Data quality assurance of granular reporting
- the SHSG DQ metrics

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Item 3.1
Dialogue with the banking industry on ESCB statistics
## Overview

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Where we come from

- Common approach for standardised Data Quality (DQ) assessment of granular data collection schemes has been jointly developed with the industry
- Quality assessment based on limited set of clear and simple data quality metrics (DQis)

Application of common approach for the Securities holdings statistics by banking groups (SHSG)

- Definition and communication of quality checks as well as specification of SHSG DQ metrics with the aim to further prioritise data quality work
- Implementation of integrated and structured DQ procedures/rules in the SHSDB system operated jointly by Deutsche Bundesbank and ECB
### 2. Results of first rounds after SHSG DQ metrics go-live (1/2)

#### Securities holdings statistics by banking groups (SHSG) - DQ metrics summary

- **Metric FV1:** Formal validity
  - *“Did we receive formally compliant data on time?”*
  - **100%**
    - All submissions timely and formally valid

- **Metric EP1:** Total FINREP Coverage
  - *“Do we have all expected holdings included in SHSG?”*
  - **99%**
    - Further improvements achieved due to implementation of special treatment of short positions and classification of holdings of investment funds as well as securities holdings not recognised on balance sheet

- **Metric EP2:** Deviation across FINREP breakdowns
  - *“Are the attributes correctly reported?”*
  - **98%**
    - Initial accounting classification breakdown comparison stabilised over time
    - Further breakdowns will be included in future rounds for EP2 checks

- Reference period: 2021-Q4
- Present DQ metric indicator: Weighted total share of passed/confirmed data for all reporting agents, considering thresholds of relevance to ensure prioritisation of work
- Note: Results show the situation after production round for the reception at the central SHSDB system
2. Results of first rounds after SHSG DQ metrics go-live (2/2)

| Metric IP1: Consistency of holder reference data | Metric IP2: Consistency of securities reference data |
| “Are group and entity data reported consistently?” | “Are attributes for securities data reported correctly?” |
| 100% | 98% |
| ▪ Reported data on groups and entities already of very high quality | ▪ Some minor structural issues mainly related to excess holdings |
| ▪ Identified problems resolved in timely manner | ▪ Remaining discrepancies to be solved with reporting banks and/or by adjusting data validation rules |

| Metric IP3: Time consistency | Metric IP4: Consistency data across banks |
| “Do reported data change significantly over time?” | “Are there large reporting differences between banks?” |
| 100% | 100% |
| ▪ Comparison against previous period allowed identification and subsequent correction of high impact errors | ▪ No significant errors detected for limited number of initial checks |
| ▪ Additional information provided by banks for this metric led to better understanding of reported data | ▪ Investigations to add further comparisons will continue |
3. Main takeaways and next steps

Main takeaways after first rounds

- First results show already significant improvements concerning the level of data quality
- Standardised checks and possibility to confirm items reduced overall data quality work and helped focusing the work on the most relevant items
- Harmonised feedback structure helped all relevant parties, including possibility to drill down by individual holders and very granular securities holdings level

Next steps

- Follow up with reporting agents on remaining/pending quality issues
- Update of DQ metric indicators based on experience gained in first production rounds
- Application of DQ metrics logic also to other granular securities datasets in order to benefit further from the positive impact of the integrated data quality assurance approach
Thank you very much!

Questions are welcome