Collection of Macro Financial Statistics for Central Banking in Reserve Bank of India – Evolution of Information Acquisition and Management Technology

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Statistical System in India – Brief Overview

- Central Statistical Office
- National Sample Survey Organisation
- Ministries and Directorates for specific purpose
- State Governments
- Regulatory Organisations (RBI, SEBI, IRDA etc.)
  - Regulators collect large amount of data for their own use
  - These data are also disseminated to public through publications and website
  - Data exchanged with other government / international agencies for functional and statistical requirements
- RBI disseminates macro-economic statistics, including those compiled by other statistical agencies, as part of “Database on Indian Economy” through website and “Handbook of Statistics on Indian Economy”
Role of the Reserve Bank of India in Statistical System

- Monetary and Financial Statistics
  - Assets and liabilities of banks, Money supply, reserve money, interest rates

- External Sector Statistics

- Financial Sector Stability

- National Accounts Statistics
  - Flow of fund accounts, finances of private corporate business sector, savings and investment estimates of corporate sector

- Surveys
  - Policy related and statistical (external, banking and corporate sectors)
Challenges to the Statistical System

- **Infrastructural Challenges**
  - Increasing data volume, declining staff, need to bring in discipline in timeliness and quality, technological transformation of infrastructure

- **Changing Regulatory Requirements**
  - Undergone considerable changes in response to Basel regulations (Bank for International Settlements) and international initiatives (such as Financial Standard Board)

- **Changing economic, business and technological environment**
  - Bank Branch Locator- a dynamic tool providing information on various aspects of bank branches
  - Includes detailed information like location, type of business on branches of commercial banks.

- **Addressing the Data Gaps**
  - Compliant with the IMF Special Data Dissemination Standard (SDDS)
  - Reports data on 12 core and 13 encouraged financial soundness indicators (FSI) for banks
Initiatives to Improve the Statistical Infrastructure

1. XBRL Project
2. Harmonisation of Statistics
3. Automated Data Flow
Taxonomy Structure

- Formula Linkbase (.xml)
- Reference Linkbase (.xml)
- Presentation Linkbase (.xml)
- Calculation Linkbase (.xml)
- Definition Linkbase (.xml)
- Taxonomy Schema File (.xsd)
- Label Linkbase (.xml)
- XBRL Instance Document (.xbrl,.xml)
XBRL Project-Highlights

- 97 returns have been developed so far
  - Financial accounts of the banks
  - Regulatory monitoring like, Cash Reserve Ratio, Statutory Liquidity Ratio, Unclaimed Deposits, Gap, Positions and Balances (GPB), Capital Adequacy (designed as per Basel II guidelines) etc.
  - Supervisory monitoring like Off-Site Monitoring and Surveillance System (OSMOS), Fraud Monitoring System
- Facilitates proper communication between the data seeker and data provider
- Enables data quality improvement in terms of consistency of data within a particular return and also with other related returns
- Enables automated data receipt monitoring and follow up with non-responding institutions.
Harmonisation of Statistics

- The core taxonomy created under XBRL project formed the basis of the harmonisation of statistics project.

- The keys step—Agreeing common definitions of the information required across returns owned by different departments of the Reserve Bank.

- The harmonisation project will now strengthen the XBRL system by
  - providing a base for defining all data elements required for XBRL taxonomy
  - deleting existing duplicate/creating new data elements, as the case may be.
Automated Data Flow

- An initiative taken by the Reserve Bank in order to ensure accurate and consistent flow of data to the Reserve Bank without any manual intervention.
- Mandates all banks to have a Centralised Data Repository (CDR), which forms the reporting database for all filings.
- The common end state is broken down into four distinct logical layers:
  - Data Acquisition: Capture data from various source systems
  - Data Integration & Storage: Extract and integrate the data from source systems with maximum granularity
  - Data Conversion: Converts the data stored in the CDR to the prescribed formats using pre-defined business rules.
  - Data Submission: A Single transmission channel channel which ensures file upload mechanism in a STP mode
Concluding Remarks

- Operational efficiency in data management
- Better monitoring, validation and improved data quality
- Consistent data with reduced reporting burden on the data providers
- Timely availability of data for various policy and operational requirements