximately **USD 85.9 billion in FY 2026** and is projected to reach **USD 200 billion by 2030**, registering a **CAGR of around 23.5% during FY 2026–FY 2030**³². This growth is expected to be supported by increasing vehicle production, rising adoption of electric vehicles (EVs), growing demand for advanced automotive technologies, and the localisation of automotive supply chains. The increasing complexity of automotive systems and the shift towards lightweight, high-performance components are expected to create sustained demand for precision-engineered and machined components. Manufacturers specialising in transmission components, EV motor housings, aluminium and steel castings, shafts, gears, and other high-accuracy assemblies are likely to benefit from the expansion of the automotive ecosystem. Additionally, the growing focus of OEMs and Tier-I suppliers on domestic sourcing and supply chain resilience is expected to further strengthen opportunities for Indian precision engineering companies across both conventional and electric mobility segments.

The defence sector is also expected to emerge as a key demand driver for the industry. India's focus on defence self-reliance and domestic manufacturing is creating significant opportunities for precision engineering companies. The country achieved its highest-ever **defence production of INR 1.54 lakh crore in FY 2024–25**, with the Government targeting **INR 3 lakh crore by 2028–29**³³. The expansion of defence

³² <https://www.acma.in/pdf/acma-report-sep-25.pdf>

³³ <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2191937&lang=2®=3>



manufacturing capabilities, increasing private sector participation, and localisation of critical defence components are expected to drive demand for high-precision machined parts, specialised castings, forgings, and engineered assemblies used across aerospace, naval, and defence platforms. The continued emphasis on indigenous sourcing and import substitution is expected to further strengthen the long-term growth prospects for precision component manufacturers.

In addition, the rapid expansion of India's medical device industry is expected to create substantial long-term opportunities for precision engineering companies. The **Indian medical devices market** was valued at approximately **USD 14 billion in FY 2024** and is projected to reach **USD 30 billion by 2030**, growing at a **CAGR of around 13%** during FY 2024–FY 2030³⁴. Rising healthcare expenditure, expansion of healthcare infrastructure, technological advancements, and government initiatives aimed at strengthening domestic medical device manufacturing are expected to boost demand for precision-engineered components. Manufacturers with expertise in high-accuracy machining, specialised metal processing, and the production of complex components for surgical instruments, diagnostic equipment, implants, and other medical devices are likely to benefit from the sector's continued expansion.

Overall, the India precision engineering & machined components industry is well positioned for sustained growth, supported by the continued expansion of high-growth sectors including automotive, defence, medical devices, aerospace, electronics, and industrial manufacturing. The increasing emphasis on localisation, advanced manufacturing capabilities, and integration into global supply chains is expected to create significant opportunities for domestic precision component manufacturers. As end-user industries continue to demand greater accuracy, improved performance, and highly engineered solutions, companies with capabilities in precision machining, CNC manufacturing, casting, forging, and specialised metal processing are expected to witness strong and sustained growth during the forecast period.

³⁴ <https://www.investindia.gov.in/team-india-blogs/why-india-poised-become-global-hub-medtech-manufacturing>



Key Threats & Challenges

Volatility in Raw Material Prices and Supply Availability

The **precision engineering & machined components industry** is highly dependent on raw materials such as alloy steel, stainless steel, aluminium, titanium, brass, and specialty metals, whose prices are influenced by fluctuations in global commodity markets, energy costs, and supply chain disruptions. Frequent volatility in raw material prices increases manufacturing costs and compresses profit margins, particularly for suppliers operating under long-term fixed-price contracts. In addition, delays in the availability of high-grade engineering materials can disrupt production schedules and affect the timely delivery of precision components to OEMs.

2. Shortage of Skilled Workforce for Advanced Precision Manufacturing

The increasing adoption of CNC machining, multi-axis machining centres, industrial automation, robotics, and digital manufacturing has significantly increased the demand for highly skilled operators, programmers, tool designers, and quality inspection professionals. However, the availability of adequately trained manpower remains limited, particularly among MSMEs. The shortage of skilled personnel affects machining accuracy, production efficiency, and product quality, thereby limiting the industry's ability to meet stringent customer specifications and expand production capacity.

3. High Capital Investment and Rapid Technological Obsolescence

Precision engineering manufacturing requires continuous investment in advanced CNC machines, precision tooling, coordinate measuring machines (CMM), automation systems, industrial robots, and quality inspection equipment. The rapid pace of technological advancements and the emergence of Industry 4.0 technologies result in faster equipment obsolescence, requiring manufacturers to regularly upgrade their production facilities. These high capital requirements pose a significant challenge for small and medium-sized enterprises with limited financial resources.

4. Increasing Global Competition and Pricing Pressure

Indian precision engineering manufacturers compete with suppliers from countries such as **China, Japan, South Korea, Germany, and Taiwan**, which possess advanced manufacturing capabilities, economies of scale, and established global supply networks. Intense competition places significant pressure on pricing while customers increasingly demand higher quality, shorter lead times, and customized products. To remain competitive, domestic manufacturers must continuously improve operational efficiency, invest in advanced manufacturing technologies, and achieve international quality certifications.

Competitive Landscape

The Indian precision engineering & machined components industry is characterized by a fragmented yet highly specialized competitive landscape, comprising a mix of large integrated engineering companies, Tier-I component manufacturers, export-oriented firms, and a vast number of MSMEs catering to diverse end-use industries. The market serves sectors such as automotive, aerospace & defence, industrial machinery, railways, medical devices, electronics, capital goods, and energy, each requiring components with stringent dimensional accuracy and quality standards. While large manufacturers compete through advanced manufacturing capabilities, automation, and diversified product portfolios, small and medium enterprises primarily focus on customized machining, niche applications, and regional OEM requirements.

Competition within the industry is increasingly shifting from conventional machining capabilities towards technology-driven manufacturing, quality assurance, precision engineering, and value-added services. Manufacturers are investing in CNC machining centres, multi-axis machining, robotics, Industry 4.0 technologies, automated inspection systems, and digital manufacturing to improve productivity and meet increasingly stringent customer specifications. Furthermore, long-term supply agreements with OEMs, international quality certifications, engineering expertise, and the ability to manufacture complex high-precision components have become key differentiating factors. As end-user industries continue to localize production and demand higher precision products, companies capable of delivering superior quality, shorter lead times, and cost-efficient manufacturing are expected to strengthen their competitive position.

Factors that shape competition in the India precision engineering & machined components industry

1. Manufacturing Capabilities & Technology Adoption

Advanced manufacturing capabilities are a key competitive differentiator in the precision engineering industry. Companies investing in CNC machining centres, multi-axis machining, robotics, automation, and Industry 4.0 technologies are able to manufacture complex components with higher precision, productivity, and consistency while reducing production lead times.

2. Product Quality, Precision & Technical Expertise

Customers across automotive, aerospace, medical devices, and defence industries demand components with extremely tight dimensional tolerances and superior surface finishes. Manufacturers with strong engineering capabilities, advanced quality control systems, and precision inspection technologies are better positioned to secure long-term contracts and premium customers.

3. Customer Relationships & OEM Approval

The industry largely operates through long-term supply relationships with OEMs and Tier-I suppliers, where supplier qualification, product reliability, and delivery performance play a critical role. Companies with established customer relationships, approved vendor status, and a proven track record of consistent quality enjoy a significant competitive advantage.

4. Manufacturing Cost Efficiency & Operational Excellence



Maintaining cost competitiveness while ensuring high precision is essential in the industry. Manufacturers focus on optimizing machining cycles, improving material utilization, reducing scrap generation, and adopting lean manufacturing practices to enhance operational efficiency and protect profit margins.

5. Product Diversification & End-Use Industry Exposure

Manufacturers serving multiple industries such as automotive, aerospace & defence, industrial machinery, railways, electronics, medical devices, and renewable energy are better insulated from sector-specific demand fluctuations. A diversified customer base also creates opportunities to supply high-value precision components across different industrial applications.

6. Quality Certifications & Regulatory Compliance

Compliance with internationally recognized certifications such as ISO 9001, IATF 16949, AS9100, ISO 13485, and BIS standards is increasingly becoming a prerequisite for supplying components to regulated industries. Manufacturers possessing these certifications gain easier access to domestic OEMs, export markets, and global supply chains.

7. Innovation, Product Development & Value-Added Engineering

Beyond conventional machining, manufacturers are increasingly competing through design support, prototype development, precision tooling, reverse engineering, and customized component manufacturing. The ability to develop application-specific, high-value engineered components enhances customer retention and strengthens long-term competitiveness.

Analysis of Entry Barriers

1. High Capital Investment Requirement

Establishing a precision engineering manufacturing facility requires substantial capital investment in advanced CNC machining centres, multi-axis machining systems, coordinate measuring machines (CMMs), robotics, precision tooling, heat treatment facilities, and quality inspection equipment. In addition, significant investments are needed for factory infrastructure, testing laboratories, and automation technologies. These high upfront costs create a significant barrier for new entrants, particularly small and medium-sized enterprises.

2. Stringent Quality Certifications and Customer Approval Process

Manufacturers supplying components to industries such as automotive, aerospace, defence, medical devices, and railways must comply with stringent quality standards and obtain certifications such as ISO 9001, IATF 16949, AS9100, ISO 13485, and BIS certifications. Moreover, OEMs and Tier-I suppliers follow rigorous supplier qualification and product validation processes, which may take several months or even years before commercial production begins. These extensive certification and approval requirements significantly increase the entry barrier for new manufacturers.

3. Requirement for Advanced Manufacturing Technology and Skilled Workforce



The industry demands advanced manufacturing capabilities, including high-speed CNC machining, multi-axis machining, CAD/CAM software, industrial automation, robotics, and precision metrology. At the same time, manufacturers require highly skilled CNC programmers, machinists, tooling engineers, and quality professionals to maintain micron-level accuracy. The combined requirement for sophisticated technology and specialized human resources creates a significant hurdle for new entrants.

4. Long-Term Customer Relationships and High Switching Costs

The industry is largely driven by long-term supply agreements with OEMs and Tier-I manufacturers, who prioritize proven quality, delivery reliability, and engineering expertise. Once suppliers are approved and integrated into production programs, customers are generally reluctant to switch due to the costs associated with product validation, testing, and production disruptions. Consequently, new entrants face considerable challenges in securing contracts and establishing a customer base.

5. Dependence on High-Quality Raw Materials and Supply Chain Integration

Precision engineering manufacturers rely on consistent supplies of high-grade alloy steel, stainless steel, aluminium, titanium, specialty metals, and precision tooling materials. Maintaining product quality requires reliable supplier networks and stringent material traceability. New entrants often face difficulties in establishing long-term procurement relationships and achieving cost-efficient sourcing, affecting both product quality and overall competitiveness.

Company Profiling: Sunrise Middle East Turn Tech Limited

Company Overview:

The company was originally established as a partnership firm under the name M/s. Sunrise Middle East pursuant to a Deed of Partnership dated April 1, 2013, under the provisions of the Partnership Act, 1932, was converted into a public limited company under the Companies Act, 2013. Consequent to such conversion, the name of the Company was changed from M/s. Sunrise Middle East to Sunrise Middle East Turn Tech Limited, and a Fresh Certificate of Incorporation dated December 4, 2024 was issued by the Registrar of Companies, Central Registration Centre. The Corporate Identity Number (CIN) of our Company is U25999GJ2024PLC156879.

The company is engaged in the manufacturing of high-precision engineering components, including Precision Machined Components, Automotive Components, Electrical Components, Fire Safety Components, Industrial Fasteners & Fixings, Gas Components, HVAC Components and Customized Industrial Components. It also undertakes various job-work services for its customers, including processing customer-supplied raw materials into finished components in accordance with their specified requirements. Backed by advanced manufacturing capabilities and technical expertise, the company manufactures components using CNC turning, CNC milling, precision machining, and other value-added manufacturing processes. These activities are carried out in accordance with customer-specific technical drawings, specifications, and applicable industry requirements. The company provides customized engineering and machining solutions tailored to the specific applications and performance requirements of its customers. Its expertise extends across a broad range of industries, including automotive, general engineering, electrical and renewable energy, oil and gas, plumbing, industrial machinery, and other precision-engineering sectors. Through its manufacturing capabilities and stringent quality-control processes, the company strives to deliver precision components and job-work services that meet the required standards of quality, precision, performance, reliability, and durability across diverse engineering applications.

In addition to its manufacturing operations, the company is also engaged in the trading of raw materials sourced from its suppliers to meet the diverse requirements of its customers. This enables the company to offer a comprehensive range of engineering products and solutions under one roof while maintaining consistent quality and ensuring timely delivery.

The company has developed and manufactured **various customized products**, leveraging its engineering capabilities to provide application-specific solutions tailored to customer requirements. With a strong focus on product quality, innovation, and process excellence, Sunrise supports global OEMs and industrial customers through reliable supply chain management and stringent quality control systems. The company is certified under **ISO 9001:2015, IATF 16949, ISO 14001:2015, ISO 45001:2018**, and **RoHS**, reinforcing its commitment to international manufacturing and automotive quality standards.



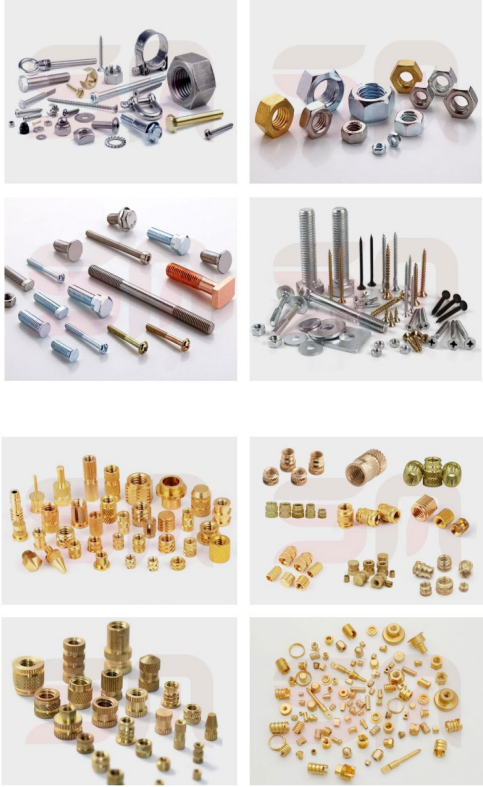
The company operates an integrated manufacturing facility at GIDC, Dared, Jamnagar, machineries with advanced 5, 6 & 7-axis Swiss-type CNC machining centres, CNC Turning Centres, Turn-Mill Centres, Vertical Machining Centres (VMCs), and Special Purpose Machines (SPMs). Its manufacturing capabilities encompass hot forging, investment casting, sand casting, CNC turning, milling, heat treatment, annealing, plating, assembly, and precision quality inspection, enabling end-to-end production of complex engineering components. Sunrise currently operates 14 five-axis Swiss turning machines, 6 six-axis Swiss turning machines, 1 CNC turn-mill machine, 17 CNC turning centres, 4 special-purpose machines, and 3 vertical machining centres (VMCs).

The Company has established robust manufacturing and metrology infrastructure. To meet growing domestic and export demand, the Company is developing a proposed manufacturing facility at Haripar, Taluka Lalpur, Jamnagar, Gujarat, comprising Plot No. 1, New Revenue Survey No. 413 (Old Revenue Survey No. 335), admeasuring 8,493.08 sq. mtrs., and Plot No. 2, New Revenue Survey No. 413 (Old Revenue Survey No. 335), admeasuring 1,710.21 sq. mtrs. The proposed facility will have an aggregate area of 10,203.29 sq. mtrs. (approximately 109,819 sq. ft.) and is expected to significantly strengthen the Company's production capabilities, enhance its manufacturing capacity and reinforce its position as a preferred supplier of precision-engineered components across domestic and global markets.

Products & Services Offered

Precision Machined Components	
 	Precision machined components comprise accurately manufactured metal components produced through machining processes such as CNC turning, CNC milling, drilling, tapping, grinding and other secondary operations, depending on customer requirements. These components include pins, bushes, sleeves, spacers, nozzles, housings, connectors, flanges, turned components, CNC Machined Components, Custom Engineered Components, Customized Machine Components and other engineered parts manufactured as per customer drawings, specifications and dimensional tolerances.
	These products are generally used in automotive, industrial machinery, engineering, electrical, gas, HVAC and other industrial applications.
Automotive Components	

	Automotive components comprise engineered components used in automobiles and automotive assemblies and sub-assemblies. These components include precision machined parts, fastening components, brackets, spacers, bushes, pins, shafts and other components used in applications such as Banjo Bolts Union, Bushes, Connectors, Conductors, Ball Studs, customized automotive components and other automotive components, as per the requirement of the client. The components may be manufactured using processes such as CNC machining, turning, milling, drilling, threading, grinding and other finishing operations based on customer specifications. These products are generally used in automotive, Passenger Vehicles, Commercial Vehicles, Agricultural Equipment, Construction Equipment, Industrial Machinery.
Electrical Components	
	Electrical components comprise metal and/or engineered components used in electrical and electronic equipment and assemblies. Depending on the Company's product portfolio, these may include terminals, connectors, electronic housing, contact components, conductors, pressure switch parts, spacers, pins, bushings, Other customized components and precision components. Such components may be used in switchgear, electrical panels, control equipment, power distribution systems, wiring assemblies and other electrical applications.
Fire Safety Components	
	Fire safety components comprise components used in fire protection, fire detection, fire suppression and related safety systems. The product range may include Pressure Fire VLV, valves/fittings-related parts, brackets, pins, connectors, fasteners and other engineered components, custom machined components/ customized fire safety parts depending on the depending on the client requirement. These components may be incorporated into fire extinguishing systems, fire protection equipment, fire hydrant systems, sprinkler systems and other fire safety installations.
Industrial Fasteners & Fixings	

	Industrial fasteners and fixings comprise mechanical components used to join, secure, assemble or position two or more components. The product range may include: - Nuts, - Bolts, - Screws, - Pins, - Brass Contact Cap Without Filling Hole, - Connecting Screw, - Brass Cap with Fitting Pin, - M S Flange, - Telescopic guide Joint, - Brass Insert (Molding Insert) - Other engineering products These products are used across automotive, engineering, machinery, construction, electrical, HVAC, gas and other industrial applications. Fasteners may be manufactured or supplied in different materials, dimensions, thread configurations, grades and surface finishes based on customer requirements and applicable standards.
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Gas Components

	Gas components comprise precision-engineered components used in gas handling, regulation, distribution and control systems. Depending on the Company's actual product portfolio, these may include gas fittings, connectors, adapters, nipples, valves-related components, nozzles, and other precision machined components. These components may be used in LPG, CNG, industrial gas, gas distribution, gas control and related applications, subject to the applicable product specifications and certifications.
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HVAC Components

	HVAC components comprise components used in heating, ventilation and air-conditioning systems. The product range may include precision machined fittings, connectors, adapters, mounting components, fasteners, spacers, bushings and other engineered parts used in HVAC equipment and assemblies. These components may be used in applications relating to air-conditioning units, refrigeration equipment, ventilation systems, heat pumps and other heating or cooling equipment, depending on the Company's product portfolio.
Customized Industrial Components	
	Customized industrial components comprise components manufactured in accordance with customer-specific drawings, designs, dimensions, materials, tolerances and functional requirements. These products may be developed for specific applications across industries such as automotive, electrical, industrial machinery, HVAC, gas, fire safety and general engineering. The Company's capabilities in this segment may include component design support, CNC machining, turning, milling, drilling, tapping, grinding, finishing, assembly and other value-added operations, as applicable. Customized components enable customers to source application-specific parts according to their technical specifications and assembly requirements.

Manufacturing Infrastructure of Sunrise Middle East Turn Tech Limited:

Machine	Quantity
5 Axis Swiss Turn Machines	14
6 Axis Swiss Turn Machines	6
CNC Turn Mill Machines	1
CNC Turning Centers	17
Special Purpose Machine	4

Key Customer Segments Served

- **Automotive OEMs & Tier-I Suppliers:** Supplies precision machined components for engine, transmission, braking, and other automotive applications.
- **Electric Vehicle Manufacturers:** Manufactures EV charging pins, battery pack components, and precision electrical parts for electric mobility applications.
- **Electrical & Electronics Industry:** Manufactures connectors, terminals, PCB components, and switchgear parts for electrical and electronic equipment.
- **Plumbing & Sanitary Industry:** Supplies brass fittings, valves, compression fittings, and tap components for residential and industrial plumbing applications.
- **Oil & Gas & Hydraulic Equipment Manufacturers:** Manufactures precision valves, fittings, and machined components used in fluid handling and hydraulic systems.
- **Industrial Machinery Manufacturers:** Produces customized CNC-machined components for industrial equipment, automation systems, and engineering machinery.

Key Strengths

- **Integrated Manufacturing Capabilities:** Operates end-to-end manufacturing facilities covering CNC machining, surface finishing, and quality inspection.
- **Diversified Product Portfolio:** Manufactures a wide range of brass products, precision machined components, plumbing fittings, and electrical components for multiple industries.
- **Advanced Manufacturing Infrastructure:** Equipped with modern CNC and VMC machining centres, enabling the production of high-precision and customized engineering components.
- **Strong Export Presence:** Exports products to international markets including the USA and Europe, supported by a reliable global supply network.
- **Focus on Quality & Process Excellence:** Adopts internationally recognized quality management systems and continuous improvement practices to ensure consistent product quality.
- **Customization & Engineering Expertise:** Offers customized precision components manufactured according to customer drawings and application-specific technical requirements.



Peer Profile

Peer Name	Profile
Narmadesh Brass Industries Limited	Narmadesh Brass Industries Limited was established in 2019 and is headquartered in Jamnagar, Gujarat, India, a major hub for India's brass and precision engineering industry. The company is engaged in the manufacturing of precision-engineered brass, copper, and other non-ferrous metal components, catering to industries such as electrical & electronics, automotive, plumbing, sanitaryware, hardware, industrial machinery, and general engineering. Its product portfolio includes brass billets, continuous casting rods, extruded profiles, forged components, lead-free brass fittings, valves, tap components, CNC-turned parts, VMC-machined components, and customized precision-engineered parts. The company exports its products to international markets, including the USA, Europe, Australia, Canada, South Africa, and the UAE, while maintaining ISO 9001:2015 certification for quality management. The company operates an integrated manufacturing facility in Jamnagar with in-house capabilities spanning continuous casting, extrusion, forging, CNC & VMC machining, surface finishing, and quality inspection. It has an installed production capacity of approximately 4,320 MTPA each for brass billets and brass rods, along with 1,600 MTPA for precision brass components. Backed by advanced manufacturing technologies and process improvement practices such as 5S, Kaizen, and PPAP, the company focuses on delivering customized, high-precision components to OEMs and industrial customers across domestic and international markets.
Millworks Technologies Limited	Millworks Technologies Limited was established in 2021 and is headquartered in Bengaluru, Karnataka, India. The company is engaged in manufacturing precision-machined components, sheet-metal parts, sub-assemblies and assemblies for the aerospace, railway and semiconductor industries. Its diversified product portfolio includes precision CNC-machined components, sheet-metal components, hot- and cold-forged components, pressure die-cast components, investment castings, gravity die castings, gaskets, fasteners and brass products. The company also manufactures application-specific products such as aero-engine parts, turbocharger parts, aerostructure parts, engine blade parts, train-door parts, braking-system components, actuators, couplers and precision components for semiconductor automation machinery. In



	addition, it operates a global supply-chain division that sources machined components, forgings, die castings, sheet-metal parts and fasteners for overseas customers, either as individual components or assembled products. The company operates four manufacturing facilities in and around Bengaluru, with an aggregate floor area of approximately 40,000 square feet and 52 CNC machines. Its integrated manufacturing infrastructure includes CNC turning centres, turn-mill machines, three-, four- and five-axis vertical milling machines, horizontal milling machines, wire EDM machines, fibre-laser machines, CNC bending equipment, and 50-ton and 160-ton presses. Its manufacturing capabilities are supported by advanced inspection and metrology equipment, including Carl Zeiss coordinate measuring machines, profile projectors, video-measuring systems, roughness testers, and two- and three-dimensional height gauges. The company is certified under AS9100 Rev. D, ISO 9001:2015, ISO 14001 and ISO 18001 standards. Backed by precision-manufacturing capabilities, skilled personnel and quality-control infrastructure, Millworks Technologies Limited focuses on delivering customized, high-accuracy components and integrated engineering solutions to customers operating in technologically demanding industries.
Metalic Technoforge Limited	Metalic Technoforge Limited was incorporated in 2016 and is engaged in the manufacturing of closed-die forged and precision-machined components. The company offers a diversified portfolio of complex and safety-critical products, including large and small rings, ball studs, gear blanks with broaching, gears, shafts, coupling assemblies, hydraulic-cylinder components, construction-equipment components and other customized engineering parts. It primarily serves domestic and international original equipment manufacturers across the automotive and non-automotive sectors. Its customers include manufacturers of automobiles, tractors, commercial vehicles, agricultural equipment, hydraulic equipment, construction machinery, power-transmission systems and general-engineering products. The company exports its products to markets including Germany, Italy, China, Poland, Finland, Austria, Turkey and the United States. The company operates an integrated manufacturing setup encompassing die manufacturing, raw-material cutting, induction heating, closed-die forging, heat treatment, shot blasting, precision machining, gear manufacturing, component assembly, surface treatment, testing and quality assurance. Its infrastructure includes screw presses, drop-forge hammers, induction billet heaters, continuous heat-treatment furnaces, CNC turning and milling centres, vertical

machining centres, broaching machines, grinders, robotic drilling machines, gear-hobbing and gear-grinding equipment, coining presses and laser-marking systems. Its IIoT-enabled machining operations support real-time process monitoring and the production of complex components with tight tolerances and consistent surface finishes. The company processes carbon steel, alloy steel, stainless steel and non-ferrous metals such as aluminium, brass and copper, depending on customer specifications and application requirements.

Metalic Technoforge Limited's manufacturing capabilities are supported by inspection and metrology equipment such as coordinate-measuring machines, gear-profile testers, contour-measuring systems, surface-roughness testers, height gauges and magnetic-particle inspection equipment. The company holds certifications including IATF 16949, ISO 14001:2015, ISO 45001:2018, PED 2014/68/EU, AD 2000 W0 and ZED Bronze. Backed by integrated forging, machining, heat-treatment, gear-manufacturing and assembly capabilities, the company focuses on delivering high-strength, dimensionally accurate and performance-critical components to OEM, Tier-1 and Tier-2 customers across the automotive, agriculture, hydraulics, construction, oil and gas, power-transmission, off-highway and general-engineering industries.

Financial Analysis

Particular	Unit	Narmadesh Brass Industries Ltd			Millworks Technologies Limited			Metalic Technoforge Limited			Sunrise Middle East Turn Tech Limited		
		As at end for Fiscal			As at end for Fiscal			As at end for Fiscal			As at end for Fiscal		
		Fiscal 2026	Fiscal 2025	Fiscal 2024	Fiscal 2026	Fiscal 2025	Fiscal 2024	Fiscal 2026	Fiscal 2025	Fiscal 2024	Fiscal 2026	Fiscal 2025	Fiscal 2024
Revenue From operations	₹ in Lakhs	9522.48	8772.09	7888.45	14,876.70	2210.01	938.6	9,554.75	7437.22	5085.09	3,741.77	2,929.16	1,797.09
Revenue from Operation Growth	in %	8.55%	11.20%	31.56%	573.15%	135.46%	429.09%	28.47%	46.26%	-	27.74%	62.99%	1.44%
Total revenue	₹ in Lakhs	9722.6	8805.02	7906.11	15339.67	2241.8	939.56	9798.32	7563.73	5149.6	3,807.68	3,012.53	1,852.26
EBIT	₹ in Lakhs	356.25	825.33	1048.6	4900.06	744.38	268.05	1753.25	1347.37	619.85	801.69	478.15	294.97
EBITDA	₹ in Lakhs	458.33	900.64	1,123.08	5,195.29	775.55	278.52	2,194.75	1,607.66	729.37	934.82	597.68	400.24
EBITDA Margin	in %	4.81%	10.27%	14.24%	34.92%	35.09%	29.67%	22.97%	21.62%	14.34%	24.98%	20.40%	22.27%
Profit after tax	₹ in Lakhs	355.13	572.30	709.61	3706.39	524.9	195.41	1236.44	902.81	426.41	622.27	398.51	245.91
PAT Margin	in %	3.73%	6.52%	9.00%	24.91%	23.75%	20.82%	12.94%	12.14%	8.39%	16.63%	13.60%	13.68%
Net worth	₹ in Lakhs	5326.25	1469.31	897.01	8266.99	2331.25	232.98	3341.57	1740.13	772.32	1561.88	939.62	622.81
Return on Net Worth (RONW)	in %	6.67%	38.95%	79.11%	44.83%	22.52%	83.87%	37.00%	51.88%	55.21%	39.84%	42.41%	39.48%
Debt To Equity Ratio	Times	0.19	1.68	2.50	0.21	0.41	1.96	0.95	1.61	1.40	0.58	0.45	0.63
Debt Service Coverage Ratio	Times	0.39	0.34	0.48	2.54	0.75	0.57	0.64	0.53	0.62	0.99	1.32	0.96
Capital employed	₹ in Lakhs	6,388.21	4,003.04	3,202.66	9,968.81	3,293.86	692.56	6,580.92	4,632.05	1,857.33	2477.09	1379.36	1031.17
Return on Capital Employed (ROCE)	In %	5.56%	14.30%	22.16%	49.15%	22.60%	38.70%	26.64%	29.09%	33.37%	32.36%	34.66%	28.61%
RoE	In%	10.45%	48.37%	82.18%	69.94%	40.94%	144.44%	48.66%	71.87%	76.27%	49.75%	51.01%	44.94%
Current ratio	Times	3.13	1.19	1.15	1.43	2.99	1.98	1.35	1.14	1.00	1.54	1.12	1.29

Note: For All Companies we have considered Standalone Balance Sheet.

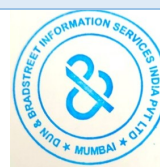
All peer company figures considered in the table are based on the Restated Financial Statements disclosed in their respective Final Prospectus. For **Narmadesh Brass Industries Limited (FY 2026)**, the figures have been derived from the audited financial statements, as the Restated Financial Statements are not available.



Notes:

- 1) Revenue from Operations means the Revenue from Operations as appearing in the Restated Financial Statements.
- 2) EBITDA is calculated as Profit before tax + Depreciation + Amortization+ Interest Expenses-Other Income
- 3) EBITDA Margin is calculated as EBITDA divided by Revenue from operations
- 4) Restated Profit After Tax is calculated as Profit after tax for the period.
- 5) PAT Margin is calculated as PAT for the period/year divided by revenue from operations.
- 6) EBIT is calculated as Profit before Tax + Interest Expenses- Other Income.
- 7) Net worth means the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account reduced by miscellaneous expenditure and the debit of Profit & Loss Account.
- 8) Capital Employed means aggregate of shareholders' funds and total current and non-current debts including Deferred tax Liabilities.
- 9) Return on Equity is ratio of Profit after Tax divided by Average Shareholder Equity.
- 10) Return on Capital Employed is calculated as EBIT divided by capital employed, which is defined as shareholders' equity plus total borrowings (current & non-current including deferred tax liabilities).
- 11) Return on Net Worth is ratio of Profit after Tax divided by Net Worth.
- 12) Debt Equity Ratio is Total Debt divided by Shareholders' Equity.
- 13) Debt Service Coverage Ratio is Earning available for Debt Service (EBITDA) divided by Debt Service.
- 14) Current Ratio is Current Assets divided by Current Liabilities.

KPI	Explanation
Revenue from Operation	Revenue from Operations is used by our management to track the revenue profile of the business and in turn helps to assess the overall financial performance of our Company and volume of our business.
EBITDA	EBITDA provides information regarding the operational efficiency of the business
EBITDA Margin (%)	EBITDA Margin (%) is an indicator of the operational profitability and financial performance of our business
Restated Profit After Tax	Restated Profit after Tax is an indicator which determine the actual earning available to equity shareholders
PAT Margin	PAT Margin is an indicator of the overall profitability and financial performance of the Business.



EBIT	EBIT provides information regarding the operational efficiency of the business and it is after Depreciation.
Net Worth	Net worth shows the financial strength of a company (assets minus liabilities) and helps in credit approval, investor confidence, regulatory compliance, and valuation.
Capital Employed	Capital Employed refers to the total amount of capital that a company uses to run its operations and generate profits. It represents the funds invested in the business, either from shareholders or lenders that are deployed in assets to conduct business activities.
ROE %	ROE provides how efficiently the Company generates profits from shareholders' funds.
ROCE %	ROCE provides how efficiently our Company generates earnings from the capital employed in the business
Debt Equity Ratio	Debt Equity Ratio indicates the proportion of the Company's debt relative to shareholders' equity and reflects its financial leverage.
Debt Service Coverage Ratio	DSCR measures the Company's ability to service its debt obligations from its operating earnings.
RONW%	Return on Net Worth (RONW) measures the efficiency with which our Company generates profits from shareholders' funds. It indicates the Company's ability to create value for its shareholders by effectively utilizing its net worth.
Current Ratio	Current Ratio measures our Company's ability to meet its short-term obligations using its current assets. It is an indicator of liquidity, working capital management, and the overall short-term financial strength of our business.