Using Metadata Standards to Improve National and IMF DATA*

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Abstract. Metadata standardization leads to greater efficiencies and lower costs in global exchange and internal production of data. Use of metadata standards enhances the accountability of countries for providing quality information about their economy and improves the understanding of data by users. The International Monetary Fund (IMF) experience, as outlined in this paper, demonstrates how metadata standards have resulted in faster, cheaper and more consistent production and dissemination of data.

Keywords: International Monetary Fund, IMF, Metadata standards.

1 Using Metadata to Monitor Data Quality

One of the challenges that we face is to best guide member countries to provide quality information about their economy, while holding them accountable for dissemination of such information. In this regard, the IMF has established the Data Standards Initiatives1 for guiding the dissemination statistical data and metadata. They comprise the General Data Dissemination System, the Special Data Dissemination Standard (SDDS) and the SDDS Plus. Countries following these standards use the IMF Data Quality Assessment Framework (DQAF). The framework defines five data quality aspects:

1. Integrity
2. Methodological Soundness
3. Accuracy and Reliability
4. Serviceability
5. Accessibility

Countries are required to submit text (metadata) describing their data and dissemination practices to the IMF for posting on an electronic bulletin board. Each country is responsible for the accuracy and timeliness of its metadata. IMF Staff review countries’ postings to ensure they provide comprehensive and internationally comparable metadata.

* The views expressed herein are those of the authors and should not be attributed to the International Monetary Fund (IMF), its Executive Board, or its management.

1 For more information on Dissemination Standards at the IMF, refer to the following link: http://dsbb.imf.org/
The benefits of the Dissemination Standards are that countries are made accountable for providing metadata about their data and users are able to obtain consistent information that facilitates cross-country comparisons as well as a better understanding of the quality of a country’s statistics.


1.1 Content of the Framework

The elements and indicators within their respective dimensions are as follows:

1 Prerequisites of Quality: Although it is not a dimension of quality, this group of “pointers to quality” includes elements and indicators that have an overarching role as prerequisites, or institutional preconditions, for quality of statistics. Note that the focus is on the agency, such as a national statistical office, central bank, or a ministry/department. These prerequisites cover the following elements:

1.1 Legal and institutional environments
1.2 Resources available for the statistical program
1.3 Relevance
1.4 Other quality management

2 Assurances of Integrity: This dimension refers to the adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics. The dimension encompasses institutional arrangements that ensure professionalism in statistical policies and practices, transparency, and satisfactory ethical standards. The three elements for this dimension of quality are the following:

2.1 Institutional Integrity
2.2 Transparency
2.3 Ethical standards

3 Methodological Soundness: This dimension specifies that the methodological basis for the production of statistics should be sound and that this can be attained by following internationally accepted standards, guidelines, or good practices. This dimension is necessarily dataset-specific, reflecting different methodologies for different datasets. This dimension has four elements, namely:

3.1 Concepts and definitions
3.2 Scope
3.3 Classification/sectorization
3.4 Basis for recording

² For further information, refer to the link: http://dsbb.imf.org/Pages/DQRS/DQAF.aspx