Updating BIS statistical processes to face the challenges of the data revolution

Edward Lambe,

BIS

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1 This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.
Updating BIS statistical processes
to face the challenges of the data revolution

IFC High Level Meeting on Data Governance
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Agenda

- Facing the challenges of the data revolution
- Changing culture
  - Data Governance Principles
  - Data Stewards Mandate
- Changing technology
  - SDMX (Statistical Data and Metadata Exchange) Information Model
  - Future BIS processing architecture (MEDAL)
- Envisaging the BIS Data Portal
Facing the challenges of the data revolution

- The data revolution offers opportunities for the BIS, Central Banks, IO’s and NSI’s
  - Access to new data sources
    - 3 V’s of Big Data; Volume, Variety, Velocity
    - Internet of things (IOT)
  - Advances in Artificial Intelligence

- How should we adapt to exploit the opportunities presented?
  - Culture
  - Technology
Data Governance Principles

1. Data is an Asset
2. Data has an Owner
3. Data that has shared value should be shared
4. Data is accessible
5. Data quality is actively managed
6. Data is described with a common vocabulary and data dictionaries
7. Data security is actively managed
Data Stewards Mandate

Promotion of MED Data Governance Principles

Development & maintenance of the Data Catalog

Selection & implementation of IT tools

Management of Metadata

Promoting awareness of data assets
Credit Catalog

Credit to the non-financial sector
Credit-to-GDP gaps
Debt service ratios (DSR)
Joint External Debt Statistics
Credit risk
CCR
CVA

Institution-to-institution credit exposure data (l-l Credit data: Template A)
Institution-to-institution credit exposure data (l-l Credit data: Template B)
Institution-to-institution credit exposure data (l-l Credit data: Template C)
Institution-to-institution credit exposure data (l-l Credit data: Template D)
OTC derivatives outstanding - semiannual data
Dashboards
SDMX (Statistical Data and Metadata Exchange) Information Model

- Global standard for statistical data and metadata exchange (ISO/IS 17369)
- Facilitates data exchange between central banks and international organisations
- Provides an information model with which to model data, key elements being:
  - Data Flow
  - Data Structure Definition (DSD)
  - Code Lists
  - Constraints
  - Validation and Transformation Language (VTL)
- The BIS has many years of experience working with SDMX
Future BIS Statistical Processing Architecture (MEDAL)
Existing Statistical Dissemination Toolset

- 3 discrete offerings;
  - DBSOnline (Extranet and Internal audience / MED-IT)
  - Stats Explorer (Public / Web Communications)
  - Statistical DWH (Public / Web Communications)

- Lack of consistency in the user experience / design
- They don’t share a common architecture
Envisaging the BIS Data Portal (BIS 2025)

- The BIS Data Portal will be a single location for the dissemination of statistical outputs
- Serving the general public, extranet and internal customer needs
- Clean modern interface for BIS statistical output
- Leverage the power of the MEDAL platform
- Unified interface for the querying, downloading and sharing of data
- Enhanced search performance
- Personalisation of content;
  - Tagging content of interest
  - Saving of queries
  - Notification of new releases
Thank you