Statistics and the Reserve Bank: Some Reflections*

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Deputy Governors, Dr. Subir Gokarn and Dr. K. C. Chakrabarty; distinguished statisticians and economists from the academia; Regional Director, Chandigarh; heads of select departments; Shri A. B. Chakraborty, Officer-in-Charge, Department of Statistics and Information Management (DSIM) and friends. I extend a warm welcome to you all to the Annual Conference 2012 of the Department of Statistics and Information Management (DSIM). For the first time, this conference is organised outside Reserve Bank of India (RBI), which provides an informal atmosphere for bonding and brainstorming needed for a research conference like this. This conference provides a platform to the officers of DSIM to present their research work before the experts and receive their feedback in order to make analysis more meaningful for policy and research. I thank the distinguished professors who have consented to discuss various papers presented by my colleagues in DSIM: Prof. Manoj Panda (CESS, Hyderabad), Prof. N. R. Bhanumurthy (NIPFP, New Delhi), Prof. Subrata Sarkar (IGIDR, Mumbai), Prof. Surinder Kumar (CRRID, Chandigarh), Prof. Mahajan (Punjab University, Chandigarh), Prof. Chetan Ghate (ISI Delhi), Prof. Shalabh (IIT Kanpur). You all bring together plenty of expertise and experience in the field of theory and practice of statistical research for economic policymaking which is of great value to us.

2. Statistics as a method of systematic learning from observation and experience has been practiced for centuries. India has a distinction of starting early in compilation of economic statistics for analysis and policymaking. Of late, however, there have been some concerns over the quality of economic statistics. This underscores the need for renewed focus and greater

- 3. Statistics is a public good as it is necessary for empowerment of citizens. Today most of the economic analysis has statistical foundation. Therefore, a solid statistical grounding and soiling the hands with data are basic prerequisites for the making of a good empirical economist. This is evident from the presence of many eminent economists amongst us in this conference. Actually, many renowned economists started their career as statisticians.
- 4. For example, Professor Milton Friedman, Nobel laureate and perhaps the most celebrated monetarist economist of the past century began his career as a statistician in Washington DC. Nobel laureate Simon Kuznets presented a more scientific approach to macroeconomic analysis by laying the foundations of national accounts statistics.
- 5. Central banking today is more challenging than ever and availability of reliable and timely information is the key to effective policymaking. As a central bank, we are responsible for generating various macrofinancial statistics collected both from primary and secondary sources in the process of implementing our policies. As the Reserve Bank boasts of one of the largest body of statisticians in the country, let me start with the role of statisticians in our organisation and highlight the achievements and challenges for DSIM.
- 6. The statistician in the Reserve Bank performs a multifarious role. DSIM provides statistical service by way of collection, compilation, analysis and dissemination of information relating to monetary, banking, corporate and external sectors. Another major area of focus is to provide inputs for policy formulation, conducting surveys and to carry out research activities in conformity with the needs of the Bank. Over the years, it has widened its scope and

organisational efforts for improving the quality of official statistics.

 $^{^{*}}$ Address by Shri Deepak Mohanty, Executive Director, Reserve Bank of India on March 17, 2012 at Chandigarh.

spectrum of data collection and dissemination. A key achievement in this regard is the improvement of the Bank's web-enabled Data Warehouse, popular among the researchers as Database on Indian Economy (DBIE). Today, various flagship data publications of the Bank like the Handbook of Statistics on Indian Economy originate from DBIE. A large amount of downloadable data is made available as a public good on near real time basis on the RBI website. I am happy to note that a more user-friendly version of DBIE is being released today.

- 7. Towards information management and dissemination, the system of data submission under the Online Return Filing System (ORFS) is further strengthened. At present, 40 returns of various departments like DBOD, DBS, FED, FMD, DPSS and MPD are submitted using this platform. At the same time, the Extensible Business Reporting Language (XBRL) project on the standardisation in the reporting of financial data has made considerable progress during the year with 42 returns taken up for implementation.
- 8. During the last one year, the Department has made considerable progress in identifying and filling data gaps. This includes implementation of Coordinated Direct Investment Survey (CDIS), extension of Master Office File (MOF) with population census and economic census, development of service price and production index for banking service, construction of house price index, collation of time series data on rural wages¹, and system of Loan Registration Numbers (LRNs) for ECBs under automatic route.
- The research activities of the Department encompass economic measurement, analysis, modelling and forecasting of economic growth, corporate performance inflation, and macroeconomic indicators and capturing economic agents' response to expected macro developments for forward-looking monetary policy formulation. Based on various univariate and multivariate models. growth and inflation projected path is presented in the form of fan charts. With inflation running higher than Reserve Bank's comfort level for the last two

years, the analysis of growth-inflation trade-off carried out by the Department was particularly useful for calibrating monetary policy actions.

- 10. The surveys conducted by the Department, particularly on macroeconomic changes, continue to provide valuable inputs for forward-looking monetary policy formulation. These include Industrial Outlook Survey (IOS), Order Books, Inventories and Capacity Utilisation Survey (OBICUS), Credit Conditions Survey (CrCS), Inflation Expectations Survey of Households (IESH), Consumer Confidence Survey (CCS) and Survey of Professional Forecasters (SPF). Key findings of most of these surveys are now published on the the Reserve Bank website simultaneously with the Macroeconomic and Monetary Developments every quarter. This has increased visibility of our survey output and has improved considerably the timeliness in dissemination of survey results. I am sure availability of these surveys now in public domain will spur research in these areas.
- 11. Understanding asset price developments has gained increasing importance, especially after the global financial crisis. In this context, the Department has made considerable progress in compiling House Price Index (HPI) based on registration price. The coverage has increased to nine cities now. Regional offices of DSIM are making important contribution towards this. Further, in order to complement this, the Department has introduced an Asset Price Monitoring System (APMS) based on housing loan account information as available with banks. Financial stability analysis is another important focus area of Reserve Bank. I am happy to note that the Department is making important contribution in this area by providing inputs such as financial stress indicators and asset prices.
- 12. Notwithstanding the achievements, let me share a few challenges for the Department going forward.

First, in the wake of financial crisis, quality and timely availability of statistics has become essential. The information and analytical requirements have become more diversified with added emphasis on financial stability. With structured monetary policy reviews becoming more frequent, the need for high

¹ Based on Labour Bureau data.

quality and frequent forward-looking information has increased. At the same time, application of statistics in solving operational issues has gained increasing importance. These developments have contributed to the demand for trained statisticians across the departments of the Bank. The Department, being the second largest pool of statisticians after Indian Statistical Institute (ISI) in the country, must rise to the occasion to serve the organisation better.

Second, as the central bank of the country, we have the responsibility of providing a sizable part of macro-financial statistics. Our publications have a standard that provides confidence to data users. Even for secondary data like price statistics, users prefer to consult the Reserve Bank publications. Therefore, the responsibility of maintaining data quality, timeliness and making data meaningful inevitably falls on DSIM. The Department should make greater use of technology to validate and improve data quality.

Third, there are some surveys on macroeconomic changes which have not progressed to our desired level of satisfaction. We have made a beginning on collection of data on trading sector and employment opportunities of fresh graduates. But we need to expedite and bring out these survey results soon. Another important indicator which provides early signs of overall economic activity is retail sales. A quarterly survey on retail sales across cities may be initiated with the help of regional offices.

Fourth, the Department is involved in various data gap and statistical measurement issues through its participation in various committees within and outside the Reserve Bank. One particular issue, that has received renewed attention across the globe in view of the complexity of inflation dynamics, is measurement of prices – commodity prices, consumer prices and asset prices. In recent years, there is greater institutional effort for improving measurement of prices in India. We have a new CPI (rural, urban and combined) now. The base of WPI was also revised. There is, however, considerable scope for improving the coverage and reporting of prices data besides research on measurement of prices and inflation, in terms of commodities/asset classes, stages of

production as well as various sectors and regions. Now that we have a more representative CPI series, institutional efforts need to be directed towards compilation of a Producers Price Index (PPI) as well as a Service Price Index.

Fifth, regional market intelligence or statistical intelligence plays a pivotal role in providing important inputs to monetary policy making. For example, the Bank of England (BoE) has established a regional statistical data collection system covering as many as 25 indicators including business conditions, price variation, labour and employment. These are different from the qualitative surveys. Information so collected is analysed and transformed into scores which forms an important input in the deliberations of the Monetary Policy Committee (MPC) of the BoE. India is a country with significant regional variations. Hence, regional inputs are valuable for policymaking. With its reorganised structure and envisaged wider presence of regional offices in major centres, the Department may put in a similar system of gathering relevant statistics and market intelligence, particularly in the area of prices and agricultural conditions to aid policy formulation at the national level.

Sixth, as a part of the on-going work with DCM on forecasting of demand for currency and coins, it is necessary to conduct focused regional surveys relating to (i) availability/shortages of coins/currency notes, (ii) regional practice and usage of currency notes, and (iii) estimation of counterfeit currency notes in the system. In addition, the regional offices of the Department could be directly involved in conducting surveys on financial inclusion, particularly assessment of financial inclusion outcomes in the villages following the outreach programme of the Bank.

Seventh, the Department has noticeable presence in a number of central office departments, like Department of External Investment and Operations (DEIO), Monetary Policy Department (MPD), Internal Debt Management Department (IDMD), Department of Information Technology (DIT), Department of Payment and Settlement Systems (DPSS), Department of Banking Supervision (DBS) and Financial Stability Unit (FSU). It is desirable that our officers in these

departments provide analytical inputs for policy and operational issues and come out with research papers. These papers could be presented in conferences and published eventually in the Reserve Bank Working Paper Series. This will make research more valuable in furthering our organisational objectives.

Eighth, focused and determined approach to research across various units, including the regional offices, should be pursued so that research agenda being adopted by the Department is accomplished in a timely manner. For data management and dissemination, technology must be harnessed to its fullest extent. There is also a need to strengthen the modelling and forecasting capabilities towards developing a full-fledged forecasting suite including

Dynamic Stochastic General Equilibrium (DSGE) models.

13. Finally, I congratulate the Department for its many achievements. However, there are challenges ahead, to some of which I have drawn your attention. As noted statistician John Tukey once observed, 'An approximate answer to the right problem is worth a good deal more than an exact answer to an approximate problem.' I see the demand for statistical skills and statistics in the Bank growing as we grapple with many questions. I hope the deliberations of this conference will bring academics and policymakers closer and lead to strengthening of our statistical analysis and system. I wish the conference all success.