Update on the management of supervisory reporting from the ECB: A SUPERVISOR’S PERSPECTIVE

20th XBRL Europe day

Copenhagen 1st February 2018
Agenda

1. Introduction and sequential approach: where do we stand
2. BCBS 239 and data quality assessment: state of play
3. Giving feedback to the industry and the public: next steps
4. What about the future?
Levels of data quality validation under the lead of DGS

- Feedback document
- Automatic control
- Questions to banks
- Ticketing tool / direct contacts
Since 2015, the Working Group on Supervisory Statistics has been mandated to work on the *harmonisation of the national practices* to establish a *level playing field* for the data quality assessment of the reporting institutions.
BCBS 239 and Data Quality

Governance and Infrastructure
- Governance
- Data Infrastructure & IT infrastructure

Risk Data Aggregation Capabilities
- Accuracy and integrity
- Completeness
- Timeliness
- Adaptability

Risk Reporting Practices
- Accuracy
- Comprehensiveness
- Clarity and usefulness
- Frequency
- Distribution

Regulatory Review
- Review
- Remedial actions and supervisory measures
- Home/host cooperation

Scope of application!

ECB Banking Supervision Data Quality Framework
Data Quality Framework – How is DQ assessed?

Punctuality

- Refers to the lag in time between the ECB remittance date and the actual reception date of the data.

Accuracy

- Is interpreted as the absence of mistakes and exact correspondence of the reported values with the underlying concept for each data point.
- Accuracy is ensured by a set of validation rules that have to be respected by the reported data.

Completeness

- Is defined as the availability of the required information.
- Completeness checks are carried out to detect missing information.

Stability

- It is examining changes between periods in the total number of data points reported per module and template.
- In addition to key data points for supervision, the number of countries that have been reported in the geographical breakdowns are analyzed.

Plausibility

- Plausibility checks aim to detect outliers in the reported data.
- We look at values with:
  - extremely high (or extremely negative) growth rates and
  - extremely high (or extremely negative) levels.

Reliability

- Also referred to as resubmissions analysis.
- Based on the analysis of the difference between preliminary and revised reported values.
Data quality of supervisory reporting

Individual Dashboard: an example
Data quality of supervisory reporting

Individual Dashboard: an example

### Accuracy over time

![Accuracy over time chart]

### Accuracy

<table>
<thead>
<tr>
<th>Validation rules failing</th>
<th>Peer group average</th>
<th>Data points failing</th>
<th>Peer group average</th>
<th>Ras impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COREP</strong></td>
<td><strong>LE</strong></td>
<td><strong>LCR</strong></td>
<td><strong>NSFR</strong></td>
<td><strong>FINREP</strong></td>
</tr>
<tr>
<td>Validation rules failing</td>
<td>3</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Peer-group average</td>
<td>0.9</td>
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<tr>
<td>Data points failing</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peer-group average</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ras impact</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Peer-group average</td>
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<td>0</td>
<td>2.6</td>
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</table>

### Punctuality

<table>
<thead>
<tr>
<th>Delay With Errors (days)</th>
<th><strong>COREP</strong></th>
<th><strong>LE</strong></th>
<th><strong>LCR</strong></th>
<th><strong>NSFR</strong></th>
<th><strong>FINREP</strong></th>
<th><strong>AE</strong></th>
<th><strong>ALM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-group average</td>
<td>0.0</td>
<td>0.0</td>
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<td>Delay Fully Valid (days)</td>
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<td>Peer-group average</td>
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### Completeness

<table>
<thead>
<tr>
<th>Missing templates</th>
<th><strong>COREP</strong></th>
<th><strong>LE</strong></th>
<th><strong>LCR</strong></th>
<th><strong>NSFR</strong></th>
<th><strong>FINREP</strong></th>
<th><strong>AE</strong></th>
<th><strong>ALM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-group average</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Missing data points</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Peer-group average</td>
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<td>0.1</td>
<td>0.7</td>
<td>1.3</td>
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<td>1.7</td>
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</table>
DQIs introduced for SREP 2017

- JSTs’ SREP Element 2 assessment in sub-category “Risk Infrastructure, Data & Reporting”

- MSD’s SREP horizontal analyses

- Supervisory Dialogues with banks
3. Some Facts about the scores

Overall numbers

- Number of entities under direct supervision change
- Decreasing number of entities scoring 3 or 4 – absolute and relative
- 20 entities seems to have recurrent problems
- Distribution is highly concentrated on 2
The state of play for ITS data quality is shared at aggregated level with the industry in a quarterly basis via the publication of Banking Statistics.

Data from banks and banking groups directly supervised by the ECB.

… is combined

… and split again by banks’ classifications.
Improved feedback to banks on data quality issues – individual feedback to banks

4 steps escalation procedure:
- In case of data quality issues, banks will first be approached informally via NCAs to provide or resubmit data (Step 1).
- In case the issues remain, the bank will receive letters from the ECB to raise and remind of the data quality issues.
  *Step 2: Letter signed by ECB manager
  *Step 3: Letter signed by ECB manager (higher hierarchy)
- In case the issues still remain, ECB seek to apply enforcements measures or sanction proceedings (Step 4)
- When a bank receives a letter the, Data Quality Dashboard per institution will be attached (including rating).

• **SREP rating:** Several initiatives on data quality – like the BCBS 239 Thematic Review – are used in the SREP Element 2 Internal Governance assessment.
What about the future?

- Increase in: *data-driven modelling techniques and granular data (volume, formats) within banking sector.*

- **Machine Learning at supervisory side (specially from an off-site perspective):**
  1. Creation of Validation alerts (hard, soft) for main supervisory data points → but, it is limited as ITS scope is aggregated data.
  2. Clustering for plausibility checks (geographical, business model) → specially using the several geographical /portfolio breakdowns to differentiate group of supervised entities.
  3. May be useful in the detection of outliers → but, nature of supervisory data is still volatile, even at aggregated level.
  4. XBRL is a tool for business reporting → second step in the implementation of checks derived from machine learning techniques.
Thank you!