

EcoSphere

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Exploring Indian and Global Economies, Financial Markets & Climate Change with InsPIRE

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Pioneering Insightful
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InsPIRE

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September 2026, Volume III, Issue 8

EcoSphere is a monthly review providing insights into the Indian and global economies, financial markets, climate change, and a digest of academic and policy research papers and articles. Designed to share information and ideas with professionals, researchers, and students, it is not intended as financial or investment advice. EcoSphere is compiled based on best efforts, utilizing information from diverse published sources. InsPIRE does not ensure the completeness or accuracy of this publication, nor does it guarantee the precision of future conditions based on its use.

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Chairman's Reflections



Beyond Growth: Competitiveness, Stability and Sustainability in a Changing World

The global economy is entering a period in which economic opportunity and uncertainty are increasingly intertwined. Geopolitical tensions, disruptions in energy markets, renewed inflationary pressures, changing monetary-policy trajectories and volatility in financial markets are reshaping the environment in which governments, businesses and investors make decisions. At the same time, technological transformation, evolving trade relationships and the growing urgency of climate action are redefining the foundations of competitiveness. In such an environment, resilience is no longer merely the capacity to withstand shocks; it is the ability to adapt, innovate and sustain long-term economic progress despite persistent uncertainty.

India's economic performance offers grounds for confidence, but it also calls for a careful assessment of the challenges ahead. The latest national accounts estimates indicate real GDP growth of 7.8 percent in the first quarter of FY2026–27, accompanied by real GVA growth of 8.2 percent. Manufacturing expanded by 9.2 percent, services grew by 10 percent, and gross fixed capital formation accelerated by 11.9 percent. These figures suggest that investment is assuming a more prominent role in the growth process, alongside the continued contribution of services and domestic consumption. The critical question, however, is whether this momentum can be sustained and translated into higher productivity, quality employment, stronger household incomes and a more competitive productive economy.

The acceleration in investment is particularly encouraging. A durable investment cycle can expand productive capacity, strengthen industrial capabilities and create the foundations for future growth. Yet the quality of investment matters as much as its volume. The ultimate test will be whether capital formation generates adequate economic returns, encourages private investment, improves productivity and supports employment creation. India must also ensure that the benefits of growth extend across sectors and regions. The relative moderation in

agriculture and allied activities, for instance, underlines the importance of strengthening rural incomes, agricultural productivity and the resilience of food systems. High aggregate growth will be more sustainable when its foundations are broad-based and its gains more widely shared.

The changing economic environment also highlights the importance of credible and responsive macroeconomic management. Inflation has re-emerged as a central concern. Consumer price inflation rose to 4.82 percent in August 2026, while wholesale price inflation reached 9.92 percent. The divergence between the two measures warrants close attention because sustained increases in energy, commodity and producer prices may eventually be transmitted to consumers. The immediate challenge is to distinguish temporary supply-side shocks from persistent and broad-based inflationary pressures. This requires careful monitoring of food prices, energy costs, producer-price trends, exchange-rate movements and inflation expectations.

The continuation of India's flexible inflation-targeting framework for April 2026–March 2031 provides an important institutional anchor. Its effectiveness, however, depends on maintaining credibility while recognising the changing nature of inflationary shocks. Monetary policy cannot directly resolve supply constraints in food or eliminate volatility in international crude oil prices. A coordinated policy response is therefore essential, combining price stability with measures to strengthen supply chains, improve agricultural productivity, enhance energy security and protect vulnerable households. The objective must be to preserve macroeconomic stability without unnecessarily weakening investment and growth.

Developments in global financial markets reinforce this message. September 2026 witnessed divergent equity-market performance, with technology-oriented indices in the United States and parts of Asia displaying relative resilience while several traditional US, European and Asia-Pacific benchmarks declined. Indian equity markets also experienced a broad-based correction, reflecting geopolitical uncertainty, elevated crude oil prices, rising US bond yields and foreign investor outflows. Commodity markets presented an equally uneven picture: energy and food prices rose sharply, while precious metals corrected despite continued safe-

haven demand. These movements demonstrate how quickly external shocks can influence domestic inflation, capital flows, currency movements and corporate earnings.

For India, resilience will depend partly on reducing vulnerabilities arising from imported energy and global financial volatility. Diversifying energy sources, accelerating the transition towards cleaner energy, strengthening domestic manufacturing and improving the competitiveness of exports are therefore not isolated sectoral objectives; they are integral to economic security. Equally important is the ability of firms to adapt to changing input costs, technological disruption and shifts in global demand. Businesses with sound balance sheets, sustained investment in innovation and stronger productivity will be better positioned to navigate uncertainty.

Climate change adds another dimension to this challenge. The prospect of global warming temporarily exceeding the 1.5°C threshold highlights the growing economic consequences of delayed mitigation and inadequate adaptation. Climate risks affect agricultural output, labour productivity, infrastructure, public health, water availability and financial stability. Their effects are often interconnected: extreme weather can disrupt production and logistics, damage infrastructure, raise food prices and increase demands on public finances. Climate policy must therefore be integrated more closely with economic planning rather than treated as a separate environmental concern.

Water security deserves particular attention in this context. Water underpins agriculture, industrial production, energy generation and urban development, yet its economic value is often inadequately reflected in investment decisions. India has made substantial progress in drinking water, sanitation, irrigation and river restoration, but significant gaps remain in water-use efficiency, wastewater treatment and reuse, groundwater management and integrated planning. Addressing these gaps will require more than public expenditure alone. Better project design, stronger utility finances, appropriate pricing structures, public-private collaboration and innovative financing instruments can help mobilise investment in water infrastructure and natural ecosystems. Water security must increasingly be viewed as a strategic economic asset essential to long-term prosperity.

The transition towards a more sustainable and competitive economy also demands greater attention to technological innovation, human capital and institutional capacity. Digital technologies and artificial intelligence can improve productivity, strengthen public-service delivery and support more efficient resource allocation. However, their benefits will depend on effective implementation, appropriate governance, workforce skills and broad access to opportunity. Similarly, stronger trade and investment relationships can expand markets and improve access to technology, but these gains must be supported by competitive domestic firms, reliable infrastructure and a predictable policy environment.

This edition of *EcoSphere* examines these interconnected developments through its coverage of India's macroeconomic performance, inflation, industrial and services activity, trade, employment, agriculture, monetary policy, global economic conditions, financial markets, commodities and climate change. The research digest section further explores issues ranging from the international monetary system and verifiable official statistics to the economic consequences of climate change and the financing of water security. Taken together, these contributions underscore a common proposition: economic outcomes increasingly depend on the interaction of policy choices, institutional capabilities, technological change and environmental conditions.

As India advances towards its long-term development aspirations, the task is not simply to sustain a high growth rate. It is to build an economy that can generate productive employment, maintain macroeconomic stability, withstand external shocks, use natural resources efficiently and distribute the gains of development more widely. This calls for coordinated policymaking, evidence-based decisions, stronger public and private investment, and a willingness to address structural constraints before they become binding.

The months ahead will test the resilience of both the global economy and India's domestic growth momentum. Uncertainty may persist, but it need not determine the outcome. With sound macroeconomic management, strategic investment, institutional reform and a clear commitment to sustainability, India can convert emerging challenges into opportunities for transformation.



I hope this edition of *EcoSphere* will provide readers with useful perspectives on these issues and encourage informed debate on the choices that will shape India's economic future.

Dr Debesh Roy

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**Unit Conversion**

1 lakh = 100,000

1 crore = 10 million

100 crore = 1 billion

1 lakh crore = 1 trillion

USD/INR Exchange Rate

USD (\$) 1 = INR (₹) 94.6543 (30 March 2026)

USD (\$) 1 = INR (₹) 95.9832 (30 September 2026)

COVER STORY

BEYOND 7.8 PERCENT: INDIA'S GROWTH STORY ENTERS A NEW PHASE

Dr Debesh Roy
Chairman, InsPIRE

India has begun FY2026–27 on a stronger footing than the headline 7.8 percent real GDP growth rate alone suggests. The more consequential story emerging from the first-quarter data is one of broadening activity, a marked acceleration in fixed investment, stronger manufacturing and services, and a statistical system that is being redesigned to capture an increasingly complex, formalised, digital and services-oriented economy.

Real GDP grew by 7.8 percent in Q1 FY2026–27, up from 6.9 percent a year earlier, while real GVA expanded by 8.2 percent. Manufacturing grew 9.2 percent and services 10.0 percent, while gross fixed capital formation (GFCF) accelerated to 11.9 percent from 5.8 percent. Its share in GDP rose from 31.4 percent to 34.3 percent. Private final consumption expenditure (PFCE) also remained firm, growing 7.1 percent.

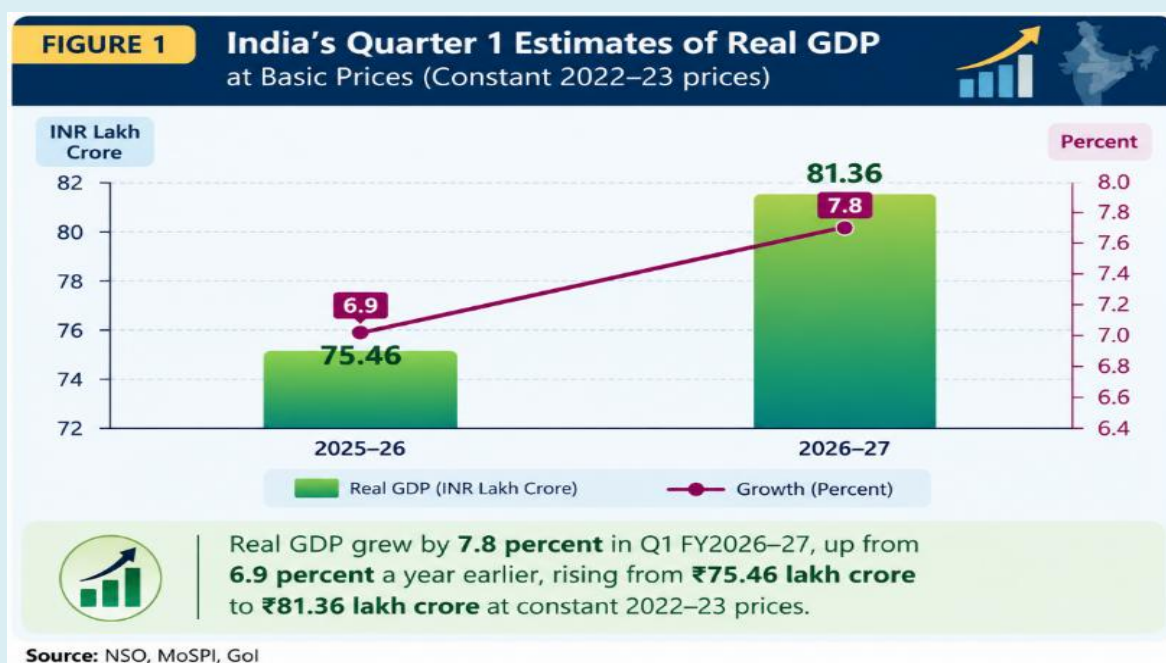
The composition of growth is therefore becoming more investment-intensive without ceasing to be consumption- or services-supported. Yet the Q1 numbers also sharpen the questions that matter for the rest of the year: how much of the investment acceleration is public and how much is private; whether higher capital formation is raising productivity and employment; whether manufacturers are retaining margins despite input-cost pressures; what the trade composition says about external resilience; and how monetary policy should respond if price pressures prove

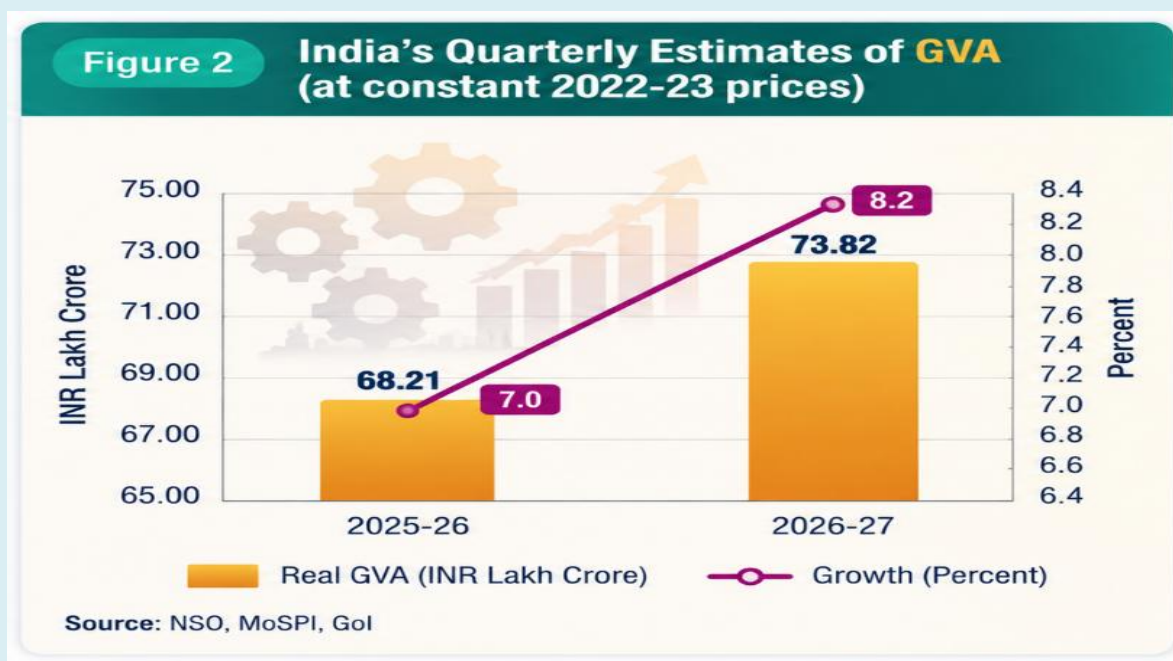
persistent rather than temporary. These are the tests that will determine the durability and quality of the expansion.

The headline number is only the beginning

At first sight, the Q1 GDP estimate presents a straightforward positive story. Real GDP at constant 2022–23 prices increased from ₹75.46 lakh crore in Q1 FY2025–26 to ₹81.36 lakh crore in Q1 FY2026–27, corresponding to growth of 7.8 percent, compared with 6.9 percent a year earlier (Figure 1). Real GVA rose from ₹68.21 lakh crore to ₹73.82 lakh crore, with growth accelerating from 7.0 percent to 8.2 percent (Figure 2).

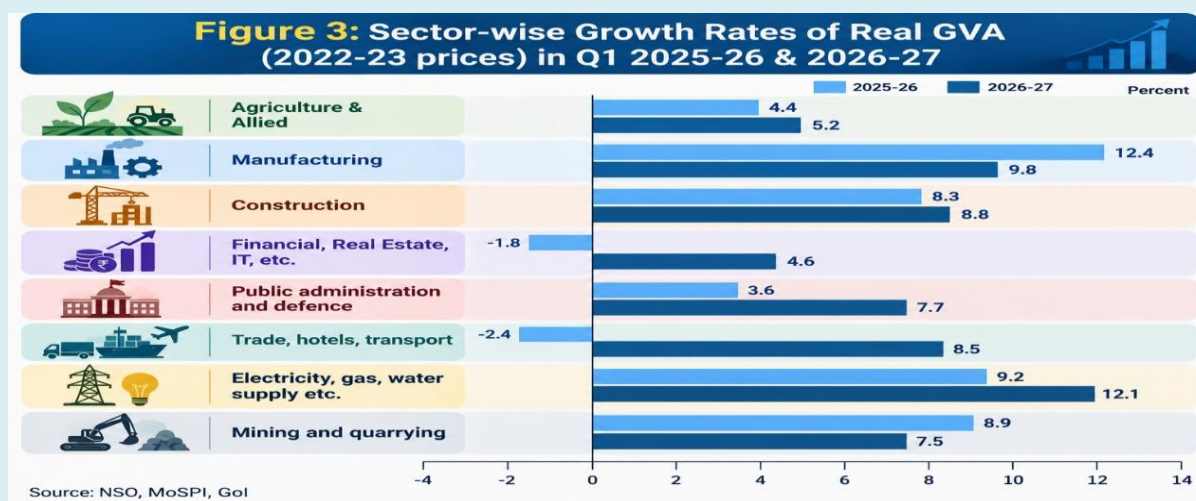
These numbers suggest that India's growth engine may be acquiring a more balanced composition. Services remain the principal anchor, consumption provides a substantial demand floor, and manufacturing and investment are assuming a more prominent role. But the strength of the first quarter also raises a more demanding question: can India sustain growth above 7 percent while maintaining price stability, protecting corporate margins, preserving financial stability and translating investment into employment and incomes? That is the real growth test.





The sectoral picture is broad-based, although not uniform. Manufacturing expanded by 9.2 percent, compared with a contraction of 1.8 percent in Q1 FY2025–26 (Figure 3). Construction grew 7.7 percent, while financial, real estate, IT and related services recorded 7.5 percent. Agriculture and allied activities slowed to 3.6 percent from 4.4 percent. The shift is therefore significant: industrial activity has strengthened sharply while services remain an important source of momentum, but the slower primary sector remains relevant for rural incomes and the breadth of domestic demand.

Services are particularly important because they now account for more than 55 percent of the economy. According to MoSPI Secretary Dr Saurabh Garg, the statistical system is increasingly able to measure activity in services such as real estate, financial services, retail and wholesale trade and information technology through a combination of administrative and digital datasets. The significance of the Q1 performance therefore lies not simply in its magnitude, but in the changing sectoral and institutional composition of activity.



Investment: the most important signal

Perhaps the most significant feature of the Q1 data is the acceleration in investment. Real GFCF increased 11.9 percent, more than twice the 5.8 percent growth recorded a year earlier (Figure 4). Its share in GDP rose from 31.4 percent to 34.3 percent (Figure 5). Private final consumption expenditure, by comparison, grew 7.1 percent, broadly maintaining its already strong momentum, while government final consumption expenditure grew 4.3 percent. Figure 4 illustrates this contrast particularly clearly: investment has become the fastest-growing major expenditure component. This matters for reasons that go beyond the immediate contribution of investment to aggregate demand.

The emerging combination of higher GFCF, stronger manufacturing and continued construction activity provides the possibility of a more durable investment cycle. But durability requires more than a strong first-quarter number. It requires investment projects to move from expenditure to productive capacity, higher capacity utilisation and productivity, and eventually to stronger employment and household incomes.

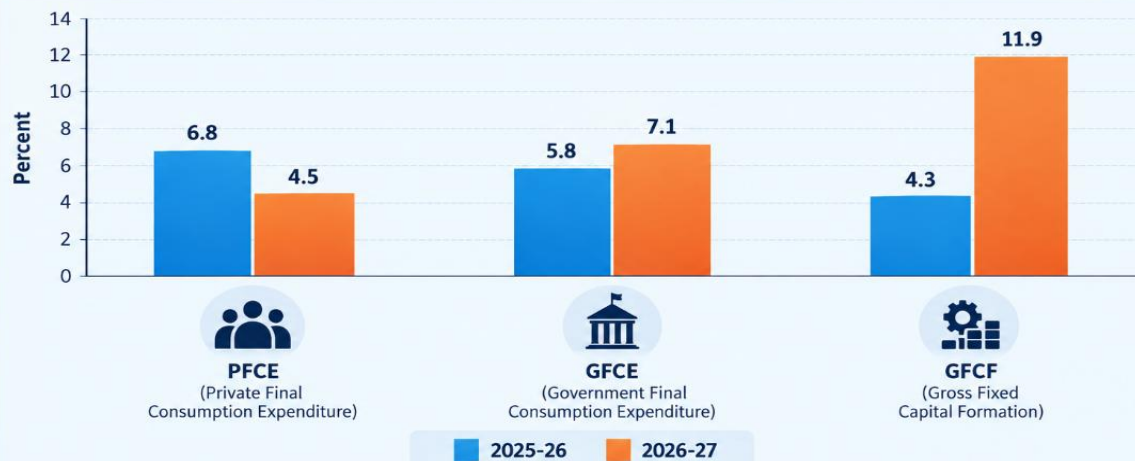
The investment story is also supported by evidence outside the expenditure accounts. Capital-goods production in the IIP grew 15.2 percent in Q1, compared with 8.8 percent a year earlier, while machinery and equipment imports rose 51.5 percent. These movements provide useful cross-checks because they suggest that part of the investment impulse is visible in physical production and in the acquisition of capital equipment. The convergence between national-

accounts investment and these indicators strengthens the case for an active capital-formation cycle, while still leaving its public-private composition to be established over a longer period.

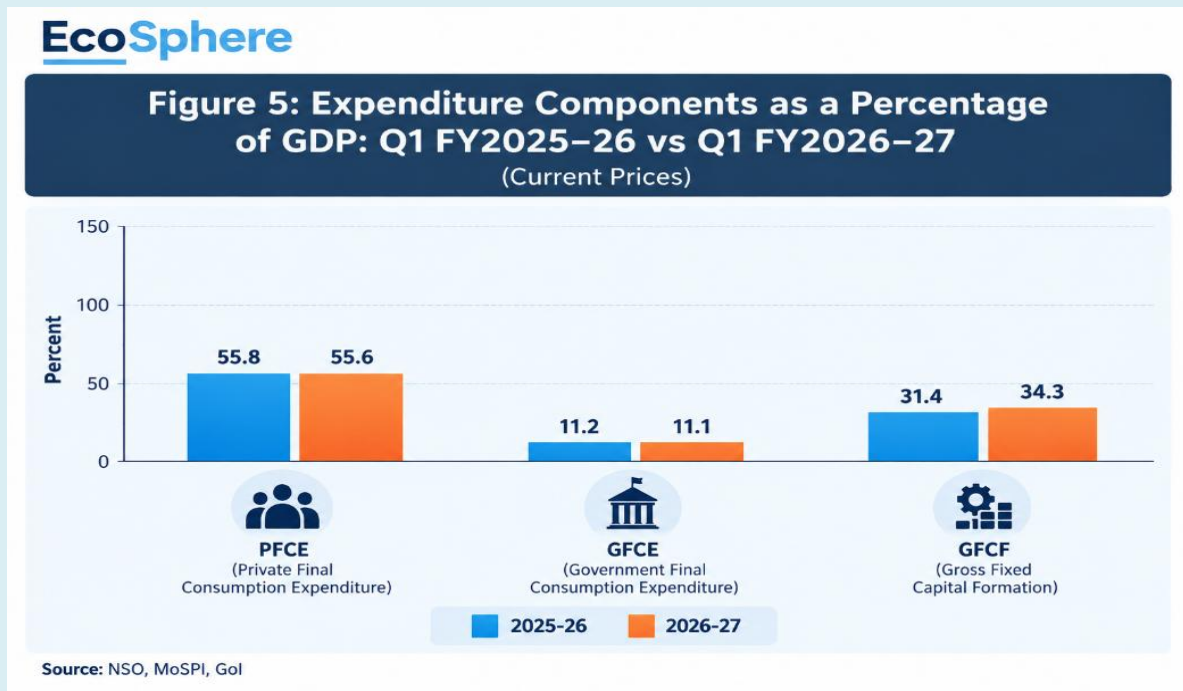
The next question is whether this investment will become self-sustaining. A durable investment cycle ultimately has to generate returns, productive capacity, jobs and household incomes. If investment accelerates without sufficient improvement in employment or incomes, the feedback into consumption could remain limited. Conversely, if capital formation raises productivity and employment, it could create the foundations for a stronger and more balanced expansion.

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**Figure 4: Quarterly (Q1 2025-26 & 2026-27)
Growth of Expenditure Components of Real GDP**
(at constant 2022-23 prices)



Source: NSO, MoSPI, GoI



Manufacturing's paradox: strong real growth, but margins require closer monitoring

The manufacturing numbers contain one of the most important interpretative issues in the new GDP estimates. Manufacturing grew by 9.2 percent in real terms, yet its deflator turned negative. Dr Garg explains that this is closely related to the introduction of double deflation under the revised National Accounts framework, supported by Producer Price Index data for inputs and outputs.

The logic is important. Manufacturers use substantial quantities of intermediate inputs. If input prices and output prices move differently, the measurement of real value added can change materially. Double deflation is intended to capture this distinction more accurately by separately accounting for changes in the prices of output and intermediate consumption. The effect can therefore be particularly visible in manufacturing. This helps explain the otherwise counter-intuitive combination of strong real manufacturing growth alongside a negative manufacturing deflator.

The economic interpretation, however, needs to be kept separate from the statistical explanation. A negative sectoral deflator by itself does not establish that manufacturers are

facing margin compression. Evidence from the RBI's Q1 corporate-sector dataset provides a useful additional perspective: raw-material expenses of listed manufacturing companies rose 27.5 percent year-on-year, but the raw-material-to-sales ratio edged down to 58.1 percent, while manufacturing operating profit grew 21.3 percent. For the companies covered by that dataset, therefore, higher input costs did not translate into weaker operating profitability in the quarter.

This does not eliminate the risk of future cost pressure. Energy prices, imported inputs, exchange-rate movements and global supply disruptions can affect margins with a lag, and listed-company evidence does not represent every manufacturer. The appropriate conclusion is therefore conditional: the Q1 data show strong real manufacturing growth and, in the listed-company sample, resilient operating profitability; whether that combination persists will depend on input prices, selling prices, productivity, capacity utilisation and demand.

The manufacturing revival should consequently be read on two levels. The volume data indicate a substantial improvement in industrial activity, while the corporate evidence suggests that profitability has so far remained resilient. The next few quarters will show whether productivity and demand are strong enough to sustain both production growth and healthy corporate returns

The GDP–GVA gap: why 8.2 percent matters

Another feature of the Q1 data is the difference between real GDP growth of 7.8 percent and real GVA growth of 8.2 percent. The distinction is not merely statistical. GVA captures value added by producers, while GDP also incorporates net taxes on products. The relatively faster growth of GVA in Q1 reflects, among other things, developments in taxes and subsidies.

Dr Garg notes that subsidies increased in the short term in the context of geopolitical pressures and efforts to limit their impact on citizens. At the same time, tax receipts remained buoyant despite reductions in GST rates and other tax measures. Customs revenue, for example, recorded strong growth. The interaction of taxes and subsidies therefore matters when interpreting the gap between production-side GVA and expenditure-side GDP.

The GDP–GVA divergence should consequently not be interpreted mechanically as evidence of weaker or stronger underlying economic activity. The broader signal from both the production and expenditure sides remains one of strong momentum, while the difference between the two measures highlights the importance of understanding the fiscal and price components embedded in the national accounts.

A new GDP framework, and a new way of reading the economy

The Q1 figures come from India’s new 2022–23-based National Accounts series. One of the most important lessons from the transition is that GDP estimates should be evaluated on a like-for-like basis within the new framework rather than by mixing revised estimates with unrevised numbers from the earlier 2011–12-based series. Within the revised framework, nominal GDP grew 10.3 percent in Q1 (Figure 6). The unusual relationship between real and nominal growth is substantially influenced by the methodological changes, particularly in manufacturing.

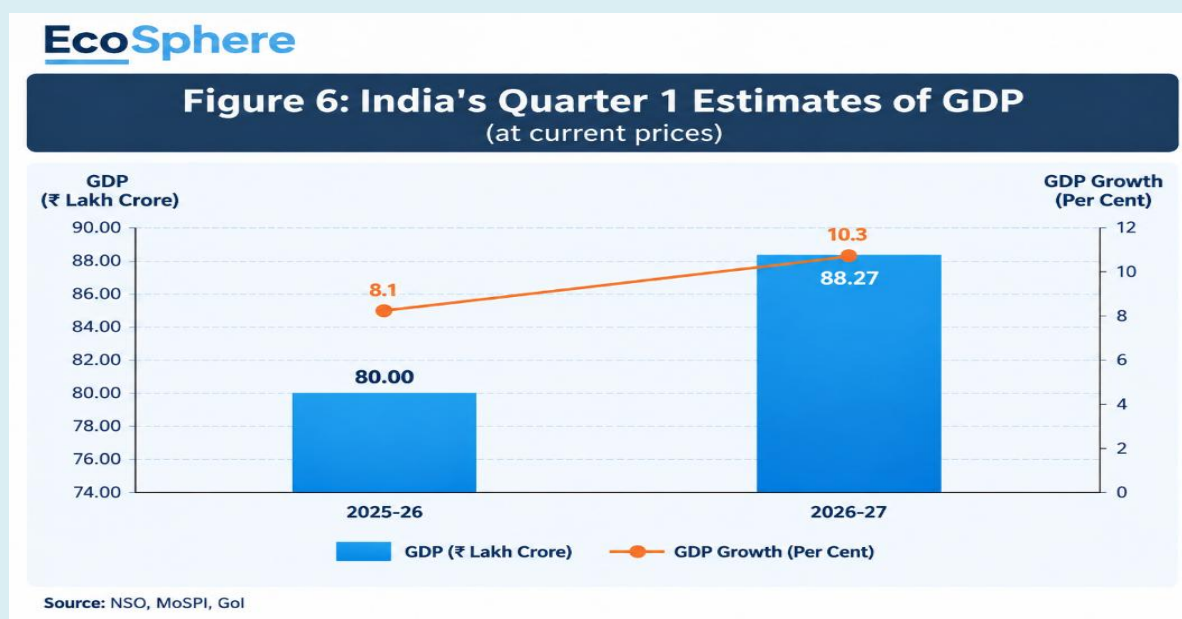
The logic is important. Manufacturers use substantial quantities of intermediate inputs. If input prices rise significantly while output prices do not rise to the same extent, the increase in gross output does not translate proportionately into value added. Double deflation is intended to capture this distinction more accurately. The effect is consequently much stronger in manufacturing than in many services, where the volume of intermediate inputs is generally lower. This helps explain an otherwise counter-intuitive combination: strong real manufacturing growth alongside a negative manufacturing deflator.

Dr Garg’s explanation is significant because it moves the discussion beyond the simplistic question of whether the GDP number is “too high” or “too low”. The revised system incorporates a new base year, double deflation in manufacturing, Producer Price Index information and a broader set of administrative datasets.

The transition has involved several sequential improvements. Revised IIP data have been incorporated, PPI data have become available and these data have subsequently been integrated into the double-deflation methodology. According to Dr Garg, these major methodological

iterations have now largely been completed. The 2022–23 and 2023–24 estimates are final, while later years will continue to undergo the normal revision process.

The forthcoming back series is therefore important. MoSPI has indicated a target of releasing it by the end of the year, which should make comparisons across the new statistical framework considerably more meaningful. As the revised series settles, the quality of economic debate should improve by allowing greater attention to structural changes rather than methodological discontinuities.



India's statistical system is undergoing its own transformation

Perhaps the most underappreciated dimension of the new GDP framework is the data infrastructure behind it. India's economy has become increasingly digital, formalised and services-driven. Traditional statistical methods remain essential, but they need to be complemented by administrative and digital data capable of capturing activity with greater frequency and granularity.

The expansion of GST data, digitisation of government expenditure through the Public Financial Management System (PFMS), revised IIP data and other administrative datasets has materially expanded the information available to MoSPI. Government expenditure can now be

observed much closer to real time, while GST provides monthly information that can strengthen expenditure-side estimates.

This is particularly valuable for services. More than 55 percent of the economy now consists of services, yet many services do not generate easily observable physical output of the kind associated with manufacturing or agriculture. Digital transactions and administrative records can consequently provide a richer picture of activity in retail, finance, real estate and IT.

The statistical system is thus moving towards a framework that combines surveys with administrative, digital and real-time information. This does not make GDP measurement infallible. Rather, it creates the possibility of more timely and granular measurement of an economy whose structure itself is changing rapidly.

India's statistical system is undergoing its own transformation: From data collection to data as an economic asset

The implications go beyond GDP. Dr Garg identifies a further priority for MoSPI: making the large volume of data held across ministries, departments and state governments more accessible to startups and citizens. His broader proposition is that data itself has become an economic asset capable of generating value through research, applications, business models and public services.

This could become an important dimension of India's next phase of digital transformation. If appropriately governed, greater access to public data could lower information costs, enable new analytical products, support innovation and improve policymaking. It could also strengthen independent research and create new opportunities for startups working at the intersection of data, technology and public policy.

In that sense, the evolution of the National Accounts is part of a larger transition: India is not only becoming a more data-intensive economy; it is also developing the infrastructure to measure that economy more effectively.

The risks beneath the strong headline

The Q1 numbers are encouraging, but they should not be extrapolated mechanically. There are several emerging risks. GDP and GVA deflators have increased, while the manufacturing deflator has turned negative. Strong credit growth could create financial pressures, while higher energy costs could squeeze manufacturers. The external environment remains uncertain because of geopolitical tensions, energy prices, global trade restrictions, weather conditions and tighter international financial conditions. Some high-frequency indicators have also begun to moderate. That is an important reminder that one exceptionally strong quarter does not automatically establish a new trend.

There is also a structural question around agriculture. While manufacturing and services have strengthened, agriculture and allied activities grew by only 3.6 percent in Q1, down from 4.4 percent a year earlier. For a country where a large share of households remains connected to agriculture, the performance of the rural economy will continue to matter for consumption, incomes and the inclusiveness of growth.

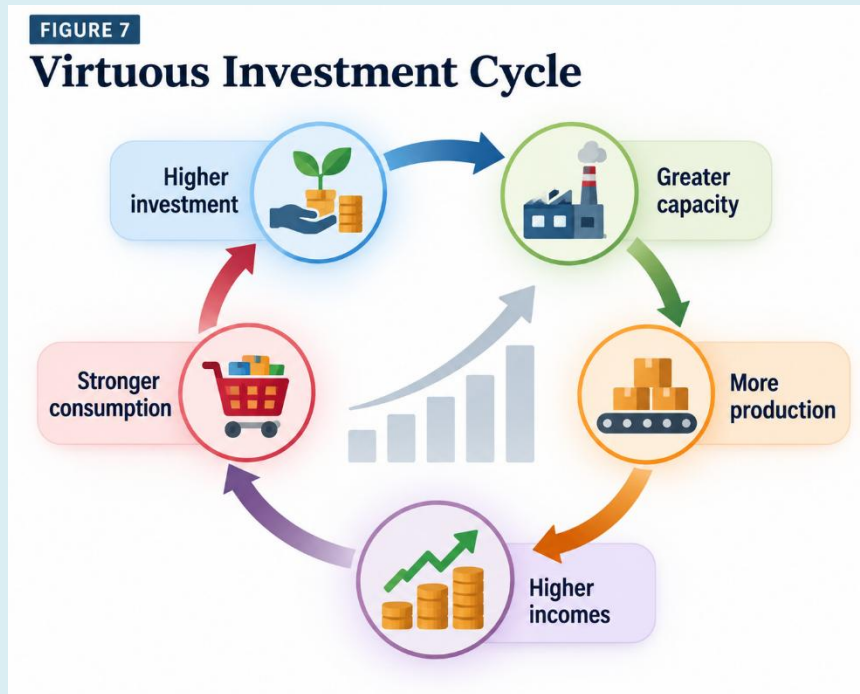
The policy challenge is therefore becoming more sophisticated. India no longer faces only the question of how to generate growth. It increasingly faces the challenge of how to sustain high growth while maintaining macroeconomic balance.

The next test: converting investment into incomes

The most important question emerging from Q1 may therefore be less about whether the 7.8 percent growth rate can be repeated immediately and more about the transmission mechanism behind it. Investment is accelerating. Manufacturing is expanding. Services remain robust. Consumption continues to provide a strong demand floor. The crucial next step is to determine whether these elements reinforce one another through productivity, employment, incomes and demand.

A successful investment cycle (Figure 7) should expand productive capacity and raise productivity. Higher productivity can strengthen competitiveness and profitability. Greater production can generate employment and incomes. Higher incomes can support consumption,

which in turn can encourage further investment. The virtuous cycle is not automatic, however; it depends on the composition of investment, the sectors in which capacity is created, labour absorption and the ability of firms to earn sustainable returns.



The alternative is a less balanced pattern in which investment and capital-intensive production expand without a commensurate increase in employment and household incomes. Such a pattern could sustain headline GDP growth while weakening the transmission from output to living standards. The Q1 data therefore need to be followed by evidence on employment, wages, labour productivity and household demand before the quality of the investment cycle can be assessed fully.

A stronger economy requires a stronger macroeconomic balance

The Q1 numbers consequently present a more demanding policy challenge. Strong growth reduces the immediate need to stimulate aggregate demand, but it does not eliminate the need to manage supply-side constraints and inflation risks. The relevant policy trade-off is between sustaining productive investment and ensuring price and financial stability, while also protecting the external position and maintaining conditions for employment-intensive growth.

India's current position is best understood as the beginning of a potentially more investment-intensive phase of expansion rather than the completion of a cycle. The evidence includes rapid GFCF growth, strong capital-goods production, robust manufacturing and services, resilient consumption and firmer external trade activity. At the same time, the public-private composition of investment, the employment and productivity response, and the durability of corporate margins remain open questions.

But the external environment is less benign, and the domestic economy has its own vulnerabilities. The policy objective should consequently be to consolidate the investment cycle while ensuring that productivity, employment, incomes and consumption broaden the gains from growth. Monetary policy, in particular, need not respond to every increase in headline or sectoral prices in the same way. A temporary supply-side shock, such as an energy or food disruption, has different implications from persistent, broad-based inflation that begins to affect core prices, wages and inflation expectations. A stronger policy response would be more clearly warranted if price pressures broadened and became persistent; if pressures remained primarily supply-driven and temporary, the appropriate response would depend on their persistence, second-round effects and impact on expectations. This conditional framing is important in assessing the growth–inflation trade-off.

Beyond the number

The most important message from India's Q1 FY2026–27 GDP data is ultimately not that growth was 7.8 percent. It is that the composition of growth is becoming more investment-intensive while services remain a major anchor and household consumption continues to expand. Manufacturing has strengthened materially, and the investment cycle is supported by both national accounts and high-frequency indicators.

The new GDP framework consequently represents more than a statistical revision. It is an attempt to construct a more appropriate lens for an economy that is increasingly services-oriented, digital, formalised and structurally complex. Better use of administrative data, PPI information, double deflation and revised production indicators can improve measurement,

while also making it more important to interpret each estimate within the framework in which it was produced.

As the new series settles and the back series becomes available, the quality of economic debate should improve. The focus can then move away from whether one number is higher or lower than an earlier estimate and towards the questions that matter more: Where is growth coming from? Is private investment broadening alongside public investment? Is productivity improving? Are jobs, wages and household incomes rising? Are exports becoming more competitive without creating excessive import dependence? And is India's structural transformation becoming more inclusive?

The answer to these questions will determine whether today's 7.8 percent becomes merely another strong quarterly number or an early marker of a more durable phase of India's economic expansion. The Q1 evidence is strong, but its significance lies in what follows: whether investment becomes self-sustaining, whether productivity and employment rise together, whether manufacturing can maintain profitability amid changing input costs, and whether macroeconomic policy can preserve price and financial stability without interrupting productive expansion. India's growth test has therefore become more demanding. The challenge is not simply to grow fast, but to make fast growth durable, productive, employment-generating, externally resilient and macroeconomically balanced.

INDIA'S NEW NATIONAL ACCOUNTS: A MORE GRANULAR LENS ON A CHANGING ECONOMY

The publication *Sources and Methods for Compilation of National Accounts Statistics*, released by the National Statistics Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), on 21 September 2026, provides a comprehensive account of the conceptual framework, data sources and estimation methodologies underlying India's new National Accounts series with 2022–23 as the base year. The new series, introduced in February 2026, represents the eighth base-year revision of India's National Accounts and marks a significant methodological advance over the previous 2011–12 series. The publication is organised into 30 chapters covering the conceptual framework, institutional and industry-wise estimates,

expenditure aggregates, capital formation, saving, Supply and Use Tables, quarterly and advance estimates, regional accounts and data dissemination.

A New Statistical Architecture for a Changing Economy

National Accounts are the principal statistical framework for measuring the size, structure and performance of an economy. They provide an integrated picture of production, income, consumption, saving and investment and form the foundation for macroeconomic analysis, forecasting and policy formulation. India's national accounting system has evolved substantially since the first official estimates based on the 1948–49 base year, reflecting successive improvements in data availability, economic structure and international statistical standards.

The choice of 2022–23 as the new base year is particularly significant. The publication notes that several recent years were unsuitable because they were affected by major economic disruptions—including demonetisation, the introduction of GST and the COVID-19 pandemic. FY2022–23 was considered the first relatively normal year after FY2015–16, while major surveys such as the Household Consumption Expenditure Survey (HCES), Annual Survey of Unincorporated Sector Enterprises (ASUSE) and Periodic Labour Force Survey (PLFS) were available for the year.

The central feature of the new series is therefore not simply a change in the base year. It represents a broader transformation in the information architecture of India's national accounts, with greater use of administrative data, annual surveys, sector-specific studies, more granular estimation and improved price and volume measurement.

From Traditional Sources to a Wider Data Ecosystem

The 2022–23 series draws on a substantially expanded range of data sources. Major additions include ASUSE, PLFS, HCES 2022–23 and 2023–24, the All India Debt and Investment Survey (AIDIS) 2019, the Land and Livestock Holding Survey and Situation Assessment Survey of Agricultural Households. Administrative sources include the Public Financial Management System, GST data, the VAHAN portal and the MPLADS portal. Sector-specific

studies by institutions such as CMFRI, CIFRI, IGFRI, NABCONS and NDRI have also been incorporated.

This shift is important because the Indian economy has become increasingly diverse, formalised and digitally recorded. The greater availability of transaction-level and administrative information reduces dependence on broad benchmark indicators and permits more direct measurement of economic activity. The publication specifically highlights the integration of high-frequency administrative datasets and regular annual surveys, together with enhanced granularity and improved estimation procedures.

A Major Improvement in Measuring the Unorganised Economy

One of the most consequential changes concerns the household and unincorporated sector, which constitutes a substantial part of India's economic activity. Under the earlier 2011–12 series, GVA in several unincorporated activities was estimated using a benchmark indicator approach. The new series adopts a Labour Input (LI) method, combining annual industry-level GVA per worker derived from ASUSE with workforce estimates from PLFS, adjusted for projected population.

This changes the nature of estimation from periodic benchmark extrapolation towards annual measurement based on productivity and employment information. The methodology is applicable across industries except agriculture and construction.

The implications extend beyond statistical refinement. Better measurement of the unincorporated economy is important for understanding employment-intensive activities, household enterprises, small businesses and the broader contribution of India's informal and semi-formal sectors to growth.

Greater Granularity Across Sectors

The new series also introduces significant improvements in sectoral measurement. In agriculture, individual crop-level information on area, production and prices has been incorporated, improving the treatment of fruits, vegetables, millets and pulses. Estimates of fodder and grass production have been updated using state-specific productivity information,

while livestock feed estimates have also been refined. Fisheries now use state-wise input-output ratios derived from specialised studies rather than a uniform ratio across states.

In manufacturing, one of the most important methodological changes is the introduction of double deflation for 28 of 30 manufacturing compilation categories. Output and intermediate consumption are separately deflated using appropriate price indices, allowing real GVA to reflect independent movements in output and input prices. This replaces the wider use of single deflation in the earlier series.

The financial sector has also benefited from improved data coverage. RBI's Statistical Tables Relating to Banks in India are used for public-sector banks; MCA annual accounts improve coverage of private NBFCs; AIDIS and ASUSE strengthen estimation of moneylenders and financial auxiliaries; and pension funds and provident-fund organisations receive improved institutional treatment.

Recasting Consumption and Investment Measurement

The expenditure side of GDP has undergone equally important changes. Private Final Consumption Expenditure (PFCE) is now estimated through a mixed approach combining HCES, production and other relevant data sources and the Commodity Flow approach. The adoption of COICOP 2018, greater item-level use of CPI data and more dynamic rates and ratios provide a more granular picture of household consumption. The revised quarterly methodology covers 93 consumption categories and uses HCES 2022–23 and 2023–24 to derive quarterly consumption patterns.

Gross Fixed Capital Formation (GFCF) has also been refined. The treatment of machinery and equipment uses a dynamic commodity-flow framework, while ASUSE and AIDIS improve the allocation of investment by industry and asset. Capital formation in cultivated biological resources now uses annual state- and plantation-specific expenditure data from NABARD. Price measurement increasingly relies on Producer Price Indices rather than broad Wholesale Price Indices.

The measurement of household saving has similarly expanded. SEBI data now provide estimates for household investment in shares, debentures, mutual funds and hybrid instruments, with broader coverage of REITs, InvITs, AIFs and secondary-market investment. This better reflects the changing composition of household financial assets.

Supply and Use Tables as the Central Balancing Framework

Perhaps the most important systemic improvement is the greater role of the Supply and Use Table (SUT) framework. Under the new GDP series, production, income and expenditure estimates are systematically integrated and reconciled through SUTs rather than being treated as independent aggregates. The framework brings together detailed information on the supply and use of goods and services and provides a mechanism for confronting, validating and balancing estimates across the economy. It is also intended to eliminate statistical discrepancies in the final annual estimates.

This represents an important step towards a more internally consistent National Accounts system and strengthens the analytical usefulness of GDP and GVA estimates.

Better Measurement of Quarterly Economic Activity

The new series also changes the compilation of quarterly GDP. The NSO has adopted Proportional Denton benchmarking in place of the earlier pro-rata method. The objective is to preserve movements in high-frequency indicators while ensuring consistency with annual benchmarks. The wider availability of administrative and other high-frequency data permits more representative indicators to be used for quarterly estimates.

This is particularly important because quarterly GDP has become central to assessing the momentum and turning points of economic activity. Better benchmarking and more granular indicators should improve the coherence between quarterly and annual estimates.

What the New Series Means for Economic Analysis

The 2022–23 National Accounts series is therefore best understood as a modernisation of India's statistical measurement system, rather than merely a routine rebasing exercise. Its

defining characteristics are wider data coverage, greater sectoral granularity, more direct measurement of the unorganised economy, improved deflation techniques, stronger integration of production and expenditure estimates, and greater use of administrative and regulatory information.

For policymakers and researchers, the principal benefit is a more detailed representation of an economy undergoing rapid structural transformation. For analysts, however, the methodological changes also mean that comparisons with the earlier 2011–12 series need to be interpreted carefully. The publication itself provides estimates for FY2022–23 under both the old and new series in the relevant chapters, enabling users to understand the effect of methodological changes.

The broader significance is that the quality of economic policy increasingly depends on the quality and relevance of economic measurement. By incorporating newer surveys, administrative databases, sector-specific studies and internationally aligned methodologies, the 2022–23 series seeks to ensure that India's National Accounts remain capable of capturing an economy that is more digital, diversified, formalised and complex than it was when the previous series was introduced.

The new *Sources and Methods* publication consequently performs an important role beyond documentation: it provides the methodological map required to understand, interpret and critically use India's new National Accounts. As the economy evolves further, continued investment in surveys, administrative data integration, price statistics and methodological research will remain essential to keep the statistical system aligned with the realities of India's economic transformation.

WHY THE NEW GDP METHODOLOGY IS MORE ROBUST

The credibility of the new GDP estimates rests not on a single methodological change, but on a combination of improved concepts, better price measurement, wider data coverage, greater use of administrative data and cross-validation across production and expenditure indicators.

1. The new series follows internationally recognised national accounting standards

The quarterly GDP estimates under the 2022–23 base year follow the Quarterly National Accounts Manual of the International Monetary Fund (IMF), 2017. The quarterly estimates continue to use the established Benchmark–Indicator methodology, whereby the previous year's estimates are extrapolated using relevant indicators reflecting the performance of different economic and institutional sectors.

This provides an important institutional foundation for the new series: the methodology is not an ad hoc response to recent economic developments but is aligned with internationally recognised national accounting practices.

2. Double deflation substantially improves the measurement of manufacturing value added

Perhaps the most important methodological improvement is the adoption of double deflation for manufacturing. Under the earlier single-deflation approach, the same deflator was effectively used for output and intermediate consumption. The new methodology separately deflates manufacturing output and intermediate consumption, using granular Producer Price Indices (PPI), and calculates real GVA as:

$$\text{Real GVA} = \text{Real Output} - \text{Real Intermediate Consumption}$$

This is conceptually superior because manufacturing value added depends not only on the price received for final output but also on the prices paid for intermediate inputs.

This is particularly important when input prices and output prices move differently—which is precisely what can happen during commodity-price shocks or supply-chain disruptions.

3. The methodology captures input-cost pressures that the earlier system could obscure

The negative manufacturing implicit deflator in Q1 should not automatically be interpreted as evidence of a statistical problem. The new methodology can produce a declining or even negative manufacturing GVA deflator when input prices rise faster than output prices. MoSPI explicitly notes that this can occur when prices of key inputs such as crude petroleum, natural gas and raw materials increase faster than manufacturers' output prices. This is actually one of the strengths of double deflation: it can reveal margin pressures and changes in the terms between input and output prices that a common deflator could fail to capture adequately.

The use of PPI for both inputs and outputs is responsible for much of the difference between real and nominal manufacturing growth, because input prices in some manufacturing sectors increased considerably while output prices did not rise correspondingly.

4. Richer and more granular price information is now being used

The robustness of double deflation depends critically on the quality of the underlying price data. The new series benefits from the availability of a new series of Output PPI, with a 2022–23 base year, as well as granular price information. Improved price data, including the new PPI series, have strengthened the implementation of double deflation.

The breadth of price information now being used: For Q1 FY2026–27, for example, the PPI for manufactured products increased 10.7 percent, while PPI for crude petroleum and natural gas increased 58.0 percent.

This granular treatment is particularly valuable in an economy exposed to substantial variation in input prices across industries.

5. The data architecture has become much broader

A major strength of the new series is that GDP estimation is no longer dependent predominantly on a relatively narrow set of conventional indicators. The Q1 methodology incorporates information from a remarkably broad range of sources, including: GST data; financial results of listed companies; granular IIP; steel consumption; commercial-vehicle and three-wheeler

sales; air traffic; railway freight and passenger traffic; port cargo; telecommunications usage; bank and NBFC credit and deposits; insurance-sector information; PFMS data on Central Government expenditure; State Government tax and subsidy information; CPI and PPI; RBI balance-of-payments data; e-VAHAN vehicle registrations; commodity-wise imports and exports; and food-grain offtake.

The significance is not simply the quantity of data but its diversity. Different datasets capture different dimensions of economic activity, reducing dependence on any single indicator.

6. Administrative data are becoming an important source of near-real-time information

India's digitalisation has created a particularly important opportunity for national accounts. GST provides high-frequency information on economic transactions, while the Public Financial Management System (PFMS) provides much more timely information on government expenditure. The MoSPI Secretary has emphasised that digitisation has enabled the statistical system to observe government expenditure much closer to real time and has strengthened measurement on the expenditure side. This is a significant methodological advance because the economy is becoming increasingly formalised and digitally recorded.

7. The new system strengthens measurement of the services economy

This is particularly important for India. Services now account for more than 55 percent of the economy, but many services do not have easily observable physical output. MoSPI has therefore benefited considerably from GST and other administrative datasets in measuring sectors such as financial services, real estate, retail and wholesale trade and IT. This makes the new framework better suited to the structural composition of today's Indian economy than a statistical architecture designed for an earlier, more manufacturing- and agriculture-centric economy.

8. Both production and expenditure sides are being strengthened

An important feature of the new framework is that it does not rely exclusively on the production approach. MoSPI now has considerably better information on both production and expenditure, helping reduce the volatility and uncertainty associated with some quarterly estimates. GST,

PFMS and administrative data have strengthened the expenditure side, while IIP, PPI and sector-specific indicators strengthen production-side measurement. This creates an important possibility for cross-validation: the same economic developments can be examined from different sides of the national accounts.

9. The Q1 growth story is corroborated by independent high-frequency indicators

The robustness of the methodology is reinforced by the fact that the GDP estimates are broadly consistent with a wide range of independent economic indicators: IIP capital goods growth: 15.2 percent ; commercial vehicle sales: 18.3 percent; three-wheeler sales: 29.7 percent ; household vehicle registrations: 15.9 percent; goods transport vehicle registrations: 20.1 percent ; cement production growth: 8.9 percent ; finished steel consumption: 8.3 percent; IIP infrastructure/construction goods: 7.2 percent; electricity IIP: 9.3 percent; export of goods and services: 25.8 percent. The particularly strong performance of capital goods is noteworthy because it independently supports the investment signal coming from the national accounts.

10. The investment story has multiple independent points of confirmation

The new GDP series reports 11.9 percent real GFCF growth in Q1 FY2026–27, compared with 5.8 percent a year earlier. This is not an isolated statistical result. Capital-goods production under IIP grew 15.2 percent, while manufacturing of electrical equipment grew 27.0 percent, computer/electronic/optical products 12.4 percent, and machinery and equipment 9.1 percent. Imports of machinery and equipment also rose 51.5 percent.

The convergence of GFCF, capital-goods production and investment-related imports provides a powerful cross-check on the investment component of GDP. This is one of the strongest arguments for taking the underlying Q1 growth momentum seriously.

11. The revisions have been part of a transparent, iterative process

Another important point is that the new estimates have not emerged from a static methodology. The new series incorporated the revised IIP, the new PPI and updated administrative data in stages. The August 2026 release explicitly states that the annual and quarterly estimates have now incorporated these improvements. According to the Secretary, MoSPI, The incorporation

of revised IIP, PPI and double deflation was an iterative process, and that the major methodological iterations have now been completed.

This is important because revisions are an inherent feature of national accounts, not necessarily evidence of weakness. As better source data become available, estimates are expected to improve. MoSPI nevertheless appropriately cautions that estimates can undergo subsequent revisions because of improved source data and revisions made by source agencies.

12. The new framework is better aligned with the structural transformation of India

Perhaps the most fundamental justification is structural. India's economy today is more services-oriented, formalised, digitised and data-rich than when the previous national accounts framework was developed. The new series responds to this transformation by combining: better price indices + double deflation + granular industrial data + GST + PFMS + administrative datasets + financial-sector data + digital transaction information. The result is not merely a revised number but a different and potentially more comprehensive statistical lens on the Indian economy. This is precisely the broader point emerging from the MoSPI Secretary's views: India's statistical system is increasingly capable of using the digital and administrative data generated by the economy itself.

Conclusion

The credibility of the new GDP series does not rest on the 7.8 percent growth number alone. It rests on the substantially stronger statistical architecture behind that number: internationally aligned national accounting standards, double deflation using granular PPI data, a wider range of administrative and market-based indicators, improved measurement of services, stronger production- and expenditure-side estimates, and independent high-frequency indicators that broadly corroborate the underlying growth story. The new methodology does not imply that every quarterly GDP estimate is final or immune to revision. MoSPI itself acknowledges that subsequent revisions will occur as source data improve. But revisability is not the same as

unreliability. In fact, a statistical system that incorporates progressively better source data and follows a defined revision calendar is a feature of a robust national accounts framework.



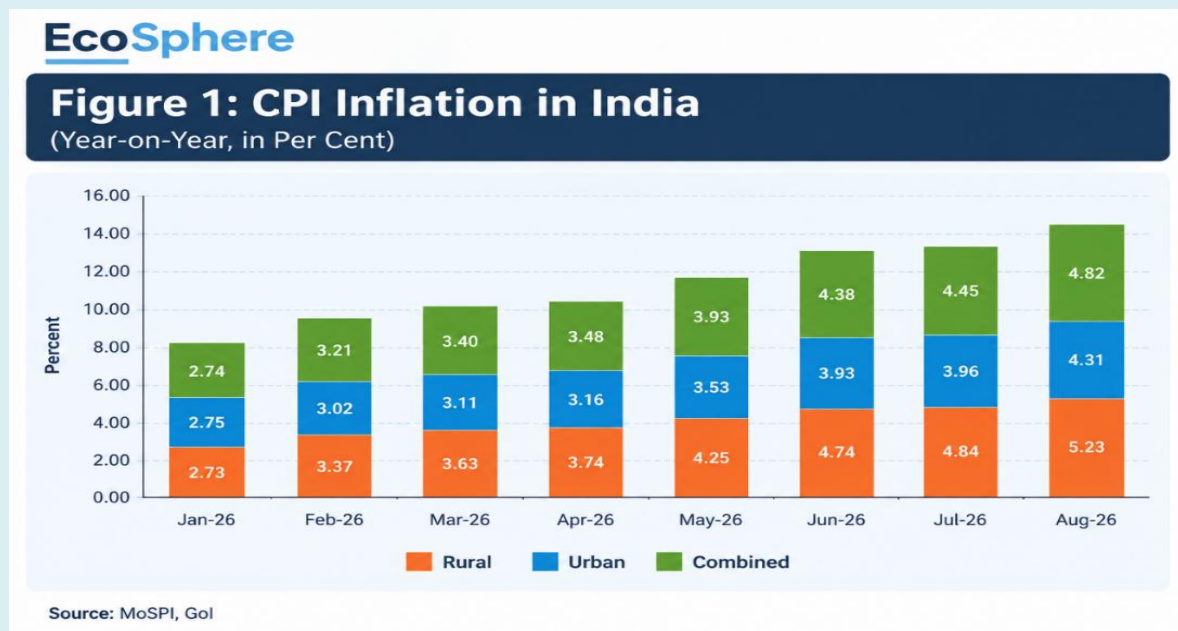
The real strength of India's new GDP series lies not merely in the 7.8% headline growth, but in the fact that the number is now being generated from a substantially richer, more granular and better cross-validated information system designed for the structure of India's contemporary economy.

SECTION 1: INDIAN ECONOMY

NAVIGATING MACROECONOMIC TRENDS

INDIA'S INFLATION CROSSROADS: READING THE SIGNALS FROM CPI, WPI AND PPI

India's inflation trajectory has changed significantly during 2026. Headline CPI inflation, which had fallen to 2.74 percent in January, increased steadily to 3.21 percent in February, 3.40 percent in March, 3.48 percent in April, 3.93 percent in May, 4.38 percent in June, 4.45 percent in July and 4.82 percent in August (Figure 1). The August reading is particularly significant because inflation has remained above the Reserve Bank of India's 4 percent target for three consecutive months.



Yet the latest inflation picture is more complex than the headline number suggests. Food prices remain an important driver, but price pressures are also becoming visible across services, manufactured products and energy-intensive sectors. At the same time, the divergence between CPI and WPI inflation has widened considerably, while the emerging Output PPI and experimental Input PPI provide new insights into the transmission of prices through the production system. The central policy question is, therefore, not simply whether inflation has risen, but how persistent, broad-based and transmissible these price pressures are likely to be.

A Changing CPI Inflation Trajectory

The steady increase in headline CPI inflation during 2026 marks a clear shift from the exceptionally low inflation recorded at the beginning of the year. By August, CPI inflation had reached 4.82 percent, significantly above the RBI's 4 percent target.

An important feature of the August data is the widening rural–urban divergence. Rural CPI inflation increased to 5.23 percent, compared with 4.31 percent in urban India (Figure 1). The divergence was even more visible in food inflation: rural food inflation reached 6.13 percent, against 5.64 percent in urban areas.

Higher rural inflation was evident across several consumption categories, including food, clothing, housing and household goods. This matters because persistent increases in food and consumption prices can erode rural purchasing power and influence the trajectory of rural demand.

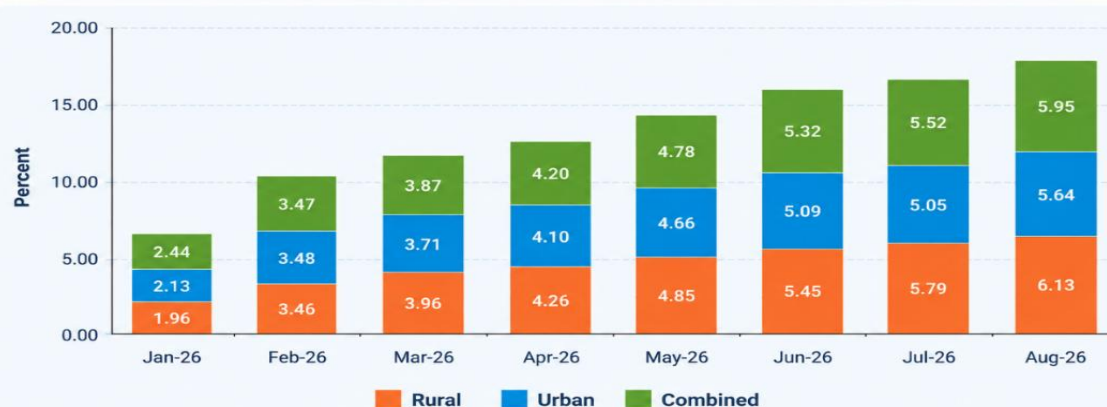
The August data therefore suggest that India's inflation challenge has both an aggregate dimension and a spatial dimension. The national headline number is important, but the distribution of inflation across rural and urban households provides additional information about its potential economic effects.

Food Inflation: Higher, but Highly Uneven

Food inflation remains one of the most important contributors to the recent increase in consumer prices. Consumer Food Price Inflation (CFPI) rose to 5.95 percent in August from 5.52 percent in July (Figure 2). Rural food inflation stood at 6.13 percent, compared with 5.64 percent in urban India.

EcoSphere

Figure 2: CFPI in India
(Year-on-Year, in Per Cent)



Source: MoSPI, GoI

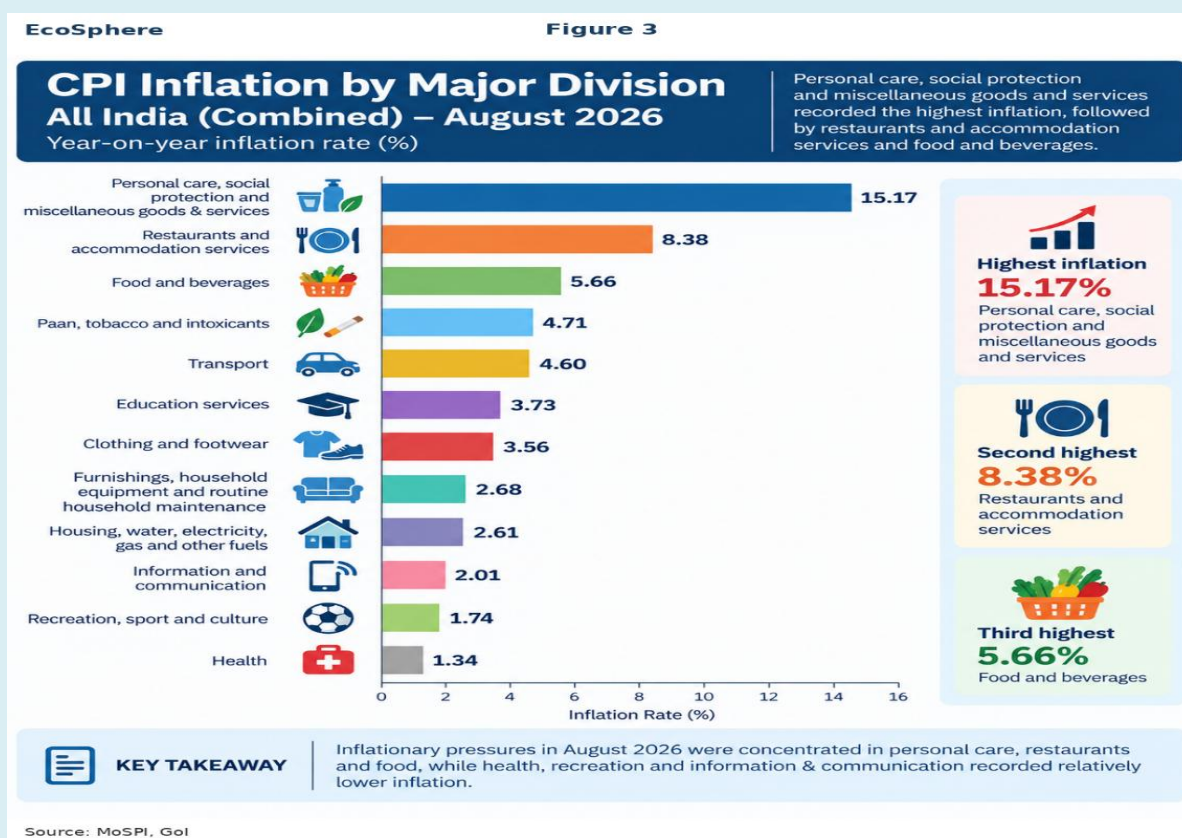
However, the food-price story is far from uniform. Prices of some vegetables declined sharply, while onion, garlic and ginger recorded substantial increases. This dispersion highlights one of the defining characteristics of Indian food inflation: considerable volatility across individual commodities.

Such volatility is important for monetary policy. A rise in food prices caused by temporary supply disruptions, weather conditions or commodity-specific shortages cannot be addressed in the same way as persistent demand-driven inflation.

The August data consequently cannot be interpreted simply as evidence of excessive aggregate demand. At the same time, it would be premature to dismiss the increase in inflation as entirely temporary. The broader price data indicate that pressures are extending beyond food.

Inflation Is Broadening Beyond Food

Several non-food categories recorded relatively elevated inflation in August, including restaurants and accommodation, transport, education, and clothing. Particularly notable was inflation of 8.38 percent in restaurants and accommodation and 15.17 percent in personal care, social protection and miscellaneous goods and services (Figure 3).



This broadening deserves attention because persistent inflation outside food can make the overall inflation process more difficult to contain. Food prices can be highly volatile and may reverse relatively quickly, whereas broader price increases can become embedded in the pricing behaviour of businesses and households. The producer-price data reinforce this concern.

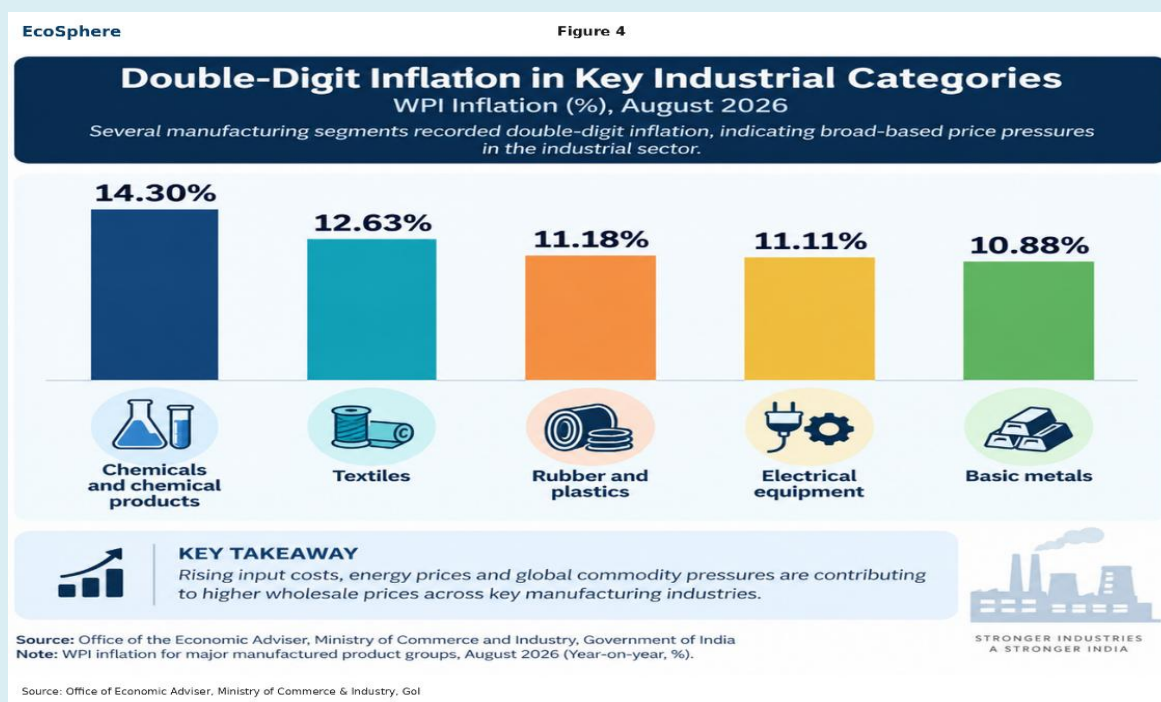
WPI Signals Strong Upstream Price Pressures

WPI inflation increased sharply from 3.98 percent in March to 9.92 percent in August (Table 1). Cumulative WPI inflation during April–August FY2026–27 reached 9.56 percent, compared with -0.20 percent during the corresponding period of FY2025–26.

Major group	Weight (%)	August 2026 inflation
 Primary Articles	22.76	7.76%
 Fuel & Power	14.11	22.93%
 Manufactured Products	63.13	8.37%
 All Commodities	100%	9.92%

Source: Office of Economic Adviser, Ministry of Commerce & Industry, GoI

The composition of WPI inflation is particularly revealing. Manufactured Products, which account for more than 63 percent of the WPI basket, recorded inflation of 8.37 percent in August. Several industrial categories recorded double-digit inflation (Figure 4), suggesting that price pressures are increasingly moving through the production system. However, these pressures are not evenly distributed across industries. Computer and electronic products, for example, recorded deflation of 0.47 percent.



The emerging picture is therefore one of broadening but differentiated inflation. Producer-price pressures are becoming more widespread, but sectoral conditions remain markedly different.

Energy Prices: A Major Source of Upstream Pressure

Fuel and Power is perhaps the most striking component of the current WPI inflation cycle. Mineral oils recorded inflation of 38.48 percent in August, while crude petroleum and natural gas registered inflation of 34.41 percent.

The cumulative April–August figures are even more pronounced. Fuel and Power inflation stood at 25.20 percent, while mineral oils and crude petroleum and natural gas recorded inflation of 41.65 percent and 42.60 percent, respectively. Such energy-price pressures have economy-wide implications because energy is embedded in transportation, logistics, manufacturing and a wide range of intermediate goods.

The implications extend well beyond the direct weight of fuel in consumer price indices. Higher energy costs can increase the cost of moving goods, operating machinery and providing services, creating the possibility of second-round effects across the economy.

The Emerging PPI Framework Adds a New Dimension

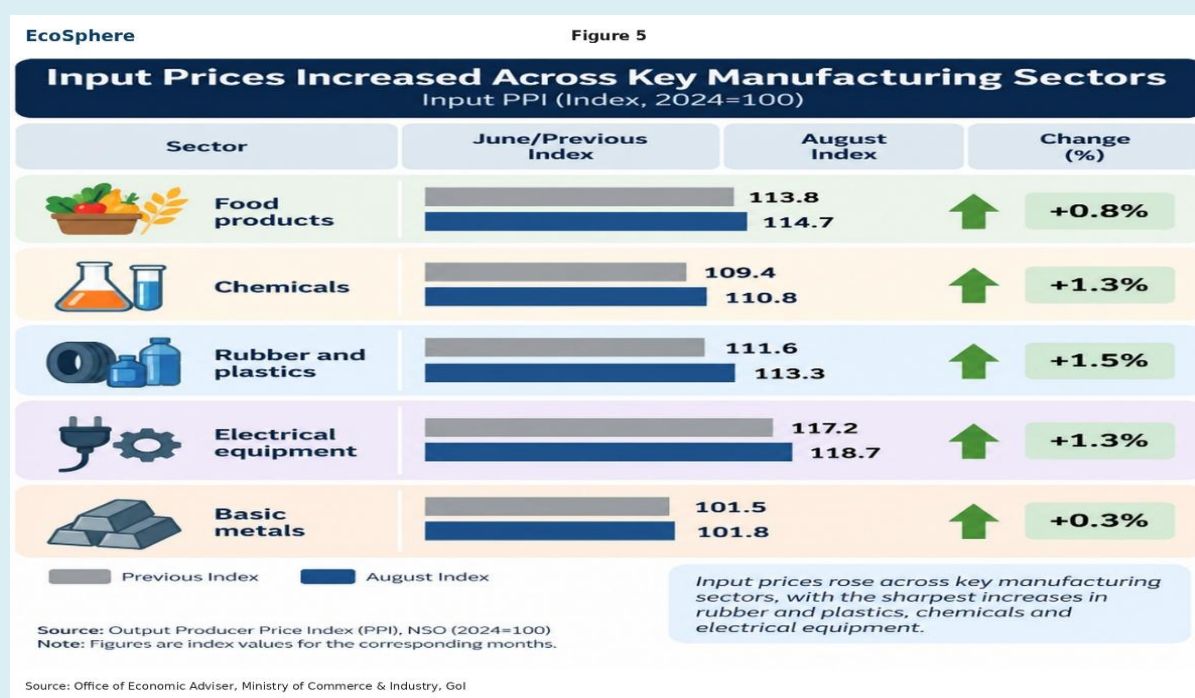
The introduction of the Output PPI and experimental Input PPI provides a potentially important new perspective on India's inflation dynamics. The All-Commodity Output PPI increased from 109.9 in July to 110.8 in August. Agriculture, Forestry and Fishing increased from 115.6 to 116.5; Mining and Quarrying from 119.4 to 122.0; and Manufactured Products from 108.8 to 109.7. This broadly corroborates the WPI evidence of continuing producer-price pressure.

The cumulative April–August Output PPI index for all commodities stood at 109.9, compared with 100.4 during the corresponding period of FY2025–26. Manufacturing stood at 109.2, agriculture at 113.9 and mining and quarrying at 122.3. The PPI therefore adds an important dimension to the inflation debate. It provides a more direct window into price movements at the producer level and can help illuminate how price pressures move through different stages of the production process.

Input PPI: An Apparently Contradictory Signal

Perhaps the most interesting development is the movement in the experimental Input PPI. The manufacturing Input PPI declined from 105.9 in July to 104.2 in August. At first sight, this appears inconsistent with the high WPI and rising Output PPI. The apparent contradiction, however, becomes clearer when the sectoral composition of input prices is examined.

Input prices increased across several important manufacturing sectors (Figure 5). At the same time, the Input PPI for coke and refined petroleum products declined sharply from 99.9 to 86.7. Given its 12.33 percent weight in the experimental manufacturing Input PPI, this decline had a substantial effect on the aggregate index. This suggests that headline movements in input costs can conceal significant sectoral differences. The current producer-price cycle therefore cannot automatically be characterised as a simple cost-push inflation episode.



The relationship between input and output prices is particularly important for investment and corporate profitability. If input prices rise faster than output prices, producer margins can come under pressure. Conversely, if output prices rise faster than input prices, margins may improve.

The August data are interesting in this respect: the aggregate manufacturing Input PPI declined even as manufacturing output prices increased.

However, this should not yet be interpreted as definitive evidence of an improvement in manufacturing profitability. The Input PPI is explicitly experimental and has been published only from March 2026. A longer time series will be necessary to determine whether the divergence between input and output prices represents a temporary movement or a more persistent structural pattern.

CPI and WPI: A Large Gap, but No Contradiction

This gap should not be interpreted as a statistical contradiction. The two indices measure different baskets and different stages of the price-formation process. CPI captures prices paid by consumers, while WPI primarily reflects wholesale prices of goods. Producer prices provide yet another perspective.

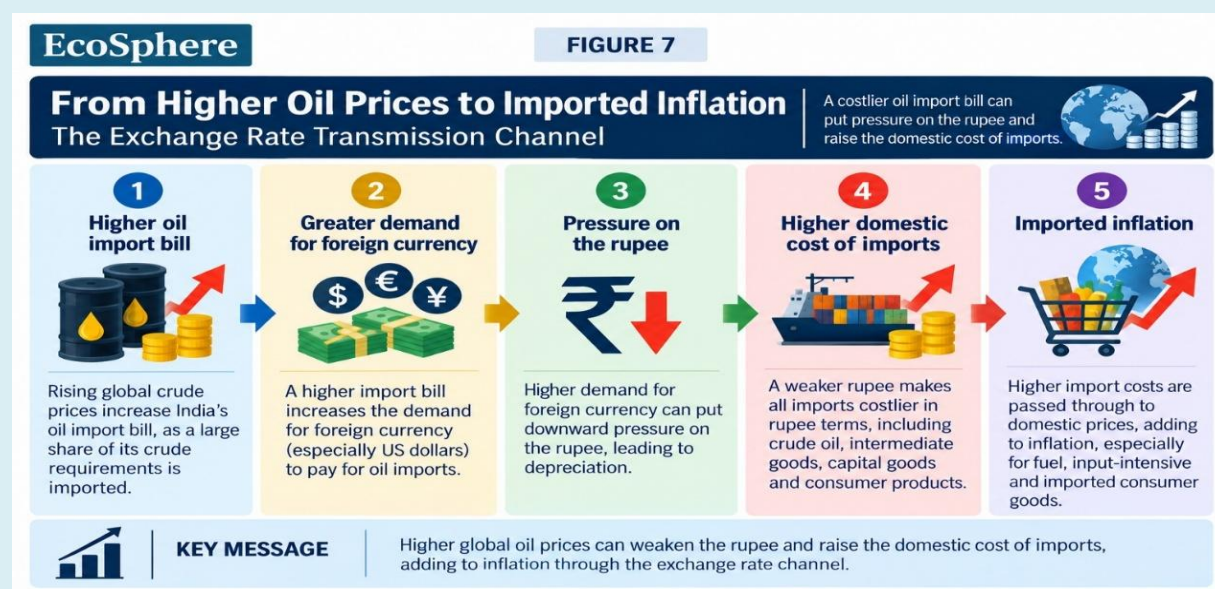
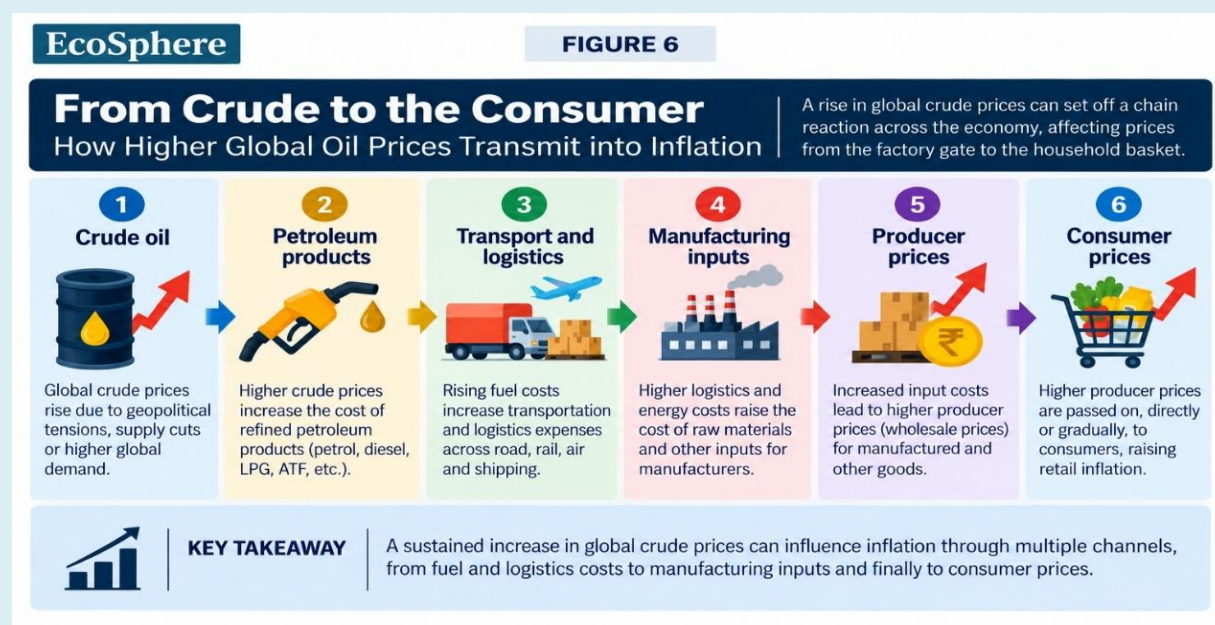
One of the most striking features of the current inflation environment is the wide gap between consumer inflation, at 4.82 percent, and wholesale inflation, at 9.92 percent. A high WPI does not automatically translate into an equivalent increase in CPI.

However, a persistent WPI–CPI gap can contain important information. It may indicate that increases in energy, commodity and industrial prices are being absorbed partly by producers, distributors or retailers rather than immediately passed through to consumers. The critical issue is therefore transmission. If elevated wholesale and producer prices persist, the probability of greater pass-through to consumer prices increases. If producer-price pressures moderate, the impact on CPI may remain limited. This makes the emerging relationship between CPI, WPI, Output PPI and Input PPI particularly important for assessing the direction of inflation.

Global Energy Prices and the External Inflation Channel

India's inflation outlook remains particularly sensitive to international energy prices because crude oil is a major imported input. The recent rise in global crude prices therefore creates risks through several channels (Figure 6). The exchange rate can amplify these pressures further

(Figure 7). A weaker rupee raises the domestic-currency cost of imported crude and other intermediate goods.



The external channel has become more important in the context of tighter global financial conditions. On 16 September 2026, the US Federal Reserve raised the federal funds target range by 25 basis points to 3.75–4.00 percent. The FOMC statement noted that economic

activity remained solid while inflation remained elevated. For India, the Fed's decision matters through several channels:

Interest-rate differential: A higher US policy rate can reduce the interest-rate differential between India and the United States. This can influence global portfolio allocation and increase pressure on emerging-market currencies.

Exchange-rate channel: A stronger dollar environment can put pressure on the rupee. For an economy dependent on imported crude and other intermediate goods, currency depreciation can amplify domestic inflation.

Capital-flow channel: Higher US yields can make dollar-denominated assets relatively more attractive, potentially increasing volatility in portfolio flows to emerging markets.

Financial-market channel: Higher global yields can feed into domestic bond yields and financing conditions, affecting the cost of capital for businesses and households. The Fed's decision, however, should not be treated as a signal that the RBI must automatically follow with a rate increase. Indian monetary policy must remain primarily responsive to domestic inflation and growth conditions.

Growth Remains Resilient: The inflation challenge would be considerably more difficult if the Indian economy were simultaneously experiencing weak growth. That is not the current situation. Real GDP growth in Q1 FY2026–27 was 7.8 percent, while real GVA increased 8.2 percent. Gross Fixed Capital Formation grew 11.9 percent, manufacturing 9.2 percent and services 10 percent. The investment share of GDP increased from 31.4 percent to 34.3 percent.

Credit growth has also remained strong: Scheduled commercial bank credit had grown 18.3 percent in the fortnight ending 15 August, with industry and personal loans accounting for around 64 percent of incremental credit growth during April–July.

This combination of strong growth, investment and credit provides greater room for monetary policy to focus on price stability than would be possible during a pronounced growth slowdown. At the same time, the strength of investment makes monetary-policy calibration

particularly important. Excessively restrictive financial conditions could eventually affect borrowing costs, investment decisions and the emerging investment cycle.

The Case for a Less Accommodative Monetary Stance

The current evidence provides several arguments for a less accommodative monetary stance.

- 1. CPI inflation has moved above target:** At 4.82 percent, headline CPI is now meaningfully above the RBI's 4 percent target.
- 2. Inflation is broadening:** Price pressures are increasingly visible in services, manufactured products and other non-food categories.
- 3. WPI inflation is exceptionally high.** At 9.92 percent, WPI indicates substantial upstream price pressure.
- 4. Energy prices pose a continuing risk:** Fuel and Power inflation of 22.93 percent creates significant potential for second-round effects.
- 5. Domestic demand remains resilient:** Strong GDP, investment and credit growth mean that any monetary tightening would take place against a relatively robust demand environment.
- 6. Global monetary conditions have tightened:** The Fed's 25-basis-point increase adds an external constraint to India's monetary-policy environment.

These factors strengthen the case for maintaining a close focus on inflation persistence and expectations.

Why Monetary Tightening Requires Caution

There are, however, equally important reasons for caution.

Supply-side origins: A substantial component of current inflation originates in food and energy prices. Higher interest rates cannot directly increase vegetable supply or reduce international crude prices.

Food-price volatility: The sharp divergence between inflation in commodities such as onion, garlic and ginger and deflation in tomato and potato demonstrates the volatility of food prices.

Input PPI is not uniformly accelerating: The experimental aggregate manufacturing Input PPI actually declined in August.

Transmission lags: Monetary policy operates with lags. A rate increase undertaken in response to a temporary shock could affect economic activity after the original inflationary pressure has already subsided.

Investment cycle: With GFCF growing 11.9 percent, financing conditions will be important for sustaining productive-capacity expansion.

The policy challenge is therefore not simply to tighten or not to tighten. It is to determine how persistent the inflation shock is likely to be.

Five Indicators That Matter for the Inflation Outlook

The current environment argues for a policy framework that looks beyond headline CPI and closely monitors five indicators.

1. Persistence of core inflation: The RBI should closely monitor whether non-food, non-fuel inflation continues to rise. Persistent increases would provide stronger evidence that inflation is becoming embedded beyond temporary supply shocks.

2. Food-price normalisation: If food inflation falls as supply conditions improve, headline CPI could moderate without significant monetary intervention.

3. Energy-price persistence: Crude oil remaining elevated for several months would materially alter the inflation outlook because of its implications for transportation, logistics, manufacturing and the exchange rate.

4. Producer-price transmission: The emerging WPI–Output PPI–Input PPI framework should be used to identify whether producer costs are being passed through to final prices.

5. Inflation expectations: Persistent inflation can become more difficult to contain if households and businesses begin incorporating higher inflation into wage and price-setting behaviour.

Policy Priorities

The appropriate policy response should combine monetary vigilance with supply-side measures and careful monitoring of price transmission.

1. Maintain a strongly data-dependent monetary stance: The RBI needs to avoid reacting mechanically to either CPI or WPI in isolation. The appropriate policy signal should depend on the persistence, breadth and expectations associated with inflation.

2. Strengthen monitoring of producer-price transmission: The new Output PPI and Input PPI should be integrated into the analytical framework. Their evolution can help distinguish temporary cost shocks from sustained price-setting behaviour.

3. Improve the Input PPI series: The experimental Input PPI has the potential to identify sector-specific cost pressures. Continued improvements in coverage, quality and time-series length would significantly strengthen inflation analysis.

4. Address supply-side inflation through complementary policies: Food supply chains, storage, logistics, import policy and energy-market management remain important instruments for containing supply-driven inflation.

5. Protect the investment cycle: If monetary tightening becomes necessary, calibration will be critical to avoid unnecessarily disrupting productive investment, particularly when investment has emerged as an important source of growth.

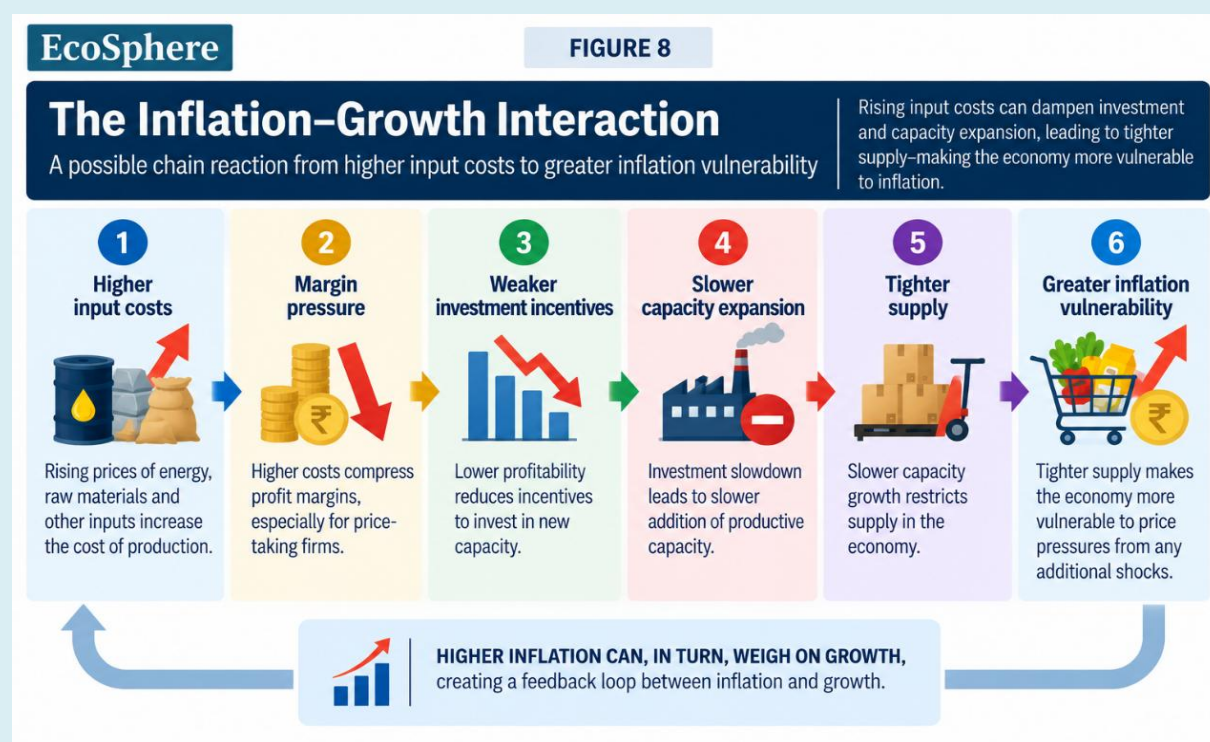
6. Preserve external stability: Foreign-exchange liquidity and orderly market conditions remain important buffers against imported inflation arising from higher oil prices and global financial volatility.

7. Strengthen inflation communication: Clear communication can help distinguish temporary supply shocks from persistent inflation and reduce the risk that temporary price increases become embedded in inflation expectations.

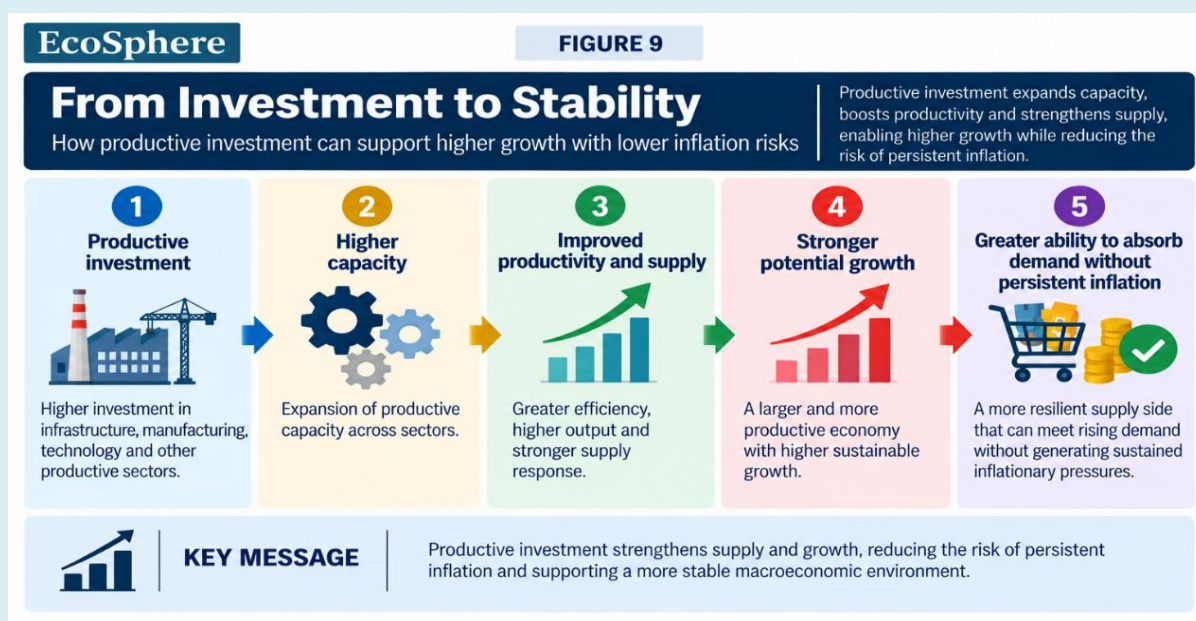
Inflation and the Investment-Led Growth Cycle

The current inflation episode should also be understood in the context of India's evolving growth structure. India's growth cycle is becoming increasingly investment-led, with manufacturing strengthening alongside services. This makes the inflation question more consequential.

If inflation remains contained, stronger investment can expand productive capacity and improve the economy's supply response. If energy and input costs rise persistently, however, margins may come under pressure and investment incentives could weaken. There is therefore a potentially important interaction between inflation and growth itself (Figure 8).



Conversely, productive investment can strengthen the supply side of the economy and help reconcile higher growth with greater price stability (Figure 9).



The policy objective should therefore be to preserve the conditions under which the second mechanism can dominate.

A Delicate Policy Balance

India's August 2026 inflation data mark an important change in the macroeconomic environment. CPI inflation has remained above the RBI's 4 percent target for a third consecutive month, while WPI inflation has risen to 9.92 percent. Primary Articles and Fuel & Power continue to record elevated inflation, while price pressures in manufactured products have also become increasingly pronounced.

Output PPI confirms continuing producer-price pressures, while the experimental Input PPI provides a more nuanced signal by showing that aggregate manufacturing input costs actually eased in August.

The external environment adds another layer of complexity. Elevated crude prices and the US Federal Reserve's September rate increase could influence the rupee, capital flows and imported inflation.

Yet the domestic economy remains resilient. Real GDP grew 7.8 percent in Q1 FY2026–27, investment increased 11.9 percent, manufacturing grew 9.2 percent and services 10 percent.

The policy challenge is consequently a delicate one. The key question is whether the current increase in inflation will prove temporary or whether it will become persistent, broad-based and embedded in expectations. The emerging PPI framework can significantly improve this assessment by illuminating the transmission of prices from inputs to producers and ultimately to consumers.

Looking Ahead

The next phase of India's macroeconomic management will require a closer integration of CPI, WPI, Output PPI, Input PPI, exchange-rate developments, commodity prices, credit conditions and real economic activity.

The objective is not simply to suppress individual price movements, particularly when they originate in food or international energy markets. Rather, the task is to ensure that temporary shocks do not become persistent inflation and that producer-price pressures do not generate an entrenched second-round effect.

At the same time, monetary policy needs to recognise the importance of the emerging investment cycle. With investment, manufacturing and services contributing strongly to economic growth, unnecessarily restrictive financial conditions could weaken the very expansion of productive capacity that can improve India's long-term supply response.

India's inflation outlook therefore calls for vigilance without mechanical tightening, and growth support without complacency about price stability. The central policy objective should be to preserve price stability while protecting the investment-led expansion that is strengthening India's medium-term growth prospects.



India's inflation challenge is broadening beyond food prices, with elevated CPI, WPI, energy and producer prices, although manufacturing input-price pressures are easing. The key policy challenge is to contain persistent inflation without undermining investment and growth momentum.

IIP REBOUND: INVESTMENT MOMENTUM STRENGTHENS DESPITE MINING WEAKNESS

Introduction

India's industrial sector recorded a significant acceleration in August 2026, with the Index of Industrial Production (IIP) growing 8.0 percent year-on-year, compared with 6.7 percent in July (Figure 1). The August performance was supported by particularly strong growth in manufacturing and electricity generation, although the contraction in mining remained a significant drag. The latest estimates therefore point to an industrial recovery that is becoming broader, but not yet uniform across sectors.



The most encouraging feature is the strength of manufacturing. Manufacturing output increased 9.0 percent in August, marking the third consecutive month in which the sector recorded growth of 8 percent or more. Electricity and gas supply expanded by 12.3 percent, while water supply, sewerage and waste management grew by 6.3 percent. Mining and quarrying, however, contracted by 5.6 percent.

The composition of demand is equally significant. Capital goods grew 16.9 percent, intermediate goods 13.7 percent and consumer durables 11.1 percent. These figures suggest that the current industrial momentum is being supported not only by consumption but also by investment and production capacity-related activity.

Sectoral Trends

Manufacturing

Manufacturing remains the principal driver of the industrial upturn. Its 9.0 percent growth in August (Table 1) followed strong performances in the preceding two months, marking a notable improvement in the sector's momentum. On a cumulative April–August basis, manufacturing grew 7.4 percent, compared with 4.2 percent during the corresponding period of the previous year (Table 1).

The sectoral composition is particularly encouraging. 18 of 23 manufacturing industry groups recorded positive year-on-year growth in August. The strongest performances came from electrical equipment, which expanded 30.9 percent; other transport equipment, 25.3 percent; and motor vehicles, trailers and semi-trailers, 25.2 percent.

The strength of electrical equipment is especially significant given its connection with investment, electrification and industrial infrastructure. Computer, electronic and optical products also expanded 19.3 percent, while fabricated metal products grew 16.9 percent and rubber and plastics 21.4 percent. Machinery and equipment increased 10.3 percent.

Automobiles and transport equipment were another important source of momentum. Motor vehicles increased 25.2 percent and other transport equipment 25.3 percent. The strong performance of auto components, passenger cars, commercial vehicles and two-wheelers points to relatively broad activity within transport-related manufacturing.

However, manufacturing remains uneven. Wearing apparel declined 7.4 percent, tobacco products 8.0 percent, and chemicals and pharmaceuticals recorded modest contractions. Coke and refined petroleum products also declined 0.6 percent.

Thus, the manufacturing recovery is substantial but not universal. Its current strength is concentrated particularly in capital-intensive, engineering, electrical, transport and technology-related segments.

Mining

Mining presents the clearest counterpoint to the broader industrial recovery. Output contracted 5.6 percent in August, following a 0.9 percent contraction in July (Table 1). On a cumulative April–August basis, mining declined 2.0 percent.

The weakness was broad within mining. Fuel minerals contracted 5.7 percent in August, while non-metallic minerals declined 12.8 percent. Metallic minerals were an exception, growing 5.0 percent.

The mining contraction is important because it can constrain the availability of industrial inputs even when downstream manufacturing is expanding rapidly. It also creates a divergence between manufacturing momentum and upstream domestic raw-material production.

Electricity & Gas Supply

Electricity and gas supply recorded the strongest sectoral growth, expanding 12.3 percent in August and 9.5 percent cumulatively during April–August (Table 1). Electricity generation itself increased 13.3 percent, while gas supply declined 2.4 percent.

Both renewable and non-renewable electricity generation contributed to the expansion. Renewable generation increased 15.4 percent in August and 11.8 percent during April–August, while non-renewable generation rose 12.3 percent in August and 9.5 percent cumulatively.

The strong electricity performance is consistent with expanding industrial activity and rising power demand. It also suggests that the energy system is accommodating the acceleration in manufacturing and investment-related production.

Water Supply, Sewerage & Waste Management

Water supply, sewerage and waste management grew 6.3 percent in August, broadly maintaining its recent positive trajectory (Table 1). Cumulative growth during April–August was 6.4 percent. Water supply increased 4.5 percent, while sewerage and waste management grew 8.8 percent.

Although the sector has a relatively small weight in the IIP, its performance is significant from an infrastructure perspective. Sustained growth in water, sanitation and waste-management activity complements industrialisation and urbanisation and supports the development of productive infrastructure.

TABLE 1
Sectoral Growth of IIP (Base 2022-23)

Sector	2025-26			2026-27		
	July	August	April–August	July	August	April–August
 Mining & Quarrying	10.7	15.8	6.8	-0.9	-5.6	-2.0
 Manufacturing	5.1	3.6	4.2	8.2	9.0	7.4
 Electricity & Gas Supply	2.4	3.7	0.1	8.7	12.3	9.5
 Water supply, sewerage & Waste Mgt.	7.5	6.9	7.8	7.4	6.3	6.4
 General	5.4	4.7	4.2	7.4	8.0	6.7

Source: MoSPI, GoI

Use-Based Insights

Primary Goods

Primary goods expanded 3.5 percent in August, with cumulative growth of 3.4 percent during April–August (Table 2). This is considerably weaker than the growth recorded in capital and intermediate goods.

The relatively modest expansion suggests that upstream production has not kept pace fully with the much stronger growth in downstream industrial categories. The contraction in mining provides an important explanation for this divergence.

Capital Goods

Capital goods were one of the strongest components of the August IIP, growing 16.9 percent, following 19.0 percent growth in July (Table 2). Cumulative growth during April–August reached 16.3 percent, compared with 7.6 percent a year earlier.

This is perhaps the strongest indication in the latest data of a strengthening investment cycle. Capital goods production reflects demand for machinery and equipment and therefore provides an important signal of businesses' investment activity and capacity expansion.

Intermediate Goods

Intermediate goods grew 13.7 percent in August and 10.0 percent cumulatively (Table 2). They were the largest positive contributor to IIP growth among the use-based categories, followed by capital goods and consumer durables. The combination of strong intermediate and capital goods growth suggests that industrial expansion is generating demand across production chains rather than being confined to final consumer products.

Infrastructure & Construction Goods

Infrastructure and construction goods increased 6.4 percent in August and 7.3 percent during April–August (Table 2). While their growth was slower than that of capital and intermediate goods, the continued expansion indicates sustained activity in construction and infrastructure-related production. This provides an important link between industrial production and the broader investment cycle.

Consumer Durables

Consumer durables expanded 11.1 percent in August, compared with only 0.9 percent in the corresponding month a year earlier (Table 2). Cumulative growth reached 9.4 percent. This is a significant improvement and suggests strengthening demand for manufactured consumer

goods. Together with the strong performance of automobiles and electrical equipment, it indicates that domestic consumption is also contributing to industrial momentum.

Consumer Non-Durables

Consumer non-durables grew only 2.1 percent in August and 1.2 percent during April–August (Table 2). This remains considerably weaker than the performance of consumer durables and investment-related categories. The divergence suggests that industrial demand is currently stronger in durable goods and investment-linked categories than in everyday non-durable consumption products. This is an important qualification to the broader industrial recovery.

TABLE 2
Growth of IIP – Use-based

Use-based category	2025-26			2026-27		
	July	August	April–August	July	August	April–August
 Primary Goods	4.8	7.6	3.1	4.2	3.5	3.4
 Capital Goods	5.9	6.0	7.6	19.0	16.9	16.3
 Intermediate Goods	3.5	3.3	4.3	10.4	13.7	10.0
 Infrastructure/ Construction Goods	11.2	9.2	7.7	8.0	6.4	7.3
 Consumer Durables	3.9	0.9	2.6	12.0	11.1	9.4
 Consumer Non-durables	5.8	0.1	2.1	-0.8	2.1	1.2

Source: MoSPI, GoI

Macroeconomic Implications

The August IIP data provide several important signals for the Indian economy.

First, industrial growth is becoming increasingly investment-oriented. The exceptionally strong performance of capital goods, combined with robust intermediate-goods growth, points towards a production cycle supported by capacity creation and industrial demand rather than consumption alone.

Second, the strength of manufacturing is broadening. Eighteen of 23 manufacturing groups recorded positive growth, while electrical equipment, automobiles, transport equipment, electronics, machinery and fabricated metal products performed particularly strongly. This indicates that industrial momentum is spreading across several technologically and investment-intensive segments.

Third, the mining contraction remains a vulnerability. Manufacturing cannot sustain high growth indefinitely if upstream domestic supply remains weak. The divergence between mining and manufacturing therefore warrants monitoring, particularly for its implications for raw-material availability, imports and industrial costs.

Fourth, the electricity data provide an important supporting signal. Strong electricity generation alongside manufacturing growth suggests that industrial activity is being accompanied by higher energy demand. The particularly strong performance of renewable electricity generation also points to an expanding role for renewable sources in meeting incremental power requirements.

Fifth, the use-based classification indicates that the investment cycle is gaining strength. Capital goods growth of 16.9 percent and intermediate goods growth of 13.7 percent are particularly significant. Consumer durables, at 11.1 percent, provide additional evidence of strengthening domestic demand.

The overall picture is therefore more encouraging than the headline 8.0 percent IIP growth alone suggests. The composition of growth indicates stronger investment activity, expanding manufacturing capacity and improving demand for durable goods. At the same time, the relatively weak performance of primary goods, mining and consumer non-durables highlights areas of continuing vulnerability.

The August IIP data consequently point to an industrial economy in which manufacturing and investment are increasingly reinforcing each other. The sustainability of this momentum will depend on whether the strength in capital and intermediate goods translates into continued

capacity expansion, whether consumer demand broadens beyond durables, and whether upstream constraints, particularly in mining, are resolved.

The latest numbers therefore strengthen the case for viewing industrial production as an important pillar of India's current growth cycle. The critical issue for the months ahead will be whether this acceleration develops into a broader and more balanced industrial expansion, with stronger linkages between upstream production, manufacturing, infrastructure and consumption.



Bottomline

India's industrial recovery is gaining momentum, led by manufacturing and investment-linked sectors, but weak mining and subdued consumer non-durables highlight the need for a broader and more balanced expansion.

MANUFACTURING SECTOR GAINS MOMENTUM: ASI 2024–25 SIGNALS STRONGER INDUSTRIAL EXPANSION

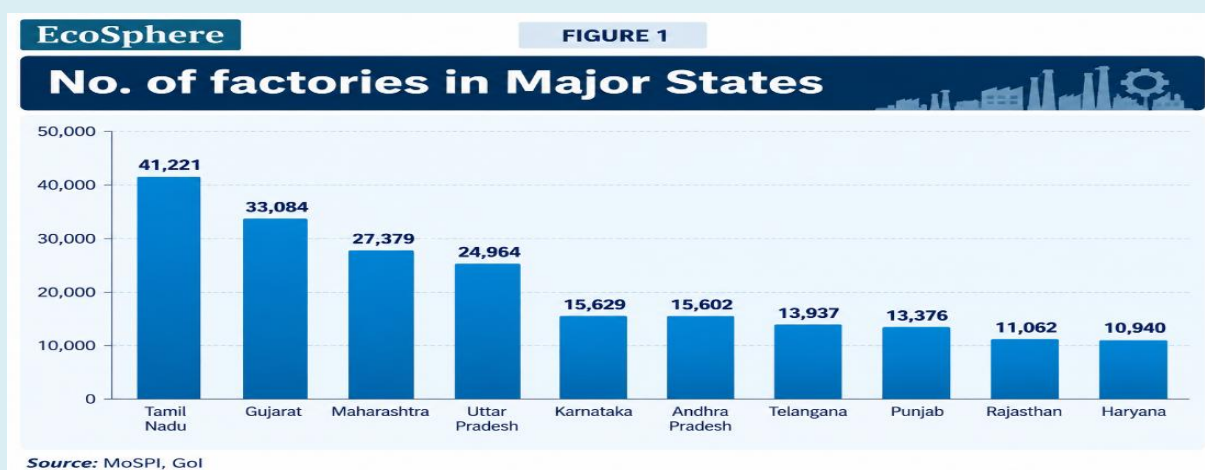
Introduction

The Annual Survey of Industries (ASI) 2024–25 presents a broadly positive picture of India's registered manufacturing sector, with expansion visible across establishments, capital formation, output, Gross Value Added (GVA), employment, wages and profitability. The survey, covering the financial year 2024–25, indicates that the registered manufacturing sector added more than 14 lakh persons to its workforce, while fixed capital increased by 10.54 percent and GVA by 9.59 percent.

The findings are significant because manufacturing remains central to India's objectives of raising productivity, creating productive employment and strengthening domestic value chains. At the same time, the data reveal a highly concentrated industrial structure: a relatively small number of states and industries account for a large share of manufacturing activity. The challenge is therefore not only to sustain the current expansion, but also to broaden its geographical and industrial base.

Expansion in the Manufacturing Base

The number of registered manufacturing establishments increased from 2.60 lakh in 2023–24 to 2.67 lakh in 2024–25, representing growth of 2.64 percent. Tamil Nadu had the largest number of establishments at 41,221, followed by Gujarat at 33,084 and Maharashtra at 27,379 (Figure 1). Uttar Pradesh, with 24,964 establishments, also featured prominently.



The increase in establishments was accompanied by stronger industrial value addition. Manufacturing GVA rose from ₹24.58 lakh crore to ₹26.94 lakh crore, an increase of 9.59 percent. Maharashtra retained the largest share of manufacturing GVA at 15.92 percent, followed by Gujarat at 14.10 percent, Tamil Nadu at 10.90 percent, Karnataka at 7.31 percent and Uttar Pradesh at 6.64 percent (Table 1). Collectively, these five states accounted for more than 54 percent of India's manufacturing GVA.

EcoSphere **TABLE 1**

Top five States with respect to GVA in ASI 2024-25: Share (in percent) of GVA and Establishments

State		 GVA		 Establishments	
		ASI 2023-24	ASI 2024-25	ASI 2023-24	ASI 2024-25
Maharashtra		15.95	15.92	10.20	10.26
Gujarat		14.20	14.10	12.81	12.39
Tamil Nadu		10.26	10.90	15.43	15.44
Karnataka		7.47	7.31	5.76	5.86
Uttar Pradesh		6.80	6.64	8.51	9.35

Source: MoSPI, GoI

This concentration has two dimensions. On the one hand, it reflects the emergence of strong manufacturing clusters supported by infrastructure, supply chains, skills and market access. On the other, it highlights the considerable scope for other states to deepen their industrial base and participate more fully in national manufacturing value chains.

Investment and Capital Formation

One of the strongest signals from the ASI is the acceleration in capital formation. Fixed capital increased from ₹46.24 lakh crore in 2023–24 to ₹51.12 lakh crore in 2024–25, while invested capital increased from ₹68.01 lakh crore to ₹75.56 lakh crore.

The reported increase in fixed capital is particularly important because manufacturing competitiveness depends increasingly on modern machinery, technology, automation, energy efficiency and production capacity. The survey records 10.54 percent growth in fixed capital, while invested capital expanded by 11.10 percent.

The capital formation trend also fits into a broader five-year trajectory. Between 2020–21 and 2024–25, fixed capital increased from ₹36.94 lakh crore to ₹51.12 lakh crore, while invested capital rose from ₹51.91 lakh crore to ₹75.56 lakh crore.

This suggests that the registered manufacturing sector has been steadily rebuilding and expanding its productive capacity. The policy significance lies in whether this investment translates into higher productivity, greater technological sophistication and stronger integration into domestic and global value chains.

Output and Value Addition

Industrial output increased 7.81 percent in 2024–25, while GVA rose 9.59 percent. Net income increased 9.68 percent and net profit 7.73 percent. The difference between output growth and GVA growth is noteworthy. GVA measures the value added by production after accounting for intermediate inputs, and its relatively stronger growth suggests that value creation within the registered manufacturing sector increased at a healthy pace.

Over the longer five-year period, output increased from ₹88.09 lakh crore in 2020–21 to ₹165.24 lakh crore in 2024–25, while GVA rose from ₹16.17 lakh crore to ₹26.94 lakh crore. Net profit increased from ₹6.14 lakh crore to ₹11.56 lakh crore over the same period.

These trends point to considerable strengthening in the scale and financial performance of registered manufacturing. However, the sustainability of this improvement will depend on continued investment and productivity gains rather than merely higher capacity utilisation.

Employment and Wages

Perhaps the most significant dimension of the latest ASI results is the improvement in manufacturing employment. The number of persons engaged increased from 1.96 crore in 2023–24 to 2.10 crore in 2024–25, representing growth of 7.19 percent. Total emoluments increased by 12.08 percent.

The increase in employment is important in the context of India's need to create large numbers of productive non-farm jobs. Manufacturing has the potential to provide employment across different skill levels while generating demand for logistics, finance, business services and other supporting activities.

The geographical distribution, however, remains concentrated. Tamil Nadu accounted for 14.99 percent of total persons engaged, Maharashtra 13.08 percent, Gujarat 12.99 percent, Uttar Pradesh 8.72 percent and Haryana 6.44 percent (Table 2). Together, these five states accounted for about 56 percent of manufacturing employment.

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TABLE 2

Top five States with respect to Total Persons Engaged in ASI 2024-25:

Share (in %) of Total Persons Engaged and Emoluments

States		Total Persons Engaged		Emoluments	
		ASI 2023-24	ASI 2024-25	ASI 2023-24	ASI 2024-25
Tamil Nadu		15.24	14.99	13.16	13.02
Maharashtra		12.95	13.08	17.48	17.64
Gujarat		13.07	12.99	13.13	12.99
Uttar Pradesh		8.30	8.72	7.61	7.82
Haryana		6.08	6.44	6.74	6.82

Source: MoSPI, GoI

The relatively faster increase in emoluments compared with employment is also notable. It may reflect rising wages, changing skill requirements or shifts in the composition of industrial employment. Strengthening skills will therefore be critical to ensure that workers can participate in increasingly technology-intensive manufacturing.

Industrial Composition: Food, Textiles, Metals and Vehicles

The ASI data show considerable diversity in the industries supporting manufacturing employment. Food products employed the largest number of persons among the major industry divisions shown, at about 2.36 million, followed by textiles at 1.76 million, basic metals at 1.58 million, motor vehicles at 1.48 million and wearing apparel at 1.46 million. Machinery and equipment, chemicals and chemical products, rubber and plastics, other non-metallic mineral products and pharmaceuticals also represented substantial sources of employment.

The composition of GVA is somewhat more concentrated. The five major industries—basic metals, motor vehicles, chemicals and chemical products, pharmaceutical products, and food products—together contributed more than 45 percent of total manufacturing GVA in 2024–25.

This combination of traditional labour-intensive sectors and more capital- and technology-intensive industries is important for India's industrial strategy. Food processing and textiles can support employment and value addition closer to agricultural and consumer markets, while automobiles, pharmaceuticals, chemicals and basic metals are important for technological capabilities and industrial depth.

Organisational Structure and Industrial Concentration

The ASI also provides insight into the organisational structure of registered manufacturing employment. Non-government companies accounted for 73.77 percent of total workforce in the reported distribution, while partnerships accounted for 13.75 percent and proprietorships 7.34 percent. LLPs, cooperatives and other categories, as well as government companies, accounted for smaller shares.

The dominance of non-government companies indicates the importance of corporate manufacturing in employment and production. At the same time, the presence of proprietorships and partnerships shows that smaller organisational forms remain an important part of the registered industrial ecosystem.

Implications for India's Growth Strategy

The ASI results have several implications for India's broader growth trajectory.

First, investment is becoming a stronger pillar of manufacturing expansion. The substantial increase in fixed and invested capital provides a basis for capacity expansion and technological upgrading.

Second, the combination of rising GVA and employment suggests that manufacturing growth is generating both value addition and jobs. This is particularly relevant for India's objective of achieving higher-productivity employment outside agriculture.

Third, the geographical concentration of manufacturing remains an important structural issue. With five states accounting for more than half of manufacturing GVA and around 56 percent

of employment, there is considerable scope to develop new industrial clusters and integrate more states into national supply chains.

Fourth, the industrial composition suggests that India's manufacturing strategy needs to pursue two objectives simultaneously: expanding employment-intensive industries while strengthening high-value and technology-intensive sectors.

Challenges Ahead

The principal challenge is to translate the current increase in capital formation into sustained productivity growth. Higher investment will generate durable benefits only if accompanied by technological upgrading, better skills, efficient logistics and reliable infrastructure.

A second challenge is geographical concentration. Developing manufacturing ecosystems in states with relatively lower industrial participation will require improvements in connectivity, power, industrial infrastructure, skills and access to finance.

Third, the manufacturing sector needs deeper integration into domestic and international value chains. Greater scale, quality, technology and export competitiveness will be necessary for Indian firms to move into higher-value activities.

Finally, the ASI covers the registered manufacturing sector and is based on survey estimates. The source itself advises appropriate caution in interpreting the estimates, although quality checks indicate that the Relative Standard Errors for important parameters at the overall level are small and within acceptable ranges.

Conclusion

The ASI 2024–25 presents a strong picture of India's registered manufacturing sector, with capital, output, GVA, employment, wages and profitability all recording growth. The rise in GVA by 9.59 percent, fixed capital by 10.54 percent and employment by 7.19 percent indicates that manufacturing is strengthening both its productive capacity and its contribution to employment.

The next phase of industrial development will require this momentum to become broader and more productive. Expanding manufacturing beyond established industrial centres, raising technology intensity, strengthening skills and integrating more firms into domestic and global value chains will be critical to converting the current investment and employment momentum into sustained manufacturing-led economic transformation.



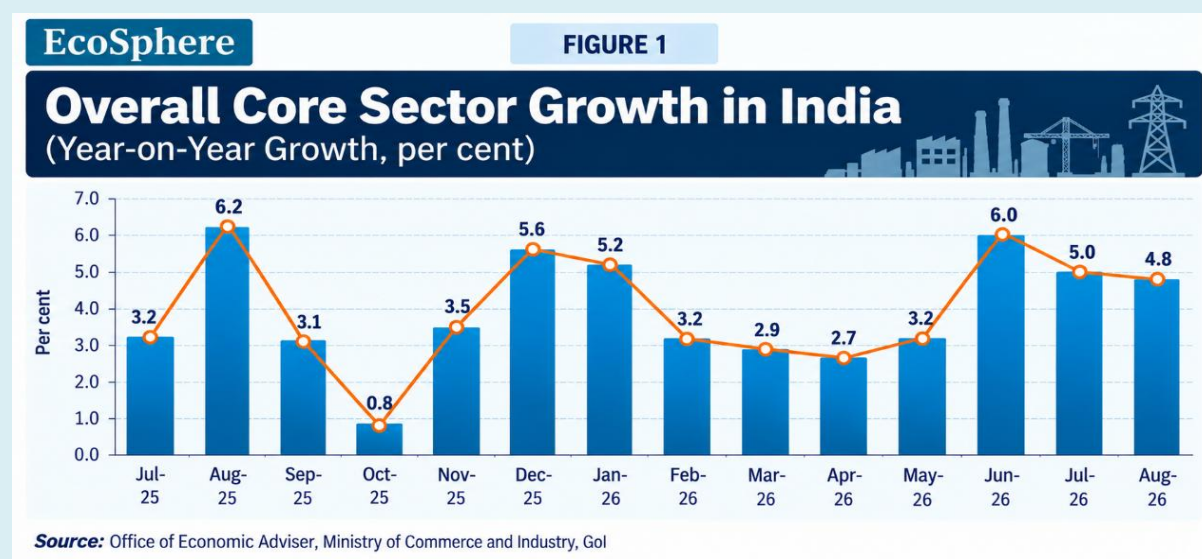
Bottomline

India's manufacturing sector is gaining momentum, supported by stronger investment, value addition and employment. The priority now is to broaden this growth across states and industries while raising productivity and technological intensity.

CORE SECTOR GROWTH MODERATES: ELECTRICITY AND CEMENT OFFSET ENERGY WEAKNESS

Introduction

India's core industries maintained positive momentum in August 2026, but the composition of growth reveals a distinctly uneven industrial picture. The Index of Core Industries (ICI), comprising eight infrastructure and basic-industry sectors, grew by 4.8 percent year-on-year in August, marginally lower than the revised 5.0 percent recorded in July (Figure 1). Nevertheless, cumulative growth during April–August 2026 strengthened to 4.3 percent, compared with 2.4 percent in the corresponding period of the previous year.



The headline number, however, conceals substantial divergence across sectors. Electricity and cement recorded double-digit growth, while steel and iron ore also expanded. In contrast, coal, natural gas, crude oil and fertilizers contracted, pointing to persistent weakness in several upstream and energy-intensive segments. The sectoral composition is therefore important for assessing the strength and sustainability of the broader industrial recovery.

Energy Sector

Electricity

Electricity emerged as the strongest pillar of the core sector in August, with output increasing 11.6 percent year-on-year, accelerating from 8.4 percent in July (Table 1). Given electricity's exceptionally high 30.932 percent weight in the ICI, this performance provided a major lift to overall core-sector growth. Electricity production has also remained robust over the first five months of FY2026–27, registering 9.6 percent cumulative growth compared with 0.7 percent in the corresponding period of the previous year.

The sustained expansion in electricity is significant because it reflects both rising economic activity and increasing power demand from industry, infrastructure and services. It also provides an important supporting base for industrial production.

Refinery Products

Refinery products grew 2.6 percent in August, moderating from 3.0 percent in July (Table 1). With a weight of 22.572 percent, refinery products constitute the second-largest component of the ICI. Yet cumulative growth during April–August remained negative at -1.4 percent, following 0.4 percent growth in the comparable period a year earlier.

The relatively modest August increase therefore represents stabilisation rather than a strong acceleration. Given the importance of petroleum products to transport, manufacturing and logistics, sustained improvement in refinery output would strengthen the transmission of industrial recovery across the economy.

Crude Oil

Crude oil production remained under pressure, contracting 3.6 percent in August, following a 5.3 percent decline in July (Table 1). The sector has recorded negative growth throughout most of the recent period, with cumulative output falling 4.1 percent during April–August 2026.

Persistent weakness in domestic crude production increases the importance of external supplies for meeting domestic energy requirements. From an industrial perspective, this also highlights

a divergence between strong electricity generation and weaker domestic production of some primary energy inputs.

Natural Gas

Natural gas production declined 4.9 percent in August, compared with a 3.0 percent contraction in July (Table 1). Its cumulative decline during April–August stood at 4.4 percent. The continuing contraction indicates that the recovery in electricity and industrial activity has not been accompanied by a corresponding strengthening in domestic natural gas output.

Coal

Coal output fell 3.8 percent in August, reversing the 7.6 percent increase recorded in July (Table 1). Cumulatively, coal production declined 3.2 percent during April–August. This is an important weakness because coal remains a major component of India's energy system. The contrasting performance of coal and electricity suggests that strong power generation is not necessarily dependent on equivalent growth in domestic coal output in any particular month, but prolonged weakness in coal production could create supply and cost pressures if sustained.

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TABLE 1

Core Sector Growth – Energy

(Year-on-Year Growth, per cent)

Month	Coal	Natural Gas	Crude Oil	Refinery Products	Electricity
Jul-25	-12.3	-3.3	-0.8	-1.4	3.7
Aug-25	10.8	-2.2	-0.7	3.4	4.2
Sep-25	-1.1	-3.7	-0.7	-3.2	3.1
Oct-25	-8.4	-5.2	-0.8	5.3	-7.0
Nov-25	2.2	-2.5	-2.6	-0.2	-1.5
Dec-25	3.7	-4.4	-5.1	-0.3	6.2
Jan-26	0.9	-4.9	-5.4	0.4	5.1
Feb-26	1.4	-5.0	-4.8	-0.4	2.3
Mar-26	-4.0	-3.7	-5.3	0.9	0.8
Apr-26	-9.0	-4.2	-3.2	-0.2	5.5
May-26	-9.5	-5.0	-4.2	-8.2	11.2
Jun-26	1.4	-4.8	-4.2	-4.0	11.4
Jul-26	7.6	-3.0	-5.3	3.0	8.4
Aug-26	-3.8	-4.9	-3.6	2.6	11.6
April–Aug. 26	-3.2	-4.4	-4.1	-1.4	9.6

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, GoI

Manufacturing & Iron Ore Sector

Fertilizers

Fertilizer production was the weakest-performing sector in August, contracting 12.4 percent, following an 8.0 percent decline in July (Table 2). Cumulative output was down 6.7 percent during April–August.

This contraction is particularly significant because fertilizers connect the industrial sector with agriculture. While the immediate impact on industrial growth is limited by the sector's relatively small 2.731 percent weight in the ICI, persistent weakness could have wider implications for agricultural input availability and production costs.

Steel

Steel production increased 3.4 percent in August, an improvement from 1.9 percent in July (Table 2). Cumulative growth during April–August reached 4.1 percent, although this remains substantially below the 11.8 percent growth recorded during the same period of the previous year.

Steel's large 17.584 percent weight means that even moderate growth contributes meaningfully to the core index. The sector's continued expansion also points to ongoing demand from construction, infrastructure, engineering and capital formation.

Cement

Cement was one of the strongest performers, recording 12.5 percent growth in August, broadly maintaining its strong July performance of 12.7 percent (Table 2). Cumulative growth accelerated to 10.3 percent during April–August, compared with 7.6 percent a year earlier.

The sustained strength of cement is particularly important because it reflects activity in construction and infrastructure. Along with electricity and iron ore, cement has been identified as one of the major drivers of overall core-sector growth in recent months.

Iron Ore

Iron ore production grew 5.5 percent in August, following an exceptional 29.5 percent increase in July (Table 2). Despite the moderation, cumulative growth during April–August remained very strong at 21.8 percent.

The sharp cumulative increase in iron ore production provides an important upstream foundation for the steel sector. It also reinforces the broader evidence of continued activity in infrastructure and construction-related industries.

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TABLE 2

Core Sector Growth – Manufacturing & Iron Ore

(Year-on-Year Growth, per cent)



Month	 Fertilizers	 Steel	 Cement	 Iron Ore
Jul-25	1.9	15.7	11.1	-7.1
Aug-25	4.5	15.3	5.4	7.9
Sep-25	1.7	14.3	5.1	0.8
Oct-25	7.4	9.5	5.2	8.7
Nov-25	5.5	11.6	15.1	19.3
Dec-25	4.1	11.1	14.0	22.3
Jan-26	3.7	13.8	11.3	12.8
Feb-26	3.5	9.9	9.1	8.5
Mar-26	-24.6	9.6	4.7	33.3
Apr-26	-8.5	4.7	8.3	12.5
May-26	-1.0	5.1	8.4	19.0
Jun-26	-3.3	5.6	9.9	44.5
Jul-26	-8.0	1.9	12.7	29.5
Aug-26	-12.4	3.4	12.5	5.5
April–Aug. 26	-6.7	4.1	10.3	21.8

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Gol

Implications for Industrial Production and GDP Growth

The August core-sector data present a mixed but broadly supportive picture for industrial production. The strongest momentum is concentrated in electricity, cement and iron ore, with steel also recording positive growth. These sectors are closely linked to infrastructure, construction, transport and investment activity.

The structure of the ICI is particularly important. Electricity alone carries a weight of nearly 31 percent, while refinery products, steel and coal together account for a substantial share of the index. Consequently, the strong performance of electricity, cement and iron ore has been sufficient to offset contractions in several energy and input sectors and keep overall core growth at 4.8 percent. The chart on page 3 also shows that electricity, cement, steel and iron ore made significant positive contributions to August's overall growth, while several energy and fertilizer segments exerted downward pressure.

For GDP growth, the message is therefore one of continued industrial support rather than an across-the-board acceleration. Strong infrastructure-linked activity can support investment and construction, while electricity generation provides an essential enabling input for wider economic activity. However, persistent contraction in crude oil, natural gas, coal and fertilizers indicates that the recovery remains uneven across the production chain.

Challenges Ahead

The principal challenge is the divergence between downstream and upstream sectors. Electricity, cement and iron ore are expanding strongly, but several primary energy inputs remain in contraction. If this divergence persists, capacity utilisation and production costs could come under pressure in energy-intensive industries.

A second challenge is the moderation in some previously stronger sectors. Iron ore growth, for instance, fell sharply from 29.5 percent in July to 5.5 percent in August. Steel growth also remains considerably below its exceptionally strong pace of the previous year.

Third, the fertilizer sector's contraction of 12.4 percent requires attention because of its linkage with agricultural production. Finally, the August data remain provisional, and the July index itself was revised from 5.4 percent to 5.0 percent, underscoring the need to interpret monthly movements with appropriate caution.

Policy Priorities

Policy should focus on broadening the industrial recovery across the production chain rather than relying predominantly on a few high-growth sectors.

First, domestic production of coal, crude oil and natural gas needs continued attention, particularly where supply constraints can affect industrial costs and energy security.

Second, the strong performance of electricity, cement and iron ore should be complemented by sustained investment in transmission, logistics and infrastructure so that capacity creation translates into higher economy-wide productivity.

Third, the contraction in fertilizer production warrants close monitoring, particularly ahead of agricultural demand cycles.

Fourth, the steel sector needs continued support for capacity expansion, technology upgrading and competitiveness, given its central role in infrastructure and manufacturing.

Finally, policy coordination between energy, infrastructure, manufacturing and agriculture is increasingly important. The core-sector data demonstrate that bottlenecks in one part of the production chain can limit the benefits of strength elsewhere.

Conclusion

India's core industries continue to provide a positive foundation for economic expansion, but the August 2026 data point to an uneven industrial recovery. Electricity, cement and iron ore are generating strong momentum, while steel is expanding at a moderate pace. At the same time, declining output of coal, crude oil, natural gas and fertilizers highlights vulnerabilities in key upstream segments.

The central policy challenge is therefore not just to sustain the 4.8 percent core-sector growth rate, but to make the recovery broader, more balanced and less constrained by weaknesses in critical inputs. A stronger and more synchronised performance across energy, manufacturing and infrastructure would provide a firmer foundation for sustained industrial production and GDP growth.



Core-sector growth remains positive, led by electricity, cement and iron ore, but weaknesses in key energy inputs point to an uneven industrial recovery.

SERVICES SECTOR GAINS MOMENTUM: BROAD-BASED GROWTH SIGNALS STRONGER ECONOMIC ACTIVITY

Introduction

India's services economy continued to display strong momentum in July 2026, with growth becoming increasingly broad-based across trade, transport, finance, real estate, information technology and business services. The Sub-Sectoral Trial Index of Services Production (ISP) released by NSO, covering 19 service sub-sectors and using 2024–25 as the base year, provides a more granular view of developments within the services sector. The index is currently being published on an experimental basis to assess data quality, resilience and user feedback.

The July numbers are encouraging. Seventeen of the 19 sub-sectors recorded positive year-on-year growth, while 10 registered double-digit expansion (Table 1). Administrative and support services, retail trade, real estate, accommodation and food, and banking were the five fastest-growing segments. At the same time, repair services and air transport contracted, highlighting that the services recovery, although broad, is not uniform.

The emerging pattern points to a services economy increasingly supported by domestic consumption, business activity, financial intermediation, urbanisation and digitalisation. However, the divergence across sectors also suggests that sustaining momentum will depend on strengthening the weaker segments and ensuring that the expansion translates into productivity and employment gains.

Trade and Consumer-Facing Services

Trade-related services were among the strongest contributors to the July performance. Wholesale trade grew 12.1 percent, while retail trade expanded 18.5 percent year-on-year. Retail trade recorded an ISP of 140.0, the highest index level among the two trade segments and one of the strongest growth rates across all 19 sub-sectors.

The strength of retail activity is significant because it provides an important indicator of domestic demand. Sustained double-digit growth suggests that consumption-related services

remain a major source of economic momentum. Wholesale trade growth, meanwhile, points to strengthening movement of goods through supply chains and distribution networks.

Accommodation and food services also grew 12.6 percent, reinforcing the evidence of buoyancy in consumer-facing activity. The ISP for the segment reached 144.0 in July, among the highest levels recorded across the services categories.

Yet the contraction in repair services, at 5.0 percent, provides an important counterpoint. It suggests that not all consumption-linked services are expanding at the same pace and that activity remains differentiated across individual service markets.

Transport and Logistics

Transport services present a mixed but generally positive picture. Road transport grew 9.9 percent, while railway transport increased 7.5 percent and water transport 7.7 percent. Warehousing and support activities for transportation also expanded 9.8 percent, indicating continued strength in logistics and goods movement. Postal and courier services grew 8.7 percent.

The performance of road transport and warehousing is particularly relevant to the broader economy because these activities connect production centres with markets. Strong logistics activity can support manufacturing, trade and construction by improving the movement and distribution of goods.

Air transport, however, contracted 8.4 percent in July, making it the weakest-performing sub-sector in the ISP. Its index fell to 87.8, compared with 91.2 in June and 95.9 in July 2025.

The divergence between air transport and other transport segments suggests that the overall improvement in mobility and logistics is not evenly distributed. This warrants monitoring because transport services are closely connected with tourism, business travel and high-value economic activity.

Financial and Real Estate Services

Financial services remained a significant source of strength. Banking grew 12.3 percent, while insurance expanded 8.9 percent. Real estate activity recorded particularly strong growth of 14.4 percent, with its ISP reaching 121.2 in July.

The performance of banking is important because financial intermediation supports consumption, investment and working capital requirements across the economy. Strong growth in banking alongside real estate suggests that financial and property-related activity is responding to broader economic and investment conditions.

The real estate expansion also has multiplier effects through construction, professional services, financing and household demand. Nevertheless, the sustainability of this momentum will depend on whether financial deepening and property activity increasingly support productive investment rather than remaining concentrated in particular segments of the economy.

Digital, IT and Knowledge-Based Services

The July data also show continued expansion in India's knowledge-intensive services. Telecommunications grew 11.0 percent, information and broadcasting 10.0 percent, IT and computer-related services 10.7 percent, and professional, scientific and technical services, including research and development, 10.4 percent.

This broad-based expansion is particularly significant for India's longer-term growth prospects. IT and digital services have become increasingly integrated with virtually every part of the economy, while professional and scientific services contribute to innovation, business productivity and technological upgrading.

The monthly index also shows considerable volatility in some knowledge-intensive categories. For example, the professional, scientific and technical services index rose from 106.3 in April to 122.7 in June before moderating to 116.2 in July. IT and computer-related services similarly declined from 130.8 in June to 119.1 in July, although the latter remained 10.7 percent above its year-earlier level.

The underlying direction remains positive, but monthly movements should be interpreted carefully given the experimental nature of the series.

Business and Administrative Services

The strongest performance in July came from administrative and support services, which grew an exceptional 20.9 percent year-on-year. Its ISP increased to 134.5, compared with 121.7 in June.

Such growth indicates rising demand for outsourced and supporting business functions. As firms expand and reorganise their operations, demand for specialised administrative, operational and support services can rise faster than traditional sectors.

Professional, scientific and technical services also recorded double-digit growth, reinforcing the broader shift towards knowledge-intensive business activity. Together, these developments suggest that the services economy is becoming increasingly diversified beyond traditional trade and transport.

Implications for Economic Growth

The July ISP data strengthen the evidence that services remain a major engine of India's economic expansion. The fact that 17 of 19 sub-sectors recorded positive growth is particularly significant because it indicates that the momentum is not confined to a handful of industries.

The combination of strong retail and wholesale trade, accommodation and food services, banking, real estate, IT, telecommunications and administrative services points towards simultaneous strength in consumption, business activity, financial intermediation and urban economic activity.

The data also complement the broader picture of an increasingly service-led Indian economy. Strong growth in logistics, telecommunications and digital services can reinforce productivity in manufacturing and agriculture by improving connectivity, market access and business processes.

However, the distinction between service activity and service productivity remains important. High growth in the index does not automatically imply equivalent gains in productivity, employment quality or real incomes. The next phase of India's services expansion will therefore need to focus increasingly on productivity-enhancing investment, skills and technological adoption.

Challenges Ahead

The first challenge is the unevenness within the services economy. Air transport and repair services contracted even as most other segments expanded. This suggests that aggregate services growth can mask pockets of weakness.

Second, the experimental nature of the ISP means that the data need to be interpreted with caution. MoSPI has explicitly indicated that the monthly series is intended to test data quality and resilience, while the indices for railways, banking and insurance are based on provisional monthly information and are subject to annual revision.

Third, maintaining strong growth in services will require continued investment in digital infrastructure, logistics, human capital and urban infrastructure. The rapid expansion of IT, professional and administrative services will also require a workforce capable of adapting to changing technology and business models.

Policy Priorities

Policy should focus on converting broad services growth into higher productivity, stronger employment and greater competitiveness.

First, improving the quality and coverage of services-sector data should remain a priority as the ISP develops into a more mature statistical indicator.

Second, infrastructure investment in transport, logistics, telecommunications and urban services should keep pace with rising demand.

Third, skill development needs to be closely aligned with the expansion of IT, professional, scientific, technical and administrative services. Greater emphasis on digital, analytical and specialised skills can help India capture higher-value segments of global services.

Fourth, financial and real estate expansion should increasingly support productive investment, entrepreneurship and business formation.

Finally, policy should address weaker segments such as air transport and repair services through sector-specific measures rather than relying solely on aggregate services growth.

Conclusion

The July 2026 ISP provides encouraging evidence of a broad-based expansion in India's services economy. With 17 of 19 sub-sectors growing and 10 recording double-digit expansion, the momentum extends across trade, hospitality, transport, finance, real estate, digital services and business support activities.

The key challenge now is to convert this breadth of growth into sustained productivity gains and higher-quality employment. If investment in infrastructure, skills, digitalisation and business capabilities keeps pace with expanding demand, India's services sector can remain an important pillar of overall economic growth while strengthening the economy's resilience and competitiveness.

India's services sector is showing broad-based momentum, with trade, finance, real estate, IT and business services driving growth. Sustaining this momentum will require stronger productivity, skills and infrastructure across the services economy.



Bottomline

India's services sector is showing broad-based momentum, with trade, finance, real estate, IT and business services driving growth. Sustaining this momentum will require stronger productivity, skills and infrastructure across the services economy.

INDIA'S UNINCORPORATED ECONOMY: DISTRICT-LEVEL DATA REVEAL NEW GROWTH OPPORTUNITIES

Introduction

India's unincorporated non-agricultural sector is a critical part of the economy, providing livelihoods, entrepreneurial opportunities and local services across urban and rural areas. Yet, its diversity and geographical spread have often been difficult to capture at a sufficiently granular level. The Annual Survey of Unincorporated Sector Enterprises (ASUSE) 2025 provides an important new perspective by presenting district-level estimates of establishments, employment, women's participation and productivity.

For the first time, the National Statistical Office (NSO) has released district-level estimates from a large-scale nationwide survey covering the unincorporated non-agricultural sectors of manufacturing, trade and other services. Estimates are available for 757 of 770 districts in the sampling frame, providing a significantly more granular picture of the sector than state-level statistics alone.

The findings reveal three important characteristics: high geographical concentration, considerable variation in productivity, and a significant role for women in several regions. Together, these patterns have important implications for local economic development, employment policy and the design of support for small and unincorporated enterprises.

A Highly Concentrated Enterprise Landscape

The most striking finding is the concentration of economic activity across districts. The top 10 districts, ranked by the number of unincorporated establishments, account for about one-tenth of the sector's total establishments, workforce and Gross Value Added (GVA). The top 50 districts account for nearly one-third of establishments, workers and GVA.

The concentration is spread across a relatively broad geographical base. The top 10 districts are located in Gujarat, Telangana, Uttar Pradesh and West Bengal, while the top 50 span 12 states, including Bihar, Karnataka, Kerala, Maharashtra, Odisha, Punjab, Rajasthan and Tamil

Nadu. This indicates that concentration is not confined to a single regional cluster but reflects the presence of strong local enterprise ecosystems in several parts of the country.

At the same time, the distribution across districts is highly uneven. Roughly one-third of districts have more than one lakh unincorporated establishments, while around 9 percent have fewer than 10,000. Only 16 districts have more than five lakh establishments, including eight in West Bengal, three in Maharashtra and two in Gujarat.

This concentration has an important policy implication: national programmes for the unincorporated sector may produce very different outcomes depending on local economic structures. District-level interventions could therefore be more effective than uniform approaches that treat the sector as geographically homogeneous.

Productivity Varies Significantly Across Districts

The district-level data also highlight substantial differences in economic productivity. GVA per worker—a useful indicator of value generated per worker—falls between ₹1 lakh and ₹1.5 lakh in about 331 districts. Importantly, 280 districts record GVA per worker above the all-India average of ₹1,56,539, indicating relatively higher levels of productivity in these locations.

The presence of a substantial number of districts above the national average suggests that the unincorporated sector is not synonymous with low-productivity activity. Certain local ecosystems appear capable of generating significantly higher value per worker, potentially reflecting differences in the composition of enterprises, access to markets, infrastructure, skills, technology and local demand.

This variation also creates an opportunity for policy learning. Rather than focusing exclusively on increasing the number of enterprises, policy could examine why some districts achieve higher productivity and identify practices that can be adapted elsewhere.

The emphasis should increasingly shift from enterprise survival to enterprise productivity and scale. Better access to technology, finance, formal markets, digital platforms, logistics and business services could enable productive enterprises to expand while raising incomes and employment quality.

Women's Participation Emerges as a Major Strength

The district-level findings provide particularly interesting evidence on women's participation in the unincorporated economy. The top 10 districts with the highest share of female-led unincorporated establishments are located in Telangana, Manipur and Meghalaya. In Mizoram, female-owned proprietary establishments account for at least half of establishments in every district.

Women's participation is also significant from an employment perspective. In 237 districts, women constitute at least one-third of the total workforce in the unincorporated sector, while in 25 districts women account for more than half of the workforce. The districts with the highest shares of female workers are concentrated in Telangana, Manipur, Meghalaya and Mizoram.

These findings point to the importance of the unincorporated sector as a platform for women's economic participation, particularly in regions where women have a strong presence in local enterprise ecosystems.

The policy focus, however, should extend beyond participation to enterprise growth, productivity and market access. Improving access to credit, digital payments, e-commerce, formal registration, business training and market linkages could help women-owned enterprises move towards higher-value activities.

Districts as the New Unit of Economic Policy

One of the most important contributions of the report is methodological as well as economic. State-level averages can conceal substantial differences between districts. In some States and Union Territories, a single district accounts for a very large share of the state's unincorporated establishments. For example, Puducherry accounts for 76.64 percent within the Union Territory, North Goa for 77.66 percent of Goa's establishments, and Dadra & Nagar Haveli for 65.48 percent of the combined UT's establishments. Such concentration suggests that local infrastructure, markets, urbanisation, connectivity and entrepreneurial ecosystems can significantly shape enterprise activity.

District-level statistics can consequently support a more targeted approach to industrial and employment policy. Districts with large enterprise bases may require policies focused on formalisation, scale and productivity, while districts with relatively small enterprise ecosystems may need foundational interventions involving infrastructure, skills, finance and market connectivity.

Implications for Employment and Economic Growth

The unincorporated sector's importance extends beyond the enterprises themselves. Its employment footprint means that improvements in enterprise productivity can have significant implications for household incomes and local demand.

The concentration of establishments, workers and GVA in the top districts also suggests that these areas can function as local growth centres, generating spillovers into logistics, finance, retail, professional services and other activities.

At the same time, the wide variation in productivity indicates considerable untapped potential. If lower-productivity districts can progressively adopt the practices, technologies and institutional arrangements found in more productive enterprise clusters, the aggregate contribution of the unincorporated economy could increase.

This is particularly relevant to India's broader objective of creating productive non-farm employment and strengthening the role of smaller enterprises in economic transformation.

Policy Priorities

The district-level evidence points towards several priorities:

First, policy should become more geographically targeted. District enterprise profiles can help identify where interventions should focus on infrastructure, finance, skills, technology or market access.

Second, productivity should become a central policy objective. Support programmes should increasingly measure outcomes in terms of GVA, employment quality, enterprise survival and scale rather than simply the number of beneficiaries or establishments.

Third, women's entrepreneurship requires greater attention. Districts with high female participation could serve as learning centres for policies aimed at strengthening women's enterprise ownership, finance and market access.

Fourth, productive enterprises should be encouraged to formalise and scale. Digital platforms, simplified compliance, access to institutional finance and integration into organised supply chains can help successful enterprises move beyond subsistence operations.

Finally, district-level statistical capacity should continue to improve. The report itself cautions that district estimates reflect regional economic and demographic differences, industrial composition, local conditions and sampling variability; in some cases, the reported Relative Standard Errors are high.

Conclusion

The ASUSE 2025 district-level estimates provide a valuable new lens on India's unincorporated economy. The sector is large, geographically concentrated, economically diverse and an important source of women's employment and entrepreneurship. The finding that the top 50 districts account for nearly one-third of establishments, workers and GVA highlights the importance of local economic ecosystems, while the 280 districts with above-average GVA per worker point to significant productivity potential.

The next step should be to move from a broad national approach towards district-specific strategies that raise productivity, strengthen enterprise capabilities, expand women's entrepreneurship and connect local businesses with larger markets. Better granular data can make that transition possible.



Bottomline

India's unincorporated economy has significant but uneven district-level potential, with productivity and women's participation emerging as key opportunities for inclusive growth.

TRADE & INVESTMENTS

INDIA'S EXPORTS ACCELERATE: ELECTRONICS, ENGINEERING AND SERVICES DRIVE TRADE GROWTH

Introduction

India's external trade has gained considerable momentum in the first five months of FY2026–27, with exports of merchandise and services rising strongly despite a faster increase in imports. Cumulative exports during April–August 2026–27 are estimated at US\$399.27 billion, compared with US\$345.55 billion in the corresponding period of 2025–26, representing growth of 15.55 percent (Table 1). Merchandise exports increased even faster, by 17.85 percent, to US\$215.91 billion, while services exports rose to US\$183.36 billion.

EcoSphere

TABLE 1

Trade during April-August 2026-27

(US\$ Billion)



Item	Category	April–August 2026–27 (US\$ Billion)	April–August 2025–26 (US\$ Billion)
 Merchandise	Exports	215.91	183.21
	Imports	363.00	307.09
 Services	Exports	183.36	162.34
	Imports	96.65	82.40
 Total (Merchandise + Services)	Trade Exports	399.27	345.55
	Imports	459.65	389.49
 Trade Balance		-60.38	-43.94

Source: Ministry of Commerce & Industry, Gol

August was particularly strong. Total exports of merchandise and services reached an estimated US\$82.68 billion, up 25.41 percent from US\$65.93 billion a year earlier. Imports increased

18.75 percent to US\$92.09 billion (Table 2). As a result, the combined trade deficit narrowed to US\$9.41 billion in August, from US\$11.62 billion in August 2025.

EcoSphere		TABLE 2	
Trade during August 2026-27 (US\$ Billion)			
Item	Category	August 2026-27 (US\$ Billion)	August 2025-26 (US\$ Billion)
 Merchandise	Exports	43.81	34.74
	Imports	70.67	61.96
 Services	Exports	38.87	31.19
	Imports	21.42	15.59
 Total (Merchandise + Services)	Trade Exports	82.68	65.93
	Trade Imports	92.09	77.55
 Trade Balance	Trade Balance	-9.41	-11.62

Source: Ministry of Commerce & Industry, Gol

The headline numbers therefore point to a strengthening export sector, but the cumulative picture is more complex: imports have risen faster than exports over April–August, widening the overall trade deficit. The composition of export growth, particularly the sharp expansion in electronic goods, engineering products and services, is consequently more important than the headline export number alone.

Merchandise Exports Gain Strength

Merchandise exports increased from US\$34.74 billion in August 2025 to US\$43.81 billion in August 2026, while merchandise imports rose from US\$61.96 billion to US\$70.67 billion.

Over April–August, merchandise exports reached US\$215.91 billion compared with US\$183.21 billion a year earlier. However, merchandise imports increased more sharply, from US\$307.09 billion to US\$363.00 billion. Consequently, the merchandise trade deficit widened from US\$123.88 billion to US\$147.09 billion.

This divergence captures a central feature of India's current external sector: export capacity is strengthening, but domestic economic activity is also generating substantial demand for imported goods. The rise in imports therefore needs to be assessed in terms of their composition and their contribution to future productive capacity rather than simply viewed as a deterioration in external performance.

Electronics Emerging as a Major Export Driver

One of the most striking developments is the exceptionally rapid growth of electronic goods exports. They increased by 89.82 percent, from US\$2.93 billion in August 2025 to US\$5.55 billion in August 2026.

This expansion is important because electronics represents a higher-value and increasingly technology-intensive segment of global trade. The rapid increase suggests that India's manufacturing and export ecosystem is gaining greater traction in this category.

Engineering goods also performed strongly, with exports increasing 24.86 percent, from US\$9.87 billion to US\$12.32 billion. Organic and inorganic chemical exports rose 16.38 percent, while cotton yarn, fabrics, made-ups and handloom products increased 13.79 percent.

The breadth of these gains is significant. Export growth is not confined to a single commodity group but spans electronics, engineering, chemicals, textiles and processed products. This provides evidence of increasing diversification in India's merchandise export basket.

Petroleum Products and Non-Petroleum Exports

Petroleum products also made a major contribution, with exports increasing 63.27 percent, from US\$4.17 billion in August 2025 to US\$6.81 billion in August 2026. At the same time, non-petroleum exports increased from US\$30.57 billion to US\$37.00 billion in August. Non-petroleum and non-gems-and-jewellery exports rose from US\$28.26 billion to US\$34.68 billion.

The cumulative figures reinforce this trend. Non-petroleum exports reached US\$180.61 billion during April–August 2026–27, up 14.39 percent from US\$157.89 billion. Non-petroleum and non-gems-and-jewellery exports increased from US\$146.52 billion to US\$168.69 billion.

This is an important structural feature of the current export performance because it indicates that the increase is not solely dependent on petroleum-related trade.

Services Exports Provide a Strong External Buffer

Services exports continue to provide an important counterweight to the merchandise trade deficit. Estimated services exports increased from US\$31.19 billion in August 2025 to US\$38.87 billion in August 2026, while services imports increased from US\$15.59 billion to US\$21.42 billion.

Over April–August, services exports rose from US\$162.34 billion to US\$183.36 billion, while services imports increased from US\$82.40 billion to US\$96.65 billion. The services trade surplus consequently expanded from US\$79.94 billion to US\$86.71 billion. Services exports are estimated to have grown 12.95 percent during the period.

The services surplus is therefore becoming increasingly important in moderating the impact of the merchandise deficit on India's overall external balance. The combination of merchandise export growth and a rising services surplus strengthens the diversification of India's external earnings.

Export Markets Are Becoming More Diverse

The trade data also indicate considerable variation across export destinations. During April–August 2026–27, exports to Singapore increased 96.56 percent, Tanzania 129 percent, Malaysia 75.4 percent and China 38.71 percent, while exports to the United States increased 6.17 percent.

Such diversification can reduce excessive dependence on individual markets, although the sustainability of these gains will depend on trade conditions, demand patterns and market access.

On the import side, Russia, China, the United States, Oman and Brazil recorded strong growth in India's imports during April–August. Imports from Oman increased particularly sharply, while Russia and Brazil also registered substantial increases.

The import pattern reflects India's continuing need for energy, industrial inputs, capital goods and other products required to sustain domestic economic activity.

Implications for Growth and the External Sector

The trade data have several implications for India's growth outlook:

First, the strong rise in merchandise exports provides support to manufacturing and industrial activity. Electronics and engineering goods are particularly important because their expansion can generate demand across supply chains and contribute to greater domestic value addition.

Second, the continued expansion of services exports strengthens India's external earnings and provides a structural source of foreign exchange. The rising services surplus partly offsets the persistent merchandise deficit.

Third, the increase in imports needs to be interpreted alongside domestic investment and production. Imports of productive inputs and capital goods can support future output and export capacity, although sustained growth in consumption-oriented imports would have different implications for the trade balance.

Finally, the narrowing of the monthly overall trade deficit in August, despite strong import growth, suggests that the exceptionally strong performance of exports—particularly services—provided meaningful support to the external balance during the month.

Challenges Ahead

The principal challenge is the widening cumulative merchandise trade deficit. Although merchandise exports grew 17.85 percent during April–August, imports grew from US\$307.09 billion to US\$363.00 billion, leaving a merchandise deficit of US\$147.09 billion.

A second challenge is the sustainability of exceptionally high growth rates in individual export categories. Electronics exports, for instance, grew nearly 90 percent in August. Maintaining such momentum will require continued investment, competitive logistics, reliable infrastructure, technology upgrading and deeper integration into global value chains.

Third, the services figures for August are estimates, as the latest RBI services-sector data available at the time were for July. The Commerce Ministry has also noted that earlier data have been revised on a pro-rata basis using quarterly balance-of-payments data. The monthly figures should therefore be interpreted with appropriate caution.

Policy Priorities

The immediate policy priority should be to strengthen the competitiveness and domestic value addition of India's export basket.

First, high-growth sectors such as electronics, engineering, chemicals and processed products require continued support for technology adoption, scale, quality standards and integration into global supply chains.

Second, export infrastructure—including ports, logistics, customs facilitation and digital trade systems—needs to keep pace with rapidly rising trade volumes.

Third, policy should encourage greater domestic production of critical intermediate goods and components where import dependence constrains competitiveness. This would help strengthen the domestic value chain without discouraging imports that contribute to productive investment.

Fourth, the services export ecosystem should be further strengthened through skills, digital infrastructure and access to international markets.

Finally, export-market diversification should continue, particularly through deeper engagement with emerging markets alongside established destinations.

Conclusion

India's external trade performance in the first five months of FY2026–27 is characterised by strong and increasingly diversified export growth. Merchandise exports have expanded rapidly, led by electronics, engineering goods, petroleum products and chemicals, while services exports have generated a larger surplus.

The principal challenge is that imports are rising faster than exports on a cumulative basis, widening the merchandise deficit. The policy task is therefore to sustain export momentum, deepen domestic value addition and expand services competitiveness while ensuring that imports increasingly support productive capacity and long-term economic growth.



Bottomline

India's exports are gaining strong momentum, led by electronics, engineering goods and services, but the widening merchandise deficit remains a key external-sector challenge.

EMPLOYMENT

LABOUR MARKET STRENGTHENS: RURAL PARTICIPATION AND FEMALE EMPLOYMENT GAIN MOMENTUM

Introduction

India's labour market showed further improvement in August 2026, with labour force participation and the worker population ratio strengthening while the overall unemployment rate remained broadly stable. The latest Periodic Labour Force Survey (PLFS) Monthly Bulletin shows that the Labour Force Participation Rate (LFPR) for persons aged 15 years and above rose to 55.6 percent in August from 55.4 percent in July, while the Worker Population Ratio (WPR) increased to 52.8 percent, its highest level since March 2026. The overall unemployment rate (UR) edged down to 5.0 percent from 5.1 percent.

The improvement, however, was driven predominantly by rural India. Rural LFPR and WPR increased significantly over the year, while urban participation remained relatively subdued. Female labour-force participation also continued to improve, although the increase was concentrated in rural areas. The August results therefore point to a strengthening labour market, but also underline persistent differences across rural–urban and gender dimensions.

The PLFS has provided monthly and quarterly estimates under the Current Weekly Status (CWS)¹ approach since the methodology was modified in January 2025. The August 2026 bulletin is the seventeenth monthly release under the revised system.

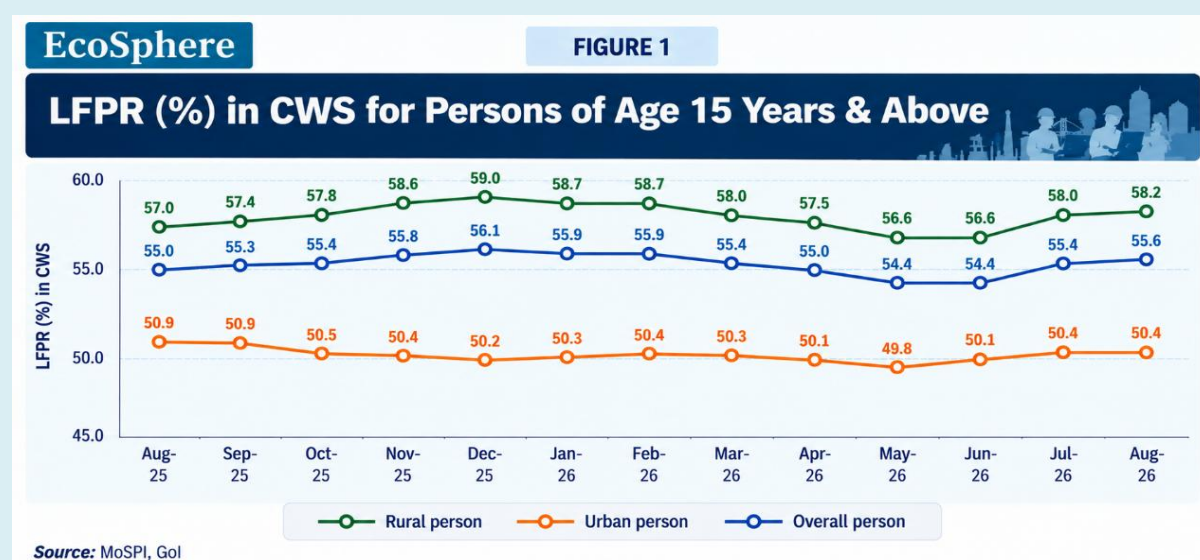
¹ The activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. The activity status determined on the basis of a reference period of last 7 days preceding the date of survey is known as the Current Weekly Status (CWS) of the person

Labour Force Participation Strengthens

The overall LFPR increased by 0.2 percentage point month-on-month to 55.6 percent in August (Figure 1). More importantly, it was 0.6 percentage point higher than the 55.0 percent recorded in August 2025.

The rural–urban divergence is striking. Rural LFPR increased to 58.2 percent, compared with 58.0 percent in July and 57.0 percent a year earlier (Figure 1). Thus, rural participation increased by 1.2 percentage points over the year. In contrast, urban LFPR remained unchanged at 50.4 percent from July and declined by 0.5 percentage point from 50.9 percent in August 2025.

The widening contribution of rural areas to labour-force participation is an important feature of the current labour-market picture. It indicates that a greater proportion of the rural working-age population is either working or actively participating in the labour market. However, the LFPR measure itself does not indicate the type, quality, productivity or earnings associated with the work being undertaken. These dimensions require separate assessment.

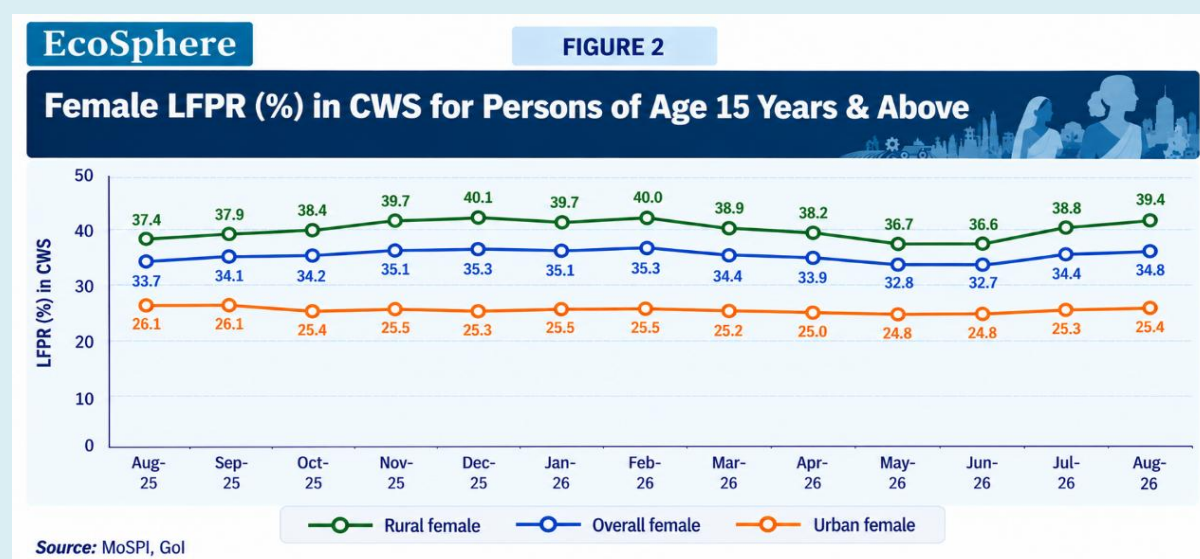


Female Labour Participation Shows Continued Improvement

One of the more encouraging developments is the continued increase in female labour-force participation. The overall female LFPR increased from 34.4 percent in July to 34.8 percent in August, marking the second consecutive monthly increase (Figure 2). On a year-on-year basis, female LFPR rose by 1.1 percentage points, from 33.7 percent in August 2025 to 34.8 percent in August 2026.

The rural component again accounts for most of the improvement. Rural female LFPR increased from 37.4 percent in August 2025 to 39.4 percent in August 2026, a rise of 2 percentage points. Urban female LFPR, however, declined from 26.1 percent to 25.4 percent over the same period.

This divergence deserves attention. The increase in female participation in rural areas is an important structural development, but the continuing gap between rural and urban female participation suggests that the determinants of women's participation differ significantly across locations. Access to suitable employment opportunities, mobility, skills, childcare and other social and economic factors can influence participation, although the PLFS bulletin itself does not establish the causes of these movements.



Worker Population Ratio Moves Higher

The WPR provides a complementary measure by indicating the proportion of the population that is employed. India's overall WPR increased from 52.5 percent in July to 52.8 percent in August 2026, and was 0.6 percentage point higher than the 52.2 percent recorded a year earlier.

Again, rural India was the principal source of improvement. Rural WPR rose from 54.5 percent in August 2025 to 55.8 percent in August 2026, an increase of 1.3 percentage points. Urban WPR, in contrast, declined from 47.5 percent to 47.0 percent over the same period. Month-on-month, urban WPR remained unchanged at 47.0 percent.

The simultaneous increase in rural LFPR and WPR is significant because it indicates that the rise in labour-force participation was accompanied by a higher share of the population being classified as workers. At the same time, the relatively stable urban WPR suggests that the improvement in the national indicator should not be interpreted as a uniform strengthening across all segments of the labour market.

Female Employment Indicators Also Improve

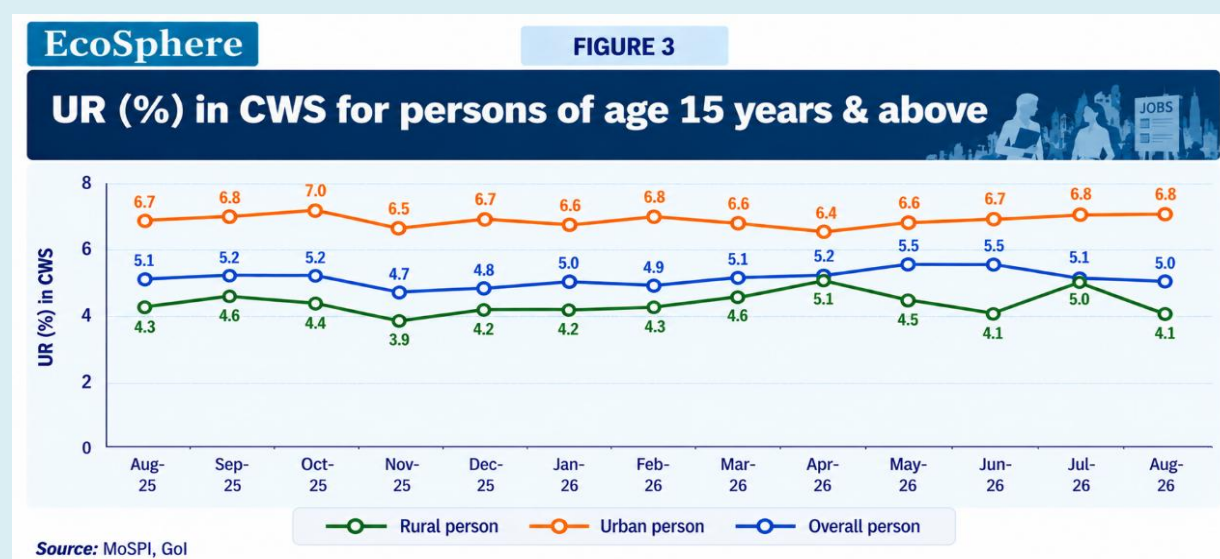
The gender dimension of WPR broadly mirrors the LFPR trend. Overall female WPR increased from 32.0 percent in August 2025 to 33.0 percent in August 2026. The rural female WPR reached 37.8 percent, compared with 35.9 percent a year earlier, while urban female WPR stood at 23.2 percent.

The improvement in female WPR is particularly relevant because an increase in participation is economically meaningful when it translates into actual employment. The August data show that both female LFPR and WPR increased over the year, suggesting that the rise in women's participation was accompanied by an increase in the proportion classified as workers.

Nevertheless, the large gap between rural and urban female WPR remains evident. Closing this gap would require expansion of employment opportunities that are accessible and suitable for women in urban areas, alongside improvements in skills and labour-market matching.

Unemployment Rate Remains Contained

The overall unemployment rate declined marginally from 5.1 percent in July to 5.0 percent in August (Figure 3). More significant was the decline in rural unemployment, from 4.5 percent to 4.1 percent, the lowest rural UR recorded since January 2026. Urban unemployment, however, edged up from 6.7 percent to 6.8 percent.



On a year-on-year basis, overall and urban unemployment remained broadly stable, while rural unemployment declined by 0.2 percentage point, from 4.3 percent in August 2025 to 4.1 percent in August 2026.

Gender-specific unemployment indicators also improved in August. Overall male unemployment declined for the third consecutive month, reaching 9 percent, while overall female unemployment declined for the second consecutive month to 5.1 percent. Rural male and female unemployment rates fell to 4.3 percent and 3.9 percent, respectively.

The combination of higher WPR and lower rural unemployment is therefore an important feature of the August labour-market data.

Rural–Urban Divergence Remains the Central Theme

Taken together, the three principal indicators—LFPR, WPR and UR—show that **rural** labour markets were the main source of improvement in August. Rural LFPR increased 1.2 percentage points over the year, rural WPR increased 1.3 percentage points, and rural UR declined 0.2 percentage point. PLFS Aug_2026

Urban indicators were comparatively weaker: urban LFPR declined 0.5 percentage point year-on-year, urban WPR fell 0.5 percentage point and urban UR remained broadly stable.

This divergence is important for understanding the broader economic implications. The national labour market is not moving as a single entity; rural and urban labour markets are experiencing different patterns of participation and employment.

Implications for Growth and Demand

The strengthening of labour-force participation and employment can support household incomes and consumption demand, particularly if employment gains translate into higher and more stable earnings. The increase in female participation also potentially broadens the productive base of the economy.

The rural improvement is especially relevant for the rural economy. Higher rural WPR combined with lower rural unemployment could support household purchasing power, although the PLFS indicators alone do not provide information on wages, hours worked or job quality.

For the urban economy, the relatively weak movement in participation and employment indicators warrants closer monitoring. A sustained improvement in overall employment will require stronger labour-market absorption in urban areas alongside continued rural gains.

Challenges Ahead

The principal challenge is to ensure that rising participation translates into productive, remunerative and sustainable employment. Participation and employment rates alone cannot capture earnings, productivity, job security or underemployment.

The second challenge is the persistent rural–urban divide, particularly in female participation. While rural female LFPR rose strongly, urban female LFPR declined over the year.

Third, the quality and sectoral distribution of employment will remain important. Stronger labour-force participation can contribute positively to growth only when the economy creates sufficient productive opportunities to absorb new entrants.

Finally, the revised PLFS methodology means that comparisons should be interpreted within the framework of the new monthly CWS estimates introduced from January 2025. The August bulletin is based on a substantial sample of 3,70,160 persons, including 2,11,353 persons in rural areas and 1,58,807 in urban areas.

Policy Priorities

Policy should focus on converting higher labour-force participation into sustained employment and productivity gains:

First, greater attention is required to urban employment generation, particularly as urban LFPR and WPR remain below their rural counterparts.

Second, the rise in female participation needs to be supported by employment opportunities, skills, mobility and appropriate workplace infrastructure, with particular attention to the relatively weaker urban indicators.

Third, rural employment gains should increasingly be connected with higher-productivity activities, including manufacturing, agro-processing, rural enterprises and modern services.

Finally, labour-market policy should focus not only on the number of jobs but also on their productivity, earnings and durability. Improving the quality of employment will be essential for converting India's expanding labour force into a stronger engine of economic growth.

Conclusion

The August 2026 PLFS presents a broadly improving labour-market picture, with higher overall LFPR and WPR and a marginal decline in unemployment. Rural India and female

participation are at the centre of this improvement, although urban labour-market indicators remain comparatively subdued.

The next challenge is to ensure that rising participation translates into productive and better-quality employment. Sustained improvement across both rural and urban labour markets, together with greater female participation, will be important for strengthening incomes, consumption and the employment contribution to India's economic growth.



India's labour market strengthened in August, led by rural and female participation, but urban employment remains comparatively subdued.

AGRICULTURE & AGRI-BUSINESS

MAHARASHTRA'S DROUGHT: FROM AGRICULTURAL STRESS TO A WIDER ECONOMIC CHALLENGE

Maharashtra is facing a significant drought situation that is extending beyond the immediate impact on Kharif agriculture. The state has declared 265 of its 358 talukas drought-affected, following an estimated 18 percent rainfall deficit during the 2026 monsoon. The severity of the situation varies considerably across regions, with Marathwada and parts of Vidarbha among the worst affected.

The economic implications extend well beyond the affected farming communities. Maharashtra is a major producer of soybean, tur, cotton, onions and sugarcane, giving the state an important role in India's agricultural and food-supply system. A prolonged production shock could therefore affect not only farm incomes but also commodity prices, rural employment, food inflation and demand.

The immediate challenge is to protect vulnerable households and agricultural livelihoods. The more consequential question is whether the current water stress will extend into the Rabi season and create a second-round shock to agricultural production and rural incomes.

A Monsoon Deficit with Significant Regional Variation

Maharashtra received around 798.2 mm of rainfall against an average of 970.9 mm, resulting in a substantial seasonal deficit. However, the aggregate figure masks considerable regional variation. While some areas, including Nashik, received excess rainfall, Marathwada experienced a deficit of around 38 percent.

This spatial variation is economically important. Agricultural production depends not only on the total volume of rainfall but also on its timing and distribution across the crop cycle. Extended dry spells during critical stages of crop development can cause significant damage even when rainfall at the state level appears less adverse. The concentration of rainfall stress

in predominantly rain-fed agricultural regions has consequently amplified the impact on farm production.

Crop Risks Extend Beyond Kharif

The most immediate impact has been on Kharif crops, particularly those that depend heavily on monsoon rainfall. Soybean, tur and cotton are among the most vulnerable crops. Maharashtra accounts for approximately 38.5 percent of India's soybean production, producing about 4.85 million tonnes out of a national output of 12.6 million tonnes. The state also contributes around 32.8 percent of India's tur production, with output of approximately 1.18 million tonnes compared with national production of 3.59 million tonnes. These production shares give the drought a significance that extends well beyond Maharashtra.

A decline in soybean output can affect edible-oil availability as well as livestock-feed markets. Lower tur production can place pressure on pulse supplies and prices, while reduced cotton output can affect both farm incomes and the wider textile value chain. The potential consequences, therefore, depend not simply on the extent of crop damage within Maharashtra, but also on the availability of supplies from other producing states, existing stocks, imports and government market interventions.

Reservoir Levels Raise a Larger Concern

The most significant medium-term risk may lie in the state's water reserves. Live storage across Maharashtra's major reservoirs stood at around 75.5 percent of capacity, compared with 88.3 percent a year earlier. The decline has been particularly sharp in the Chhatrapati Sambhajinagar region, where live storage was reported at only 45.4 percent of capacity, compared with 81.7 percent a year earlier.

Lower reservoir levels have implications beyond the current Kharif crop. They determine the availability of irrigation water during the coming months and therefore influence Rabi sowing decisions. The issue is particularly acute in regions where groundwater resources and irrigation coverage are limited. If reservoir levels continue to decline, crops that have survived the monsoon deficit could face additional moisture stress during their later growth stages. The

drought is therefore increasingly becoming a water-management challenge rather than simply a rainfall challenge.

The Rabi Season Could Become the Next Stress Point

The coming Rabi season is critical. Low residual soil moisture combined with reduced reservoir storage could constrain the area that farmers are able to cultivate and influence their choice of crops. Water-intensive crops may become less viable, encouraging farmers to shift towards shorter-duration and less water-intensive varieties. This could have significant implications for the production of wheat, gram, mustard and other Rabi crops in drought-affected regions.

The risk is particularly pronounced in rain-fed areas, where farmers have fewer options to compensate for inadequate rainfall through irrigation. The economic significance of this potential second-round effect is considerable. A weak Kharif season reduces current farm incomes; a weak Rabi season could prolong the income shock into the next agricultural cycle.

Rural Employment Demand Is Already Increasing

Agricultural distress is also beginning to manifest itself in the rural labour market. The number of households seeking employment under Maharashtra's employment guarantee programme increased from 402,493 in July to 461,596 in August and 493,169 in September. The increase suggests that the drought is affecting not only farmers but also agricultural labourers and other rural households dependent on farm activity.

The state has earmarked ₹6,728 crore for rural employment and livelihood support under the employment guarantee programme. The proposed activities include water conservation, irrigation facilities, farm infrastructure and rural asset creation. This approach has an important economic advantage. If employment expenditure is directed towards water conservation and productive rural infrastructure, it can simultaneously provide immediate income support and strengthen resilience against future rainfall shocks. The effectiveness of the programme will, however, depend on timely implementation and the ability to generate employment close to affected communities.

Credit Stress Could Amplify the Rural Shock

Drought-related crop losses also create financial stress. Farmers face lower agricultural revenues while existing obligations relating to crop loans, household expenditure and farm inputs continue. If the next crop cycle is also affected, repayment capacity can deteriorate further. The Maharashtra government has responded through measures including agricultural loan restructuring, restrictions on loan recovery, land-revenue concessions and electricity-bill relief for agricultural water pumps.

These measures can provide an important liquidity buffer. However, loan restructuring primarily postpones repayment obligations. If agricultural incomes do not recover, temporary relief can eventually translate into longer-term credit stress. This makes timely crop-loss assessment, compensation, crop insurance and access to fresh institutional credit particularly important.

Implications for Food Inflation

Maharashtra's importance in the production of several agricultural commodities creates a potential food-price channel. The drought could affect supplies of soybean, tur, onions, sugarcane and cotton, although the magnitude of the eventual price impact will depend on production losses, stocks, supplies from other states, imports and government interventions. The effect is therefore likely to be commodity-specific rather than uniformly inflationary.

Tur is particularly important because pulses have a relatively direct relationship with household food expenditure. Soybean production affects edible-oil markets, while onions have historically been an important source of short-term food-price volatility.

At the same time, India's foodgrain stocks and the availability of supplies from other regions can provide a buffer against a localised production shock. The key issue for policymakers will therefore be to distinguish between temporary commodity-specific price pressures and a broader, persistent food-inflation cycle.

The Drought and Rural Demand

The implications for rural demand deserve particular attention. Agricultural incomes influence household expenditure on consumer goods, two-wheelers, farm machinery, housing improvements and rural services. A sustained decline in farm incomes can consequently affect the broader rural economy.

The potential impact is stronger when several channels operate simultaneously: lower crop income, reduced agricultural employment, higher food expenditure and greater spending on water and livestock.

Government employment programmes, crop compensation and credit relief can moderate this effect. But if the drought extends into the Rabi season, the pressure on rural purchasing power could become more persistent. The drought should therefore be viewed not only as an agricultural supply shock but also as a potential rural-demand shock.

Water Scarcity Is Becoming a Broader Economic Issue

The possibility of restrictions on water use illustrates the widening economic dimensions of the crisis. The Maharashtra government has considered a potential 10 percent reduction in urban water supplies, alongside restrictions in rural areas, although such measures were still under consideration. This highlights the competing demands on limited water resources. Agriculture, households, industry and livestock all depend on the same underlying reservoir and groundwater systems.

As water scarcity intensifies, allocation decisions can have implications for agricultural production, industrial activity and urban consumption. This reinforces the need to treat water security as an economic-policy issue rather than solely as an agricultural or environmental concern.

From Drought Relief to Drought Resilience

The policy response needs to operate at three levels:

Immediate relief: The first priority is to protect household incomes and basic consumption through timely crop compensation, rural employment, food security, drinking-water provision and credit support.

Protection of the Rabi crop: The second priority is to maximise the productive use of available water. Crop planning, irrigation management, drought-resistant varieties and micro-irrigation can help preserve agricultural production under constrained water availability.

Long-term resilience: The third priority is to reduce the structural vulnerability of agriculture to rainfall variability. Watershed development, groundwater recharge, farm ponds, micro-irrigation, improved water harvesting, drought-resistant seeds, crop diversification and better weather information can reduce the sensitivity of farm incomes to rainfall shocks.

The ₹6,728 crore allocation for rural employment provides an opportunity to combine short-term income support with investments in precisely these areas. Employment expenditure can generate immediate purchasing power while creating assets that strengthen future water security.

A Potential Test for India's Inflation Outlook

Maharashtra's drought comes at a time when India's broader inflation environment is already receiving close attention. The potential interaction between weather conditions and food prices therefore deserves careful monitoring. A substantial reduction in soybean, tur, onion or other important crops could create commodity-specific price pressures even if overall food inflation remains contained.

The transmission to national inflation will depend on the scale of production losses, inter-state supplies, food stocks, imports, exchange-rate conditions and government intervention. This makes crop-level and regional monitoring particularly important. Aggregate rainfall data alone cannot provide a sufficiently precise assessment of the inflation risk.

The Larger Economic Lesson

Maharashtra's experience illustrates how climate-related shocks can propagate through the wider economy. The transmission mechanism begins with rainfall and soil moisture. It then moves through crop yields and agricultural incomes to rural employment, credit demand, food prices, consumption and, ultimately, economic growth.

The current episode demonstrates several elements of this chain simultaneously. Kharif agriculture has come under pressure. Reservoir levels have declined. Demand for rural employment has increased. Agricultural credit support has become necessary. The coming Rabi season faces greater uncertainty. And the potential impact on nationally important commodities creates a food-price channel. The challenge is consequently larger than managing a single failed agricultural season.

Conclusion

Maharashtra's drought has evolved from a monsoon deficit into a broader test of agricultural and rural economic resilience. The declaration of drought across 265 of 358 talukas indicates the scale of the challenge. The immediate priority is to protect vulnerable households, maintain rural employment and provide timely financial relief. The next priority is to preserve the Rabi crop through careful water management and appropriate crop planning.

The longer-term challenge is structural. India's agricultural economy remains exposed to rainfall variability, while increasing climate volatility is making the management of water resources more important for both agricultural and macroeconomic stability.

Maharashtra's experience demonstrates that drought policy cannot stop at compensation after crop losses occur. It needs to combine income protection, credit support, water management, agricultural diversification and resilience-building investment.

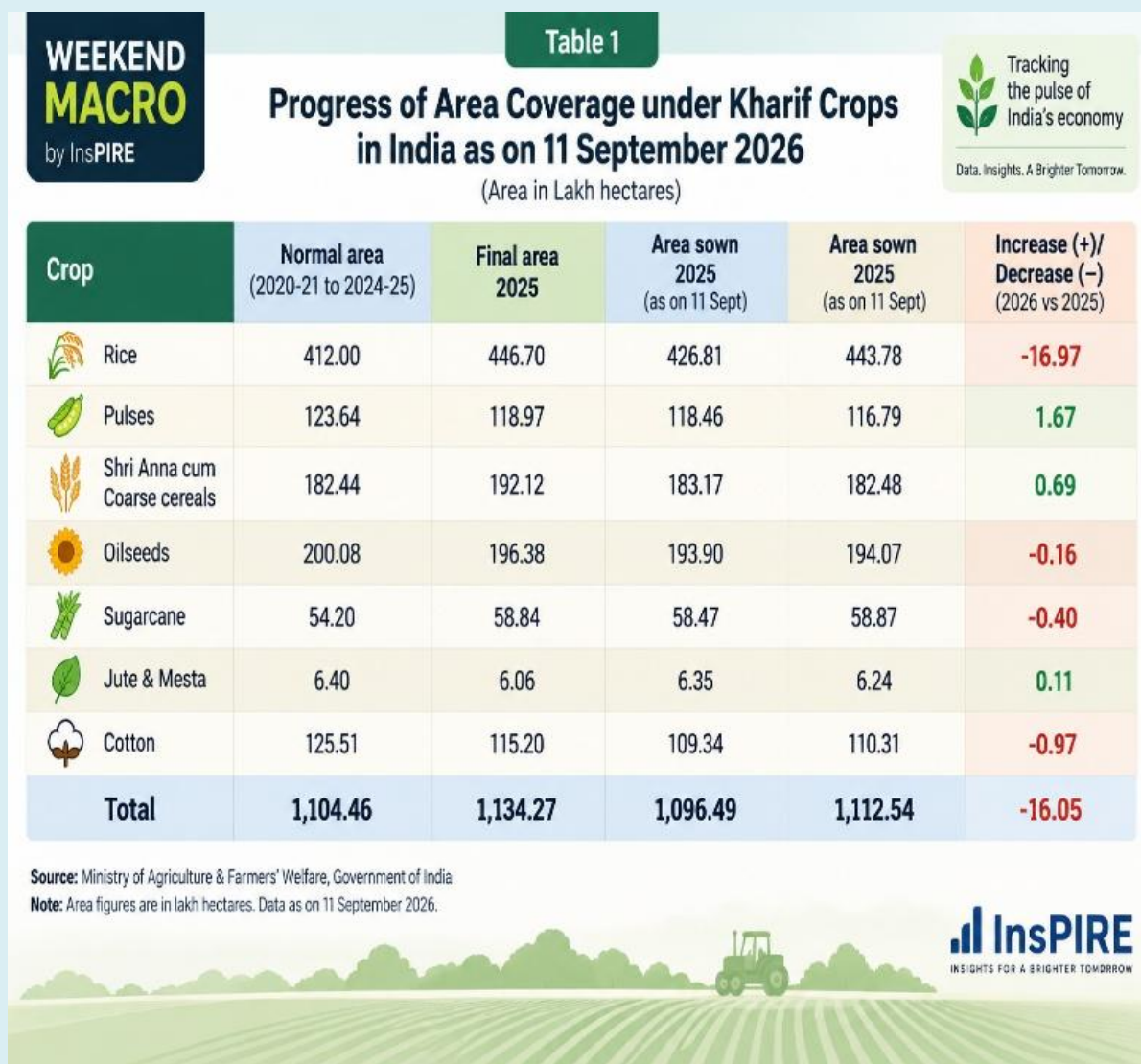
If effectively implemented, the current drought-response programme can do more than cushion the immediate shock. By directing a significant part of rural employment expenditure towards water conservation, irrigation, groundwater recharge and productive rural infrastructure, Maharashtra can strengthen its capacity to withstand future rainfall variability. The broader

lesson for India is that water security is increasingly becoming an integral part of food security, rural income security and macroeconomic stability.

NEAR-NORMAL KHARIF SOWING MASKS CROP-SPECIFIC RISKS

India's Kharif sowing season has moved close to completion with total acreage remaining broadly near its recent normal, but the aggregate picture masks important crop-level shifts. As of 11 September 2026, the total area sown under Kharif crops stood at 1,096.49 lakh hectares, compared with 1,112.54 lakh hectares at the corresponding point last year and a five-year normal of 1,104.46 lakh hectares (Table 1). Thus, the current acreage is 16.05 lakh hectares, or 1.4 percent, below last year's level and about 0.7 percent below the five-year normal.

The headline therefore remains one of relative stability rather than a significant contraction in the overall Kharif area. Yet, the composition of that acreage deserves closer attention. The decline is concentrated particularly in rice and cotton, while pulses and coarse cereals have recorded modest increases. Oilseeds and sugarcane have also registered marginal declines. This changing crop mix has implications not only for agricultural output but also for food inflation, edible-oil imports, rural incomes and the availability of key agricultural commodities.



Aggregate acreage remains broadly resilient

The overall Kharif area of 1,096.49 lakh hectares is only marginally below the five-year normal of 1,104.46 lakh hectares. The gap of roughly 7.97 lakh hectares is relatively small in the context of total cultivated area. Moreover, the current acreage remains well above the five-year normal for some crops, notably rice and sugarcane.

The comparison with the previous year, however, shows a somewhat weaker position. At the same point in 2025, farmers had covered 1,112.54 lakh hectares. The decline of 16.05 lakh hectares represents a moderate contraction rather than a broad-based deterioration in sowing

conditions. Importantly, the aggregate decline is smaller than the fall in rice acreage because increases in several other crops have partly offset the reduction in rice. This suggests that farmers have not simply reduced Kharif cultivation; there has also been some reallocation of acreage across crops.

Rice is the key source of the decline

Rice accounts for the largest reduction in acreage. Area sown under rice stood at 426.81 lakh hectares, compared with 443.78 lakh hectares at the same point last year—a decline of 16.97 lakh hectares. The decline is significant in absolute terms, accounting for more than the entire net reduction in Kharif acreage. At the same time, the current rice acreage remains 14.81 lakh hectares above the five-year normal of 412 lakh hectares. This distinction is important: the current level does not represent an unusually low rice-sowing season when assessed against the recent normal, but it does indicate a substantial moderation from the exceptionally high level recorded last year.

The implications will depend increasingly on yield and crop conditions, rather than acreage alone. With rice acreage still above normal, a reasonably favourable yield outcome could limit the impact of the lower area on overall production. Conversely, any adverse weather conditions during the remaining crop cycle could magnify the effect of reduced acreage.

Rice is also particularly important from a food-security and inflation perspective. Consequently, developments in production will remain relevant for domestic food prices and the broader agricultural supply outlook.

Cotton presents a more pronounced structural concern

Cotton provides another notable point of weakness. Area under cotton was 109.34 lakh hectares, compared with 110.31 lakh hectares a year earlier and a five-year normal of 125.51 lakh hectares. The year-on-year decline is relatively modest at 0.97 lakh hectares, but the gap from normal is much larger—around 16.17 lakh hectares, or nearly 13 percent.

This makes cotton different from rice. While rice acreage is below last year but above normal, cotton is below both the previous year's level and its recent normal. The acreage data therefore point to a potentially more persistent weakness in cotton cultivation.

For the textile value chain, domestic cotton availability is an important consideration. A lower crop area does not automatically translate into lower production, since yields can compensate for acreage changes. Nevertheless, sustained weakness in planted area could eventually influence raw-material availability and cotton prices, particularly if production conditions are also unfavourable.

Pulses and coarse cereals gain ground

The movement in pulses is encouraging from the perspective of crop diversification and domestic availability. Pulses acreage increased to 118.46 lakh hectares, from 116.79 lakh hectares a year earlier, an increase of 1.67 lakh hectares. Nevertheless, current pulses acreage remains below the five-year normal of 123.64 lakh hectares. Thus, while the year-on-year movement is positive, it does not yet represent a return to the recent normal.

Shri Anna and coarse cereals show a somewhat stronger picture. Acreage increased to 183.17 lakh hectares, from 182.48 lakh hectares a year earlier, and is also marginally above the five-year normal of 182.44 lakh hectares.

The combination of higher pulses and coarse-cereal acreage is noteworthy because both categories have an important role in improving crop diversification. It may also reflect changes in relative returns and local agronomic conditions. However, the relatively small increases mean that their contribution is not large enough to fully offset the reduction in rice acreage.

Oilseeds remain a concern

Oilseed acreage declined marginally to 193.90 lakh hectares, from 194.07 lakh hectares a year earlier, and remains below the five-year normal of 200.08 lakh hectares. Although the year-on-year decline of 0.16 lakh hectares is negligible in percentage terms, the more important issue is that acreage remains about 6.18 lakh hectares below normal. Given India's substantial

dependence on imported edible oils, domestic oilseed production remains strategically important.

Here again, the eventual production outcome will depend on yields. A relatively stable acreage can still generate stronger output under favourable weather and improved productivity. Conversely, adverse weather could increase dependence on imports and put pressure on domestic edible-oil prices.

Sugarcane and jute remain broadly stable

Sugarcane acreage declined by 0.40 lakh hectares to 58.47 lakh hectares, compared with 58.87 lakh hectares a year earlier. However, it remains substantially above the five-year normal of 54.20 lakh hectares.

The data therefore suggest no immediate acreage concern for sugarcane. Its performance will, however, need to be assessed alongside water availability, yields, sugar production and the economics of the sugar sector. Jute and mesta acreage increased marginally to 6.35 lakh hectares, from 6.24 lakh hectares a year earlier, although it remains slightly below the five-year normal of 6.40 lakh hectares.

The bigger issue is now yield, not just acreage

The Kharif acreage data point to a relatively balanced agricultural picture at the aggregate level. Total sowing is close to normal, while the shifts between crops are more consequential than the modest decline in overall acreage.

The next phase of the agricultural outlook will therefore depend heavily on crop yields, rainfall distribution, pest and disease conditions, and the quality of the harvest. Acreage is an important early indicator, but it is not sufficient to determine production.

The contrast between rice and cotton illustrates this particularly well. Rice acreage is down sharply from last year but remains above normal, whereas cotton acreage is below both last year's level and its five-year normal. Pulses and coarse cereals have gained some ground, while oilseeds remain below normal.

For policymakers, this crop-specific pattern highlights the importance of moving beyond aggregate sowing numbers. The food-price outlook, rural incomes and agricultural supply conditions will increasingly depend on how these individual crops perform through harvest.

Outlook

The Kharif 2026 sowing season presents a mixed but broadly stable picture. Total acreage of 1,096.49 lakh hectares is only modestly below the recent normal, indicating that there has been no broad-based retreat from Kharif cultivation. However, the crop composition warrants closer attention. Rice acreage has declined significantly, while cotton and oilseed acreage also remains below last year's levels and, in the case of oilseeds and cotton, below their recent normal. The increase in pulses and coarse cereals provides some diversification, but the gains are not sufficient to fully offset the risks in major food and commercial crops.

With the sowing season largely complete, the focus should now shift from acreage to yields and realised production. The relatively modest aggregate shortfall in acreage could become more significant if uneven rainfall, inadequate soil moisture or other weather-related stresses reduce yields. This is particularly important for rice, where acreage is lower than last year but still above the five-year normal, suggesting that favourable weather could partly cushion the impact of reduced planting. Conversely, continued moisture stress could amplify the production loss. The increase in pulses acreage offers some support, but overall food availability and rural incomes will increasingly depend on crop productivity and harvest conditions.

The outlook for commercial crops is similarly crop-specific rather than uniformly negative. Lower oilseed acreage could increase pressure on domestic edible-oil supplies and import dependence, while lower cotton acreage could affect raw-material availability for the textile value chain. The modest decline in sugarcane acreage also has implications for sugar availability and the feedstock base for ethanol production. At the same time, higher pulses acreage provides a positive counterpoint and could strengthen domestic availability if yields remain favourable. Overall, the principal risk is therefore not a broad contraction in Kharif

cultivation, but uneven production outcomes across crops, with potential implications for food prices, imports, farm incomes and agro-industrial supply chains.



Bottomline

Kharif 2026 acreage remains broadly stable, but the crop-specific decline in rice, cotton and oilseeds, combined with uneven rainfall, raises risks to yields and marketable output. The key challenge now is to protect productivity, as weaker production could feed into food prices, import dependence, rural incomes and agro-industrial supply chains.

CORPORATE INSIGHTS

TATA SONS AT A GOVERNANCE CROSSROADS: WHAT THE BOARDROOM DISPUTE MEANS FOR INDIA INC.

Dr Debesh Roy

Chairman, InsPIRE

The latest developments at Tata Sons have brought an unusual corporate-governance question to the forefront of India Inc.: where should the boundary lie between ownership, board authority and professional management in a large and diversified business group?

The issue has acquired particular significance because two important decisions have converged. Tata Sons' Board has decided to move ahead with steps towards a stock-market listing following the Reserve Bank of India's rejection of the company's application to surrender its Core Investment Company (CIC) registration. At the same time, the Board has reappointed N. Chandrasekaran as Executive Chairman for another five-year term after his current tenure expires in February 2027. The reappointment was approved by a 4–1 vote, with Tata Trusts Chairman Noel Tata voting against it.

These developments are important in their own right. But their larger significance lies in what they reveal about the governance architecture of one of India's most prominent business groups—and, by extension, about the evolving relationship between promoters, professional managers, boards, minority shareholders and regulators.

A contest over more than a chairman

At first glance, the controversy may appear to be a disagreement over the continuation of a chairman. But the underlying question is much deeper: who exercises decisive authority when the Board and a powerful shareholder disagree?

Tata Sons is unusual in combining professional management with a concentrated ownership structure in which Tata Trusts collectively hold around 66 percent of the company. The Trusts also possess special rights under the company's Articles of Association, including provisions

relating to board representation and affirmative voting on specified matters. These provisions were examined in the litigation surrounding the removal of Cyrus Mistry, with the Supreme Court's 2021 judgment upholding the validity of the relevant Articles.

The present situation therefore cannot be resolved simply by pointing to the 4–1 Board vote. The critical question is whether the specific governance provisions applicable to Tata Sons require affirmative support from Tata Trusts or its nominated directors for the particular decision involved. The legal interpretation of these provisions could consequently prove more important than the numerical majority itself.

This distinction is crucial for corporate governance more generally. Board majority is not necessarily the same thing as unrestricted board authority. In companies with special shareholder rights, the governing Articles can create additional layers of approval or protection. Such arrangements can safeguard long-term ownership interests, but they can also create ambiguity if the boundaries between reserved shareholder matters and board-managed matters are not sufficiently clear.

Listing versus preservation of the traditional structure

The second major issue is Tata Sons' potential listing. Tata Sons had sought to surrender its CIC registration, which could potentially have enabled it to avoid the regulatory framework applicable to upper-layer NBFCs, including the associated listing requirement. The RBI rejected the application on September 11, bringing the listing question back to centre stage. The Board has consequently decided to initiate steps towards compliance while seeking guidance from the regulator and other stakeholders.

For Tata Trusts, however, listing is not simply a regulatory matter. A public listing could alter the traditional ownership and governance environment of Tata Sons by introducing public shareholders, greater disclosure requirements and enhanced market scrutiny. The existing balance between the Trusts' special rights, Board authority and professional management would consequently operate in a substantially different setting.

The debate therefore reflects a genuine institutional tension. On one side lies the principle of regulatory compliance, transparency and market accountability. On the other is the desire to preserve a long-established ownership structure that has been central to the Tata Group's institutional identity.

The question is not merely whether Tata Sons should list. It is whether regulatory compliance can be reconciled with a governance structure that was designed for a privately held holding company.

The restructuring alternative

An alternative approach proposed by Tata Trusts seeks to address the regulatory issue through a fundamental restructuring of Tata Sons rather than through a listing. The proposed merger of Tata Electronics Systems Solutions (TESS) and Tata Consulting Engineers (TCE) with Tata Sons would introduce substantial operating-business revenues into the holding company. Tata Trusts' argument is that the resulting entity, with operating revenue of around ₹1.05 trillion compared with approximately ₹40,072 crore of income from financial assets, could cease to meet the principal-business criteria relevant to NBFC or CIC classification.

This is a potentially significant strategic proposition because it attempts to alter the underlying economic character of Tata Sons rather than simply address the regulatory requirement through a capital-market listing. Yet the proposal also highlights the complexity of the issue. Any restructuring would require regulatory scrutiny, including an RBI no-objection certificate, and its effectiveness would depend on whether the post-merger structure meets the relevant regulatory definitions in substance as well as form.

The larger lesson is that regulatory classification can influence corporate architecture. For large diversified groups, the structure of the holding company is no longer merely an internal ownership question; it can have significant implications for regulation, capital markets, governance and shareholder rights.

The Shapoorji Pallonji dimension

The Tata Sons debate also has an important ownership dimension because of the 18.37 percent stake held by the Shapoorji Pallonji Group. A proposal has been put forward under which Tata Sons could acquire shares held by SP Group affiliates for at least ₹25,000 crore, potentially allowing the minority shareholder to monetise part of its investment without requiring Tata Sons itself to become publicly listed. The proposed transaction could be structured in two tranches over 18 months, with valuation determined under applicable tax rules and a possible capital-reduction process through the National Company Law Tribunal.

This illustrates another dimension of holding-company governance: liquidity needs of minority shareholders can become intertwined with the strategic choices of the controlling shareholder and the regulatory status of the company. A reduction in the SP Group's stake could materially change Tata Sons' shareholder configuration. But it would not, by itself, resolve the broader governance question of how authority should be distributed between Tata Trusts, the Board and professional management.

The real issue: ownership versus management

Perhaps the most important lesson from the Tata Sons episode is the need to distinguish ownership from management. Professionalising a company does not mean eliminating promoter influence. Nor does promoter ownership imply that shareholders should participate in the day-to-day running of the business. The governance principle emerging from the current debate is relatively straightforward: promoters should determine the broad strategic direction, protect fundamental long-term interests and retain clearly defined rights over genuinely consequential decisions, while professional management should have sufficient autonomy to run the business. This distinction is especially important as Indian businesses become larger, more diversified and more internationally integrated.

A promoter may reasonably expect to have a say in major acquisitions, entry into new geographies, substantial borrowing or decisions that fundamentally alter the character of the enterprise. But operational decisions, organisational management and implementation of

approved strategy should normally remain within the domain of professional management. The challenge arises when these boundaries are not clearly defined—or when either side begins to perceive the other as an alternative centre of authority.

Why Articles of Association matter

The Tata Sons episode could encourage promoter-led and closely held companies to take a much closer look at their Articles of Association. For unlisted companies in particular, the Articles function as a critical governance manual. They determine who has authority, which decisions require special approval and where the boundaries of shareholder, Board and management powers lie. Legal experts suggest that companies may increasingly revisit provisions concerning reserved matters, nominee-director rights, replacement of nominees and mechanisms for resolving Board deadlocks. This is an important governance lesson for India Inc.

As businesses professionalise, it is not enough to appoint independent directors or bring in an external CEO. The governance architecture must evolve at the same time. The company needs clarity on who sets strategy, who executes it, which decisions require promoter approval and how disagreements are resolved. Without such clarity, professionalisation can create the appearance of modern governance without resolving the underlying distribution of power.

The professional CEO dilemma

The debate also raises a broader question about why promoter-led enterprises increasingly turn to professional CEOs. As companies grow, their businesses become more complex, and they often expand into unfamiliar sectors and geographies. Professional executives can bring specialised expertise and help build systems capable of managing organisations that have become too large for direct promoter supervision. But professional management works best when there is alignment between the promoter's long-term vision and the executive's strategic approach.

A CEO may favour rapid expansion and acquisitions, while the promoter may prefer a more conservative strategy focused on building the business over a longer horizon. Neither approach

is inherently right or wrong. The governance challenge is to ensure that the organisation has a mechanism for reconciling such differences before they become institutional conflict. Trust is therefore an important but insufficient condition. It needs to be supported by clearly defined authority, accountability and decision rights.

There is also a counter-risk. Long-serving professional managers can accumulate substantial influence and, over time, boards can become less effective in challenging management. The objective of professionalisation, therefore, should not be to replace promoter dominance with managerial dominance. It should be to create an effective system of checks, accountability and strategic alignment.

Why the Tata case matters for India Inc.

The Tata Group is not an isolated case. India has a large and rapidly evolving ecosystem of promoter-led enterprises, family businesses and professionally managed conglomerates.

As these companies grow across generations, several questions become increasingly important:

- How much authority should remain with promoters?
- Which decisions should require shareholder or promoter approval?
- How much operational freedom should professional CEOs have?
- How should nominee directors balance their responsibilities to the nominating shareholder with their fiduciary duties to the company?
- What happens when the promoter and the Board disagree?
- How should deadlocks be resolved?
- And how should governance structures evolve when a private enterprise becomes systemically important or subject to enhanced regulatory oversight?

The Tata Sons episode brings these questions into sharp relief. It also demonstrates why corporate governance cannot be reduced to compliance with statutory checklists. A company may satisfy formal requirements while still suffering from uncertainty over authority, accountability and institutional alignment.

From personalities to institutions

The most important takeaway from the Tata Sons controversy is that strong institutions matter more than individual personalities. Leadership continuity is undoubtedly important for a conglomerate spanning information technology, automobiles, steel, power, consumer products, aviation, hospitality and other businesses. But continuity is valuable only when the leader has a clear and stable mandate. The Chandrasekaran reappointment debate therefore raises a question larger than his individual tenure: whether the governance framework can provide sufficient clarity for the chairman and professional management to operate effectively.

Similarly, the question of listing should not be viewed simply as a choice between public and private ownership. It is ultimately about the kind of governance architecture that best balances regulatory obligations, transparency, shareholder interests and long-term institutional objectives.

For investors, lenders, employees and business partners, predictability may matter more than the outcome of any individual boardroom contest. Uncertainty at the holding-company level can influence perceptions of strategic direction, capital allocation and governance across the wider business ecosystem.

A governance test for a changing India Inc.

The Tata Sons episode is consequently much larger than a dispute over a chairman or a listing. It is a test of whether India's corporate-governance institutions can accommodate a distinctive combination of concentrated ownership, philanthropic shareholding, professional management, special shareholder rights and increasingly sophisticated financial regulation.

The answer should not necessarily be to weaken promoter rights or to give boards unlimited autonomy. Nor should it be to preserve traditional structures regardless of regulatory change.

The more sustainable approach is to establish clear boundaries and credible checks and balances. Promoters should be able to protect fundamental long-term interests. Boards should retain genuine oversight and independent judgment. Professional managers should have adequate operational freedom. Minority shareholders should receive appropriate protection.

Regulators should be able to enforce the rules consistently. And the Articles of Association should clearly define how conflicts among these interests are resolved.

For India Inc., this is an increasingly important agenda. The country's large business groups are becoming more diversified, more global and more institutionally complex. Their governance systems must evolve accordingly. The ultimate lesson from Tata Sons may therefore be simple: the objective of corporate governance is not to determine who gets the last word, but to ensure that the right decision-making authority is clear before a disagreement arises. That is the institutional foundation on which leadership continuity, professional management, shareholder confidence and long-term corporate value ultimately depend.

BANKING, FINANCIAL SERVICES & INSURANCE

TEN YEARS OF FLEXIBLE INFLATION TARGETING: WHAT INDIA HAS LEARNED—AND WHAT COMES NEXT

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India's flexible inflation-targeting (FIT) framework has completed a decade at a time when the country's monetary policy architecture has been tested by some of the most disruptive global shocks in recent history. Introduced in 2016 with a mandate for the Reserve Bank of India (RBI) to maintain consumer price inflation at 4 percent, with a tolerance band of ± 2 percentage points, FIT has survived the pandemic, the Russia–Ukraine war, global monetary tightening, tariff disruptions and the West Asia conflict. The evidence suggests that the framework has materially improved India's inflation performance, while its flexibility has allowed monetary policy to accommodate growth during exceptional shocks. Yet the next decade may require refinement rather than a fundamental redesign.

From multiple indicators to a clear nominal anchor

The adoption of FIT represented a major institutional shift in Indian monetary policy. Before 2016, the RBI followed a multiple-indicator approach, giving considerable weight to growth, credit, money supply and several other variables. The move towards a formal inflation target brought greater clarity to the central bank's primary objective and established the Monetary Policy Committee (MPC) as the institutional mechanism for setting the policy rate.

Under the amended RBI Act, the government, in consultation with the central bank, determines the CPI inflation target every five years. The current target of 4 percent, with a tolerance band of 2–6 percent, has now been retained for the five years beginning April 2026 and ending March 2031. The government's decision to retain the framework essentially unchanged reflects the value placed on policy continuity at a time of considerable global uncertainty.

The decade-long record is broadly favourable. The material provided for this article shows that average CPI inflation during the FIT period has been about 4.6 percent, compared with 7.5 percent in the four years preceding its implementation. Food inflation averaged 4.5 percent and core inflation 4.8 percent during the FIT period. Average CPI inflation declined from 8.1 percent in the pre-targeting decade to 4.6 percent during 2016–26, while average GDP growth increased modestly from 6.8 percent to 7 percent.

These numbers cannot, of course, be attributed entirely to the monetary-policy framework. Inflation is influenced by global commodity prices, agricultural supply, fiscal policy, exchange rates and structural changes in the economy. Nevertheless, the sustained moderation in inflation over a decade that included several major shocks suggests that FIT has provided a credible nominal anchor.

The real test came after Covid

The strongest test of the framework came not during relatively benign conditions but during the extraordinary inflation shock of 2022. The lingering effects of pandemic-era liquidity and supply disruptions were followed by Russia's invasion of Ukraine, sending global energy and food prices sharply higher. India's CPI inflation reached 7.8 percent in April 2022, above the upper tolerance limit. The RBI responded with an off-cycle MPC meeting and a 40-basis-point repo-rate increase to 4.4 percent, followed by a 50-basis-point increase in June. The policy rate ultimately reached 6.5 percent.

The significance of this episode lies not simply in the rate increases, but in the way the framework allowed the RBI to distinguish between a temporary deviation and a persistent inflation problem. During the pandemic itself, monetary policy had effectively looked through a temporary breach of the tolerance band in order to minimise the economic and social costs of the shock. This flexibility is an important feature of FIT rather than a weakness.

Former RBI Deputy Governor Michael Patra² argues that the evidence from the two five-year periods is particularly revealing. Headline inflation averaged 4.5 percent during the first five years and 4.9 percent during the subsequent five years, despite the latter period including the Ukraine war and the West Asia conflict. In his assessment, the ability of inflation to remain broadly aligned with the target across fundamentally different shock environments provides evidence that the framework itself—not simply favourable external conditions—has strengthened inflation anchoring.

Flexibility is the essence of FIT

The most important word in India's framework is arguably not "inflation" but "flexible". The framework does not require the RBI to mechanically respond to every movement in the CPI. Its design permits the central bank to assess the persistence, breadth and second-round effects of inflation.

This is particularly important for India because food and fuel have a relatively large weight in the consumer basket. A sudden increase in onion, vegetable or crude oil prices cannot be neutralised by interest rates without imposing unnecessary costs on the wider economy. Monetary policy operates as a relatively blunt instrument: it affects aggregate demand rather than the specific source of a supply shock.

Patra's assessment is that monetary policy may initially need to absorb the macroeconomic effects of such shocks, thereby buying time for targeted supply-side measures to address underlying sectoral imbalances. However, when a food or fuel shock becomes persistent and begins to spill over into wages, rents, transport costs and broader core inflation, monetary policy may need to respond more forcefully to prevent these pressures from becoming entrenched. This distinction remains highly relevant in the current environment. With inflationary pressures increasingly influenced by higher food and fuel costs and rising crude oil prices, the challenge for monetary policy is to prevent a temporary supply shock from becoming a more broad-based and persistent inflationary process. At the same time,

² Interview of Michael D. Patra, former Deputy Governor, RBI, *Business Standard*, 03 October 2026.

policymakers must calibrate their response carefully to contain inflation without imposing an unnecessary sacrifice on economic growth.

Has FIT supported growth?

One of the persistent criticisms of inflation targeting is that a stronger emphasis on price stability could come at the expense of economic growth. India's experience provides a more nuanced answer.

Price stability is not necessarily at odds with economic growth; rather, it can serve as a precondition for sustained and inclusive growth. Excessively rapid demand growth can push the economy beyond its productive capacity, generating inflation and ultimately forcing a sharper correction. Conversely, when the economy operates below potential, appropriately accommodative monetary policy can help revive demand.

The post-pandemic record is notable. Real GDP growth averaged 7.8 percent between 2021–22 and 2025–26, while growth averaged above 8 percent over the three quarters from July–September 2025 to April–June 2026.

Real GDP growth averaged 7.8 percent between 2021–22 and 2025–26, while growth averaged above 8 percent over the three quarters from July–September 2025 to April–June 2026. *Financial Express* also finds that average growth during the FIT decade was marginally higher than in the preceding decade. This does not establish a direct causal relationship between FIT and higher growth. It does, however, challenge the proposition that a credible inflation-targeting regime is inherently growth restrictive.

What should change in the next decade?

The decision to retain the 4 percent target through 2031 does not mean the framework should remain frozen. Indeed, the 2025 RBI discussion paper had explicitly invited views on whether the target should remain at 4 percent, whether the tolerance band should be narrowed or widened, and whether headline or core inflation should play a greater role in policy decisions.

One possible refinement concerns the tolerance band. Some economists argue that a narrower band could strengthen accountability and credibility as India's macroeconomic institutions mature. Mint has similarly argued that the framework has worked but could be sharpened. RBI Deputy Governor Poonam Gupta³ has also indicated that a lower target or narrower band could be considered in future reviews if strong growth and stable inflation persist.

A second issue is whether growth should be made an explicit statutory objective. Unlike the US Federal Reserve, whose mandate includes maximum employment, India's formal mandate places price stability first while requiring the RBI to keep growth in mind. An explicit growth mandate could better reflect India's status as a developing economy. Yet there is also a strong case for retaining the present formulation: adding multiple statutory objectives could dilute accountability and make it harder to assess monetary-policy performance.

A third challenge is communication. The RBI has increasingly provided detailed assessments of core inflation and underlying price pressures, even though the formal target remains headline CPI inflation. Explaining to households why the central bank may look beyond volatile food prices can be challenging, particularly when food costs dominate consumers' everyday experience of inflation. Clear and effective communication of this distinction will become increasingly important as inflation shocks grow more frequent and complex.

The next decade: preserve credibility, improve flexibility

India's decade under FIT demonstrates that monetary-policy frameworks matter most when the environment is difficult. The framework has provided an anchor through extraordinary shocks while leaving sufficient room for the RBI to respond pragmatically to growth and financial conditions. The retention of the 4 percent target through 2031 therefore represents continuity rather than complacency.

The more important task now is to strengthen the framework at the margins: improve communication, preserve MPC independence and diversity of views, refine the tolerance band

³ <https://www.financialexpress.com/business/news-lower-inflation-target-narrower-band-possible-in-future-reviews-rbi-deputy-governor-4232727/lite/?utm>

when economic conditions justify it, and sharpen coordination between monetary policy and supply-side measures. *Mint*'s⁴ recent assessment of the framework similarly points towards incremental improvements rather than a wholesale redesign.

The central lesson of the past decade is that inflation targeting should not be judged by whether inflation never deviates from 4 percent. No credible monetary regime can prevent wars, crop failures, oil-price shocks or global supply disruptions. Its value lies in preventing temporary shocks from becoming entrenched inflation, anchoring expectations and allowing the economy to return to sustainable growth.

For an India aspiring to become a developed economy by 2047, that credibility will be an increasingly valuable macroeconomic asset. The objective for the next decade, therefore, should not be to abandon FIT, but to make a proven framework more precise, transparent and resilient to the increasingly complex shocks that lie ahead.

⁴ <https://www.livemint.com/opinion/online-views/fit-flexible-inflation-targeting-regime-india-rbi-reserve-bank-of-india-mpc-monetary-policy-11774879334483.html?utm>

SECTION 2: GLOBAL ECONOMY

GLOBAL ECONOMIC OUTLOOK

ENERGY, INFLATION AND AI: NAVIGATING THE NEW GLOBAL ECONOMIC UNCERTAINTY

A Fragile Global Recovery Amid Energy Shocks, Inflation and Structural Change

The global economy is entering a challenging phase in which resilience in economic activity coexists with renewed inflationary pressures, geopolitical uncertainty and mounting financial vulnerabilities. The OECD's *Economic Outlook, Interim Report: Weathering Successive Shocks* (September 2026) captures this predicament. Although global growth has remained more resilient than initially anticipated, the recovery faces headwinds from the conflict in the Middle East, disruptions to energy supplies, changing trade policies and rising borrowing costs. At the same time, strong investment in artificial intelligence (AI) is supporting production, investment and international trade. The central question is whether this combination of technological dynamism and private-sector adaptability can sustain growth amid recurring supply-side shocks.

Global Growth: Resilience Under Pressure

The OECD projects global GDP growth of 2.9 percent in 2026 and 3.0 percent in 2027, compared with 3.4 percent in 2025. These projections indicate a moderation rather than a collapse in economic activity. Nevertheless, the headline figures conceal substantial differences across countries and considerable uncertainty surrounding the outlook.

The United States is projected to grow by 2.2 percent in 2026 and 2.1 percent in 2027, supported by AI-related investment but constrained by softer consumer spending and weaker real-income growth. Growth in the euro area is expected to remain at 1.0 percent in both years, reflecting higher energy costs and monetary-policy constraints, partly offset by prospective defence expenditure. China's growth is projected to moderate from 5.0 percent in 2025 to 4.5 percent in 2026 and 4.2 percent in 2027.

India remains one of the fastest-growing major economies, although the OECD expects growth to moderate over the projection period. The report has estimated India's real GDP growth at 7.8 percent in FY2025–26, 7.1 percent in FY2026–27 and 6.5 percent in FY2027–28. The projection for FY2026–27 represents an upward revision of 0.8 percentage points from the OECD's June 2026 outlook, reflecting resilient domestic demand and government measures that have helped cushion households and businesses against higher energy costs. Despite this favourable growth trajectory, the OECD anticipates headwinds during the second half of FY2026–27 as higher energy prices erode household purchasing power and raise production costs. The subsequent recovery is expected to be gradual, conditional on an easing of energy-market disruptions and an improvement in the external environment. India's headline inflation is projected at 4.7 percent in 2026 and 4.2 percent in 2027, underscoring the continuing importance of managing imported inflation alongside growth objectives.

The Energy Shock and Its Inflationary Consequences

The most immediate threat to the global outlook is the renewed disruption to energy production and exports from the Gulf region. Higher crude oil and natural gas prices have increased transport, manufacturing and electricity costs, while elevated refining margins have intensified pressures on consumer fuel prices. Disruptions to shipping routes, particularly the Strait of Hormuz, have added to uncertainty over the availability and cost of energy.

The consequences extend well beyond petroleum markets. Energy is a critical input into agriculture, fertilisers, logistics and industrial production. Rising energy costs can therefore propagate through supply chains, increasing the prices of goods and services while reducing the purchasing power of households. The OECD also highlights the risk of weather-related agricultural disruptions, including a potentially strong El Niño, which could raise food commodity prices and aggravate inflation.

The report projects G20 headline inflation to increase from 3.4 percent in 2025 to 4.1 percent in 2026 before easing to 3.6 percent in 2027. Core inflation in the advanced economies is expected to moderate only gradually, from 2.7 percent in 2026 to 2.5 percent in 2027. These

projections underline the difficulty of containing inflation when the initial impulse originates from supply disruptions rather than excessive domestic demand.

For India, the implications are particularly important because higher international oil prices can increase the import bill, put pressure on the external balance and raise domestic production and transport costs. Government measures to cushion consumers may moderate the immediate impact, but their fiscal implications and implications for energy-use incentives must also be considered.

Artificial Intelligence: A Powerful but Uneven Growth Driver

An important counterweight to the energy shock is the continued expansion of AI-related investment and production. Spending on data centres, advanced semiconductors, computing equipment and associated infrastructure has supported economic activity in the United States and several Asian economies. Technology exports from countries such as Japan and Korea have benefited, while AI-related goods shipments have contributed to the recovery in global merchandise trade.

Yet this growth driver also introduces new vulnerabilities. The OECD cautions that elevated valuations of technology companies depend on earnings growth that must materialise over the coming years. If productivity gains or corporate returns disappoint, investment could slow and financial markets could experience a sharp repricing. Such a correction would affect not only technology companies but also related industries, construction activity and credit markets.

The policy challenge is therefore to encourage the productive adoption of AI while avoiding excessive dependence on a narrow set of technology-related investments. For India, the opportunity lies in developing digital infrastructure, strengthening domestic technological capabilities and improving workforce skills so that AI contributes to productivity across manufacturing, services, agriculture and public administration.

Financial Conditions and Fiscal Constraints

Rising long-term sovereign bond yields represent another source of concern. In several major advanced economies, yields have reached their highest levels in 15 years or more, reflecting

concerns about fiscal sustainability and substantial corporate borrowing, including debt issuance by AI-related firms. Higher yields increase government debt-servicing costs and raise borrowing costs for households and businesses.

Although broader financial conditions remain relatively supportive, elevated asset valuations and rising interest rates create the possibility of abrupt adjustments. Governments consequently face a difficult balancing act: supporting vulnerable households and businesses during the energy shock while preserving fiscal space to respond to future crises.

The OECD recommends that energy assistance be targeted towards the households most in need and financially vulnerable small and medium-sized enterprises. Such measures should have clear expiry provisions and preserve incentives to conserve energy and diversify supplies. Broad-based subsidies and untargeted price relief may provide immediate assistance, but they can be expensive and weaken incentives for energy efficiency.

Monetary Policy: Balancing Inflation and Growth

Central banks face a similarly complex trade-off. Tightening monetary policy can help contain second-round inflationary effects and anchor expectations, but it cannot directly restore disrupted energy supplies or reverse higher global commodity prices. Excessive tightening could instead weaken investment, employment and household demand.

The OECD argues that central banks may look through supply-driven increases in food and energy prices while inflation expectations remain well anchored. However, further policy adjustments may become necessary if inflation spreads into broader prices or expectations become less stable. Clear communication is essential to explain how monetary authorities distinguish temporary price shocks from persistent inflation.

For India, this calls for careful assessment of imported inflation, food-price dynamics, exchange-rate pressures and the potential transmission of higher input costs into core inflation. Monetary policy must remain responsive to evidence of persistent price pressures while avoiding an unnecessary sacrifice of growth.

Building Resilience: The Strategic Imperative for India

The broader lesson of the OECD outlook is that resilience cannot depend exclusively on short-term crisis management. Economies must also address the structural vulnerabilities that amplify successive shocks.

For India, energy diversification, greater efficiency and accelerated development of domestic renewable-energy capacity can reduce exposure to international price volatility. Stronger agricultural supply chains, climate-resilient farming, efficient storage and distribution, and better access to agricultural inputs can help limit food-price pressures. Improved logistics and diversified trade relationships would further strengthen economic security.

Fiscal policy must protect vulnerable households without compromising long-term public investment or debt sustainability. Equally important are investments in education, foundational learning, digital literacy and adult skills. The OECD's warning about declining student performance in many countries reinforces the importance of human capital in sustaining productivity and enabling workers to adapt to technological change.

Finally, India must convert its strong growth potential into broader productive capacity. Investment in infrastructure, manufacturing, research and development, and technology adoption can expand supply, improve competitiveness and reduce the risk that rising demand translates disproportionately into inflation.

Conclusion

The OECD's September 2026 outlook presents a global economy that remains resilient but increasingly exposed to interconnected shocks. Energy disruptions, food-price risks, trade uncertainty, higher borrowing costs and the possibility of an AI-related financial correction complicate the prospects for sustained growth. While a gradual easing of energy prices could support recovery in 2027, that outcome remains conditional on geopolitical developments and the normalisation of supply.

For India, the outlook combines opportunity with caution. Strong growth prospects and resilient domestic demand provide important advantages, but exposure to imported energy and global financial volatility remains significant. The appropriate response is neither

indiscriminate stimulus nor excessive policy restraint. It is a coordinated strategy that anchors inflation expectations, protects vulnerable households, preserves fiscal space and accelerates structural reforms. Ultimately, the capacity to weather successive shocks will depend on how effectively economies transform short-term resilience into lasting productive strength.

MONETARY POLICY

US FEDERAL RESERVE RAISES RATES AS INFLATION KEEPS THE POLICY PATH UNCERTAIN

The U.S. Federal Reserve has raised the target range for the federal funds rate by 25 basis points to 3.75–4.00 percent, signalling that inflation remains sufficiently elevated to warrant a tighter monetary stance even as economic activity continues to expand at a solid pace. The September 16 decision was approved unanimously by the 12-member FOMC. The Committee noted that domestic spending remains resilient, productivity growth is strong and capital investment is robust, while job gains have broadly kept pace with the workforce and the unemployment rate has changed little. At the same time, it identified elevated inflation and geopolitical uncertainty as continuing concerns.

The Federal Reserve's September *Summary of Economic Projections (SEP)* provides important context for the decision. The median projection for real GDP growth was raised to 2.3 percent in 2026, from 2.2 percent in the June projections, and to 2.4 percent in 2027 from 2.3 percent. Growth is then projected to moderate to 2.2 percent in 2028 and 2.1 percent in 2029. The unemployment rate is projected at 4.1 percent for 2026–29, compared with the higher June projections of 4.3 percent for 2026 and 2027. The combination of stronger growth and a lower projected unemployment rate suggests that FOMC participants see continued resilience in the U.S. economy.

Inflation, however, remains the central complication. The median projection for PCE inflation was raised to 3.7 percent for 2026, from 3.6 percent in June, while the 2027 projection remains at 2.3 percent. It is projected to decline to 2.1 percent in 2028 and reach the Fed's 2 percent objective in 2029. Core PCE inflation is projected at 3.4 percent in 2026, 2.5 percent in 2027 and 2.2 percent in 2028, before reaching 2.0 percent in 2029. Thus, the projections envisage disinflation continuing, but at a gradual pace.

The most revealing change may be in the projected policy-rate path. The median federal funds rate is now projected at 4.1 percent at the end of 2026, compared with 3.8 percent in the June

projections. It is then projected at 4.1 percent in 2027, 3.9 percent in 2028 and 3.6 percent in 2029, before reaching 3.2 percent over the longer run. This represents a materially higher projected rate path than in June and indicates that participants envisage monetary policy remaining restrictive for longer as inflation gradually moves towards target.

The projections nevertheless carry considerable uncertainty. The FOMC's own assessment shows that the range of individual projections is wide, particularly for interest rates and inflation. Historical forecast-error ranges are also substantial: for example, the Federal Reserve reports average historical errors of ± 1.4 percentage points for GDP growth in 2026 and ± 1.0 percentage point for consumer-price inflation, with the uncertainty widening for later years.

The September policy decision therefore reflects a delicate balance between economic resilience and incomplete disinflation. Strong productivity, capital investment and resilient spending provide room for the economy to absorb relatively restrictive financial conditions, while persistent inflation limits the scope for rapid monetary easing. The evolution of inflation, employment and domestic demand will determine how the projected policy path develops. For global markets, the implications extend beyond the United States: a higher-for-longer U.S. interest-rate environment can influence global financial conditions, capital flows, exchange rates and borrowing costs.

ECB RAISES INTEREST RATES AS ENERGY SHOCK THREATENS EURO AREA INFLATION OUTLOOK

The European Central Bank (ECB), on 10 September 2026, raised all three of its key interest rates by 25 basis points, signalling its determination to prevent a renewed energy shock from derailing the progress towards price stability. The decision comes amid prolonged conflict in the Middle East, continuing geopolitical tensions involving Russia and Ukraine, and renewed volatility in global energy markets. While the euro area economy has demonstrated greater resilience than anticipated, the ECB faces a difficult balancing act: containing inflation without undermining a still-fragile recovery.

With effect from 16 September, the deposit facility rate was increased to 2.50 percent, the main refinancing operations rate to 2.65 percent, and the marginal lending facility rate to 2.90

percent. The move underscores the Governing Council's assessment that inflation could remain above its 2 percent medium-term target for an extended period.

Energy Prices Drive Inflationary Pressures

Euro area headline inflation rose to 3.3 percent in August, up from 2.9 percent in July. Energy price inflation accelerated sharply to 14.3 percent, compared with 10.3 percent in the previous month, reflecting higher energy commodity prices and refining margins on liquid fuels. By contrast, food inflation remained unchanged at 1.2 percent, while inflation excluding energy and food edged down to 2.4 percent from 2.5 percent. Services inflation declined to 3.0 percent, although goods inflation increased to 1.2 percent.

These developments illustrate the uneven nature of current inflationary pressures. Underlying inflation has shown signs of moderation, but the renewed increase in energy prices threatens to reverse some of this progress. The ECB expects headline inflation to remain well above target into the first half of 2027, before declining as energy inflation moderates. Its projections place average headline inflation at 3.0 percent in 2026, 2.5 percent in 2027 and 2.1 percent in 2028.

Inflation excluding energy and food is projected at 2.5 percent in 2026, rising to 2.6 percent in 2027 before easing to 2.3 percent in 2028. The upward revisions to the 2027 and 2028 headline inflation forecasts compared with June reflect the likelihood that higher energy costs will gradually spread to other prices.

Growth Resilience Offers Limited Reassurance

Despite the energy shock, economic activity proved resilient in the second quarter of 2026, with growth broad-based across countries and sectors. Manufacturing continued to benefit from government spending on defence and infrastructure, while consumer confidence recovered from earlier weakness. Artificial intelligence-related activity also supported digital services, business investment and exports.

The labour market remained comparatively robust, with unemployment unchanged at 6.4 percent in July. However, employment and labour-force growth have slowed, even as productivity has gradually improved.

The ECB has revised its growth projections upwards, forecasting euro area GDP growth of 0.9 percent in 2026, 1.4 percent in 2027 and 1.5 percent in 2028. The revisions reflect stronger-than-expected resilience, particularly in private consumption and public spending. Over the medium term, lower energy prices and a strong labour market could support household spending, while business and housing investment may increasingly contribute to growth.

Nevertheless, the recovery faces significant headwinds. Higher energy costs could erode real incomes, weaken consumption and discourage investment. Uncertainty surrounding global trade policies and persistent competitiveness challenges could also constrain exports. Renewed trade tensions or disruptions to critical raw-material supplies would add to these pressures.

Preventing an Energy Shock from Becoming Persistent Inflation

The ECB's central concern is that higher energy prices could gradually influence wage negotiations, inflation expectations and firms' pricing decisions. So far, wage developments have not shown a material response to the energy shock. Compensation per employee grew by 3.3 percent in the second quarter, down from 3.5 percent in the first quarter. Rising labour productivity has also helped contain unit labour-cost growth.

However, the longer energy prices remain elevated, the greater the risk that indirect and second-round effects will emerge. Food prices could face additional pressure from extreme weather and intensifying El Niño conditions, while further geopolitical disruptions could raise gas prices and aggravate supply constraints. The ECB expects inflation to return towards its target around the end of 2027, supported partly by the effects of higher interest rates.

The policy challenge is therefore to respond firmly to inflation risks while recognising the uncertainty surrounding their duration and transmission. The ECB has adopted a data-dependent, meeting-by-meeting approach and has not committed to a predetermined interest-rate path. Its future decisions will depend on incoming economic and financial data, underlying inflation dynamics and the effectiveness of monetary policy transmission.

A Delicate Balance Ahead

The September rate increase reflects the ECB's preference for preventing inflationary pressures from becoming entrenched. Yet tighter monetary conditions can also raise borrowing costs for firms and households. Bank lending rates for firms reached 3.8 percent in June and July, while the cost of market-based corporate debt stood at 4.0 percent in July. Mortgage rates remained at 3.5 percent, but mortgage lending growth softened.

Fiscal policy also has a role to play. The ECB has stressed that government responses to the energy shock should be temporary, targeted and tailored, preserving incentives for energy conservation while supporting those most affected. Structural reforms, completion of the EU Single Market, investment in the energy transition and stronger productivity will be important for sustaining growth.

The euro area thus faces a two-sided risk: inflation could prove more persistent than expected, while economic growth could weaken if energy disruptions intensify. The ECB's task is to navigate these competing pressures without allowing either price instability or excessive monetary restraint to undermine the recovery.

The effectiveness of its approach will depend ultimately on how geopolitical developments shape energy markets, how businesses and households respond to higher costs, and whether underlying inflation continues to moderate. For now, the message is clear: the path towards price stability remains uncertain, and monetary policy will need to remain vigilant and responsive.

BOJ RAISES RATE TO 1.25 PERCENT: JAPAN'S LONG EXIT FROM ULTRA-LOW RATES ACCELERATES

The Bank of Japan (BOJ) raised its policy interest rate by 25 basis points to 1.25 percent on September 18, 2026, the highest level in 31 years. The decision, taken by a 7–2 majority, marks another significant step in Japan's gradual departure from the exceptionally accommodative monetary conditions that prevailed for decades. The two dissenting members, Toichiro Asada and Ayano Sato, preferred to maintain the existing policy rate, arguing that the recent economic and price developments did not yet warrant another increase.

The significance of the decision lies not only in the size of the increase but also in the change in the BOJ's policy objective. Governor Kazuo Ueda indicated that the Bank has moved from supporting the emergence of inflation towards ensuring that underlying inflation stabilises sustainably around its 2 percent price-stability target. The BOJ's statement notes that underlying CPI inflation is approaching 2 percent, while medium- to long-term inflation expectations have continued to rise. The Bank is consequently becoming more attentive to the risk that inflation could move above target and become more persistent.

Inflation pressures are becoming broader

The BOJ's assessment suggests that Japan's inflation dynamics are no longer driven solely by temporary import-price effects. Producer prices have remained elevated, reflecting high crude-oil prices, yen depreciation and strong global AI-related demand. The Bank also noted that higher business-to-business prices are increasingly passing through to consumer prices, while firms continue to incorporate higher wages into selling prices.

This is particularly important for Japan because the current inflation episode is accompanied by a relatively tight labour market and continued wage pressures. The BOJ expects the wage-price interaction to persist, with underlying CPI inflation gradually reaching a level broadly consistent with the 2 percent target between the second half of FY2026 and FY2027. At the same time, it expects headline CPI inflation to rise to clearly above 2 percent from the second half of FY2026, partly because of crude-oil prices, higher semiconductor prices and yen depreciation.

The economy still has considerable resilience

The rate increase does not reflect an economy in broad-based contraction. The BOJ assesses that Japan's economy has recovered moderately, although some weakness has emerged partly because of the Middle East situation. Exports and industrial production have begun to increase moderately, corporate profits remain high and business fixed investment is on an upward trend. Private consumption has remained resilient against improving employment and income conditions, although household sentiment has shown some weakness.

The Bank also emphasised that financial conditions remain accommodative. Real interest rates are still low, firms' demand for funds has increased, lending attitudes remain proactive and corporate bond and commercial-paper issuance conditions remain favourable. This provides some basis for the BOJ to withdraw monetary accommodation without, in its assessment, immediately creating excessively restrictive financial conditions.

What does 1.25 percent mean for the next phase?

The September decision is significant because the BOJ explicitly stated that it will continue to raise the policy rate and adjust the degree of monetary accommodation, while determining the timing and pace on the basis of economic activity, prices and financial conditions. This is not a commitment to a predetermined sequence of rate increases. Governor Ueda stressed that larger or consecutive hikes would depend on the evolution of inflation risks.

Market expectations have nevertheless shifted towards further gradual tightening. Reuters reported that investors were looking for additional increases, although the BOJ itself has not specified a terminal policy rate. Governor Ueda has also stressed that the neutral and terminal rates are difficult to pinpoint ex ante, suggesting that future policy will remain data-dependent.

Implications for the yen and global financial conditions

The implications extend well beyond Japan. A sustained rise in Japanese interest rates could gradually alter the relative attractiveness of yen-denominated assets and influence international portfolio allocation. For years, exceptionally low Japanese rates encouraged investors to seek higher returns abroad. As Japanese yields rise, the relative incentive to hold domestic assets may change, potentially affecting cross-border capital flows and global bond markets.

The immediate currency response, however, illustrates the complexity of this transmission mechanism. Despite the rate increase, the yen weakened after the BOJ decision, with markets focusing on the two dissenting votes and the absence of an explicit commitment to rapid further tightening. Reuters reported that the dollar rose as much as 1.3 percent against the yen following the decision.

For global markets, the BOJ's normalisation therefore represents an additional dimension to the changing global interest-rate landscape. The Federal Reserve, European Central Bank and BOJ are responding to inflation pressures from higher energy costs and other supply-side developments, although their economic circumstances and policy rates differ substantially. Governor Ueda also noted that actions by other central banks can affect Japan through currency movements and other channels.

For Japan, the central policy challenge is now to normalise monetary conditions without disrupting the wage-price cycle, domestic demand or financial stability. For global investors, the more important question is not simply whether Japanese rates rise further, but how quickly the BOJ moves towards a less accommodative stance and how markets adjust to a Japan that is no longer defined by ultra-low interest rates.

BANK OF ENGLAND HOLDS RATES AS ENERGY SHOCK RAISES INFLATION RISKS

Bank of England Holds Rates as Energy Shock Raises Inflation Risks

The Bank of England's Monetary Policy Committee (MPC), at its meeting ending on 16 September 2026, voted by a majority of six to three to maintain the Bank Rate at 3.75 percent. The decision reflects a difficult policy trade-off: containing inflationary pressures arising from a prolonged geopolitical energy shock without unnecessarily weakening economic activity. Three members favoured a 25-basis-point increase to 4 percent, underscoring growing concern that higher energy prices could keep inflation above target for longer than previously anticipated.

An Energy Shock Reshapes the Inflation Outlook

The central challenge for the Bank is the renewed surge in global energy prices following the protracted conflict in the Middle East, alongside continuing disruptions associated with the Russia-Ukraine conflict. Since the period preceding the July Monetary Policy Report, Brent crude prices had risen by 36 percent and UK wholesale gas prices by 78 percent. On 14 September, Brent crude stood at \$106 per barrel, while UK wholesale gas reached 207 pence

per therm. Refined petroleum products, including petrol, diesel and jet fuel, had also become more expensive.

These developments have direct implications for household purchasing power, business operating costs and the broader price level. UK consumer price index (CPI) inflation rose to 3.1 percent in August, exceeding the Bank's 2 percent target by 1.1 percentage points. Energy prices, particularly motor fuels, accounted for approximately 0.7 percentage points of this overshoot. Based on prevailing energy prices, the Bank expected inflation to rise to around 3.75 percent in the final quarter of 2026 and slightly above 4 percent in the first quarter of 2027.

The concern extends beyond the immediate impact of fuel and utility bills. Higher energy costs can gradually feed into transport, manufacturing, food production and other supply chains. Although these indirect effects had so far been more limited than anticipated, the Bank cautioned that they might have been delayed rather than avoided. Their eventual scale will depend on how long energy prices remain elevated and how much of the additional cost businesses can absorb rather than pass on to consumers.

The Risk of Second-Round Inflation

A key consideration for monetary policy is whether an initial increase in energy prices becomes embedded in domestic wages and prices. If households seek compensation for higher living costs and businesses raise prices to protect margins, temporary supply-driven inflation can become more persistent.

There was, as yet, little evidence of material second-round effects in wage and price-setting. Private-sector regular earnings growth had moderated to 2.9 percent in the three months to July, although other indicators suggested underlying wage growth remained around 3.5 percent. Services inflation stood at 3.4 percent in August, down from 4.5 percent in March. These trends provide some reassurance that domestic inflationary pressures have been easing.

Nevertheless, the MPC judged that the risk of second-round effects had increased. Prolonged energy-price volatility could influence inflation expectations and wage negotiations,

particularly if inflation remains elevated ahead of the next round of pay settlements. Additional pressures could emerge from adverse weather and a potentially severe El Niño event, which may affect food prices, as well as strong global demand for artificial intelligence-related technology and components.

Why the MPC Chose to Hold Rates

The six members who supported maintaining Bank Rate at 3.75 percent placed weight on the restrictive effect of existing monetary conditions. Interest rates faced by households and businesses had risen since the conflict began, with quoted two-year fixed-rate mortgage rates around 95 basis points higher than before the conflict. Weak labour demand and subdued domestic spending could also restrain the transmission of higher energy costs into broader inflation.

Economic activity, however, had proved more resilient than expected. UK GDP grew by 0.4 percent in the second quarter of 2026, while monthly output also rose by 0.4 percent in July. Some business and consumer confidence indicators improved in August. This resilience complicates the policy judgement: stronger activity supports incomes and employment, but may also reduce the economic slack that would otherwise help contain inflation.

The three members favouring an increase to 4 percent argued that waiting for conclusive evidence of second-round effects could leave monetary policy responding too late. In their view, a pre-emptive increase would help anchor inflation expectations and reduce the risk of more disruptive tightening later. The majority, by contrast, judged that existing financial restraint provided time to assess how the shock was developing.

Quantitative Tightening and the Policy Outlook

Alongside its interest-rate decision, the MPC unanimously agreed to unwind the remaining stock of government bonds held for monetary policy purposes. After setting aside £120 billion of gilts to back banknote issuance, the remaining £368 billion is to be unwound through a multi-year plan. The Bank intends to sell £20 billion of bonds annually, alongside maturing securities,

producing an average annual reduction of £46 billion and completing the process by September 2034.

The decision is intended to make quantitative tightening more gradual and predictable, while preserving Bank Rate as the principal instrument for adjusting monetary policy.

The outlook remains highly uncertain. A sustained easing of geopolitical tensions could moderate energy prices and reduce the need for further tightening. Conversely, persistent supply disruptions, rising food prices or evidence that inflation is spreading into wages and other prices could strengthen the case for an increase in Bank Rate.

The September decision therefore represents neither a definitive pause nor a commitment to future rate increases. It reflects a conditional approach in which the duration of the energy shock, inflation expectations, wage developments and the strength of domestic demand will shape subsequent decisions. For the UK economy, the central policy challenge is to prevent a supply-driven price shock from becoming entrenched inflation while avoiding an unnecessarily severe contraction in economic activity.

INFLATION

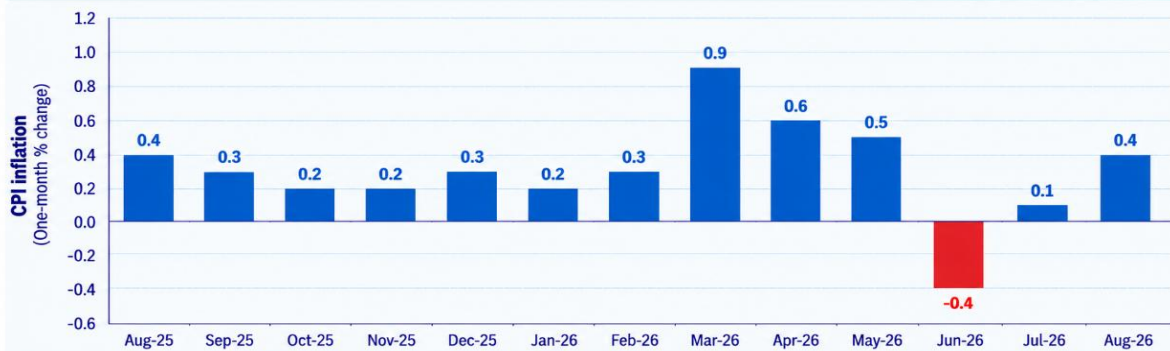
US INFLATION IN AUGUST 2026: ENERGY SHOCK COMPLICATES THE RETURN TO PRICE STABILITY

The US inflation outlook became more challenging in August 2026, as rising energy prices accelerated the monthly increase in consumer prices even as annual headline inflation remained unchanged. The Consumer Price Index for All Urban Consumers (CPI-U) rose by 0.4 percent month-on-month, compared with 0.1 percent in July (Figure 1), while year-on-year inflation held steady at 3.4 percent (Figure 2). The divergence between monthly and annual movements suggests that underlying price momentum has strengthened, complicating the path towards sustained price stability.

EcoSphere

FIGURE 1

US CPI Inflation (One-month percentage change)



Source: US Bureau of Labor Statistics

EcoSphere

FIGURE 2

US CPI Inflation (12-month percentage change)



Energy Emerges as the Principal Source of Pressure

Energy prices were the dominant driver of the August increase. Gasoline prices rose by 3.9 percent during the month, accounting for more than one-third of the increase in the overall CPI, while the energy index advanced by 2.1 percent. On an annual basis, energy prices surged by 16.3 percent. Gasoline prices increased by 27.4 percent and fuel oil by a striking 52.0 percent. Electricity and natural-gas prices rose by 3.8 percent and 4.4 percent, respectively, over the year.

The implications extend beyond the immediate impact on household budgets. Higher fuel and utility costs reduce consumers' purchasing power and raise operating expenses for businesses, particularly in transportation, manufacturing and energy-intensive activities. If these pressures persist, they may gradually pass through supply chains into the prices of other goods and services. The trajectory of US inflation is therefore increasingly sensitive to developments in global energy markets.

However, the August figures do not indicate a broad-based acceleration across all consumer-price categories. The food index increased by just 0.1 percent during the month and by 2.7 percent year-on-year. Prices of food consumed at home remained unchanged in August, rising 2.2 percent over the year, while food away from home increased by 0.3 percent during the

month and 3.4 percent annually. Within grocery categories, egg prices rose by 2.9 percent, whereas fruit and vegetable prices declined by 0.4 percent.

Core Inflation and Persistent Services Pressures

The behaviour of underlying inflation remains central to assessing whether the energy shock will prove temporary or become more persistent. Core CPI, which excludes food and energy, rose by 0.3 percent in August, following a 0.2 percent increase in July. Its annual rate reached 2.4 percent (Figure 2), remaining below headline inflation.

Nevertheless, services and shelter continue to contribute to underlying price pressures. Shelter inflation increased by 0.3 percent in August and stood at 3.0 percent year-on-year. Services excluding energy services also rose by 3.0 percent annually, while transportation services and medical-care services increased by 2.4 percent and 2.5 percent, respectively.

This composition matters for the inflation outlook. Energy-driven inflation may ease if global supply conditions improve and prices stabilise. Persistent increases in services and shelter, by contrast, may take longer to moderate. The distinction between these components is essential when evaluating the durability of disinflation and the implications for monetary policy.

Goods inflation outside food and energy remains comparatively restrained. Annual inflation in commodities excluding food and energy was only 0.7 percent. New-vehicle prices increased by 0.6 percent, while used cars and trucks declined by 2.3 percent. Although apparel prices rose by 3.6 percent, medical-care commodities fell by 2.7 percent. These movements suggest that the current inflationary pressure is concentrated more heavily in energy and selected services than across the broader goods sector.

Implications for the Inflation Outlook

The difference between monthly and annual inflation warrants particular attention. A seasonally adjusted monthly increase of 0.4 percent, if sustained, would be inconsistent with a comfortable return to a low-inflation environment. Yet the unchanged annual rate of 3.4 percent indicates that the latest acceleration has not, by itself, established a new upward trend. Annual

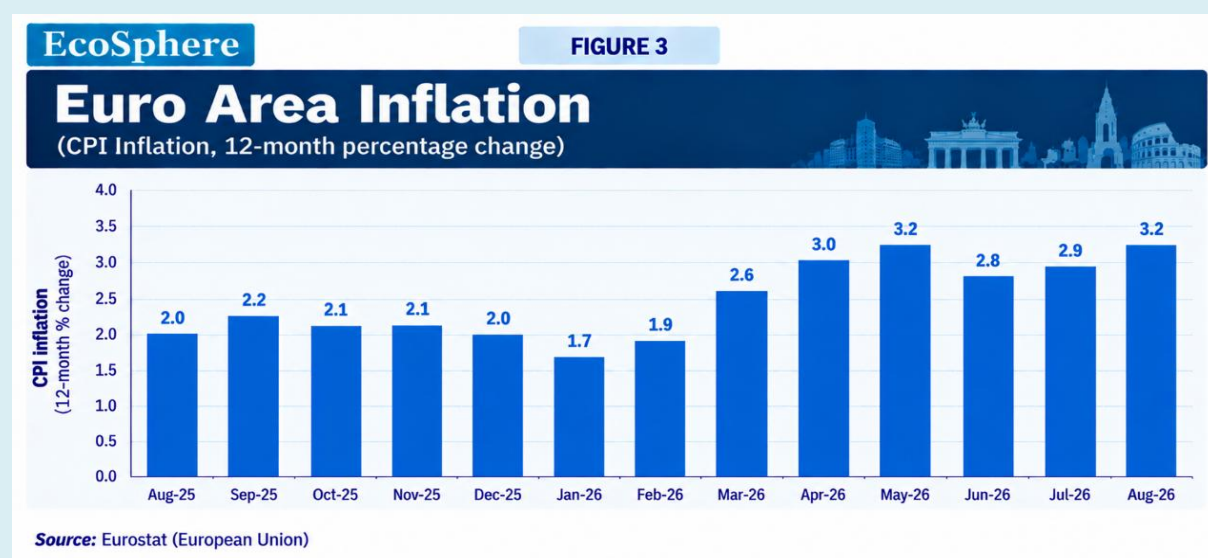
inflation captures price movements over twelve months, while the monthly measure offers a more immediate indication of changing momentum.

For policymakers, the challenge is to distinguish a temporary energy-led increase from a broader resurgence in domestic price pressures. The persistence of energy inflation, the evolution of monthly core CPI and the behaviour of services and shelter prices will be critical indicators. A sustained energy shock could complicate the disinflation process, while continued moderation in underlying prices would offer some reassurance.

Overall, the August CPI release presents a mixed picture. Headline inflation remained at 3.4 percent, core inflation stood at 2.4 percent, and food inflation was comparatively moderate, but annual energy inflation surged to 16.3 percent. The US disinflation process has not necessarily stalled; rather, its trajectory has become more uneven and increasingly exposed to energy-market volatility. Whether this represents a temporary setback or a more persistent obstacle will depend on the duration of the energy shock and the resilience of underlying price moderation.

EURO AREA INFLATION RISES TO 3.2 PERCENT AS ENERGY AND SERVICES DRIVE PRICE PRESSURES

Inflationary pressures across Europe strengthened in August 2026, with annual inflation in both the euro area and the European Union (EU) increasing amid rising contributions from energy and services. According to Eurostat, the euro area's annual inflation rate rose to 3.2 percent in August from 2.9 percent in July, compared with 2.0 percent in August 2025 (Figure 3). EU-wide inflation also increased, reaching 3.2 percent, up from 3.0 percent in July and 2.4 percent a year earlier. The figures indicate that price pressures have intensified over the past year, complicating the pursuit of price stability.



Wide Variations Across Member States

Inflation trends varied considerably across EU economies. Sweden recorded the lowest annual rate at 0.3 percent, followed by Estonia at 1.3 percent and Czechia at 1.5 percent. At the other end of the spectrum, Romania registered the highest inflation at 6.3 percent, followed by Lithuania at 5.6 percent and Cyprus at 5.2 percent.

The monthly comparison points to a broad-based increase in inflationary pressures. Compared with July 2026, annual inflation declined in six Member States, remained unchanged in one and increased in twenty. This divergence highlights the uneven transmission of price pressures

across the European economy, with national inflation outcomes reflecting differing economic conditions and exposure to cost increases.

Energy and Services Lead Inflationary Contributions

The composition of euro area inflation offers important insights into the forces driving the latest increase. In August, services made the largest contribution to annual inflation, at 1.43 percentage points, followed closely by energy at 1.29 percentage points. Non-energy industrial goods contributed 0.30 percentage points, while food, alcohol and tobacco added 0.22 percentage points.

The substantial contributions from energy and services suggest that inflationary pressures extend beyond a single component of consumer expenditure. Higher energy costs can affect household budgets directly while increasing production and transportation expenses for businesses. Services inflation, meanwhile, represents an important component of underlying price pressures.

Implications for the Economic Outlook

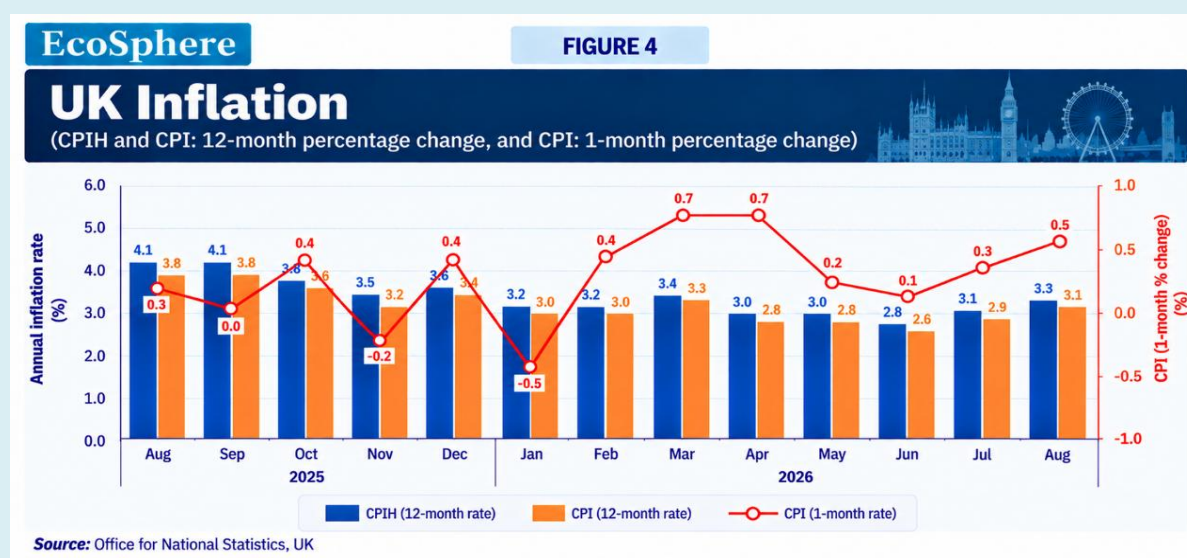
The rise in inflation presents a challenge for European policymakers, particularly as they seek to balance price stability with economic growth. Persistent energy-related pressures could constrain household purchasing power and raise business costs, while sustained services inflation could complicate the return to lower inflation.

The August figures alone do not establish whether the increase will persist. Nevertheless, the acceleration in annual inflation across both the euro area and the EU warrants close monitoring. The subsequent trajectory will depend on whether energy pressures ease and whether price increases in services and other components moderate.

Overall, August's data signal a renewed challenge for Europe's disinflation process, with substantial differences among Member States reinforcing the need for careful assessment of both aggregate and country-level inflation trends.

UK INFLATION EDGES HIGHER IN AUGUST AS MOTOR FUEL PRICES DRIVE RENEWED PRESSURE

UK inflation accelerated in August 2026, reflecting stronger monthly price increases and rising goods inflation, even as underlying services inflation remained unchanged. The Consumer Prices Index (CPI) rose by 3.1 percent in the 12 months to August, up from 2.9 percent in July (Figure 4). Meanwhile, the Consumer Prices Index including owner occupiers' housing costs (CPIH) increased by 3.3 percent, compared with 3.1 percent in the previous month (Figure 4). The latest figures suggest that the disinflation process remains uneven, with renewed energy-related pressures complicating the return to price stability.



Transport and Motor Fuels Drive Inflation

On a monthly basis, both CPI and CPIH increased by 0.5 percent in August 2026, compared with a rise of 0.3 percent in August 2025 (Figure 4). Transport, particularly motor fuels, made the largest upward contribution to the monthly change in both annual inflation measures. This highlights the sensitivity of household expenditure and the broader price level to movements in fuel prices.

The increase in CPIH relative to CPI also reflects differences in their coverage. CPIH incorporates owner occupiers' housing costs, which account for approximately 18 percent of the index and are an important source of divergence between the two measures.

Goods Inflation Strengthens as Services Remain Elevated

Core inflation, which excludes energy, food, alcohol and tobacco, remained unchanged year-on-year in August. Core CPIH stood at 2.9 percent, while core CPI was 2.6 percent, both unchanged from July.

However, the composition of inflation showed a notable shift. The annual goods inflation rate increased from 2.2 percent to 2.7 percent under both CPIH and CPI. In contrast, services inflation remained elevated but stable: the CPIH services rate was 3.6 percent, while the CPI services rate stood at 3.4 percent.

This divergence suggests that the latest acceleration in headline inflation has not been accompanied by a further increase in core inflation overall, although rising goods prices warrant attention.

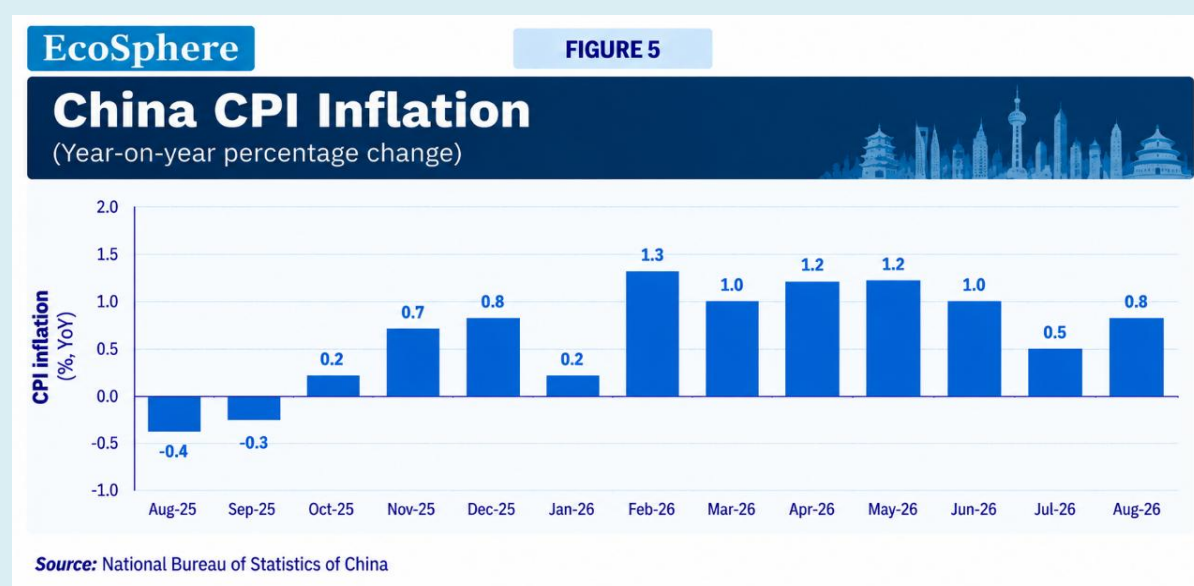
Implications for Monetary Policy

The August data present a mixed picture for policymakers. Higher headline inflation and rising goods prices may delay progress towards price stability, while unchanged core inflation and stable services inflation offer some reassurance. The persistence of fuel-related pressures will be particularly important in determining whether the latest increase proves temporary or feeds into broader price-setting behaviour.

Overall, UK inflation has moved higher, but the underlying picture remains differentiated. Monitoring goods prices, services inflation and transport costs will be essential to assessing the durability of disinflation and the implications for monetary policy.

CHINA'S INFLATION EDGES HIGHER AS RISING TRANSPORT COSTS OFFSET FALLING FOOD PRICES

China's consumer inflation strengthened in August 2026, with the annual inflation rate rising to 0.8 percent from 0.5 percent in July (Figure 5), in line with market expectations. The increase reflects firmer non-food prices and a recovery in monthly consumer prices, although persistent food-price declines and subdued housing costs continue to signal weakness in domestic demand.



Transport Costs Drive Price Increases

Non-food inflation accelerated to 1.2 percent year-on-year in August from 0.9 percent in July, led by a sharp increase in transport costs. Transport inflation rose to 2.5 percent from 0.4 percent, reflecting higher fuel prices and stronger travel-related demand. Price pressures in clothing, healthcare and education remained mixed. Clothing inflation eased marginally to 1.3 percent from 1.4 percent, while healthcare inflation moderated to 2.7 percent from 2.9 percent. Education inflation edged up to 1.4 percent from 1.3 percent.

Housing costs remained subdued, with prices declining by 0.3 percent year-on-year, unchanged from July. This continued weakness points to persistent softness in the housing market and limits the broader momentum in consumer prices.

Food Prices Continue to Decline

Food prices fell for the fifth consecutive month, declining by 1.4 percent year-on-year in August, compared with a 1.5 percent decrease in July. The continued fall was largely driven by lower pork prices amid abundant supplies and weak consumption. Persistent food-price declines have restrained headline inflation, offsetting some of the upward pressure from non-food categories.

Core inflation, which excludes food and energy, rose to 1.0 percent year-on-year from 0.9 percent in July, indicating a modest strengthening in underlying price pressures.

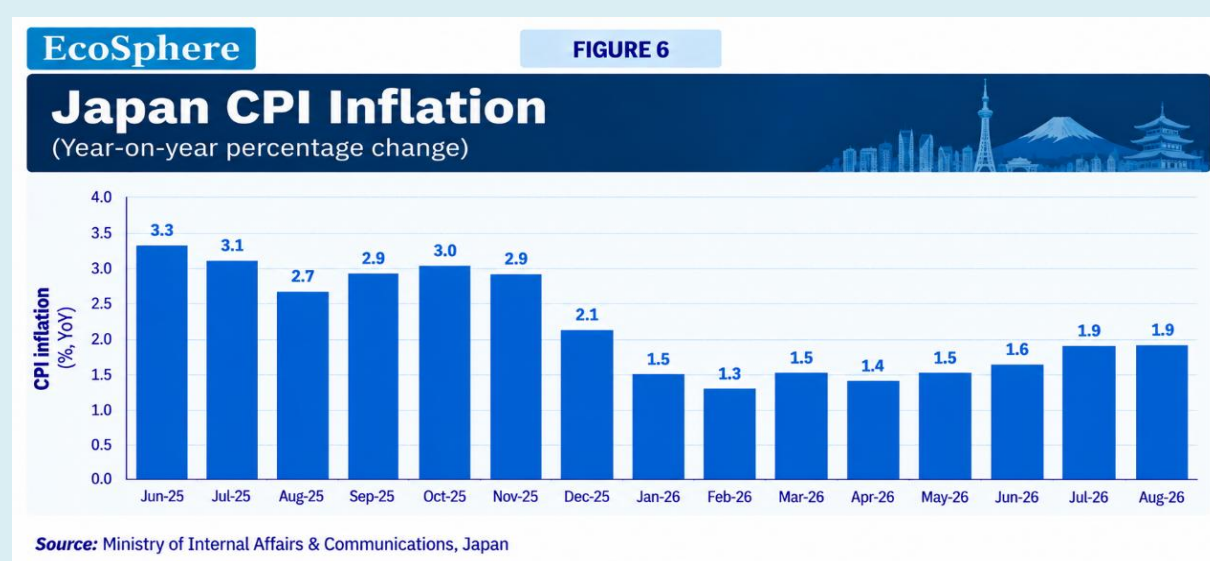
A Gradual Improvement, but Demand Remains a Concern

On a monthly basis, consumer prices increased by 0.4 percent in August, reversing July's 0.1 percent decline and exceeding market expectations of a 0.3 percent rise. This was the strongest monthly increase since February 2026, suggesting some improvement in near-term price momentum.

Nevertheless, the recovery remains modest. Rising transport costs and firmer core inflation offer encouraging signs, but falling food prices and persistently weak housing costs indicate that demand pressures remain uneven. The key challenge for China is to translate this tentative improvement into sustained domestic consumption and broader price stability. The coming months will reveal whether August marks the beginning of a more durable recovery in inflation or a temporary increase driven primarily by transport-related costs.

JAPAN INFLATION HOLDS AT 1.9 PERCENT AS CORE PRICE PRESSURES BEGIN TO EASE

Japan's annual consumer inflation rate remained unchanged at 1.9 percent in August 2026, matching July's reading and staying at its highest level since December 2025 (Figure 6). Beneath this stability, however, price movements across sectors were mixed. While inflation moderated in food and transport, price increases accelerated in several other categories. Meanwhile, core inflation eased for the first time in four months, suggesting that underlying price pressures may be gradually weakening.



Divergent Price Trends Across Sectors

Food inflation slowed to 3.1 percent in August from 3.5 percent in July, while transport inflation declined to 2.3 percent from 2.6 percent. Housing inflation remained steady at 1.0 percent. In contrast, household goods inflation accelerated sharply to 4.9 percent from 3.7 percent, while healthcare inflation rose to 3.0 percent from 2.1 percent. Clothing, recreation and miscellaneous items also recorded higher inflation rates.

Energy prices presented a contrasting picture. Gas inflation edged up to 2.0 percent from 1.8 percent, whereas electricity prices fell by 2.4 percent, compared with a marginal decline of 0.1 percent in July. The sharper fall in electricity prices was attributed to government energy

subsidies. Education prices remained in deflation at 3.8 percent, continuing a trend that began in early 2024.

These differences indicate that stable headline inflation masks varying cost pressures across household expenditure categories. The moderation in food and transport prices has been offset by stronger increases in household goods, healthcare and other items.

Core Inflation Moves Below the BoJ Target

Core inflation, which excludes fresh food, eased to 1.7 percent in August from 1.8 percent in July. This marked its first slowdown in four months and kept inflation below the Bank of Japan's 2 percent target for the seventh consecutive month.

On a monthly basis, consumer prices rose by just 0.1 percent, substantially slower than the upwardly revised increase of 0.5 percent in July. This moderation suggests that near-term price momentum has weakened.

Implications for Monetary Policy

Japan's inflation outlook remains finely balanced. Persistent price increases in several categories could sustain pressure on household purchasing power, while lower food inflation, subsidised electricity prices and easing core inflation offer some relief.

For the Bank of Japan, the key question is whether underlying inflation will stabilise around its 2 percent target or continue to soften. The August data provide evidence of moderation but do not establish a sustained downward trend. Future policy decisions will depend on the persistence of price pressures, domestic demand and wage developments.

Overall, Japan's inflation remains stable at the headline level, but the easing in core inflation points to a more nuanced economic picture.

FOOD & AGRICULTURE

FAO FOOD PRICE INDEX: RENEWED GLOBAL PRESSURES ACROSS KEY COMMODITIES

Global Food Prices Rise Further in August

The FAO Food Price Index (FFPI) averaged 133.3 points in August 2026, increasing by 2.5 points, or 1.9 percent, from its revised July level (Table 1). All five commodity groups recorded higher price indices during the month, although the magnitude of the increases varied significantly across categories. Compared with August 2025, the FFPI was 3.3 points, or 2.5 percent, higher. Nevertheless, it remained 26.9 points, or 16.8 percent, below its historical peak reached in March 2022.

The August increase was broad-based, but sugar and cereals recorded particularly notable gains, while vegetable oils continued their upward trend. Dairy prices also recovered, whereas meat prices increased more moderately.

Cereal Prices Reach Their Highest Level Since May 2024

The FAO Cereal Price Index averaged 116.3 points in August, rising 2.5 points, or 2.2 percent, from July and reaching its highest level since May 2024. International prices increased across all major grains, supported by robust demand, weather-related concerns over crop prospects in key producing regions and continued uncertainty surrounding Black Sea export flows.

World wheat prices increased 2.6 percent month-on-month and stood 15.0 percent above their level a year earlier. The increase reflected persistent disruptions to Black Sea export logistics, lower production prospects in parts of Europe following hot and dry weather, and a weaker US dollar, which improved the competitiveness of dollar-denominated export supplies.

International maize prices rose 2.5 percent from July. Concerns over yield prospects in parts of the US Corn Belt and deteriorating production conditions in the European Union, following prolonged heat and dryness, supported prices. Strong demand from the ethanol and feed

sectors, together with disruptions to Ukrainian export flows, provided additional support. Concerns over input supplies following the closure of the Strait of Hormuz also contributed to firmer maize prices.

Prices of sorghum and barley increased by 3.9 percent and 2.6 percent, respectively, reflecting broadly firmer conditions across feed-grain markets. The FAO All Rice Price Index increased by 0.5 percent, supported by currency movements, sustained purchases by Asian and African countries and expectations of tighter supplies, particularly for Indica rice.

Vegetable Oils Continue Their Upward Trend

The FAO Vegetable Oil Price Index averaged 196.9 points in August, increasing by 1.1 points, or 0.6 percent, from July. This marked the third consecutive monthly increase and brought the index to its highest level since June 2022. The increase was driven primarily by higher palm and soybean oil prices, which more than offset declines in sunflower and rapeseed oil quotations.

International palm oil prices continued to strengthen amid robust global import demand and concerns about the potential impact of El Niño-related weather conditions on production in Southeast Asia. South American soyoil prices remained firm, supported by strong export demand. In the United States, however, prices declined moderately amid uncertainty over biofuel policies and their implications for domestic feedstock demand. Sunflower and rapeseed oil prices edged lower as subdued import demand and expectations of ample supplies during the 2026/27 season weighed on markets.

Meat Prices Edge Higher

The FAO Meat Price Index averaged 127.9 points in August, rising 1.2 points, or 1.0 percent, from its revised July level and remaining close to its level a year earlier. The increase reflected higher prices for poultry, pig and ovine meat, partly offset by lower bovine meat prices.

International poultry prices rose as Brazilian export prices recovered amid strong global import demand. Pig meat prices also increased substantially, principally because of higher European

Union prices, where high temperatures slowed animal growth and reduced the availability of slaughter-ready pigs. This was partly offset by lower Brazilian prices amid ample supplies.

Ovine meat prices increased on firmer quotations in New Zealand, supported by persistently limited export supplies and strong global import demand. Bovine meat prices moved in the opposite direction. Brazil's allocation under China's beef safeguard import quota was nearing full utilisation, slowing exports amid expectations of higher tariffs on additional shipments. Australia had already reached quota thresholds in China and the Republic of Korea. The resulting intensification of competition for alternative markets exerted downward pressure on export prices in both countries.

Dairy Prices Recover After Three Months of Decline

The FAO Dairy Price Index averaged 119.2 points in August, increasing by 2.7 points, or 2.3 percent, from July. This was its first monthly increase in four months, although the index remained 21.7 percent below its level a year earlier. The recovery was driven by higher milk powder and cheese prices, while butter prices remained broadly stable.

Skim milk powder and whole milk powder prices increased by 3.0 percent and 2.4 percent, respectively. Firmer European Union prices more than offset seasonal declines in Oceania. In the European Union, tightening milk supplies, compounded by hot and dry weather in several major producing regions, supported prices, while sustained import demand added further upward pressure, particularly for skim milk powder. In Oceania, increasing seasonal milk production weighed on milk powder prices.

Cheese prices increased 2.7 percent, extending the recovery that began in July. Higher European Union quotations, supported by limited milk availability, more than offset further declines in Oceania, where expanding export supplies and continued competition from the United States weighed on prices.

Butter prices were broadly unchanged. Firmer European prices, reflecting tighter milkfat availability, were offset by lower quotations in Oceania amid increasing seasonal supplies.

Sugar Emerges as the Strongest Source of Pressure

The most pronounced increase among the major food commodity groups came from sugar. The FAO Sugar Price Index averaged 106.4 points in August, rising by 11.3 points, or 11.9 percent, from July. This was the highest level since June 2025. The sharp increase was driven primarily by growing concerns over the global sugar supply outlook for the 2026/27 season.

Persistent hot and dry weather resulted in downward revisions to sugarbeet yield forecasts in the European Union, where planted area was already expected to decline from the previous season. El Niño-related weather conditions also continued to affect production prospects in key Asian producing countries. Lower sugar production in Brazil's key Centre-South region added further pressure to the global supply outlook. India's announcement of duty-free raw sugar imports provided an additional source of support to international sugar prices.

A Broad-Based but Uneven Increase

The August 2026 FAO data point to a renewed firming of global food prices, but the underlying drivers differ substantially across commodities. Cereals are being influenced by weather risks, export disruptions, strong demand and uncertainty surrounding major producing regions. Vegetable oils are responding to stronger palm and soybean oil prices and weather-related supply concerns. Meat prices are being shaped by divergent supply conditions across regions and species. Dairy markets have begun to recover after several months of weakness. Sugar, meanwhile, has emerged as the most significant source of upward pressure, reflecting growing concerns over global production. The broader picture is therefore not one of a uniform acceleration in global food prices. Rather, it reflects a combination of weather shocks, supply constraints, trade and logistics disruptions, currency movements and changing demand conditions.

For food-importing economies, these developments remain important because sustained increases in international commodity prices can eventually feed into domestic food inflation, depending on exchange-rate movements, domestic supply conditions, trade policies and the extent of pass-through to consumers.

EcoSphere

TABLE 1

FAO Food Price Index (FFPI)



Month	Food Price Index 	Meat 	Dairy 	Cereals 	Oils 	Sugar 
August 2025	130.0	127.8	152.2	105.7	169.1	103.6
September 2025	128.6	127.9	147.2	104.9	167.9	99.4
October 2025	126.4	125.0	141.7	103.6	169.4	94.1
November 2025	125.2	125.5	136.2	105.5	165.0	88.6
December 2025	124.5	124.8	128.2	107.2	165.2	90.7
January 2026	124.1	124.9	120.9	107.5	168.6	89.8
February 2026	125.5	126.5	119.4	108.7	174.2	86.2
March 2026	128.7	128.0	121.2	110.4	183.1	92.8
April 2026	131.0	130.4	119.7	111.3	193.9	88.5
May 2026	131.0	131.3	119.1	114.2	185.0	95.1
June 2026	130.1	130.5	116.9	110.0	192.0	90.0
July 2026	130.8	126.7	116.6	113.8	195.7	95.0
August 2026	133.3	127.9	119.2	116.3	196.9	106.4

Source: FAO

SECTION 3: FINANCIAL MARKETS

INDIAN FINANCIAL MARKETS

INDIAN EQUITY MARKETS IN SEPTEMBER 2026: A BROAD-BASED CORRECTION AMID GLOBAL UNCERTAINTY

India's equity markets experienced a downward trend in September 2026, with both the BSE SENSEX and NIFTY 50 registering substantial declines over the month. Although intermittent recoveries suggested some buying interest, these gains proved insufficient to reverse the broader correction. The market trajectory points to weakening investor sentiment and heightened sensitivity to domestic and international developments.

Both indices lost close to 6 percent between the first and last trading observations (Table 1). The NIFTY 50 declined slightly more in percentage terms, indicating that the correction was broad-based across the large-cap equity market rather than confined to one benchmark. These figures measure the change between the two closing dates; they do not represent the indices' total returns, which would also account for dividends.

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TABLE 1

Market Snapshot: SENSEX and NIFTY 50

Indicator	 BSE SENSEX	 NIFTY 50
 Close on 1 September	76,944	24,056
 Close on 30 September	72,480	22,620
 Absolute decline	4,464 points	1,436 points
 Percentage decline	5.80%	5.97%

Market Movement: SENSEX and NIFTY 50

The market's trajectory during September can be divided into three broad phases.

Phase I: Early-month weakness

Both indices began September at relatively high levels but weakened during the first half of the month. The SENSEX declined from 76,944 on 1 September to 74,004 on 15 September (Figure 1), while the NIFTY 50 fell from 24,056 to 23,119 over the same period (Figure 2).

The decline reflected growing caution over crude oil prices, geopolitical uncertainty and foreign investor selling. By mid-September, investors were increasingly concerned that sustained energy-price pressures and tighter global financial conditions could affect India's inflation outlook, currency stability and corporate earnings. Reports during the month also highlighted elevated US interest rates and bond yields as factors reducing the relative attractiveness of emerging-market equities.

Phase II: A tentative mid-month recovery

The market attempted a recovery between 16 and 23 September. The SENSEX rose from 74,336 on 16 September to 74,828 on 23 September, while the NIFTY 50 moved from 23,218 to 23,447. This rebound was limited and did not reverse the losses accumulated earlier in the month. The indices remained well below their opening levels, suggesting that investors were reluctant to make sustained commitments amid unresolved global risks. The recovery was therefore better understood as a temporary stabilisation than as evidence of a durable change in market direction.

Phase III: Renewed selling towards month-end

Selling pressure intensified again during the final week. On 24 September, the SENSEX fell to 73,581 and the NIFTY 50 to 23,063. The decline continued through the last three trading sessions, with the SENSEX closing at 72,480 and the NIFTY 50 at 22,620 on 30 September.

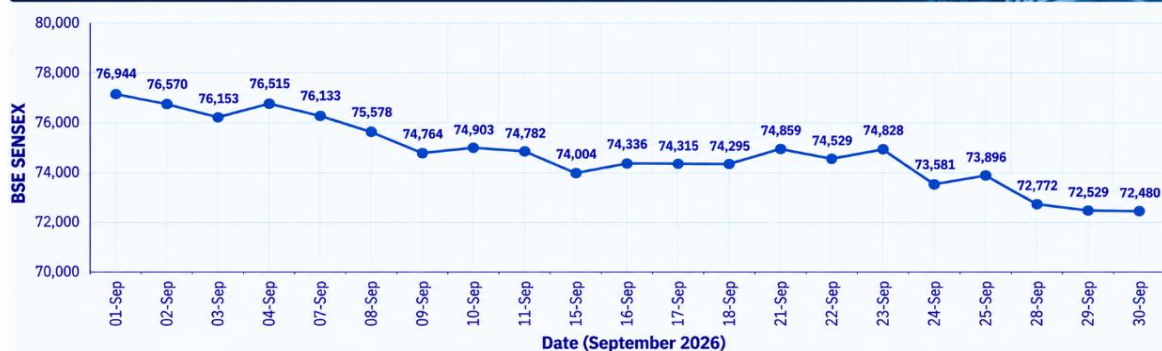
The absence of a convincing geopolitical resolution, crude oil prices above \$100 per barrel and US Treasury yields at elevated levels reinforced investor caution. *Reuters* reported that Brent crude was around \$105 a barrel on 29 September, while the US 10-year Treasury yield had risen above 5.27 percent. Both benchmarks were approaching six-month lows amid continued

foreign selling. The final week thus confirmed that the mid-month recovery had failed to establish a sustained upward trend.

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FIGURE 1

BSE SENSEX Daily Close – September 2026



Source: BSE (<https://www.bseindia.com/indices/IndexArchiveData.html>)

EcoSphere

FIGURE 2

NIFTY 50 Daily Close – September 2026



Source: NSE (<https://www.niftyindices.com/reports>)

Key Milestones During September

The month was marked by a series of declines, a short-lived recovery and a renewed sell-off.

The following milestones capture the main movement in the two indices (Table 2):

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TABLE 2

Key Milestones During September

 Date	 SENSEX	 NIFTY 50	 Market phase
 1 September	76,944	24,056	— Opening level
 9 September	74,764	23,432	▼ Early-month decline
 15 September	74,004	23,119	▼ Weakness persists
 23 September	74,828	23,447	▲ Temporary recovery
 24 September	73,581	23,063	▼ Selling resumes
 28 September	72,772	22,780	▼ Sharp late-month weakness
 30 September	72,480	22,620	▼ Month-end close

The table highlights three features of September's market behaviour. First, the decline was already well established by mid-month. Second, the recovery around 16–23 September was insufficient to restore investor confidence. Third, the sharp weakness in the closing sessions pushed both benchmarks close to their lowest levels of the month. The pattern indicates that the market was responding to a sustained accumulation of risks rather than to a single day's adverse news.

Factors Influencing Market Sentiment

Elevated crude oil prices and geopolitical uncertainty: The rise in crude oil prices was one of the most important factors influencing Indian equity markets during September. As a major importer of crude oil, India is vulnerable to a sustained increase in international energy prices. Higher oil prices can widen the import bill, put pressure on the current account, increase domestic inflationary risks and contribute to rupee depreciation.

For businesses, the effects vary across sectors. Oil marketing companies may face pressure depending on their ability to pass on higher costs, while aviation, transport, chemicals and other energy-intensive industries may experience margin compression. Higher energy costs can also affect household purchasing power and consumer demand.

Geopolitical tensions in West Asia amplified these concerns by raising uncertainty over energy supplies and the duration of elevated prices. By the end of September, Brent crude was trading around \$105 per barrel, reinforcing concerns about the potential consequences for India's macroeconomic stability and corporate profitability.

Foreign portfolio investor outflows: Foreign investor selling was another major source of downward pressure. After investing in Indian equities during July and August, foreign portfolio investors returned to net selling in September. *The Economic Times*, reported foreign equity outflows of approximately ₹25,662 crore (\$2.7 billion) during the month.

Several factors contributed to this reversal:

- **Higher US bond yields:** Attractive returns on US government securities reduced the relative appeal of riskier emerging-market assets.
- **Global portfolio reallocation:** Investors reassessed the relative returns available across markets, including opportunities in technology-oriented Asian economies.
- **Currency risk:** Rupee depreciation reduced the dollar-denominated returns that foreign investors could realise from Indian investments.
- **Geopolitical uncertainty:** Elevated oil prices and uncertainty over the conflict in West Asia encouraged a more defensive investment stance.

Foreign selling also reflected global portfolio decisions rather than a straightforward rejection of India's long-term economic prospects. Nevertheless, sustained outflows can weigh on valuations, increase volatility and weaken near-term investor sentiment.

Rising US Treasury yields and tighter global financial conditions: The rise in US Treasury yields compounded the pressure from crude oil and foreign selling. When yields on relatively

safe assets increase, investors may demand a higher expected return from equities to compensate for risk. This can reduce the attractiveness of markets where valuations are perceived to be demanding.

Higher global borrowing costs can also tighten liquidity and make financing more expensive. For Indian companies, the effect may be felt through higher capital costs, more cautious investment decisions and changes in foreign capital flows.

The rise in the US 10-year Treasury yield above 5.27 percent towards the end of September illustrated the extent of the change in global financial conditions. Together with oil prices above \$100 per barrel, this created an unfavourable combination for Indian equities.

Domestic liquidity and the role of institutional investors: Domestic institutional investors provided an important counterweight to foreign selling. Their purchases, supported in part by domestic savings and systematic investment flows, helped absorb some of the supply of shares entering the market.

However, domestic buying did not prevent the benchmark indices from declining. This suggests that the pressure generated by foreign outflows and global risk factors was substantial enough to outweigh the support provided by domestic capital.

It is important to distinguish between the resilience of domestic investment flows and the direction of market prices: strong domestic participation can cushion a correction without necessarily reversing it.

Sectoral pressures and corporate earnings concerns: Selling during September was not confined to one industry. Reports indicated pressure on financial, automotive, oil and gas, and consumer-related stocks during the first half of the month. Healthcare attracted comparatively greater foreign investor interest, reflecting a more selective and defensive investment approach.

The effects of the market correction were therefore uneven across sectors. Companies with strong balance sheets, stable cash flows and greater pricing power were better positioned to withstand cost pressures than businesses with high energy exposure or weaker margins.

The possibility that higher input costs could affect earnings expectations also encouraged investors to reassess valuations. Where share prices had already incorporated strong growth expectations, even a moderate deterioration in the outlook could trigger a more pronounced correction.

Overall Trend: A Broad-Based Correction

September 2026 was characterised by a clear downward trend in India's two principal equity benchmarks. The SENSEX declined by 5.80 percent and the NIFTY 50 by 5.97 percent between the first and last trading observations in the month.

Three conclusions emerge from this performance:

First, the correction was broad enough to affect both benchmarks. The similar magnitude of their declines indicates that the weakness was not confined to a narrow segment of the market.

Second, the mid-month recovery lacked durability. The indices gained ground temporarily but failed to overcome the pressures associated with crude oil prices, foreign selling and global bond yields.

Third, global factors played a prominent role in shaping domestic market sentiment. India's economic growth prospects and domestic investment flows offered some support, but they could not fully offset the deterioration in the external environment.

The correction should not, however, be interpreted as conclusive evidence of a deterioration in India's underlying economic fundamentals. Equity markets respond not only to current economic performance but also to changes in expected earnings, interest rates, risk premiums and the availability of global capital. September's decline reflected a reassessment of these risks.

Outlook: What Could Determine the Market's Direction?

The near-term outlook will depend on whether the pressures that drove September's correction begin to ease. Several indicators merit close attention.

Crude oil prices and developments in West Asia. A sustained decline in oil prices would reduce pressure on India's import bill, inflation expectations and corporate margins. Conversely, prolonged geopolitical tensions and supply disruptions could keep energy costs elevated and delay a recovery in market sentiment.

Foreign portfolio investment flows. A moderation in foreign selling, particularly if accompanied by renewed net purchases, could help stabilise the benchmarks. The direction of these flows will depend on global yields, currency movements, relative valuations and the perceived attractiveness of Indian equities compared with competing markets.

The rupee and US Treasury yields. Currency stability and a moderation in global bond yields would improve the external investment environment. Continued pressure on the rupee, combined with persistently high US yields, could make Indian equities less attractive to foreign investors.

Corporate earnings and valuations. The sustainability of the market recovery will ultimately depend on earnings delivery. Companies demonstrating resilient demand, healthy balance sheets, sound cash flows and an ability to manage input costs may be better positioned to withstand volatility. Investors are also likely to differentiate more sharply between companies whose valuations are supported by earnings and those dependent on optimistic growth expectations.

Domestic investment and macroeconomic resilience. Continued participation by domestic institutional investors could help moderate the impact of foreign outflows. However, the strength of this support will need to be assessed alongside corporate earnings, consumption trends and the broader economic outlook.

The immediate outlook is therefore likely to remain sensitive to global developments. A recovery in the indices would be more convincing if it were supported by easing oil prices, stabilising foreign flows and improving earnings visibility, rather than by a short-lived rebound in share prices alone.

Conclusion

The September 2026 correction was a reminder that Indian equity markets remain closely connected to global energy markets, international interest rates and cross-border capital flows. The SENSEX and NIFTY 50 fell by 5.80 percent and 5.97 percent, respectively, during the month, with the renewed sell-off in the final week erasing the gains made during the brief mid-month recovery.

The immediate challenge is to distinguish temporary external shocks from risks that could have more persistent consequences for inflation, investment and corporate earnings. Higher crude oil prices, elevated US Treasury yields and foreign investor outflows created a difficult environment for equities, while domestic institutional investment offered partial support.

For investors, the episode reinforces the importance of earnings quality, valuation discipline and diversification. For policymakers, it underlines the significance of energy security, macroeconomic stability and the resilience of domestic financial markets to external shocks.

A sustained recovery will require more than a technical rebound. It will depend on greater clarity in the geopolitical environment, a more favourable global financial backdrop and evidence that corporate earnings can withstand the pressures created by higher energy costs and tighter financial conditions.



Bottomline

Indian equity markets endured a broad-based correction in September 2026 as elevated crude oil prices, geopolitical uncertainty, rising US bond yields and foreign investor outflows overwhelmed domestic buying support, leaving a sustained recovery dependent on easing external pressures and stronger corporate earnings.

GLOBAL FINANCIAL MARKETS

GLOBAL EQUITY MARKETS IN SEPTEMBER 2026: DIVERGENCE, TECHNOLOGY-LED RESILIENCE AND RISING MARKET RISKS

September 2026 was a month of divergent performance across global equity markets. Technology-heavy indices in the United States and parts of Asia demonstrated resilience, while traditional blue-chip indices in the US, Europe and several Asia-Pacific economies weakened. Rising bond yields, renewed inflation concerns, higher energy prices and uncertainty surrounding monetary policy shaped investor sentiment. *The Wall Street Journal* highlighted the changing market environment in its September coverage, noting that investors were moving from an earnings-driven market towards one increasingly influenced by inflation, interest rates and Federal Reserve policy.

The closing data for September reinforce this divergence. Among the 13 indices examined, the NASDAQ Composite and Taiwan TAIEX recorded gains of approximately 2.9 percent and 2.1 percent, respectively, based on their first and last available observations. The S&P 500 edged higher, while the Dow Jones Industrial Average, all three European indices, the Shanghai Composite, Hang Seng and Australian benchmark recorded declines. The NIKKEI 225 finished modestly higher, while the KOSPI Composite was virtually unchanged.

Global Equities in September: Divergence Amid Rising Uncertainty

The global equity landscape reflected a contest between corporate earnings optimism and deteriorating macro-financial conditions. Technology-related demand provided support to selected markets, but the benefits were unevenly distributed. Rising sovereign bond yields increased the discount rates applied to future corporate earnings, while higher energy prices threatened to revive inflation and constrain monetary-policy flexibility. *The Wall Street Journal* reported on 16 September that US equities fell after the Federal Reserve raised interest rates, underscoring the sensitivity of equity valuations to the cost of capital.

The month therefore did not produce a uniform global sell-off. Instead, investors appeared to favour markets and sectors perceived to have stronger earnings momentum, particularly those linked to artificial intelligence and technology, while traditional industrial, consumer and financial exposures faced greater pressure.

US Equities Under Pressure from Rates and Inflation

US equities displayed a marked divergence between the technology-oriented NASDAQ Composite and the more traditional Dow Jones Industrial Average. The S&P 500 remained broadly stable. This pattern was consistent with commentary in the Wall Street Journal on the growing influence of large technology companies and the risks associated with higher interest rates.

Dow Under Pressure: The Dow Jones Industrial Average declined from 52,767 on 1 September to 50,906 on 30 September, a fall of approximately 3.5 percent (Figure 1). It reached a monthly high of 53,686 on 3 September before weakening through much of the remainder of the month. The closing level on 30 September was the lowest observation in the series.

The decline suggests that traditional blue-chip stocks were more exposed to concerns about borrowing costs, economic momentum and the outlook for non-technology sectors. The sharp fall in US equities following the Federal Reserve's rate decision on 16 September reinforced the pressure on the index.

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FIGURE 1

DJIA - Daily Close September 2026



Source: WSJ (<https://www.wsj.com/market-data/quotes/index/DJIA/historical-prices>)

S&P 500 Holds its Ground: The S&P 500 edged up from 7,631 to 7,652, a gain of approximately 0.3 percent (Figure 2). It climbed to 7,748 on 3 September, fell to a monthly low of 7,552 on 16 September, and recovered to a high of 7,765 on 21 and 22 September before easing towards month-end.

The narrow positive change masks substantial intra-month volatility. The recovery after mid-September suggests that demand for selected large-cap stocks helped offset weakness elsewhere. Nevertheless, the limited net gain indicates that the market struggled to build sustained upward momentum amid higher rates and persistent inflation risks.

EcoSphere

FIGURE 2

S&P 500 - Daily Close September 2026



Monthly high: 7,765 (21 & 22 Sep) | Monthly low: 7,552 (16 Sep) | Month-end close: 7,652

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/SPX/historical-prices>)

September 2026

NASDAQ Leads the US Market: The NASDAQ Composite rose from 26,100 to 26,861, an increase of approximately 2.9 percent (Figure 3), making it the strongest-performing US index in this comparison. Following a mid-month low of 25,978 on 16 September, the index rallied sharply, reaching 27,244 on 22 September before moderating.

The recovery points to the relative resilience of technology-oriented shares. *The Wall Street Journal* described how demand for artificial intelligence and the strength of major technology companies helped support the broader US market even as rising yields and energy costs created headwinds. However, dependence on a narrower group of growth stocks also leaves the index vulnerable to changes in earnings expectations, valuations and investor sentiment.

EcoSphere

FIGURE 3

NASDAQ Composite Index - Daily Close September 2026



Monthly high: 27,244 (22 Sep) | Monthly low: 25,978 (16 Sep) | Month-end close: 26,861

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/COMP/historical-prices>)

September 2026

European Equities Weaken as Investor Confidence Falter

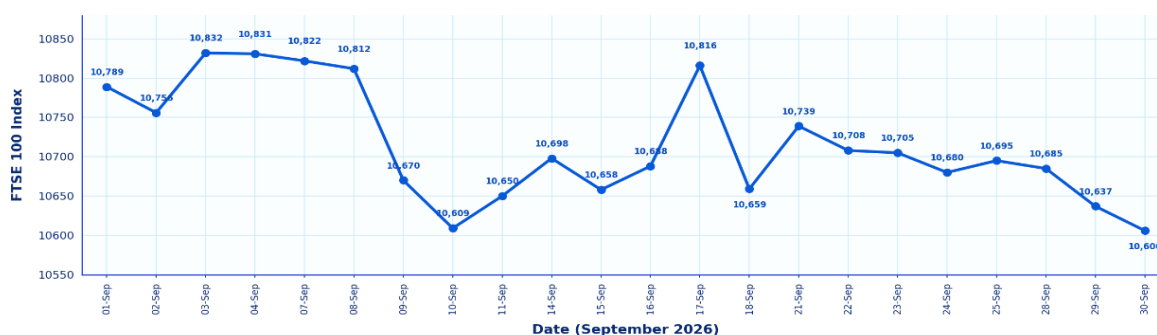
European markets experienced broad-based declines, with the CAC 40 recording the steepest fall among the three indices. The FTSE 100 proved relatively more resilient, although it also ended below its opening level. *The Wall Street Journal* reported on 17 September that European stocks benefited temporarily from falling oil prices, with industrial, automobile and technology shares contributing to a recovery. The subsequent month-end weakness, however, suggests that these gains did not translate into a sustained rally.

FTSE 100 Retreats from Early-September Highs: The FTSE 100 declined from 10,789 to 10,606 (Figure 4), a fall of approximately 1.7 percent. It reached a high of 10,832 on 3 September before losing ground, with a brief recovery in the middle of the month failing to reverse the broader decline. Its comparatively moderate fall suggests relative resilience, but the closing level at the end of September indicated continuing caution among investors.

EcoSphere

FIGURE 4

FTSE 100 Index - Daily Close September 2026



Monthly high: 10,832 (03 Sep) | Monthly low: 10,606 (30 Sep) | Month-end close: 10,606

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/UK/UKXX/historical-prices>)

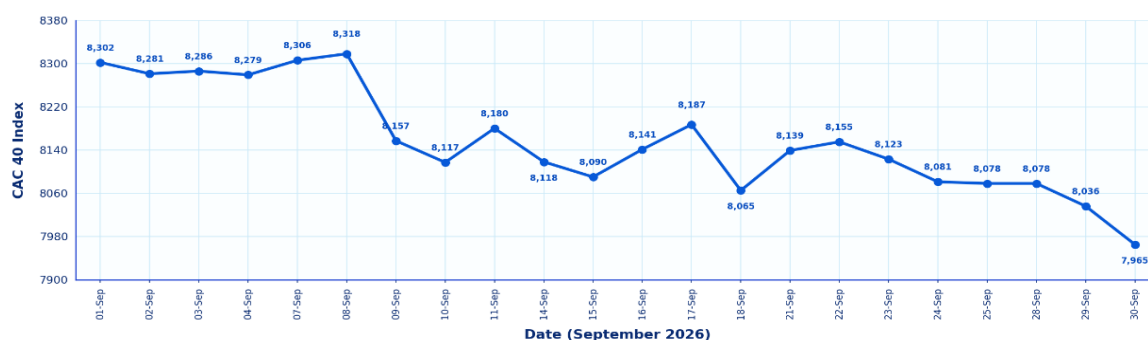
September 2026

CAC 40 Leads Europe's Declines: The CAC 40 fell from 8,302 to 7,965, a decline of approximately 4.1 percent (Figure 5), the largest among the three European benchmarks. After reaching 8,318 on 8 September, the index weakened, eventually closing at its lowest recorded level of the month. The sustained downward movement suggests that investors remained cautious about the outlook for French equities amid broader European economic and financial uncertainty.

EcoSphere

FIGURE 5

CAC 40 Index - Daily Close September 2026



Monthly high: 8,318 (08 Sep) | Monthly low: 7,965 (30 Sep) | Month-end close: 7,965

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/FR/PX1/historical-prices>)

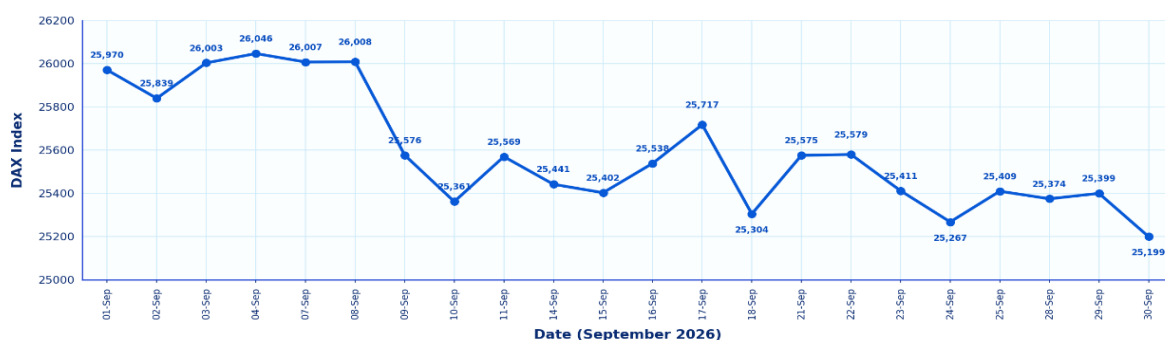
September 2026

DAX Slips as German Equities Lose Ground: Germany's DAX declined from 25,970 to 25,199, a fall of approximately 3.0 percent (Figure 6). The index peaked at 26,046 on 4 September before retreating, with only intermittent recoveries during the second half of the month. Although German automobile stocks supported a temporary advance on 17 September, the overall trend remained negative. The performance points to the difficulty of sustaining gains when higher financing costs and uncertain demand weigh on industrial and cyclical stocks.

EcoSphere

FIGURE 6

DAX Index - Daily Close September 2026



Monthly high: 26,046 (04 Sep) | Monthly low: 25,199 (30 Sep) | Month-end close: 25,199

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/DX/DAX/historical-prices>)

September 2026

Asia-Pacific Equities: Sharp Divergence Across Regional Benchmarks

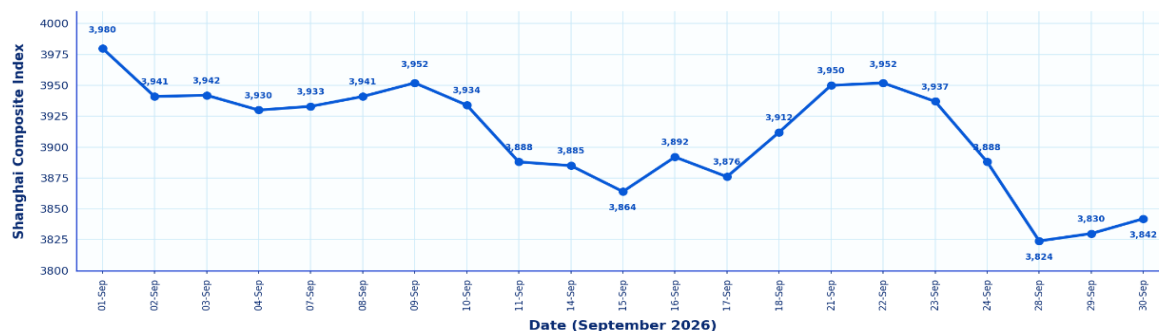
Asia-Pacific markets presented a mixed picture. Taiwan and Japan ended higher, South Korea was broadly unchanged, and China, Hong Kong, Singapore and Australia recorded declines. The contrast between the technology-oriented Taiwanese market and weaker regional indices illustrates the importance of sector composition and investor expectations. *The Wall Street Journal* also reported on concerns in South Korea about leveraged investments linked to major technology companies, highlighting the potential for concentrated technology exposure to amplify volatility.

Shanghai Equities Lose Ground: The Shanghai Composite declined from 3,980 to 3,842, a fall of approximately 3.5 percent (Figure 7). It reached its monthly high on 1 September and subsequently weakened, hitting a low of 3,824 on 28 September. The limited recovery towards month-end was insufficient to offset the earlier losses, leaving the index among the weaker Asia-Pacific benchmarks.

EcoSphere

FIGURE 7

Shanghai Composite Index - Daily Close September 2026



Monthly high: 3,980 (01 Sep) | Monthly low: 3,824 (28 Sep) | Month-end close: 3,842

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/CN/XSHG/SHCOMP/historical-prices>)

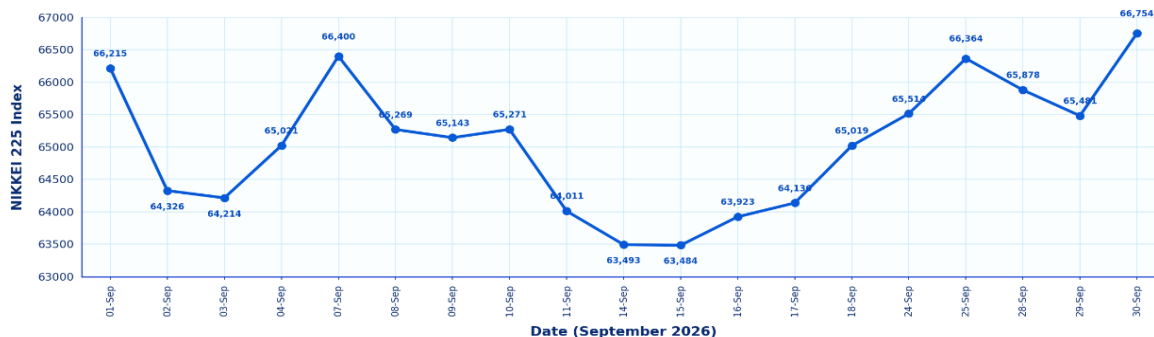
September 2026

NIKKEI Recovers to End September Higher: The NIKKEI 225 rose from 66,215 to 66,754, a gain of approximately 0.8 percent (Figure 8). It fell to 63,484 on 15 September but recovered strongly towards month-end, reaching 66,754 on 30 September. The late recovery suggests renewed buying interest.

EcoSphere

FIGURE 8

NIKKEI 225 Index - Daily Close September 2026



Monthly high: 66,754 (30-Sep Sep) | Monthly low: 63,484 (15-Sep Sep) | Month-end close: 66,754

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/JPN/NIK/historical-prices>)

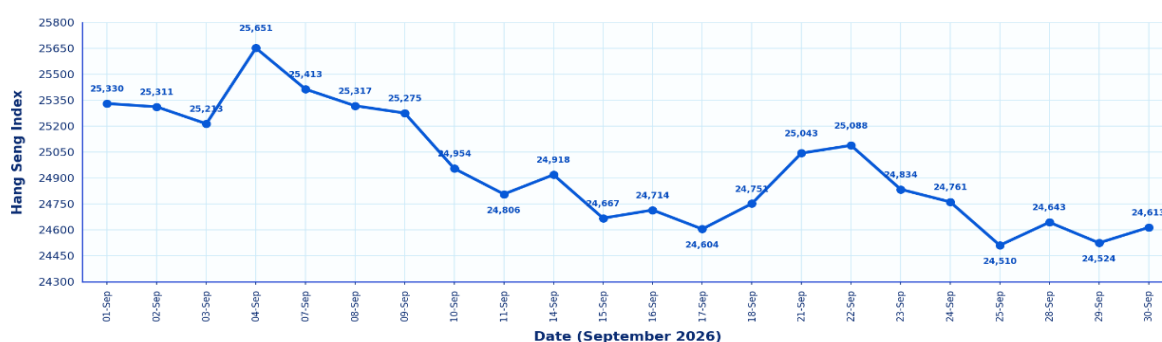
September 2026

A Weak September for the Hang Seng: The Hang Seng declined from 25,330 to 24,613, a fall of approximately 2.8 percent (Figure 9). After touching 25,651 on 4 September, the index weakened and reached a monthly low of 24,510 on 25 September. The modest rebound thereafter did little to reverse the overall decline.

EcoSphere

FIGURE 9

Hang Seng Index - Daily Close September 2026



Monthly high: 25,651 (04-Sep Sep) | Monthly low: 24,510 (25-Sep Sep) | Month-end close: 24,613

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/HK/HSI/historical-prices>)

September 2026

Straits Times Index Records a Modest Decline: Singapore's FTSE Straits Times Index fell from 5,710 to 5,676, a decline of approximately 0.6 percent (Figure 10). It peaked at 5,802 on 4 September and subsequently fluctuated within a narrower range. Its relatively small month-end decline suggests greater stability than that observed in several other regional markets, although the downward gap between its early-month high and closing level remained substantial.

EcoSphere

FIGURE 10

FTSE Straits Times Index - Daily Close September 2026



Monthly high: 5,802 (04 Sep) | Monthly low: 5,635 (16 Sep) | Month-end close: 5,676

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/SG/STI/historical-prices>)

September 2026

KOSPI Ends Almost Unchanged After Sharp Swings: The KOSPI Composite edged up from 6,836 to 6,838, virtually unchanged over the month (Figure 11). However, this stability in the opening-to-closing comparison masks considerable volatility: the index fell to 6,563 on 2 September before rising to 7,081 on 23 September. The reversal towards month-end highlights the importance of distinguishing between net performance and intra-month fluctuations. Concerns about leveraged technology investments and market concentration, reported by the *Wall Street Journal*, provide relevant context for interpreting this volatility.

EcoSphere

FIGURE 11

KOSPI Composite Index - Daily Close September 2026



Monthly high: 7,081 (23 Sep) | Monthly low: 6,563 (02 Sep) | Month-end close: 6,838

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/KR/SEU/historical-prices>)

September 2026

TAIEX Benefits from Strong Late-Month Momentum: Taiwan's TAIEX rose from 46,949 to 47,940, an increase of approximately 2.1 percent (Figure 12). After falling to 45,511 on 15 September, the index recovered strongly and reached a high of 48,157 on 23 September. Its subsequent consolidation left it well above the opening level. This performance underscores the relative strength of Taiwan's market during a month in which several other Asian benchmarks declined.

EcoSphere

FIGURE 12

Taiwan TAIEX Index - Daily Close September 2026

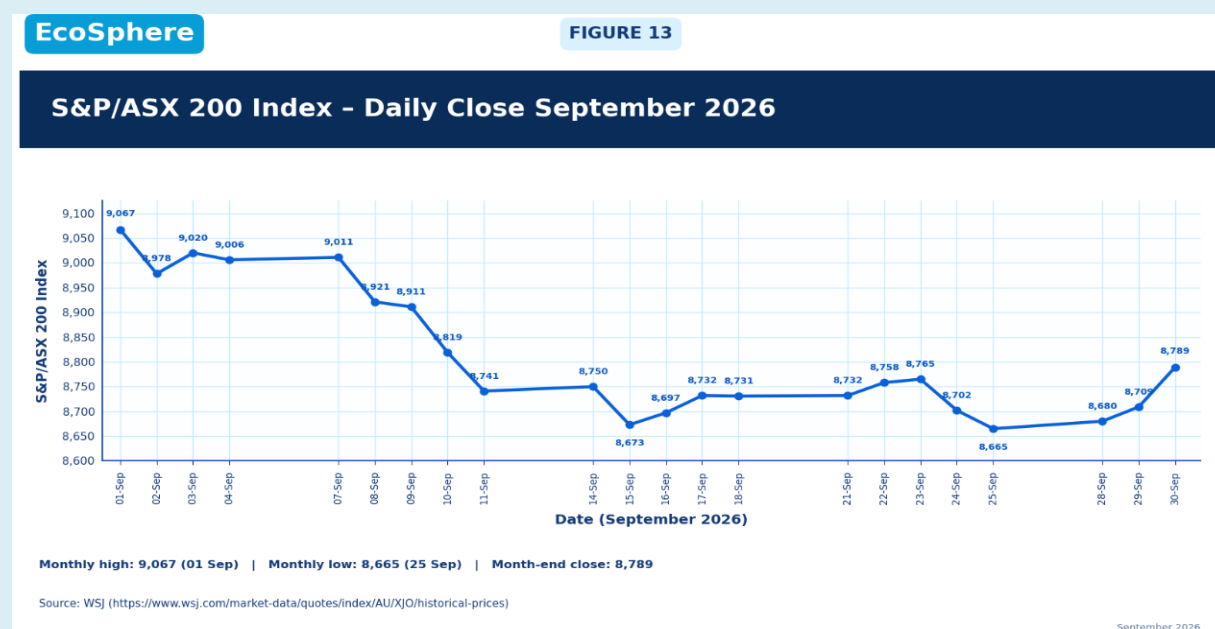


Monthly high: 48,157 (23 Sep) | Monthly low: 45,511 (15 Sep) | Month-end close: 47,940

Source: WSJ (<https://www.wsj.com/market-data/quotes/index/TW/Y9999/historical-prices>)

September 2026

ASX 200 Retreats Despite a Late Recovery: The S&P/ASX 200 declined from 9,067 to 8,789, a fall of approximately 3.1 percent (Figure 13). The index recorded its high on 1 September and weakened during the first half of the month, reaching a low of 8,665 on 25 September. A modest recovery followed, but it did not reverse the overall decline. Australia therefore underperformed Taiwan and Japan in this comparison.



Outlook: Interest Rates, Earnings and Energy Prices to Shape the Next Market Phase

The September performance suggests that global equity markets are entering the final quarter of 2026 with uneven momentum. Technology-related shares may continue to benefit from earnings growth and investment in artificial intelligence, but reliance on a relatively narrow group of companies creates risks if valuations become detached from underlying earnings. *The Wall Street Journal* has highlighted both the support provided by major technology companies and the vulnerability associated with rising interest rates and a less broad-based market rally.

Three factors warrant close attention. First, monetary policy and bond yields will remain central to equity valuations: further tightening or persistently elevated yields could pressure growth stocks as well as more rate-sensitive sectors. Second, energy prices and geopolitical developments will influence inflation expectations, production costs and consumer demand.

Third, corporate earnings and market breadth will determine whether the strength of technology shares can spread to industrial, financial and consumer sectors.

For investors, September's experience reinforces the importance of looking beyond headline index movements. The NASDAQ and TAIEX gains contrasted with declines in the Dow, European indices and several Asia-Pacific markets. This divergence suggests that sector composition, earnings visibility and sensitivity to interest rates may remain decisive influences on returns. The immediate outlook is therefore best characterised as cautiously uncertain: opportunities remain, but sustained market gains will depend on stronger earnings participation and greater clarity on inflation, energy prices and monetary policy.



Bottomline

Global equity markets delivered a divergent performance in September 2026, as technology-led resilience in the NASDAQ and Taiwan TAIEX contrasted with widespread losses across traditional US, European and several Asia-Pacific benchmarks, leaving the outlook dependent on interest-rate trajectories, inflation risks, energy prices and the sustainability of corporate earnings growth.

COMMODITY MARKETS

GLOBAL COMMODITIES AT A CROSSROADS: ENERGY TURMOIL, RISING FOOD PRICES AND WEAKENING METALS

Global commodity markets during September 2026 experienced high volatility and a stark divergence between sectors. A severe energy crisis driven by West Asia geopolitical shocks and weather disruptions pushed energy and food indices sharply higher, while precious and industrial metals largely bucked the trend by sliding downward.

According to World Bank data⁵, the global energy price index surged by 25.7 percent in September, while the non-energy index managed a modest 1.3 percent increase.

Energy Markets: A Massive Surge

The energy sector was the primary driver of global commodity volatility, triggered by escalated military tensions in the Persian Gulf and fresh Houthi drone and rocket attacks on oil installations in Saudi Arabia.

Crude Oil: Brent Crude futures skyrocketed, posting a 14.0 percent gain for the month according to Morgans Financial Market Update⁶. Prices repeatedly crossed the \$100 to \$108 per barrel range due to anxieties surrounding prolonged maritime blocks in the Strait of Hormuz.

Natural Gas: Global natural gas indexes jumped 15.3 percent, compounding input cost stress for utilities and manufacturing industries worldwide.

Agriculture & Food: Near Four-Year Highs: Climate shocks, shipping delays, and skyrocketing diesel costs drove up planting and harvesting expenses, lifting the FAO Food

⁵ <https://www.worldbank.org/en/research/commodity-markets>

⁶ <https://morgans.com.au/news/macro-monthly-market-a-worldly-lens-september-2026>

Price Index⁷ by 1.5 percent month-on-month to its highest level in nearly four years. **Grains & Oilseeds:** Geopolitical disruptions to Black Sea export routes pushed wheat prices up by 6 percent. Erratically dry weather and extreme heat slashed US corn harvest forecasts by 7 percent, driving corn futures past a 3-year high of \$5.00 a bushel. Soybeans also jumped 7 percent to nearly \$13 per bushel.

Offsets: The gains in grains, sugar, and vegetable oils were only partially offset by minor price pullbacks in global meat and dairy markets.

Precious Metals: Strong Inflows, Falling Prices

Despite massive physical demand, precious metals faced severe macroeconomic pressure from a surging US Dollar and climbing US Treasury yields.

Gold: Spot gold prices fell 8.5 percent over the month to settle near \$4,157–\$4,176 per ounce. However, this price drop triggered an unprecedented wave of safe-haven accumulation, with global gold ETFs attracting a massive \$10 billion in inflows during September alone.

Silver: Suffered an even steeper correction, plunging 9.19 percent to close the month at its lowest monthly benchmark of \$60.407 an ounce.

Industrial Metals: Broadly Stable but Constrained

Base metals remained relatively flat overall (+0.4 percent), balancing supply shocks against macroeconomic fears.

Copper & Aluminium: Copper slipped by a marginal 0.52 percent to \$6.559 a pound, supported by structural clean-energy demand despite Federal Reserve interest rate pressures. Aluminium markets faced extreme regional tight spots, as production cuts at major refineries in Brazil and European power limits forced global buyers to rely heavily on record production out of China.

⁷ <https://www.fao.org/newsroom/detail/fao-food-price-index-rises-in-september-amid-weather-concerns-and-transport-disruptions/en>

Lithium: Maintained a downward bias due to near-term oversupply driven by renewed mining output from Australia.

DIVERGING COMMODITY TRENDS IN INDIA: GEOPOLITICAL SHOCKS, BULLION VOLATILITY AND FIRM AGRICULTURAL PRICES

Indian commodity markets experienced starkly diverging trends across exchanges in September 2026. Trading on the Multi Commodity Exchange (MCX) surged to high volumes, driven primarily by severe global geopolitical escalations, whereas the National Commodity & Derivatives Exchange (NCDEX) navigated seasonal monsoon patterns and regulatory dynamics affecting agricultural volumes.

MCX (Energy and Metals): Geopolitical Heavyweight

The non-agricultural index was dominated by West Asia conflict escalations, which pushed energy indices rapidly higher.

Crude Oil & Natural Gas: MCX Crude Oil futures experienced a sharp rally, trading extensively between ₹8,312 and ₹9,292 per barrel. Reversing historical trends, a temporary threat of conflict expansion involving Iran drove local supply anxieties, forcing domestic prices higher and causing Brent crude to climb past **\$100 a barrel** globally.

Bullion (Gold & Silver): Mirroring global COMEX pullbacks, domestic precious metals faced a corrective posture due to strong US Dollar Index signals. MCX Gold futures stabilised towards the end of the month, trading in a range of ₹1,49,000–₹1,56,800 per 10 grams across different contract expiries.

Base Metals: Base metals remained relatively robust. MCX Zinc stood out as a prominent gainer, sustaining a "Buy on Dips" momentum supported by stable physical demand, targeting local resistances near ₹435–₹440 per kg.

NCDEX (Agricultural Commodities): Supply Disruptions & Firming Prices

Domestic agricultural commodities faced localized pressures from a deficient monsoon tail-end, driving up retail food inflation expectations.

Guar Complex: Guar Gum and Guar Seed entered September on incredibly firm ground. Strong global crude prices sustained industrial demand for fracking, holding NCDEX spot quotes for Guar Gum around ₹13,800/100 kg.

Pulses & Oilseeds: While certain Rabi pulses faced downward price realisations in local physical mandis, specialized import items and essential oilseeds like Soybean (Kota spot averaging ₹6,262/100 kg) held firm against seasonal arrivals.

Volume & Participation: Despite historical volume impacts from SEBI's suspension of select agricultural derivatives, Farmer Producer Organisations (FPOs) recorded massive transaction growth, accelerating institutional trade volume significantly onto the exchange

SECTION 4: RESEARCH DIGEST

SYNOPSIS OF RESEARCH PAPERS

FINANCIAL INNOVATION AND THE INTERNATIONAL MONETARY SYSTEM

Authors: Gordon Y. Liao, Eswar S. Prasad, and Tony Zhang

NBER Working Paper No. 35822, September 2026

National Bureau of Economic Research (NBER), Cambridge, MA, USA

This paper examines how financial innovation is reshaping the international monetary system (IMS), with particular emphasis on the persistence of US dollar dominance, the evolving competition among international currencies, and the implications for global financial stability. Although concerns about US macroeconomic policies, rising public debt, institutional uncertainty and the use of financial sanctions have encouraged countries to diversify away from the dollar, the paper finds that the dollar continues to dominate cross-border payments, foreign exchange transactions, international bank lending and debt securities. The euro and the Chinese renminbi are emerging as competitors within a fragmented second tier of currencies, but neither has established itself as a comprehensive alternative to the dollar.

The analysis explores the potential of financial innovations—including fast payment systems, central bank digital currencies (CBDCs), stablecoins, tokenisation of bank deposits and government securities, and financial technology platforms—to reduce transaction costs and facilitate cross-border capital flows. In principle, these innovations could weaken the network effects that sustain dominant currencies, reduce dependence on vehicle currencies and enable smaller economies to participate more effectively in international financial markets. However, the paper argues that technological progress may instead reinforce existing currency hierarchies, particularly when innovations make it easier to acquire and transfer dollar-denominated financial assets. It also highlights the growing role of private-sector foreign asset accumulation in emerging-market and developing economies, suggesting that reduced transaction frictions could significantly influence international portfolio allocation and currency use.

A central contribution of the paper is its theoretical analysis of dollar-backed payment stablecoins and their potential to strengthen the dollar's international position. By reducing the search and settlement costs associated with acquiring safe dollar assets, these instruments can encourage emerging-market firms to issue dollar-denominated debt, deepen the global market for US Treasury securities and reinforce the dollar's convenience and liquidity advantages. The same mechanism, however, creates opportunities for competing currencies if alternative jurisdictions develop equally efficient settlement technologies, deepen their safe-asset markets and strengthen their institutional credibility. The future configuration of the international monetary system will therefore depend not only on technological innovation but also on the quality of domestic policies, financial-market development and regulatory frameworks.

The paper identifies three possible trajectories for the international monetary system. The first involves further concentration of financial power around the dollar, offering the benefits of a common and highly liquid currency and access to the Federal Reserve's capacity to supply international dollar liquidity during crises. However, this arrangement exposes other economies to US monetary and financial conditions, potentially amplifying global financial cycles and existing macroeconomic imbalances. The second scenario envisages a more balanced multipolar system in which several trusted currencies are supported by deep financial markets, credible institutions and effective regulatory arrangements. This could promote reserve diversification, strengthen policy discipline and improve the distribution of financial power. The third scenario involves fragmented currency and financial markets, in which multiple currencies compete without sufficiently deep pools of safe assets or reliable lender-of-last-resort arrangements. The paper cautions that such fragmentation could increase settlement failures, destabilise capital flows and intensify financial stress.

Particular attention is given to the financial-stability implications of stablecoins and tokenised assets. Although fully reserved stablecoins backed by high-quality liquid assets can enhance resilience, inadequate reserves and uncertain redemption arrangements may generate run risks and transmit stress to underlying securities markets. The paper also highlights differences in regulatory approaches across jurisdictions, including the United States, the European Union, the United Kingdom and Japan. It argues that reserve requirements centred on high-quality

sovereign assets can provide stronger protection during crises than requirements that concentrate reserves in commercial bank deposits, which may themselves become vulnerable during episodes of funding stress. As international dollar intermediation increasingly shifts towards market-based and tokenised instruments, existing crisis-management arrangements—including central-bank swap lines—may need to be complemented by mechanisms such as market-maker-of-last-resort facilities, robust redemption safeguards and circuit breakers for tokenised markets.

The findings have important implications for emerging-market and developing economies, which may benefit from cheaper cross-border transactions and improved access to international capital while facing greater exposure to volatile capital flows, weaker monetary anchors and reduced effectiveness of capital controls. The paper concludes that neither continued dollar dominance nor a multipolar monetary system is inherently optimal under all circumstances. The principal challenge is to secure the efficiency and welfare gains from financial innovation without creating new sources of systemic fragility. Achieving this balance requires credible domestic macroeconomic policies, deeper and more liquid financial markets, effective regulation of stablecoins and tokenised assets, and stronger international regulatory cooperation. The paper ultimately argues that a stable and welfare-enhancing international monetary system will depend on whether policymakers can combine technological innovation with institutional credibility, adequate liquidity backstops and coordinated safeguards against cross-border financial risks.

The full paper can be accessed from: https://www.nber.org/system/files/working_papers/w35822/w35822.pdf

VERIFIABLE OFFICIAL STATISTICS: A BLOCKCHAIN-BASED APPROACH

Authors: Mario Rusev, Rafael Schmidt, Edward Lambe, Christian Schmieder and Glenn Philip Tice

BIS Working Papers No. 1374, September 2026

Bank for International Settlements

This paper examines how blockchain technology can strengthen the authenticity, integrity and verifiability of official statistics disseminated through the Statistical Data and Metadata (SDMx) standard. Recognising that trust in official data is fundamental to evidence-based policymaking, financial stability analysis and public accountability, the paper addresses a critical limitation of existing statistical dissemination systems: although SDMx facilitates standardised data exchange, it does not natively provide cryptographic mechanisms to establish data provenance and detect unauthorised modifications. The proposed approach combines blockchain-based verification with established statistical standards to enable independent verification of published datasets without disrupting existing dissemination workflows.

The paper presents a proof of concept implemented on the XRP Ledger (XRPL) and makes five principal contributions. First, it develops an SDMx-native canonicalisation and hashing pipeline that generates cryptographic hashes for both complete files and individual statistical series. Second, it introduces a domain-separated Merkle aggregation mechanism for securely combining multiple fingerprints into a single cryptographic root, enabling datasets to be anchored in batches while preventing ambiguities associated with naive Merkle implementations. Third, it creates a self-contained, identity-bound verification artefact embedded within the SDMx message. This artefact incorporates the ordered Merkle leaves and a W3C Verifiable Credential signed by the publisher's identity key, which is cryptographically linked to the publisher's XRPL address through an on-chain attestation registry. Consequently, data consumers can independently reconstruct the anchored root, verify the integrity of the dataset and establish the publisher's identity using the published file and a single ledger lookup. Fourth, the paper provides an open-source XRPL-based reference implementation. Fifth, it develops an economic cost model that captures the trade-offs between batch size, publication

latency, transaction fees, storage and processing costs, and derives an economically optimal batch size, including an extension for datasets with different urgency requirements.

The proposed system addresses the practical requirements of statistical authorities, central banks, international organisations and other public-sector institutions that exchange authoritative data across organisational and national boundaries. By maintaining compatibility with SDMX, it offers a means of adding cryptographic integrity guarantees and tamper-evident audit trails to existing statistical infrastructure. The decentralised verification mechanism reduces dependence on the publisher's backend and enables third parties to establish whether a dataset remains unchanged and whether it can be attributed to an authenticated publisher. These capabilities have potential applications in regulatory reporting, inter-agency collaboration, cross-border statistical exchange and the development of standardised verification protocols for multilateral data-sharing arrangements.

Performance measurements from the prototype demonstrate median publication latency of approximately three to five seconds and verification latency of one to two seconds under controlled test conditions. The architecture requires a single on-chain transaction for each anchored batch, irrespective of the number of datasets included, while verification scales linearly with the size of the data payload, with logarithmic cryptographic overhead. The associated cost model provides a framework for balancing transaction costs against publication delays, helping statistical organisations determine suitable batching strategies for different publication frequencies and operational priorities.

The paper also considers the broader relevance of cryptographically verifiable statistics in an environment increasingly shaped by artificial intelligence and automated data processing. By making data provenance and integrity independently verifiable, the proposed framework can strengthen the reliability and reproducibility of statistical information consumed by analytical systems and AI agents. Its format-agnostic design also creates opportunities for extension beyond SDMX to other structured statistical and regulatory formats. Potential future developments include zero-knowledge proofs for privacy-preserving verification, cross-chain

anchoring, integration with decentralised data oracles, enhanced compliance automation and enterprise deployment across statistical institutions.

The paper concludes that blockchain can provide a practical and cost-effective complement to established statistical standards when applied in a targeted, interoperable and standards-aware manner. Rather than replacing existing dissemination systems, the proposed approach embeds cryptographic accountability within them, enabling independent verification of data integrity and publisher identity. By combining SDMX-native fingerprinting, secure batch anchoring, verifiable credentials and an explicit cost optimisation framework, the study establishes a foundation for more transparent, reproducible and trustworthy official statistics, while supporting the wider adoption of verifiable data exchange across public institutions and digital information ecosystems.

The full paper can be accessed from:

https://www.bis.org/publications/working-paper-1374-verifiable-official-statistics-blockchain-based-approach_1.pdf

BOOKSHELF CHRONICLES

EVERYTHING ALL AT ONCE: INDIA AND THE SIX SIMULTANEOUS GLOBAL TRANSITIONS

Author: Rajiv Kumar and Ishan Joshi

Publisher: Rupa Publications India

Year of Publication: 2025

In *Everything All at Once*, Rajiv Kumar and Ishan Joshi offer a timely and thought-provoking examination of the six major global transitions reshaping the international order—geopolitical, geoeconomic, technological, environmental, geographical and ideological. The central argument is that these transformations are unfolding simultaneously, creating unprecedented uncertainty but also opening new opportunities for India to strengthen its global position and accelerate its development.

The book's principal strength lies in its ability to connect developments that are often examined in isolation. The changing balance of global power, the relative decline of the US-led order, China's growing influence, technological disruption, climate change and the emergence of the Global South are presented as interconnected forces demanding a coherent national response. The authors argue that India cannot rely on incremental policy adjustments or business-as-usual approaches if it aspires to become a developed nation. Instead, it must adopt a flexible, forward-looking strategy that combines economic ambition with institutional reform, technological preparedness, environmental sustainability and social inclusion.

Particularly significant is the book's emphasis on India's strategic autonomy and its capacity to shape, rather than merely respond to, global transitions. The proposal for a "Coalition of the Willing" among countries of the Global South reflects the authors' conviction that collective action can help address shared challenges, including climate change, technological transformation and geopolitical uncertainty. Their broader perspective also invites a reconsideration of development priorities, encouraging policymakers to look beyond

conventional measures of economic growth and pay greater attention to welfare, equity and human development.

The book's wide-ranging scope is both an asset and a challenge. While its integrated framework helps readers appreciate the complexity of contemporary global change, the breadth of the subject inevitably leaves some policy choices open to further examination, particularly regarding implementation, institutional capacity and the management of competing domestic priorities. Nevertheless, this does not diminish the value of its central proposition: India's future will depend on its ability to anticipate change, make difficult policy choices and build effective institutions.

Overall, *Everything All at Once* is a valuable contribution to contemporary debates on India's economic transformation, foreign policy and long-term development strategy. It will be particularly useful to policymakers, researchers, business leaders, students of international affairs and readers interested in India's evolving role in the global order. The book ultimately offers both a diagnosis of a world in flux and a call for India to convert uncertainty into strategic opportunity.

SECTION 5: CLIMATE CHANGE

CLIMATE POLICY

LIMITING CLIMATE OVERSHOOT: THE ECONOMIC COST OF CROSSING 1.5°C

The global climate debate is entering a fundamentally different phase. For more than a decade, the central objective of international climate policy has been to limit global warming to 1.5°C above pre-industrial levels. The latest United Nations Environment Programme (UNEP) report, *Limiting Overshoot: Navigating Exceedance of 1.5°C and Pathways Towards Return*, argues that the world is now likely to cross this threshold in the coming years. The report, however, does not interpret this as a reason to abandon the 1.5°C objective. Instead, it reframes the challenge: how high will warming rise, how long will the world remain above 1.5°C, what impacts will accumulate during that period, and can warming eventually be brought back below the threshold?

This shift from avoiding overshoot to limiting and reversing overshoot has profound economic implications. Climate change is no longer simply an environmental externality requiring long-term mitigation. It increasingly represents a macroeconomic risk affecting productivity, infrastructure, agriculture, food and water security, public finances, insurance markets, investment decisions and financial stability.

From a Temperature Target to an Economic Constraint

UNEP's central message is that there is no benign overshoot pathway. Even if global temperatures subsequently decline, the period above 1.5°C would impose additional risks and damages, some of which could be irreversible. The report notes that even an optimistic scenario based on full implementation of current national climate plans and additional net-zero commitments results in an expected peak warming of around 1.8°C.

The economic significance lies not simply in the difference between 1.5°C and 1.8°C, but in the cumulative consequences of higher temperatures and longer exposure. Every additional fraction of a degree raises the probability and intensity of climate hazards. The report identifies

rising risks to food and water security, infrastructure, human health, cities and ecosystems, alongside higher energy demand, consumer costs and stress on insurance and financial systems.

Climate risk therefore increasingly becomes a supply-side constraint on economic growth. Extreme heat can reduce labour productivity; water stress can constrain agriculture and industrial activity; damage to infrastructure can disrupt production and logistics; and ecosystem degradation can weaken natural services that support economic activity. These effects can occur simultaneously and reinforce one another.

Agriculture and Food Security: A Direct Growth Channel

Agriculture is among the sectors most exposed to an overshoot world. Changes in temperature, precipitation and water availability can affect crop yields, livestock, food quality and rural livelihoods. The consequences extend beyond agriculture because food-price shocks affect household purchasing power, inflation and monetary policy.

UNEP highlights the possibility of significant deterioration in global food production in the absence of effective adaptation. Its assessment cites projections of up to a 14 percent decline in global food production by 2050 under conditions without effective adaptation. The burden would be particularly significant for low-income households and developing regions.

The interaction between food security and climate mitigation creates another policy challenge. Carbon dioxide removal, particularly land-intensive approaches, can compete with agriculture for land and water. The report therefore stresses that mitigation strategies must be designed alongside food-security objectives rather than in isolation.

For emerging economies, this has an important macroeconomic implication. Climate-related agricultural shocks can simultaneously affect rural incomes, food inflation, fiscal support requirements, external trade and overall demand. Adaptation investment in irrigation, resilient crop varieties, agricultural technology, climate information and water management therefore becomes an element of economic resilience rather than merely environmental expenditure.

Infrastructure: From Efficiency to Resilience

The infrastructure implications of overshoot are equally significant. Roads, railways, power systems, water networks, ports, housing and urban infrastructure are long-lived assets. Decisions made today can therefore lock in either resilience or vulnerability for decades.

UNEP warns that infrastructure designed using historical climate conditions may increasingly operate beyond its original design parameters. During peak warming, extreme events may become persistent or overlapping, increasing the probability of cascading failures across energy, water, transport, communications and healthcare systems.

This changes the economics of infrastructure investment. The objective can no longer be simply to maximise efficiency under historical conditions. Robustness, flexibility and redundancy acquire economic value. Stress-testing infrastructure against a range of future climate conditions becomes essential.

This also creates an important investment opportunity. Climate-resilient infrastructure can reduce future disruption while supporting current development needs. But UNEP cautions against maladaptation: large capital investments based on an assumption of climatic stability can create stranded assets and lock economies into inappropriate technologies or locations.

The Fiscal and Financial Stability Dimension

Perhaps one of the less appreciated consequences of climate overshoot is its interaction with public finance and financial stability. Climate disasters can simultaneously reduce government revenues and increase expenditure on reconstruction, social protection, health and infrastructure. For countries already carrying high public debt, repeated climate shocks can weaken fiscal space precisely when additional investment is required.

UNEP highlights growing stress on insurance and financial systems as climate risks intensify. Declining insurability of infrastructure assets, combined with rising sovereign debt, could constrain investment in resilience and threaten the economic viability of infrastructure, housing and utilities.

This suggests that climate adaptation needs to be integrated more systematically into fiscal policy, financial regulation and investment planning. Public investment appraisal may increasingly need to incorporate climate-adjusted risk rather than relying exclusively on historical probabilities.

Insurance markets could become an important transmission mechanism. As physical risks rise, insurance premiums may increase or coverage may become unavailable in particularly exposed locations. The resulting protection gap could shift risks back to households, businesses and governments, increasing fiscal liabilities.

Mitigation and Adaptation Are Complementary Investments

One of UNEP's most important conclusions is that mitigation and adaptation cannot be treated as sequential policies. Both must advance simultaneously throughout the overshoot pathway. The report describes three broad phases: immediate action to slow warming, a period of coping and containment around peak warming, and longer-term resilience during temperature decline.

This has major implications for investment allocation. Rapid decarbonisation remains the most effective way to reduce the eventual scale of climate damage. UNEP stresses the importance of deep reductions in carbon dioxide, methane and other greenhouse gases. At the same time, adaptation must protect people, productive assets and ecosystems against impacts that can no longer be avoided.

There are also substantial areas of complementarity. Energy-efficient buildings, resilient urban infrastructure, public transport, renewable energy systems and nature-based solutions can simultaneously reduce emissions and improve resilience. The economic objective should therefore increasingly be to identify investments that generate both mitigation and adaptation benefits.

Carbon Removal: Necessary but Not a Substitute for Emission Cuts

A return to 1.5°C after overshoot would require sustained net-negative CO₂ emissions. This makes carbon dioxide removal an important component of the long-term pathway. But UNEP strongly cautions against treating carbon removal as a substitute for rapid emissions reductions.

The report identifies both conventional approaches, such as afforestation and ecosystem restoration, and novel approaches such as direct air capture and storage and bioenergy with carbon capture and storage. However, carbon removal faces constraints relating to land, water, biodiversity, storage capacity, technological uncertainty, cost and governance. UNEP estimates that even ambitious carbon-removal deployment is unlikely to deliver a temperature reversal of more than a few tenths of a degree this century, reinforcing the priority of reducing emissions now.

The economic implication is straightforward: the longer emission reductions are delayed, the greater the future dependence on expensive and uncertain removal technologies.

The Development Challenge for Emerging Economies

The distribution of climate risks is highly unequal. Countries differ substantially in historical responsibility, exposure, fiscal capacity, technological capabilities and ability to finance adaptation. UNEP therefore places equity and justice at the centre of the overshoot challenge.

For developing economies, the policy challenge is especially complex. They must simultaneously expand infrastructure, raise living standards, create employment and improve access to energy while increasing resilience and reducing emissions. Climate finance, technology transfer and capacity-building consequently become important economic enablers, not merely instruments of international climate diplomacy.

UNEP also emphasises the need for stronger multilateral cooperation and substantially greater finance, technology transfer and capacity-building.

The Economic Logic of Acting Early

The central economic lesson from UNEP's assessment is that delay raises both physical and economic costs. Every fraction of a degree avoided reduces climate risks; every year by which overshoot is shortened preserves adaptation capacity and reduces irreversible damage.

The report captures this logic clearly: three challenges must be addressed simultaneously—reducing emissions while managing current impacts; limiting peak warming while managing

escalating risks; and sustaining temperature decline while continuing adaptation. The report stresses that these are not sequential stages; mitigation and adaptation remain interconnected throughout the pathway.

For policymakers and investors, this implies a shift from short-term cost minimisation to long-term risk-adjusted economic decision-making. Investments in clean energy, resilient infrastructure, climate-smart agriculture, water security, early-warning systems and ecosystem restoration should increasingly be viewed as productive investments that protect future economic capacity.

The prospect of overshoot narrows the policy space, but it does not eliminate it. UNEP's conclusion is therefore neither one of complacency nor fatalism. The world may have to navigate a warmer climate before temperatures can return below 1.5°C, but the magnitude and duration of that overshoot remain influenced by decisions taken today. Rapid emissions reductions, transformational adaptation, responsible carbon removal, stronger institutions and adequate climate finance can still reduce the economic and human costs.

Climate action is no longer only about preventing future environmental damage. It is also about preserving the productive capacity, fiscal resilience, financial stability and development opportunities of economies in an increasingly climate-constrained world.

(Source: UNEP. 2026. Limiting Overshoot

<https://wedocs.unep.org/items/156d074c-ab1d-4833-acf8-6343589ede9b>)

SYNOPSIS OF RESEARCH PAPERS/ REPORTS

GLOBAL TEMPERATURE AND GLOBAL MORTALITY

Authors: Adrien Bilal, Diego R. Känzig, and Krzysztof Lisiecki

NBER Working Paper No. 35832, September 2026

National Bureau of Economic Research (NBER), Cambridge, MA, USA

This paper examines the indirect mortality consequences of climate change, highlighting the critical role of global economic disruptions in translating temperature increases into adverse health outcomes. Using time-series variation in global mean temperature, the authors estimate that a permanent 1°C increase in global temperature raises annual mortality by 2.5 deaths per 1,000 individuals—substantially higher than the estimated 0.1 additional deaths per 1,000 attributable to local heat exposure alone. The findings suggest that conventional assessments focusing primarily on direct temperature-related health risks significantly underestimate the mortality burden of climate change.

The empirical analysis draws on a comprehensive climate–mortality dataset covering more than 100 countries and approximately 70 percent of the world’s population over 1960–2019. By exploiting plausibly exogenous global temperature shocks, the authors identify the dynamic effects of temperature changes on mortality while addressing potential confounding factors, reverse causality and concerns about external validity. The results indicate that mortality rises gradually following temperature shocks, with particularly pronounced effects among individuals aged 65 and older. Extensive robustness checks support the stability of the estimates across alternative specifications and country samples.

The paper investigates three potential mechanisms underlying the mortality effects: local heat and cold exposure, other extreme weather events, and income losses associated with global temperature changes. While direct exposure to heat and other extreme events explains part of the observed mortality increase, the dominant mechanism operates through macroeconomic disruptions. Combining external estimates of the impact of global temperature on economic

output with evidence linking income to mortality, the authors find that income losses account for approximately two-thirds of the aggregate mortality response. Larger effects in lower-income regions and countries with limited public healthcare expenditure further support the conclusion that economic vulnerability and access to healthcare are central to the relationship between climate change and mortality.

To assess the broader welfare implications, the authors incorporate their empirical findings into a neoclassical growth model that links mortality, economic activity and adaptation. The model accounts for both direct temperature-related mortality and indirect effects arising through output losses, while recognising the roles of private health expenditure and aggregate economic growth in reducing mortality risks. Under a scenario in which global temperatures rise by an additional 2°C above current levels by the end of the century, the model projects approximately six excess deaths per 1,000 individuals. The associated welfare losses are substantial, with mortality damages alone accounting for an estimated present-value loss of approximately 14 percent, rising to more than 40 percent when broader economic damages are included.

A central contribution of the paper is its reassessment of the Social Cost of Carbon (SCC). Under damage functions based on global temperature effects, the estimated SCC reaches approximately \$1,640 per tonne of CO₂, with mortality contributing around \$400 per tonne, or one-quarter of total climate damages. By contrast, estimates based primarily on local heat exposure yield a substantially lower SCC of approximately \$250 per tonne, with a mortality component of around \$40. These differences demonstrate the importance of incorporating indirect, macroeconomic pathways into climate damage assessments. The analysis also identifies substantial regional variation in domestic mortality costs, reflecting differences in population size and income levels.

The findings have important implications for climate policy and economic development. Although private adaptation through health expenditure has a limited effect, sustained economic growth reduces climate-related mortality through broader health and income spillovers. Economic adaptation therefore generates a double dividend by mitigating both output losses and associated mortality risks. The paper strengthens the case for ambitious

climate mitigation, including unilateral decarbonisation by populous or wealthy economies, and underscores the importance of policies that preserve economic growth, strengthen healthcare capacity and improve resilience to climate-related disruptions. Overall, it establishes that the mortality costs of climate change are not confined to direct environmental exposure but are transmitted substantially through interconnected global economic systems.

The full paper can be accessed from:

https://www.nber.org/system/files/working_papers/w35832/w35832.pdf

INDIA WATER DIGEST: SCALING INVESTMENT FOR A WATER-SECURE INDIA

Authors: Ekansha Khanduja, Sanjana Kadam, Edith Zheng, Don Mani Paul, Saiba Gupta, and Theresa Beltramo

Policy Brief, September 2026

Council on Energy, Environment and Water (CEEW), New Delhi, India and Asian Infrastructure Investment Bank (AIIB), Shanghai, China

India's long-term economic growth, fiscal resilience, and global competitiveness will increasingly depend on its ability to manage water resources sustainably and mobilise adequate financing for the sector. Although water is fundamental to agriculture, industry, energy production, urban development, and ecosystem services, its full economic value remains insufficiently reflected in policy, investment, and financing decisions. Intensifying water stress, compounded by climate change, groundwater depletion, deteriorating water quality, inefficient irrigation, and fragmented institutional responsibilities, threatens food security, economic productivity, public health, and climate resilience. These challenges also carry wider macroeconomic implications, including rising disaster-related losses, pressure on public finances, and potential sovereign credit risks.

India has made considerable progress through national programmes covering drinking water, sanitation, irrigation, groundwater management, river restoration, watershed development, and flood resilience. Initiatives such as the Jal Jeevan Mission, AMRUT, Namami Gange Programme, Swachh Bharat Mission, National Water Mission, and Pradhan Mantri Krishi

Sinchayee Yojana have expanded infrastructure and improved service delivery. Nevertheless, significant gaps persist in cost recovery, used-water treatment and reuse, integrated urban water management, institutional coordination, and the mobilisation of private capital. Weak revenue streams, limited creditworthiness, and perceived investment risks continue to constrain commercial financing, leaving the sector heavily dependent on public expenditure.

At the same time, substantial investment opportunities are emerging in used-water treatment and reuse, micro-irrigation, pumped-storage hydropower, climate-risk assessment, watershed restoration, and digital water infrastructure. Realising these opportunities requires a diversified financing architecture that combines public expenditure, development finance, domestic financial institutions, private capital, and performance-based incentives. Instruments such as blended finance, guarantees, resilience-linked finance, labelled bonds, and payments for ecosystem services can help reduce investment risks and channel capital towards economically and environmentally valuable projects.

The policy brief advances five recommendations: recognise water as a strategic economic asset and incorporate its full economic value into policy and investment decisions; strengthen the financial sustainability of water services through gradual, socially sensitive pricing and incentive reforms that protect vulnerable households; mainstream hybrid grey–green infrastructure by integrating engineered assets with restored natural systems; improve project bankability, utility finances, and revenue certainty to attract investment; and develop future environmental and water-finance markets while scaling proven financing mechanisms. By aligning governance, infrastructure planning, and financing with these priorities, India can strengthen water security, improve resource efficiency, enhance climate resilience, and support sustained economic growth and long-term prosperity.

The full paper can be accessed from:

<https://www.ceew.in/sites/default/files/ceew-india-water-digest-water-security-investment.pdf>



All issues of EcoSphere are available at <https://inspire-solutions.in/ecosphere/>

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