Towards a Full Integration of SDMX in the Data Value Chain – the Present and the Future of SDMX tools

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2023 SDMX Global Conference
The survey - background

- Building upon a 2016 report on the use of SDMX by central banks by the Irving Fisher Committee (IFC).
- Assess the **state of SDMX adoption** and **usage of SDMX tools**

- **IFC members** – 97 Central Banks.*
- **Unit of analysis**: the Organisation (Central Bank).

- Questionnaire was developed by a working group (7 organisations)
- Survey ran from March – August 2023

* Currently, the IFC has 102 full institutional **members** (October 2023).
The survey – 4 focus areas

- SDMX sophistication
- SDMX adoption
- SDMX tools in use

- SDMX implementation
- Tools used
- Gaps in domain-specific learning materials

- SDMX relevance
- SDMX knowledge
- Tools used, need for new tools
- Gaps in learning materials

- Primary use cases
- Level of satisfaction
- Strengths, weaknesses, areas for improvement
- Documentation/ resources
The survey – key takeaways: the Present

- SDMX adoption and relevance
  - ~80% of respondent central banks are using or implementing SDMX
  - Need to adapt internal tools and Lack of resource are key barriers to SDMX adoption
  - SDMX 2.1 is the predominantly used version of the standard
  - Along the statistical value chain, SDMX most relevant for Reporting to other institutions and Data Production

- SDMX tools
  - Overall satisfaction is good
  - Open-source tools and libraries are the most used.
  - There is a vast range of tools in use, but many by only a few respondents
  - The main barrier to using open-source tools is cyber security
The survey – response rate

Very good response rate = 54%

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<thead>
<tr>
<th>Region</th>
<th>Respondents</th>
<th>Non-Respondents</th>
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<tbody>
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Initial Findings

Preliminary results of the 2023 IFC survey
The survey – SDMX usage
The survey – SDMX versions and SDMX 3.0 migration plans

- SDMX 2.0: 59%
- SDMX 2.1: 6%
- SDMX 3.0: 35%

Planning within 2 years:
- Americas: 6
- Asia: 2
- Europe: 2
- Africa: 3

Planning in 3+ years:
- Americas: 1
- Asia: 1
- Europe: 8
- Africa: 3

No plans to use:
- Americas: 8
- Asia: 3
- Europe: 3
- Africa: 8
The survey – Not using SDMX. Why?

- Need to adapt internal tools to support SDMX
- Lack of SDMX learning materials
- Lack of support for SDMX in commercial tools
- Lack of support for SDMX in open-source tools
- Lack of resources
- Other

Legend:
- Africa
- Americas
- Asia
- Europe
The survey – Barriers to SDMX 3.0 adoption

- Lack of support for SDMX 3.0 in open-source tools
- Lack of SDMX 3.0 learning materials
- Lack of SDMX 3.0 implementation reference materials
- Need to adapt internal tools
- No business case to migrate
- Lack of resources

Africa, Americas, Asia, Europe
### The survey – SDMX Relevance vs Knowledge

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| The survey – **SDMX Relevance** vs Knowledge

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The table shows the distribution of responses regarding the SDMX Relevance and Knowledge. The shaded area indicates a **Knowledge gap**.
The survey – SDMX relevance in the statistical value chain

- Collection
- Dissemination to the public
- Data modelling
- Data production
- Technical implementation of SDMX standards
- Reporting (to other organisations)
The survey – Overall satisfaction with SDMX tools
The survey – SDMX tools, by type

- Open-source tools or open source library
- Commercial tool
- Inhouse or other

Africa
- Open-source tools or open source library
- Commercial tool
- Inhouse or other

Americas
- Open-source tools or open source library
- Commercial tool
- Inhouse or other

Asia
- Open-source tools or open source library
- Commercial tool
- Inhouse or other

Europe
- Open-source tools or open source library
- Commercial tool
- Inhouse or other
The survey – open-source and commercial tools
The survey – Barriers to using open-source tools

- Cyber security must approve use of open-source tools or open source library
- Policies require that in order to use an open-source tool, the source code must be provided
- Policies forbid the use of open-source tools
The survey – key takeaways for the future

- SDMX adoption and relevance
  - 13% of respondent central banks are evaluating or planning to implement SDMX
  - There is a knowledge gap. Learning initiatives to close this gap are essential!

- Empower the data community through
  - Tools are not keeping up with the standard. Lack of support for SDMX 3.0.
  - Address barriers to adoption and use of open-source tools
  - Continued strong cooperation and collaboration to support SDMX in tools through the full value chain
Thank You