European Reporting Framework (ERF) - a possible solution to reporting challenges for banks

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Why new ways in data reporting?

- In all fields of statistics, **data reporting** requirements have **grown** significantly.
- They are getting more **granular** and **complex**.

- Traditionally, each body used to devise its **own approach to data collection**.
- This often leads to **redundant** data collection schemes and a **lack of data consistency**.
- Internal and external reporting often **diverge**.

- Need for **high-quality, comparable** and **timely data** on the one hand (**BCBS 239**) and **cost efficiency** on the other-hand motivate for

⇒ **New ways** in data reporting.
(Solo) Data requirements regarding loans granted to non-financial corporations (supervision) (1)

- Financial reporting (**FinRep**) solo (as of mid 2016) – loans and advances
  - Same loan is taken several times as input for different FinRep (**balance sheet**) templates
  - At maximum 3 **pre-defined** dimensions (of loans/borrowers) can be analysed simultaneously
  - Some characteristics are missing (e.g. currency, maturity)
  - Including own foreign branches (“home approach”)

- National supervisory reporting templates on a solo basis
  - **NGAAP** balance sheet statement
  - Several **risk** oriented templates → incl. dimensions not in the balance sheet statement
  - Same reporting principle as above

- **(National) Central Credit Register (CCR)**
  - On a borrower-by-borrower basis
  - Above a threshold of 350 tsd.
  - **Balance sheet** and risk/collateral information
Unconsolidated data requirements regarding loans granted to non-financial corporations (statistics) (2)

- ECB Monetary Financial Institutions (MFI) **Balance Sheet** Items (BSI)
  - Own foreign branches are not included („host approach“)
  - aggregated in different templates with at maximum three pre-defined dimensions
  - Dimensions/definitions are slightly different to supervision balance sheet items

- MFI **Interest Rates** (MIR)

- AnaCredit (Analytical Credit Datasets)
  - Detailed **Balance sheet** and risk/collateral information on a loan-by-loan basis
  - Above a certain threshold
  - **Planned:** as of beginning 2018 in three phases


⇒ Same loan could be collected with up to **seven** different reporting forms
GRISS\textsuperscript{1} - Overview of recommendations

- Coordination of reporting setters’ requirements
- Common methodology and concepts definition
  - Statistical Data Dictionary (SDD)
- Harmonisation of primary reporting
  - European Reporting Framework (ERF)
- Input approach
  - Banking Data Dictionary (BDD)
- Cross country harmonisation
- Cross domain integration
- Governance and management roles in the new system
- IT solutions
- Accounting issues

GRISS … Groupe de Réflexion on the integration of statistical and supervisory data
What is the ERF aimed to be?

- ESCB harmonised, consistent primary reporting scheme for most reporting requirements of ECB, and at a later stage SSM & EBA for banks
- Basis for harmonised production of required statistical and supervisory templates via unique transformation rules
- Best practice for collecting banks’ data for different purposes (multi use of data) → market standard

- Addressed directly to reporting agents and aimed at replacing existing reporting templates in the long run
- Developed to be applied by central banks in a unique way (with national flexibility concerning add-ons)
The Role of BDD, ERF and SDD

Overall reporting and transformation process

Primary data (Operational system)

Transformations defined by banks

Input layer

Transformations defined by banks

Output layer

NCBs/NSAs requirements

Transformations defined by NCBs/NSAs

Transformations defined by banks and authorities in close collaboration

BDD Banking Data Dictionary

ERF European Reporting Framework

Transformations defined by NCBs/NCAs and ECB in close collaboration

Secondary statistics and templates (BSI, FINREP,...)

Statistical Data Dictionary (SDD)
Planned stepwise introduction of the ERF

1) **Definition** of a first version of a harmonised “primary” reporting framework for NCBs’ data collection, covering BSI, MIR, SEC, SHS, AnaCredit, the needs of other statistics such as BOP and national accounts

2) **Investigate** possible ways for further integration of reporting schemes and new requirements, in particular, from the SSM …

3) … and EBA →

4) → Single and integrated European Reporting Framework (ERF), incorporating both EBA’s ITS and ECB’s reporting requirements

It is still too early to express a precise timing for the introduction of this framework
Main Advantages

- It fosters **efficient, less-redundant** data collection, a **consistent** interpretation of different statistics, an identical compilation process and the application of identical data quality methods.
- **Data quality** will improve through the use of harmonised concepts, business-friendly definitions and collection methods that are, as far as possible, free of redundancy.
- A common framework **eliminates the need to cross-check** individual reports published by one and the same reporting institution.
- A common framework increases the **analytical value** as it enables data users to drill down within the respective secondary statistics.
- Integrated and harmonized data production **reduces** the need for burdensome **ex-post reconciliation** and comparisons.
What challenges are we facing?

- Legal boundaries?
- Timeliness, Reporting Deadlines?
- Quality assurance?
- Optimal Design
- Reference data?
- Harmonised accounting standards?
- Differing definitions, concepts, classifications?

How much time to transmit data?
Peak loads?
National Flexibility?
Communication Channels?
Assurance of data consistency?
Revision policy?
Legal Entity Identifier (LEI)?
Harmonization of accounting standards instead of mapping
Conclusions

- An integrated data model has the **potential** to solve the problem of the “information bottleneck”
- It represents a **paradigm shift** in bank supervision and statistical **data remittance**
- It allows **greater reconciliation** between data collected for various purposes and **minimises redundant** data deliveries
- In so far the Austrian approach takes a kind of **pioneering role** regarding both the organization model (joint venture / regulatory reporting factory) and the innovative, cube-based data model
Appendix – the Austrian integrated data model
Austrian new ways in reporting with integration of

➢ IT-Systems
   ❖ Reporting Tools
   ❖ Calculation Engine
   ❖ Analysing Tools

➢ Structures
   ❖ Re-organisation of the Statistics Department
   ❖ One stop shop philosophy

➢ Processes
   ❖ Harmonised co-operation and communication with banks

➢ Contents
   ❖ Integrated data model & shared documentation
The Austrian integrated data model

- "BasicCube" (input layer)
  - Interfaces operational systems
  - Highly integrated data model based on micro data
  - Selection, Aggregation
  - A single business case
    - Loans
    - Derivatives
    - Off-balance sheet
    - Debt securities
    - Equity securities

- "SmartCubes" (primary reporting)
  - Aggregated Smart Cubes
  - ISIN & Loan Cube (micro data)

- Secondary statistics and templates
  - Supervisory
  - Statistics
  - National Needs

Common development of data-model, aggregation and quality checks
Basic Cube (~ Input Layer)

- Provides an exact, Standardized, unique and hence unambiguous definition of individual business transactions and their attributes
- Establishes a Harmonised database model at a very Granular level
- Consistency, the absence of redundancy and ease of expandability are key features of the Basic Cube
- Has been Developed jointly by banks and the OeNB, but OeNB staff will not be allowed to access the Basic Cube
- Will be the Basis for (almost) all Reporting obligations and it is the harmonised basis for additional data requests
- Is not a legally binding but banks committed to its implementation in a cooperation agreement
Smart Cubes (~ Primary Reporting)

- Describe multi dimensional primary reporting
- Derived by jointly defined transformation rules from the Basic Cube
- Are the basis for the production of final (secondary) products (e.g. BSI, MIR, SHS, supervisory templates)
- Allow drill down from final products and – especially in the case of micro cubes – flexible and detailed analysis of special cases
- Delivery is obligatory
- They are based on shared standardised entity reference data
Co-operation with Austrian banks

- Establishment of a **joint Standing Committee** (SCom)
- **Development** of the integrated data model in **SCom Working Groups** (consisting of OeNB, staff members of banks and software developers)
- Joint development of a market standard through **know how transfer**
- **Decisions** regarding the data model are taken in meetings of the **SCom Steering Group**
- SCom Steering Group consists of OeNB, mid management of big banks, Austrian Bankers' Association, Austrian Economic Chamber, Financial Market Authority (observer)
Austrian Reporting Services GmbH

- Founded in 2014 by 7 banks as **central reporting platform**
- With Raiffeisen as a new partner AuRep covers about 90% of the Austrian banking sector
- Banks are still responsible for correctness of the reports and their content
Loan Cube

- **Stepwise** introduction of the Loan Cube
- **First stage** of the multidimensional (aggregated) loan cube will primarily serve “statistical needs”
- **Second stage** will include additional attributes and the business of foreign branches → it will meet some national needs of **supervisors** and **financial market stability analysts**
- **Third stage** will be the extension of existing concepts to loan-by-loan reporting to fulfill the needs of **CCR** and ECB’s **AnaCredit**
- The cube is aimed at **replacing** respective parts of some existing reporting templates in the field of monetary and financial statistics as well as – in the long run - supervisory templates
- Risk information, e.g. non performing loans, ratings and risk weighted assets, as well as collateral information will be also integrated.
Use of the Loan Cube

Reported/Derived borrower attributes

Risk attributes

- Borrower / Loan identifier
- Balance sheet position according to national banking act
- Original/Residual maturity
- Interest information
- Currency
- Purpose of the loan
- Indicator for reverse repos
- Redemption information
- Credit type
- Credit drawn
- Credit granted
- Specific provisions
- Interest rate

BSI statistics
MIR statistics
External statistics
Supervisory statistics
CCR
AnaCredit

Financial accounts
Stepwise implementation of regulatory reporting requirements using the example of FinRep solo

short term

Banks
(operational data bases)

E.g. AuRep

Multidimensional Cubes (securities, loans, deposits)

OeNB

EZB

medium term

Banks
(operational data bases)

E.g. AuRep

Multidimensional Cubes (securities, loans, deposits)

OeNB

EZB

long term

(European Integration)

Banks
(operational data bases)

ERF

Basic Cube

EZB