Enhancing User Value of Macroeconomic and Financial Statistics
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I. Introduction

1. The IMF Statistics department (STA) has experienced a significant increase over the last ten years in the volume of data and metadata we collect, process, and disseminate. This trend is set to accelerate over the next few years, especially as sectoral balance sheet data comes on-stream and Special Data Dissemination Standard Plus (SDDS Plus) takes hold. At the same time, our data users demand that we continue to improve the quality of our data, especially its timeliness and frequency. More broadly, our data users are demanding “better value” from our macroeconomic and financial statistics.

2. Enhancing user value of our data services in this changing environment requires knowledge of, and the ability to adapt to, the needs of the user. After all, user value is ultimately determined in the eyes of the beholder. However, optimizing user value through a tailored approach would likely be prohibitively costly. Our main challenge is rather to meet the specific needs of these audiences by developing flexible and adaptive tools that allow for quick and low-cost customization, or, even better, easy end-user customization.

II. Bigger, Better, Faster, More Data

3. The sharp increase in data volume stems from at least four interrelated factors. One is that we tend to handle bigger data sets with larger country coverage than before. International Financial Statistics is a case in point. It has grown from when it was first published in the 1940s, with a less than 40 variables and 60 countries, to currently more than 220 variables covering 194 countries and institutions. But there has also been a substantial improvement in statistical methodologies, including in government finance, real and the external sector as well as in monetary and financial statistics. These improved data standards, which call for a wider and deeper range of data, have, often with technical assistance, been implemented worldwide with a consequent increase in volume of data we handle. The internet, and more generally better technology and communication, has helped increase the volume of data by delivering it faster and enabling

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wider dissemination. Finally, we have much more data due to shorter lags in reporting and higher frequency of data.

4. Most of our statistical data is received from IMF member countries, either through direct data submissions or indirect though other means and is, in turn, disseminated to internal and external users within the global economic and financial community. The increase in data volume and requirement to provide timely data are major challenges to the way we are collecting, processing, and disseminating data. Most data collection is now electronic, even that from remote locations, and processing is increasingly becoming streamlined and automated with the aim of focusing efforts and resources where they are most needed. Dissemination is increasingly electronic as well, especially to internal users.

5. These challenges are likely even more prevalent among our users. The availability of more detailed data with better country coverage at a higher frequency with less of a lag requires users to quickly absorb and interpret massive amounts of data for their own specific uses. Their purposes of data usage vary, from facilitating policy making to meet a particular business need and from research to a general or specific information-relation task. However, what they have in common is that they want data presented and disseminated in a way that fits their needs as efficiently as possible.

III. Traditional Positioning of IMF Statistical Data

6. The trends outlined above provide a challenge for us as data disseminators and for our users. This may, in turn, impact the positioning of IMF’s statistical data in the “data market place,” vis-à-vis users as well as other data disseminators. The historical objective of IMF statistical data activities has been to achieve the “widest possible coverage of member countries and to present country data in internationally comparable form.” This has led to an emphasis on internationally accepted data standards, and cross country comparability of data. [User surveys show that IMF data is generally viewed as credible, and often used as an authoritative data source either used directly or to cross-check other data sources.]

7. Our users are generally from academia, governments, or the private sector. Much of our data is also available to data resellers, who often complement our data with market data or data from specific economic and social sectors. Data resellers also tend to offer more user friendly interfaces, placing emphasis on the relationship with the client. User surveys indicate that our data have traditionally been used to produce periodic reports and research projects.

IV. Serving User Needs

8. The emergence of bigger, more detailed and timelier datasets, with better country coverage and higher frequency, is expanding the scope of usage of our data. Specifically, the role our statistical data plays is increasingly morphing into active inputs for ongoing decision making. This complements the traditionally more passive role as, for example, a source for model calibration. The outcome is that our data is increasingly helping guide policy choices. The success of this transformation depends on our ability to effectively serve the specific needs of the users.
9. These needs reflect that more, better, and timely data enhance the potential capability of economic agents in at least three ways. The new data environment allows economic agents to better:

   a. Assess the current situation, say, of pricing of credit risks, both relative to the past and vis-à-vis others;
   b. Evaluate the impact of various alternative courses of actions, such as of monetary policy tightening; and
   c. Monitor outcomes and recent developments and take corrective actions as needed.

This does not necessarily mean that public and private sector decision is necessarily becoming easier. On the contrary, “information overload” and “big data” may have made it more difficult. It does mean, however, that more, better and timely data is fuelling a need to process information more effectively, irrespective of whether it is for policy making, private and public sector decision making, or monitoring of outcomes and recent developments.

V. Strengthening Data Usability

10. The flipside of increased availability of pertinent and timely data is the need to improve users’ capability to efficiently integrate the data in their decision making process. This means that strengthening data usability is essential to enhancing user value. But usability depends on the specific needs of each user group.

11. To tailor data dissemination to optimize user value would require in-depth knowledge of each user’s (changing) needs. This is impractical; even tailoring dissemination to a group level would be prohibitively costly. On the other hand, the user knows his or her needs the best, and should be able to create a data environment that optimizes his/her user value if the dissemination platform is sufficiently flexible. Our main challenge is to meet the specific needs of these audiences by developing flexible and adaptive tools that allow for easy and quick customization by the end-user.

VI. Differentiating Data Dissemination Options by Broad User Groups

12. Given the large range of user needs, some degree of differentiation among data users is required to ensure that customization options is sufficiently easy to set up and manage by the end-user. Differentiation may work best where it is based on self-selection of users into broad channels, with pre-set menu options designed to fit the characteristics of broad categories of users. Some examples of such user groups with possible customization options could be:

   a. **Heavy data users.** This group is looking to download large batches of data, and use it for a particular purpose, such as econometric estimation. This group typically has less interest in data visualization or other “value added” options. Instead, these users want the ability to easily download a wide, standard set of data and have the ability quickly search for and define a custom dataset. They want to get automatic updates as new data becomes available, using software that is compatible with their own working environment.

   b. **Market and policy analysts.** The main priority of this group is to monitor recent developments in a particular sector, a country or a region. They need the ability to quickly scan a wide range of data and some are interested in having the ability to design and manipulate “dashboards”
covering one or more datasets. They may also be interested in feeding the data into simple, predefined readily available forecasting models.

c. **Story-tellers.** This group would be looking at how to interpret the underlying data, with, or to develop, a point to get across. They would likely be interested in accessing others interpretations of the data, and perhaps also in sharing their views. This group may want easy access to analyzing cross-correlations and other relationships or trends in the underlying data.

**Conclusion**

Enhancing user value of macroeconomic and financial statistics means better serving the needs for such quantitative information. Ideally, data dissemination should be tailored to each user, but this would be both impractical and prohibitively costly. Instead, the main challenge is to meet the specific needs of these audiences by developing flexible and adaptive tools that allow for easy and quick customization by the end-user. This may be coupled with some degree of user differentiation of customization options based on self-selection designed to fit the characteristics of broad categories of users. The ultimate user value would depend on the fit between the customization options and the needs of the user.