Governance and dissemination
ECB data for analysis and decision-making:
Data Governance and technology

9th IFC Conference
“Are post-crisis statistical initiatives completed?”

Basel, 31 August 2018
1. Our starting point

Exponentially increasing availability of data

Amount of data

Time

Financial crisis
Need for in depth analysis

Credit & loans
Money markets
Individual balance sheets
Supervisory data
Securities holdings

Evidence-based decision making

Macroeconomic statistics to analyse
- economic signals
- macroeconomic forecasts
- economic linkages

Micro data (in addition to macroeconomic statistics) to analyse
- timely and diverse economic signals
- risk concentration and distributional effects
- flexibly new questions
New challenges call for a holistic approach

To exploit the increasing availability of micro data challenges have to be addressed:

- Increasing volume and speed
- Heterogeneity of data
- Complexity of data
- Data confidentiality

Technology | Governance | Standardisation | Collaboration
DISC facilitates data usage, collaboration, automation

Macro data
- FAME

Micro data
- Credit & loans
- Securities
- Derivatives
- Money markets
- ...

Central, secure **data platform** to store, analyse and collaborate on large data volumes

- Secure infrastructure
- Analytical tools
- Data labs and workbench
- Metadata tools
- Data management
- Data factory

ECB data for analysis and decision-making
Strong ECB data governance ensures alignment

**Data Committee**

*Area heads from data producing/consuming BAs*

*Decide and steer …*
- data management strategy, policies and work
- data standardization
- data collection and access requests
- purchase and provision of market data

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**DG Statistics**

*Data integration team and others*

*Develop and provide…*
- data strategy, policies, standards
- shared data services pilot
- master data, single data dictionary, data inventory

*In addition to regular statistical production*

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**Data Steward Group**

*Experts from data producing/using BAs*

*Raise, discuss, contribute…*
- data related experiences, needs and issues of the BAs
- data strategy/policies/standards/management
- data inventory/single data dictionary
4. Standardisation

Standardisation for efficiency gains and integration

- **Global standardisation of identifiers**
  - Entity
  - product
  - transaction

- **Joint initiatives with European banks**
  - Banks’ Integrated Reporting Dictionary (BIRD)
  - Integrated Reporting Framework (IReF)

- **ECB Single Data Dictionary**

- **Reference data for entities and securities**
  - Register of Institutes and Affiliates Data (RIAD)
  - Centralised Securities Database (CSDB)
5. Collaboration

Shift in working culture to optimise data usage

Make data fit for use whilst protecting confidentiality

- Create transparency of data and data needs
- Make data access clear and efficient within legal boundaries
- Apply appropriate measures to protect data
- Adhere to clear rules for data usage and output control

Document guides, methodologies and code

- Use metadata and document methods and code to reproduce results
- Apply corporate standards for visualisation (Tableau user guide)

Create multidisciplinary teams and share knowledge

- Combine expertise from different fields e.g. economics, statistics, data science, legal, IT
- Define concrete projects to jointly analyse data for multiple purposes
- Exchange knowledge, code and output
- Provide quality feedback for data producers
- Learn new skills and experiment with e.g. machine learning, AI
Joint project to leverage expertise and data

High quality integrated security data on assets and liabilities of banks

- Economics
- Statistics
- Financial Stability
- IT

Joint team

Security data

- On-board all relevant data sets to DISC, optimise table structures
- Harmonise definitions and codes via SDD, comparable identifier, etc.
- Ensure secure access (Jumphost)
- Use DISC workbench for storing, distributing and analysing data
- Manage and collaborate on code (BitBucket)
- Use Tableau for data visualisation
- Interact with production teams to clarify quality issues
7. Time to conclude and ask questions

- The journey is going into the right direction
- Persistence and collaboration are required

Time for questions and comments