Timely and Topical Statistics for Agile Policy Making¹

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Good morning, Dr. Mahendra Dev, Chairman, EAC-PM, Dr. Saurabh Garg, Secretary, Ministry of Statistics and Programme Implementation (MoSPI), officers from MoSPI, fellow economists, and fellow policymakers. It is my privilege to be a part of this prerelease consultative workshop.

I would like to recognise the leadership of Dr. Saurabh Garg in bringing credibility, ownership, and, may I say, excitement, to the process of base revision of the key macroeconomic data series of India. I would also like to acknowledge the invaluable contributions of the experts, academics, and officials, many of whom are present here today, in this exercise. The data and statistics are public goods. In helping create the revised series, you all are performing an important public service.

Our statistical system has a long tradition of professionalism, transparency, and methodological rigour. Gross Domestic Product (GDP), Consumer Price Index (CPI), and Index of Industrial Production (IIP) are among the most widely used indicators for decision-making by governments, businesses, financial institutions, and households. Therefore, the base revision of these series is not merely a technical exercise, it is of foundational importance for the wider community. With the economy becoming more diversified and digital, with rising prosperity, demographic shifts, evolving consumer preferences, and deeper financial inclusion, our consumption and production baskets are changing rapidly. But that is not all.

Alongside, the ways in which we produce, market, distribute, and finance consumption and investment are evolving too. Global and domestic supply chains are realigning. Savings and investment habits of households are changing, as are the modes of financial intermediation. All of these have a bearing on what we construct and how we construct our key macro data series.

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In my remarks, I will briefly outline some of the initiatives we are taking at the Reserve Bank of India (RBI) in order to enhance our own data and statistical offerings, in view of these underlying shifts.

RBI's data offerings can be grouped into three categories.

First, as you know, the RBI curates, compiles and disseminates a vast amount of economic and financial data, at frequencies ranging from daily to annual. It is not just an important source, but at times the only source for comprehensive data on banking, the balance of payments, non-banking financial companies, state finances, municipal finances, and the finances of the Panchayati Raj institutions.

RBI disseminates these data promptly through press releases, its flagship publications, as well as through timely updates on its data portal, the Database on Indian Economy (DBIE).

Second, in addition to such 'hard data', the RBI conducts eight forward-looking surveys (four at quarterly and four at bi-monthly frequency) of households, corporates, banks, and professional forecasters, covering areas such as inflation expectations, consumer confidence, and sectoral outlooks.² These surveys provide early signals of shifts in economic activity and sentiments. They serve as inputs in the policy deliberations as well as meet the needs of the wider community, even before the 'hard' statistics become available.

Finally, as a part of its mandate to conduct monetary policy, which under the flexible inflation targeting regime (FIT), is forward-looking, RBI prepares and releases inflation and growth forecasts in its bi-monthly monetary policy announcements.³

Let me briefly describe some of our recent initiatives in each one of these offerings.

² These include i. Bank Lending Survey; ii. Industrial Outlook Survey of the Manufacturing Sector; iii. Inflation Expectations Survey of Households; iv. OBICUS on Manufacturing Sector; v. Rural Consumer Confidence Survey; vi. Services and Infrastructure Outlook Survey; vii. Survey of Professional Forecasters on Macroeconomic Indicators; and viii. Urban Consumer Confidence Survey.

³ The Reserve Bank also conducts a <u>bi-monthly Survey of Professional Forecasters</u> to capture the assessments and expectations of economists and industry experts on major economic parameters such as GDP growth, inflation, and external-sector developments including exports and imports.

Recent Initiatives Pertaining to the 'Hard' Data published by the RBI

(i) The RBI compiles a large body of administrative and regulatory-reporting data that it receives directly from regulated and other entities. These include information ranging from Basic Statistical Returns, supervisory returns, liquidity and capital adequacy metrics, non-performing assets (NPAs), to high-frequency payments data such as UPI, NEFT, and RTGS transactions. In recent years, as the demand for timely, granular, and user-friendly data has increased, the RBI has intensified its efforts to modernise its data dissemination systems, expand coverage, and enhance the user experience through the adoption of advanced technologies.

The Database on Indian Economy, was launched in 2004 as the RBI's unified data dissemination platform. Over time, the DBIE has undergone continuous enhancements in coverage, functionality, and accessibility. It now hosts more than 2,000 statistical tables, which contain over 20,000 individual data series spanning the real sector, financial markets, public finance, the external sector, banking statistics, surveys, and corporate performance. Since 2009, it has provided near-real-time updates of the Handbook of Statistics on the Indian Economy through the DBIE, ensuring that users receive the most current information.⁴

The efforts to make it savvier, user friendly and extensive are continuing on an ongoing basis. Planned enhancements include a redesign of the underlying data architecture, development of Application Programming Interfaces (APIs) for automatic retrieval, improved search and visualisation tools, and harmonised user experience across the portal, mobile app and future digital channels.

(ii) Data on Flow of Financial Resources and Outstanding Credit to Commercial Sector in India - The Indian financial system has traditionally been largely bank-dominated. Therefore, quite reasonably, bank credit growth has thus far been viewed as a key parameter to assess the flow of financial resources to the commercial sector and its implications for the growth outlook of the economy.

⁴ The interface has been progressively refined. In addition, RBIDATA, a mobile application, was launched in February 2025.

However, given the increasing role of non-bank sources of finance, an assessment of the broader spectrum of flow of financial resources to the commercial sector from banks and non-bank sources (including domestic and foreign) has become essential.

Against this backdrop, we have started to compile data on the total flow of financial resources to the commercial sector. The non-bank sources include issuances of equity, commercial paper, and corporate bonds by non-financial entities directly in the money and capital markets as well as credit to these entities from non-banking financial institutions. External commercial borrowings and foreign direct investments are additional sources of resources to the commercial sector. In fact, during 2024-25, just a little less than half (48.7 per cent) of total resources to the commercial sector were mobilised from non-bank sources.

Given the primacy of this information in assessing overall resource flow to economic activity, starting this month, we have started disseminating two tables, *namely*, 'Flow of Financial Resources to Commercial Sector in India', and 'Outstanding Credit to Commercial Sector in India' in the RBI Bulletin.⁵ These data will be updated and released in the RBI Bulletin on a monthly frequency from now on.

(iii) More timely and frequent Balance of Payments Data - Further, to facilitate the timely and more frequent availability of India's balance of payments (BoP) statistics, the time lag in the release of the quarterly BoP statistics has been brought down from 90 days to around 60 days beginning from Q1:2025-26.⁶ This was achieved by optimising the data reporting timelines and streamlining the internal processes.

Going ahead, we will endeavour to prepare and release the monthly BoP statistics (*albeit* at a slightly more aggregate-level and at a lag of approximately 40 days). To achieve this, the data processing timelines of various reporting entities are being expedited and streamlined, and further internal cohesion is being established.

format) was published in the <u>Handbook of Statistics on the Indian Economy 2024-25</u>.

⁵ An article titled '<u>Flow of Financial Resources to Commercial Sector in India during 2024-25</u>', including outstanding credit to the commercial sector in India for three financial years, *viz.*, 2022-23, 2023-24 and 2024-25, was published in the September 2025 issue of the RBI Bulletin. Annual data on 'Flow of Financial Resources to Commercial Sector in India' for the period 2019-20 to 2024-25 (as per revised

⁶ This has been done without compromising the data coverage. The data are released at a disaggregated level as per the IMF's guidelines. Additionally, the IMF has revised the BoP compilation manual with the release of its 7th edition of the Integrated Balance of Payments and International Investment Position Manual (BPM7) [from its earlier BPM6] in March 2025. With these updates/developments, countries are encouraged to publish their BoP and national account statistics in line with the BPM7 framework.

Recent Initiatives in the RBI's Surveys

Furthermore, the RBI is upgrading its enterprise and household surveys. Enterprise surveys, such as Order Books, Inventories and Capacity Utilisation Survey (OBICUS), and the Industrial and Services Outlook surveys are being comprehensively reviewed, as their methodologies have remained largely unchanged for nearly a decade. We are planning for periodic updates to expand coverage, incorporate emerging sectors, refine methodologies, and enhance data quality.

Household surveys on inflation expectations and consumer confidence have been expanded progressively to more cities and rural areas over the last two years. However, their broad methodology has remained unchanged since 2018. These surveys are undergoing a fresh evaluation to address the gap between perceived and realised inflation, improve questionnaire design, and explore the inclusion of household panels.⁷

Recent Initiatives in our Inflation and Growth Forecasts

Under the FIT framework, our mandate is to maintain price stability while keeping in mind the objective of growth. Because monetary policy operates with well-recognised lags in transmission, decisions taken today affect output and inflation over several quarters.

For the Monetary Policy Committee (MPC) to fulfil its mandate effectively, it must therefore form a view not just of current conditions, but also of where the economy is likely to be in the near-term. Therefore, the bi-monthly MPC resolution provides forecasts of inflation and growth up to four quarters ahead.⁸

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⁷ The expected outcomes of enterprise surveys include (i) enhancing the coverage of surveys (ii) inclusion of emerging industry-groups like semiconductors, electric vehicles, Production Linked Incentive industry-groups in the sampling frame (iii) revising the methodology for aggregation of survey indicators (iv) modifying the survey questionnaires, (v) adopting more rigorous data quality checks among others. The expected outcomes for Household surveys include augmenting, rewording, and refining the semantics of the survey questionnaire, and possibility of inclusion of panel of households as part of survey design (based on several rounds of pilot survey) to better capture inflation expectations and economic sentiments of the households.

⁸ Except in February MPC resolution where 5 quarter ahead projection for inflation is provided along with the annual inflation projection for the next financial year. Additionally, the Reserve Bank of India Act and Monetary Policy Committee and Monetary Policy Process Regulations (2016) requires the RBI to present the projections of inflation and growth and the balance of risks, and an assessment of our projection performance in the Monetary Policy Report, released bi-annually in April and October.

Any forecasting exercise, by its very nature, has the risk of incurring forecast errors.

Such errors are a common feature around the world. These are generally larger when there are unpredictable shocks or events and are larger when one is predicting far ahead into the future. Research has shown that variance across forecasters tends to increase during periods of uncertainty. Inflation forecasting is equally challenging in India, if not more so, given the high and outdated weight of food in the CPI basket and the volatile nature of food prices.

Therefore, we take a multifaceted approach in forecasting inflation. This includes (i) using a suite of structural and time-series models, each providing a different lens on the economy; (ii) examining historical patterns in data to identify the underlying momentum in prices, and assess the base effects, which often shape near-term inflation dynamics; (iii) drawing upon a wide range of high-frequency indicators and surveys to capture real-time movements in demand, supply, and their implications on prices; (iv) seeking expert views to interpret turning points, structural breaks, and emerging risks that models alone may not be able to fully capture.

We are committed to using the state-of-the-art models and approaches to improve our forecast accuracy continuously. Thus, we have been assessing the appropriate time length that we should consider in our models, ensuring that we use more recent and relevant information than the distant past. We have also extended the scope of our stakeholder consultations, wherein besides, a detailed schedule of existing consultations, we have added a day-long workshop with a rotating set of professional forecasters so that we can learn from each other.

Besides minimising the forecast errors, what is equally important is to ensure that there is no systematic bias in the forecasts. As far as the inflation forecasts used in the MPC resolution are concerned, they are unbiased. The recently released Discussion Paper on Review of the Monetary Policy Framework shows that, the deviation of inflation and growth forecasts of the Monetary Policy Committee in India during the inflation-

10 Uncertainty and Disagreement among Professional Macroeconomic Forecasters, RBI Bulletin, November 2021.

⁹ Inflation Forecast Accuracy Under High Volatility: Cross-Country Evidence. Box I.1 in the Monetary Policy Report, April 2023, RBI.

targeting regime does not have any systematic directional bias from the realised inflation and growth.¹¹

Just as the inflation forecasts, the RBI uses a varied set of approaches to generate its growth projections. RBI relies on a balanced synthesis of robust econometric analysis, contemporary economic conditions, and forward-looking sectoral perspectives in preparing its projections. Among the technical models, projections are derived from a suite of approaches, rather than any single model. These include the benchmark indicator approach, a dynamic factor model, and various time series models for short-term growth projections.¹²

Before each Monetary Policy meeting, we hold nearly a dozen discussions with stakeholders from the real sector, financial markets, banks, NBFCs, analysts, and economists. These interactions provide us with valuable insights into their perspectives, outlooks, and forecasts, which inform our assessments. Our periodic interactions with the NSO are noteworthy, as they help in improving the RBI's methods.

Closing Remarks

The Indian economy has been a high growth economy that has exhibited both resilience and agility. Our statistical offerings, data and techniques must keep pace with an economy that is growing and evolving rapidly. Regularly updating and revising the existing data series, as well as constructing new ones, is essential to capture ongoing transformations. We all are looking forward to the revised series being prepared by MoSPI. I once again congratulate MoSPI for launching this consultative process and wish the workshop every success.

¹¹ <u>Annex 4: Inflation and Growth Projection Analysis. Review of Monetary Policy Framework - A Discussion Paper, RBI, August 2025.</u>

The use of multiple methods imparts robustness to RBI's projections. The Benchmark Indicator Approach, which relates to deriving sectoral contributions to GDP as recommended by the NSO, is used to nowcast GDP growth. The dynamic factor model relating to deriving condensed factors from a wide range of high frequency indicators is also used for nowcasting GDP growth. The time series models include ARIMAX model (ARIMA model including exogenous variables), and VARX model (vector autoregressive model including both endogenous and exogenous variables). ARIMAX and VARX models complement each other as the former focuses on a single target variable (GDP growth), while the latter jointly models multiple variables with mutual interactions.