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USE OF METADATA IN DATA QUALITY ASSESSMENTS – AN SDDS EXAMPLE

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Invited paper

ABSTRACT

The paper begins with a discussion of the advantages of using the SDDS metadata model as a source of information on the Internet. The paper notes that the model has been adopted by a number of other international/regional organizations—the European Central Bank and Eurostat—and, therefore, offers the advantages of widespread brand recognition. Nevertheless, while the model offers a wide variety of information, it does not directly address the issue of data quality, i.e. it does not provide quality assessment, either against international best practice or relative to other data series.

The paper then discusses how metadata are a necessary input into data quality assessments, but that even a well articulated metadata model is not sufficient for making quality inferences. To this end the IMF has developed frameworks that draw upon international standards or best practices and structure statistical information—metadata—to make quality assessments. The Data Quality Assessment Framework (DQAF) developed by the IMF utilizes available information—provided through questionnaires and on the Internet—to assess national practices against international best practice in five areas, namely: integrity in the collection, compilation, and dissemination of statistics; methodological soundness; accuracy and reliability; serviceability (or usefulness); and accessibility of statistics as well as in terms of the prerequisites of quality such as the legal and institutional infrastructure.

The paper explains how an open exchange system for the dissemination of statistical information (SDMX) will leverage the investments of providers of data and metadata on the Internet. The system, utilizing an XML based language for rendering SDDS metadata, will enable intelligent search and query capabilities across the Internet, including the ability to access and repurpose information from various Internet sites. Therefore, the potential exists for undertaking quality assessments using intelligent search engines, available at portal web sites such as the DSBB, to compile information from various websites in pre-defined frameworks such as the DQAF. As more organizations adopt the open exchange system and utilize the SDDS model for disseminating metadata, the results of such searches should improve dramatically. Also, frameworks for other purposes may be developed.

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