IFC Satellite Seminar on “Post-crisis data landscape: micro data for the macro world”, co-organised with the Central Bank of Malaysia and the European Central Bank
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OeNB’s reporting data model as RegTech/SupTech solution¹

Johannes Turner,
Central Bank of the Republic of Austria

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.
OeNB’s reporting data model as RegTech/SupTech solution

IFC-BNM-ECB Satellite on "Post-crisis data landscape: micro data for the macro world"
August, 16, Sasana Kijang, Bank Negara Malaysia
Johannes Turner, Director Statistics Department
Challenges in banks’ reporting

- Increasing reporting requirements
- Centralisation towards European Level
- Exploding costs
- FINTECHs
- New technologies
- CRR disclosure
- BCBS 239

Are (central) banks well prepared?
Traditional processes of banks’ reports …

Core systems

- Core business
- Securities
- Derivatives
- Collaterals
- Customers

Internal Reporting

Statistical Reporting

Regulatory Reporting

Primary reporting obligations

Separate processes

Secondary reports

- AnaCredit
- BSI
- MIR
- BoP

- FinRep
- CoRep
Inconsistencies \quad \rightarrow \quad \text{Redundancies} \quad \rightarrow \quad \text{Inflexibilities} \quad \rightarrow \quad \text{CHANGE}
The RegTech/SupTech perspective

“A combination of technologies and innovative processes are deployed to modernize data gathering and data analytics”

“It helps supervisory agencies digitise reporting and regulatory processes. Suptech could be a game-changer in efficient reporting”

“RegTech/Suptech could have significant organisational impact”

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Make reporting more efficient …

… by using an integrated reporting process

Core systems
- Core business
- Securities
- Derivatives
- Collaterals
- Customers

Basic Cube (Input layer)
- Selection
- Aggregation
- Transformation rules

Smart Cubes
- Drill down
- Templates

Templates
- AnaCredit
- BSI
- MIR
- SHSG
- GKE
- CoRep
- FinRep

www.oenb.at  oenb.info@oenb.at
Realise synergizes and reduce costs

- Higher data quality
- Less reporting burden
- Reducing costs

Founded 2014
Covers 90% of the market

A B C D
Unique Software Shared Hardware Shared DQM Common Strategy
Use granular data for aggregation and drills

Security-by-security information based on a long term experience since 1991

Sec-by-sec system

ISIN/Non-ISIN

Issuer

Country

Maturity

more than 60 attributes

Products

- Balance sheet items statistics
- Securities issues statistics
- Securities holdings statistics
- Insurance corporations statistics
- Pension funds statistics
- Investment funds statistics
- Balance of Payments
- Financial accounts
- International Investment Position

Analysis

- Ad-hoc requests
- Reports
- Press information
- Plausi checks
Apply advanced drill downs for DQM and analytics

- Reverse engineering of transformation rules from basic cube to reports allows:
  - drills within banks (e.g. from reports to basic cube) and
  - in the central bank (between reports in different granularity, e.g. FinRep to AnaCredit/SHSG), and
  - timely replies to ad hoc requests

- Drills show cross linking,
- Foster understanding, and
- Minimise enquiries from authorities
Linking different levels of aggregation

Aggregated view

Sectoral view

Consolidated view

Solo view

Component drill

Drill
Do data quality management at the basis

- Central Data-management
- Translation of validation rules into Basic Cube

- Validation at Basic Cube level has positive affects at all other levels
- OeNB’s/ECB’s/EBA’s DQM reduced
- Basis for passive data concept
- Need for machine-to-machine communication

Development of validation rules by
- OeNB, AuRep, banks in cooperation
Passive data concept - the future of reporting?

Basic Cube – quality assured standard

- Reduced set on regular transmissions
- Especially for time series analysis (e.g. economics, financial stability) and key indicators
- Specific drills/data requests only when needed (e.g. onsite inspection)
- via standardised language
- e.g. use of APIs

Request
Drill
Conclusions

Solution

= Austrian integrated reporting data model

- represents a **paradigm shift** in regulatory and statistical data remittance.
- fosters two-way **understanding** and **transparency**.
- offers new ways in **DQM** and **data analytics**
- Leads to
  - higher **consistency** and **data quality**,
  - **less redundant** data deliveries,
  - higher **flexibility**, and
  - expected **lower costs**.