

## ANNEX 3

# A Brief History of Data and Statistics at the Fund<sup>1</sup>

## In the Beginning . . .<sup>2</sup>

### Data provision

The provision of data by member countries to the IMF is rooted in the IMF's Articles of Agreement. Specifically, Article VIII, Section 5(a) describes the obligations of members to furnish information—both for surveillance and for the use of the Fund's general resources—and establishes the “minimum necessary” information to be provided by member countries, so that the Fund can discharge its duties.<sup>3</sup> Data requirements laid out in the Articles reflected the needs of the institution at the time of its founding, working under the par value system, and thus they were mainly centered on holdings and flows of gold and foreign exchange, trade, and exchange controls.

Beyond the Articles of Agreement, the de jure provision of data by member countries has been under frequent review since the early years of the IMF, in a quasi-continuous effort to keep the institution's statistical activities aligned with its needs. A major step in this process was the 1977 Surveillance Decision. Following the termination of the par value system in 1971, the 1977 Decision significantly expanded the purview of the Fund's surveillance responsibilities, implicitly recognizing the need for a wider range of data.<sup>4</sup> In practice, however, most member countries voluntarily provide much more data to the Fund than is required under the Articles.

<sup>1</sup>This is not meant to be a comprehensive history of data and statistics in the Fund, but merely to highlight those areas upon which the evaluation is most focused.

<sup>2</sup>This section draws on De Las Casas (2016).

<sup>3</sup>Article VIII, Section 5(b) also empowers the Fund to request additional information, but it enjoins the Fund to take into account members' capacity and not to require data that would disclose the details of individuals or corporations.

<sup>4</sup>The 1977 Surveillance Decision was replaced by the 2007 and 2012 Surveillance Decisions, which further aligned surveillance with the requirements of the evolving global economy, albeit without imposing new obligations on members, including those of a statistical nature.

The adoption of Decision No. 13183—Strengthening the Effectiveness of Article VIII, Section 5—in 2004 was another major step in redefining the IMF's data provision framework. Several factors drove the Executive Board to take this decision: major crisis episodes had highlighted the criticality of timely and proper provision of information to the Fund; the list of data to be provided to the IMF on a mandatory basis had become clearly insufficient (most notably, some fiscal and monetary aggregates were missing from the list); and the Fund wanted to better equip itself to deal with the growing number of misreporting cases. Thus, the Decision expanded and updated the list of data considered mandatory and outlined the steps to be followed when a country does not meet its obligations or when a member is unable to furnish the required information.

### Data dissemination

In addition to collecting data and information for its core operations, Article VIII also states that one of the Fund's functions is to “act as a center for the collection and exchange of information on monetary and financial problems.” As a first step to fulfilling this function, the Executive Board agreed in June 1946 that the IMF should publish a “monthly or quarterly Fund bulletin containing statistics of material bearing directly on the problems of the Fund,” and the first issue of the *International Financial Statistics (IFS)* appeared in January 1948.

The *IFS* established itself as the principal channel for disseminating to the membership and the public the macroeconomic data collected by the IMF. The Fund also began producing more specialized statistical publications in its early years, with the first *Balance of Payments Statistics Yearbook* appearing in 1949. The *Direction of Trade Statistics* followed closely on its heels, with its first edition in 1950. The *Government Finance Statistics Yearbook* was introduced in 1977, providing internationally comparable data on the finances of over 100 member country governments.

While the above publications are the responsibility of the Fund's Statistics Department (STA), it was the Research Department (RES) that initiated the *World Economic Outlook (WEO)* in 1969, although its external publication only began in 1980. In contrast to the STA publications, the *WEO's* main purpose is analytical, with data dissemination largely a by-product of the global economic outlook exercise.

### Data management

In 1956, the IMF's Bureau of Statistics, the forerunner of today's Statistics Department (STA), was created.<sup>5</sup> Strong initial personalities influenced the development of statistical activities and the culture of the Bureau, with the first Director establishing the Fund's conceptual framework for statistics as well as the mechanism for collecting statistics from member countries. The Bureau of Statistics focused on its monthly publication program, with the aim of having high-quality, internationally comparable data that would not be published unless they were "right."<sup>6</sup> This proved problematic for the area departments, which needed timely data and in a format that would allow them to speak the same language as the policymakers in the relevant countries, and thus sent STA and area departments on diverging statistical paths.

Area departments began compiling their own country databases (often during the course of staff missions), which became the primary data source for the Fund's operational work. Meanwhile, RES, the Monetary and Capital Markets (MCM), Fiscal Affairs (FAD), and Strategy, Policy, and Review (SPR) Departments also created specialized cross-country databases suited to their needs, such as for the publication of the various IMF flagships (*WEO*, *GFSR*, and *Fiscal Monitor*). This led to a highly decentralized, uncoordinated approach to data collection and management which persists to this day.

### Progress Through Crises<sup>7</sup>

While the evolution of statistical activities at the IMF has followed the changing needs and activities of the institution, the process was neither smooth nor

<sup>5</sup>The Bureau of Statistics was initially in the Research Department, but was separated from RES in 1968.

<sup>6</sup>This discussion is based on interviews, including of Jacques Polak, conducted for a proposed *History of Statistics*, with the project led by John McLenaghan, a former IMF economist and Director of Statistics.

<sup>7</sup>This section draws on Reichmann (2016).

continuous. Innovation largely came in irregular spurts, often prompted by a crisis that laid bare some inadequacy in the existing statistical toolkit. Indeed, data deficiencies were identified as among the core reasons for failing to foresee and/or prevent most of the major economic crises of recent times. The following briefly describes four instances where concerted efforts at improving statistical arrangements sprang out of crises that had global systemic relevance.

### Latin American debt crisis of the 1980s

This crisis highlighted the need to collect more extensive data on the *external debt and debt-service obligations* of member countries. The year 1983 thus witnessed an explosion of Fund preoccupation with statistical issues. Concerns with the coverage and timeliness of debt statistics, as well as the mechanisms for controlling foreign borrowing by the public sector, were foremost among the Fund's preoccupations. The Fund expanded its provision of technical assistance in the external debt field and took steps to strengthen its work on the measurement of debt, including on the coverage of short-term debt and international banking flows. Bilateral surveillance for emerging markets was enhanced within the Article IV consultation process by including a forward-looking analysis assessing the *sustainability of external debt* in the medium-term.

### Mexican crisis in 1994

Lack of timely crucial information<sup>8</sup> had resulted in both the Fund and financial market participants being caught unaware of a looming major crisis. This served as a wakeup call to the IMF, both to intensify its efforts to ensure the timely availability of comprehensive data and to arrange for the wider dissemination of these data into the public domain. An important milestone was the Executive Board agreement, in April 1995, on an "*absolute minimum*" of data that members were expected to provide to the Fund for surveillance purposes. This minimum included the balance sheet of the central bank, plus ten key economic indicators.<sup>9</sup>

Provision of data to the public also became a main strand of the Executive Board's debate. Well-informed markets would not only function more efficiently, but could enhance policy discipline. The Fund, under its

<sup>8</sup>Data on international reserves and the central bank balance sheet had been made available to the Fund, but with a two-to-three-month lag.

<sup>9</sup>Exchange rates, international reserves, reserve or base money, broad money, interest rates, consumer prices, external trade, external current account balance, fiscal balance, and GDP/GNP.

Articles, had no authority to require members to publish data and could rely only on their willingness to do so. It thus undertook to design standards for public dissemination and invited members to voluntarily subscribe to them. To this end, the Executive Board established in 1996 the *Special Data Dissemination Standard (SDDS)*, which was followed in 1997 by the less demanding *General Data Dissemination System (GDDS)*. To operationalize the standard, the Fund set up an electronic bulletin board—the *Dissemination Standards Bulletin Board (DSBB)*.<sup>10</sup>

### Asian crisis of the late 1990s

Nontransparent information on reserves and external borrowing and shortcomings in the quality and integrity of data were cited as among the deficiencies behind this crisis. In Thailand—the country where the crisis first appeared—the IMF and international financial markets had not been able to obtain a clear picture of the true situation regarding international reserves until the onset of the crisis revealed existing data to be misleading.

Notwithstanding the reluctance of country authorities to disclose information regarded as sensitive, agreement was reached in 1999 on a *data template on international reserves and foreign currency liquidity* that was incorporated into the SDDS as a prescribed component. On external borrowing, efforts were directed towards obtaining more comprehensive, timely data, especially from the private sector and at shorter maturities. A separate data category for external debt was established in the SDDS, a first step towards the development of data on a country's entire *International Investment Position (IIP)*.

Other major changes in the statistical toolbox included the data modules of the *Reports on the Observance of Standards and Codes (ROSCs)*, in which the IMF was asked to assess countries' observance of international standards in economic and financial statistics. The IMF subsequently developed a *Data Quality Assessment Framework (DQAF)*, which provides a structure for assessing the extent to which countries meet the prerequisites of data quality and follow international best practices in regard to the standards espoused by the SDDS. The DQAF became the basis for conducting the data ROSC.

The Asian crisis (and other capital account crises in the late 1990s) gave renewed impetus to a wider

discussion on the early detection of risks. Principal elements were the establishment of the *Financial Sector Assessment Program (FSAP)* in 1999, the *Vulnerability Exercise for Emerging Markets* in 2001, and the *Global Financial Stability Report (GFSR)* in 2002. These exercises were very data-intensive and greatly increased the need for more (and more detailed) data from the financial and corporate sectors, areas where data weaknesses are particularly notable. With a greater focus on financial sector vulnerabilities, the IMF's Executive Board endorsed a list of core and encouraged *Financial Soundness Indicators (FSIs)*. Like the *WEO*, the *GFSR* is a flagship analytical publication of the Fund that has also become a public source of financial data.

Finally, public pressure during and after the Asian crisis contributed to a revolution in the Fund's approach to disclosure of country information. The Fund's *transparency policy*, introduced in the late 1990s, evolved into the publication of most of its country reports, opening up a major avenue of additional dissemination of data, in particular, the Fund's "operational" data upon which the Board bases its decisions.

### Recent global financial crisis

The crisis revealed a number of areas where statistical information was either insufficient or lacking and highlighted, in particular, that financial innovation had far outpaced financial disclosure.<sup>11</sup> The crisis also exposed fundamental weaknesses in integrating financial sector linkages into the macroeconomic models used for policymaking. The G20 called on the IMF and the Financial Stability Board (FSB) to explore and address data gaps revealed by the crisis.<sup>12</sup> This gave rise to the *G20 Data Gaps Initiative (DGI)* in 2009. In general terms, the data gaps fell into three main interrelated areas: (i) the buildup of risk in the financial sector; (ii) cross-border financial linkages;<sup>13</sup> and (iii) the monitoring of the vulnerability of the domestic economy.

The IMF took an active part in addressing these shortcomings. It launched new initiatives to *strengthen data provision for surveillance*, including intensifying

<sup>11</sup>Despite the increased use of a growing number of Financial Soundness Indicators (FSIs), these failed to give a proper sense of the degree and location of leverage and risk taking within the system, particularly in the lightly regulated or unregulated areas that constitute the "shadow banking system."

<sup>12</sup>*The Financial Crisis and Information Gaps—Report to the G-20 Finance Ministers and Central Bank Governors* (IMF, 2009c).

<sup>13</sup>The rapid growth of large financial institutions with a global reach gave rise to a network of financial links and exposures that was not captured by the information available to domestic regulators or policymakers.

<sup>10</sup>The DSBB contains information about the availability of the data and explanations as to how the statistics are produced (the "metadata").

efforts to increase the number of countries reporting the IIP, foreign exchange reserves, and financial soundness indicators; publishing new or updated manuals in several areas; enhancing the relevance of IIP data through two coordinated surveys on direct and portfolio investment; and urging more countries to report the currency composition of their foreign exchange reserves. The IMF also sought to *strengthen data dissemination*. Several new data categories were incorporated into the SDDS on either a prescribed or encouraged basis, but the principal modification was the establishment of the *SDDS Plus*, a higher tier of data standards aimed at systemically important countries.

The crisis also prompted the Fund to undertake a wide-ranging series of reforms to strengthen the assessment of risks and vulnerabilities. These have included

the development of an *Early Warning Exercise (EWE)*, conducted jointly with the FSB; the *expansion of the vulnerability exercise* to advanced countries and low-income countries; and the introduction of *Spillover Reports*,<sup>14</sup> *the Fiscal Monitor*,<sup>15</sup> and *the External Sector Reports*.<sup>16</sup> Each of these new analytical approaches is heavily data dependent.

---

<sup>14</sup>Spillover reports aim to assess the impact of outward spillovers from systemic countries, entailing the need for data on macroeconomic and financial interlinkages.

<sup>15</sup>The *Fiscal Monitor* is the third Fund flagship report, with a focus on assessing fiscal sustainability.

<sup>16</sup>In the External Sector Report, the EBA methodology is to gradually replace the CGER approach—“subject to data availability” (IMF, 2014b)—for external sector assessments, as the EBA requires a broader set of indicators.