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

IFC High Level Meeting on Data Governance
Edward Lambe, 22nd Nov 2019
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

- Data is an Asset
- Data has an Owner
- Data that has shared value should be shared
- Data is accessible
- Data quality is actively managed
- Data is described with a common vocabulary and data dictionaries
- Data security is actively managed
Data Stewards Mandate

- Promotion of MED Data Governance Principles
- Selection & implementation of IT tools
- Development & maintenance of the Data Catalog
- Management of Metadata
- Promoting awareness of data assets
Data 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 (I-I Credit data: Template A)
Institution-to-institution credit exposure data (I-I Credit data: Template B)
Institution-to-institution credit exposure data (I-I Credit data: Template C)
Institution-to-institution credit exposure data (I-I 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