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Central bank statistics in response to the financial crisis: the ECB perspective

National Bank of the Republic of Macedonia
Skopje, 14 November 2016

The views expressed are those of the author and do not necessarily reflect those of the European Central Bank
“Policy-making and, indeed, decision-making are only as good as the information on which they are based”

Seventh ECB Statistics Conference, Frankfurt am Main, 15 October 2014

ECB President
Mario Draghi
Outline

1. Increased policy relevance of central bank statistics
2. ECB’s production of statistics as a team effort
3. Quality of statistics
4. Responding to challenges
   4.1 More micro-data
   4.2 Standardisation
   4.3 Integration
   4.4 Improving communication of ESCB statistics
Increased policy relevance of central bank statistics

Phase A - post Lehman Brothers – Sept 2008
- banks’ rescue, government guarantees

Phase B – May 2010
- Sovereign debt crisis and again banking crisis

Phase C - May 2012
- Banking Union announced


EU Financial Supervision
- ESAs/ESRB - Nov 2010

ECB’s banking supervision – Nov 2014

Single Resolution Mechanism – Jan 2015

How exposed are euro area investors?

Who holds GR, IE, PT government debt?

How big are EU financial inter-linkages?

How healthy are euro area banks?

Increased policy relevance of central bank statistics
The ECB data needs for monetary, micro-prudential and macro-prudential policies have expanded rapidly.

Increased policy relevance of central bank statistics
ECB’s monetary policy requires a vast amount of data

- Conventional monetary policy focused mostly on aggregates for the whole euro area
- Unconventional monetary policy measures to fight the crisis have required also the use of detailed data by country, sector, sub-sector and financial instruments
ECB and European Systemic Risk Board (ESRB) macro-prudential supervision need **detailed data on EU financial interlinkages**

### ESRB Risk Dashboard: objectives

- **RDB as a risk assessment tool** *(input to further systemic risk analysis)*
- **RDB as communication tool**

### Risk Categories

- Interlinkages and composite measures of systemic risk
- Macro risk
- Credit risk
- Funding and Liquidity
- Market risk
- Profitability and Solvency

**ESRB Risk Dashboard:**

**And also in SDW:**

Increased policy relevance of central bank statistics
ECB’s micro-prudential supervision of banks requires **detailed data on euro area banks and banking groups**

Supervisory data

- **Direct supervision**
  - Oversees the system
  - Joint Supervisory Teams
  - Horizontal divisions
  - Significant institutions

- **Indirect supervision**
  - National supervisors
  - Less significant institutions

**Increased policy relevance of central bank statistics**
ECB statistics are also:

- Used in EU policy-makers’ decisions (e.g. Macro-economic Imbalance Procedure scoreboard)
- Contributing to G-20 initiatives to close global data gaps
- Freely distributed as a public good
1. Increased policy relevance of central bank statistics

2. **ECB’s production of statistics as a team effort**

3. Quality of statistics

4. Responding to challenges

   4.1. More micro-data

   4.2. Standardisation

   4.3. Integration

   4.4. Improving communication of ESCB statistics
ECB is a big user and a big producer of statistics

- **European statistics by the ESCB**
  - Monetary and financial statistics
  - External statistics
  - Securities statistics
  - Quarterly euro area accounts
  - Other statistics

- Other statistics by the ESCB
  - Supervisory data

- European statistics produced by Eurostat and the national statistical offices (e.g. GDP, HICP, labour market and short-term business statistics)

- Principal Global Indicators (BIS, ECB, Eurostat, IMF, OECD, WB)

- Commercial data providers and market sources
Harmonisation and cross-country comparability are essential

- A network of National Central Banks / National (Supervisory) Competent Authorities:
  - Perform tasks in accordance with EU/ECB legal acts
  - Responsibility for meeting the ECB’s/SSM requirement
  - Collect data from reporting agents, other national statistical authorities, other national sources

- ECB:
  - Quality assurance, compilation and publication of euro area aggregates

- Shared tasks:
  - Conceptual/development work, development of legal/technical infrastructure (ECB in lead)
  - Participation in European/international statistical committees
ECB’s production of statistics as a team effort

Teamwork of two European statistical systems cooperating under separate legal frameworks

Treaty on the Functioning of the EU

Article 338.1 TFEU

European Statistical System Council Regulation 223/09

Regulations adopted by European Parliament and Council

Article 5 ESCB/ECB Statute

European System of Central Banks Council Regulation 2533/98

ECB legal acts adopted by the ECB Governing Council

Committee for Monetary, Financial & Balance of Payments Statistics

European Statistical Forum

www.ecb.europa.eu
ECB’s production of statistics as a team effort

International teamwork

- The ECB cooperates closely with Eurostat, the European Banking Authority, BIS, IMF, OECD, UN ...

- The ECB and Eurostat are members of the Inter-Agency Group on Economic and Financial Statistics (IAG)
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Quality of statistics in the ESCB

Quality frameworks for statistics

1. UN Fundamental Principles of Official Statistics
2. IMF DQAF
3. Principles governing International Statistical Activities
4. ECB Statistics Quality Framework
5. Code of Practice
6. IMF
7. ECB
8. UN
9. ECB
10. IMF
11. ECB
12. IMF
13. ECB
14. IMF
15. ECB

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<td>Mandate for data collection</td>
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<td>Adequacy of resources</td>
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<td>Quality commitment</td>
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<td>Statistical confidentiality</td>
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<td>Sound methodology</td>
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<td>Appropriate statistical procedures</td>
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<td>Non-excessive burden on respondents</td>
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<td>Coherence and compatibility</td>
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<td>Accessibility and clarity</td>
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Quality of statistics in the ESCB

Public commitment on European Statistics by ESCB

- Adhering to high quality standards = key factor in maintaining public trust in ECB statistics
- Takes into consideration internationally agreed quality standards
- Quality principles definitions fully aligned to those of ESS (i.e. Eurostat + NSIs)
  

ECB Statistics Quality Framework

- Quality reports:
  

Work programmes

- 2016 ESCB statistics:
  
- 2013-2016 STC Medium-term work programme:
  
Quality of statistics in the ESCB

- **Institutional environment**
  - + Principle 1: Professional independence
  - + Principle 2: Mandate for data collection
  - + Principle 3: Adequacy of resources
  - + Principle 4: Commitment to quality
  - + Principle 5: Statistical confidentiality
  - + Principle 6: Impartiality and objectivity

- **Statistical processes**
  - + Principle 7: Sound methodology
  - + Principle 8: Appropriate statistical procedures
  - + Principle 9: Minimisation of the reporting burden
  - + Principle 10: Cost-effectiveness

- **High output quality**
  - + Principle 11: Relevance
  - + Principle 12: Accuracy and reliability (including stability)
  - + Principle 13: Timeliness (including punctuality)
  - + Principle 14: Consistency and comparability
  - + Principle 15: Accessibility and clarity

**Quality reports**

**Auditing**

**Merits and Costs Procedure**
## Responding to challenges

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Responding to challenges

Increasing demands

- More detailed data
  - Country data
  - Micro-databases
  - Distributional data

Facing constraints

- Reporting burden
- Confidentiality
- Compiler’s resources
### More micro-data

#### Operation
- Centralised Securities Database (CSDB)
- Securities Holdings Statistics (SHS)
- Money Market Statistical Reporting (MMSR)
- Register of Institutions and Affiliates (RIAD)
- Individual banks’ balance sheet data
- Individual banks’ interest rate data
- Small and Medium Enterprises (SME) Access to Finance
- Eurosystem survey on household finance & consumption

#### Development
- Analytical granular credit and credit risk dataset (loan-by-loan)
- Securities Holding statistics for Large Banking Groups under ECB direct supervision (LBGs)
Money market statistical reporting (MMSR)

individual transactions relating to various segments of the money market

- **When?** started 1 April 2016
- **What?** daily operations on a transaction-by-transaction basis in four market segments: secured, unsecured, FX swaps and OIS
- **Who?** 52 largest banks in the euro area
- **Why?** information on the transmission mechanism of monetary policy decisions; provide information to market participants on market functioning
- **Legal basis?** ECB Regulation ECB/2014/48
Micro-data on a “security-by-security” basis

Centralised Securities Database (CSDB) - Who issues what?

Securities Holdings Statistics Database (SHSDB) - Who holds what?

Example:
Issuer A issues a security B which is held by Holder C at the amount of X EUR

<table>
<thead>
<tr>
<th>Issuer reference data</th>
<th>Instrument reference data</th>
<th>Holder reference data</th>
<th>Holding data</th>
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<td>Holding amount</td>
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<td>Price</td>
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Analytical Credit Dataset (AnaCredit)

Multipurpose set of harmonised granular data on credit and credit risk

- **When?** to be implemented in a stepwise approach; the first stage to be introduced in September 2018
- **What?** bank loans (and guarantees) to legal entities above €25,000 e.g. non-financial corporations (not households, at least in the first stage!)
- **Who?** all banks in the euro area
- **For whom?** central banking purposes e.g. monetary policy, research, risk management, macro-prudential supervision… and statistics
- **Legal basis?** ECB Regulation 2016/13
4 Responding to challenges

4.1 More micro-data

4.2 **Standardisation**

4.3 Integration

4.4 Improving communication of ESCB statistics
ECB statistics conform to the extent possible to and influence on international standards for macro statistics
ECB supports and contributes to develop standards for micro statistics

- **Legal Entity Identifier (LEI)**

- **Unique Trade and Product Identifier (UTI, UPI)**

- **Money Market Statistical Reporting (MMSR) is ISO 20022 standard compliant**
  - ISO approved *in January 2016* MMSR messages for being officially and globally recognised
## Responding to challenges

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Integration

Three key elements

**Banks’ Integrated Reporting Dictionary (BIRD)**
Common language with the industry
Logical description of data at the banks and transformation rules to produce existing reports

**ECB Single Data Dictionary (SDD)**
Common language within the ECB
Methodological and semantic integration of existing European reporting frameworks

**European Reporting Framework (ERF)**
“One report” replacing the multiple, overlapping reports
Vision: single and integrated ERF for the ECB and EBA (ITS)
The Role of BIRD, ERF and SDD

- **Banks**: Primary Data (Operational System) - Transformations by banks, Bank Integrated Reporting Dictionary (BIRD)
- **NCB/NCAs**: Reporting data warehouse - Transformations by banks, European Reporting Framework (ERF)
- **ECB**: Transformations defined by banks and authorities in close collaboration, ECB’s Single Data Dictionary (SDD)

Transformations defined by banks and NCBs/NCAs lead to Secondary Reports.
## Responding to challenges

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Improving communication of ESCB statistics

Strategy: multiple channels & user-friendly access

- ECB website
  - Press releases
  - Interactive graphics
  - Publications

- Statistical Data Warehouse

  - NEW!! - Insight to Euro area statistics

- ECB statistical tablet app
The Principal Global Indicators (PGI) dataset provides internationally comparable data for the Group of 20 economies (G-20) and economies with systemically important financial sectors that are not members of the G-20. The PGI dataset facilitates the monitoring of economic and financial developments for these jurisdictions.

Data by Indicator
- Real sector
- External sector
- Financial sector
- Fiscal sector
- Market sector

Data by Country
- Real sector
- External sector
- Financial sector
- Fiscal sector
- Market sector

Sectoral Transactions and Balance Sheets

National Data Sources

Metadata

Cross-Border Positions

Additional Data Sources

Data Charts

New on PGI: IAG reference document: Consolidation and corporate groups: an overview of methodological and practical issues
Thank you for your attention!

Any questions?