



Methodology in STA over the past 25 years



A MESSAGE FROM THE DIRECTOR



Since 1945, the IMF has worked to foster global economic and monetary cooperation, secure financial stability, and facilitate international trade, with the final aim of improving living conditions around the world. To tackle these challenges, high-quality macroeconomic statistics are vital for the IMF and its member countries to develop appropriate policies and meet our shared objectives of a sustainable, inclusive, and growing global economy.

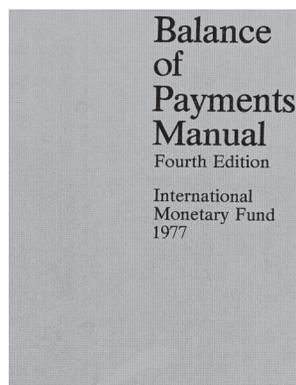
For 25 years the staff of the IMF Statistics Department (STA) has worked to develop and collect the macroeconomic and financial statistics of its member countries to serve the IMF's bilateral and multilateral surveillance and the respective country needs. In close collaboration with other international agencies, the IMF has played a key role in improving and developing international statistical standards that reflect the evolving features of the global economy, the needs of policymakers and the existing statistical compilation capacity.

This document provides a short overview of the methodological work by STA, since its creation in 1991. The substantial contribution of the IMF to the international statistical methodological standards is shown through the extensive number of manuals, guides, and other publications that STA has authored or co-authored, in close co-operation with other international agencies, and in consultation with national authorities and other IMF departments.

Looking forward, STA is fully committed to provide the methodological statistical work that better fits the statistical needs of the IMF and its membership, on the basis of both their evolving macro-financial policy needs and the statistical capacity of the national compilers.

I would like to conclude by thanking Robert Heath (former Deputy Director), the author of this document, for a very nice overview of STA methodological contributions to the large statistical community. Without standards, there are no consistent and comparable data and without data there are no good policies.

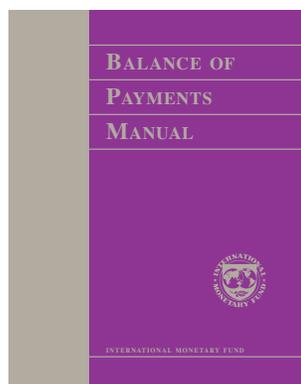
Developing statistical methodology has been integral to the IMF’s work program since its earliest days, with the first Balance of Payments Manual (BPM) published in January 1948. Then, as now, the objective was to promote the collection of consistent and comparable data from member countries in support of the Fund’s mandate to ensure the stability of the international monetary system. To this end, STA staff develop robust statistical methodology that facilitates the compilation of data that meets the needs of policymakers. Consequently, methodological work is at the heart of STA’s work, the prerequisite for the technical assistance and data collection work the department undertakes.



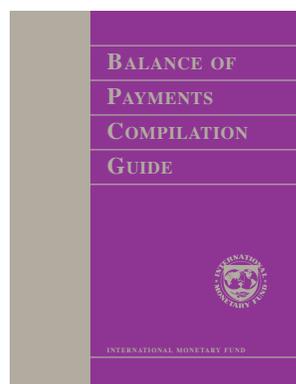
This article sets out the main features of this work over the past 25 years starting with the flagship publication, the *Balance of Payments Manual (BPM)*.

Balance of Payments

As noted above the first manual was published in 1948 and since the third edition in 1961, an updated *BPM* has been published every 16 years.



Starting with the 1993 edition (*BPM5*), and following a decision of senior national accountants and balance of payments experts in the late 1980s, the conceptual advice and the timing of the update has been aligned with the *System of National Accounts (SNA)*.¹ This landmark decision laid the foundation for subsequent coordinated updates not only of *BPM* and *SNA*, but of other manuals in the *SNA* “family.”

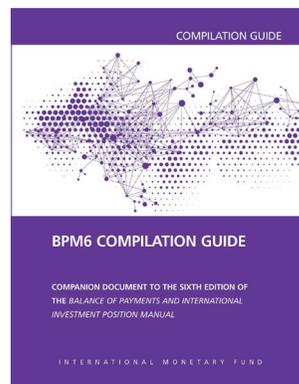
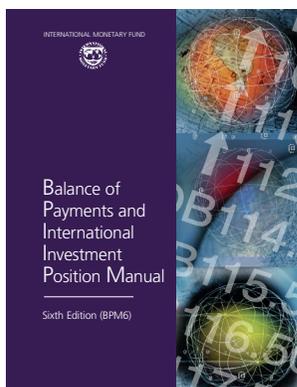


The *BPM5* update was also noteworthy for the publication of two companion documents —a *Compilation Guide* and a

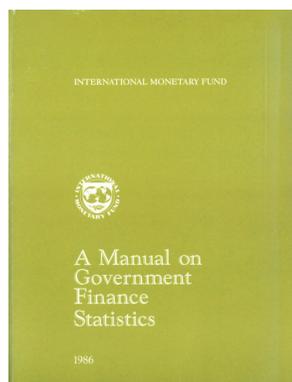
¹ The *SNA* is the responsibility of the Inter-Secretariat Working Group on National Accounts (ISWGNA). The ISWGNA is composed of Eurostat, the IMF, the Organisation for Economic Co-operation and Development (OECD), the United Nations, and the World Bank.

Textbook—, and the concurrent establishment of the IMF Committee on Balance of Payment Statistics to support enhancements in the quality and availability of external sector statistics.²

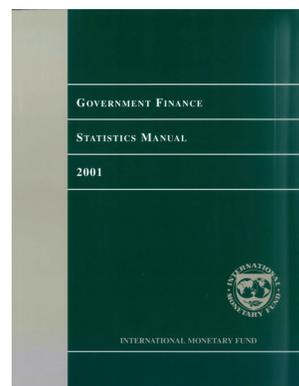
The *BPM6* update in 2009 tied BPM and SNA methodology even closer together and provided more detailed guidance across all the accounts in the balance of payments. But particularly noteworthy was that *BPM6* promoted the international investment position data (i.e. a statement recording all external financial assets and liabilities of a country) to the same standing as the balance of payments transactions data as reflected in the title: *Balance of Payments and International Investment Position Manual*.



Government Finance Statistics



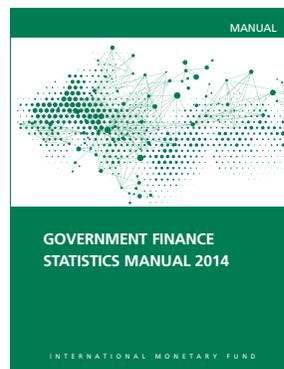
In the 1990s it became clear that the analytical framework of the first edition of the 1986 *Government Finance Statistics Manual (GFSM)* needed to be updated. In particular, *GFSM 2001* followed the example of the BPM and SNA, updating the conceptual advice to allow compatibility between GFS, balance of payments and national accounts data; presented government activities in an integrated framework that gave as much emphasis to the net worth of government, as the operating balance, that is, the “government deficit”; and promoted the analytical usefulness of incorporating accrual accounting into the central framework. The latter, in particular, proved to be, and among some fiscal economists still is, controversial because of their preference for cash accounting and an emphasis on the governments’ liquidity position.³



² The Committee is composed of national and international experts. It was created in 1992 following a recommendation of a working party set up by the IMF Executive Board to investigate discrepancies in the measurement of international capital flows.

³ To explain the benefits of accrual accounting, a Working Paper was published in 1996: “The Case for Accrual Recording in the IMF’s Government Finance Statistics System,” by Don Efford.

The *GFSM 2014* maintained the analytical enhancements of *GFSM 2001*, while providing more detailed conceptual guidance on many types of government activities. The *GFSM 2014* also gave more recognition than its predecessor to the need to maintain cash accounting as a complement to the phased implementation of accrual accounting.⁴

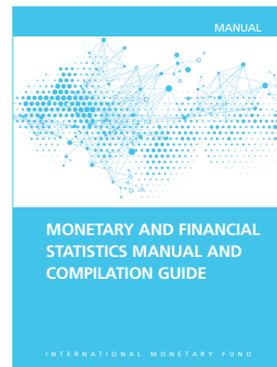
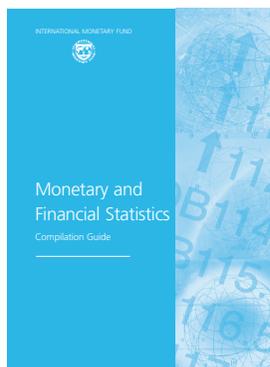


Monetary and Financial Statistics

In the early 1990s, STA was called on to develop a manual to guide IMF member countries in presenting monetary and financial statistics in an integrated framework.⁵ This proved a difficult task as monetary data are presented in many different ways among IMF member countries reflecting the different institutional frameworks. Almost 10 years after the work started, the *Monetary and Financial Statistics Manual (MFSM)* was published in 2000 providing a set of guidelines for compiling and presenting MFS, with concepts and principles largely harmonized with the SNA. Further progress was made in the 2000s, with the introduction of the Standardized Report Forms for the financial corporation sector and the publication of a MFS Compilation Guide.



In 2016 STA brought these three aforementioned elements together in releasing the *Monetary and Financial Statistics Manual and Compilation Guide (MFSMCG)*. The *MFSMCG* provides a greater depth of advice on monetary statistics than its 2000 predecessor including covering the basic functions of money, the potential range of instruments covered, as well as examples of national monetary aggregate measures. By 2016 the vision of the early 1990s had been realized.

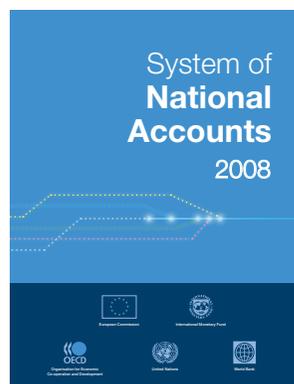


⁴ In 2010, the IMF Executive Board decided that IMF Staff reports should include the key elements of the *GFSM* presentation and in 2013 supported the creation of a GFS Advisory Committee to support the implementation of *GFSM* by countries.

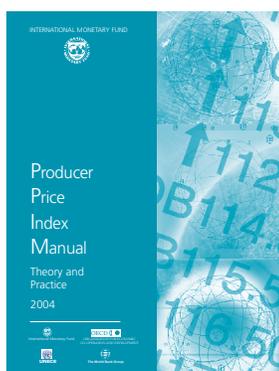
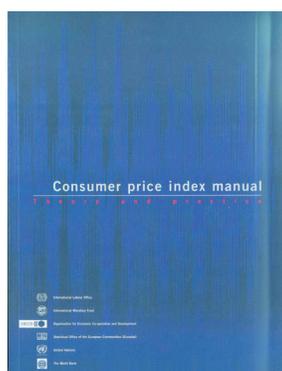
⁵ *A Guide to Money and Banking Statistics in International Financial Statistics (IFS)* was published in 1984 to explain the money and banking data in *IFS*.

System of National Accounts

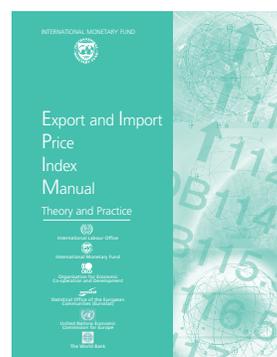
In 2001, STA published the *Quarterly National Accounts (QNA)* manual. The QNA manual provides guidance and recommendations on the compilation of quarterly national accounts statistics, such as seasonal adjustment and benchmarking techniques. Following the publication of the *2008 SNA* in which STA played a key role along with ISWGNA partners, STA is updating the QNA manual to align it with the *2008 SNA* recommendations and other recent methodological advances.



Price Statistics



As a member of the Inter-Secretariat Working Group on Price Statistics (ISWPS), STA has taken the leading role in developing methodology for consumer prices, producer prices, and export and import prices - *Consumer Price Index Manual* (2004), *Producer Price Index Manual* (2004), *Export and Import Price Index Manual* (2009).



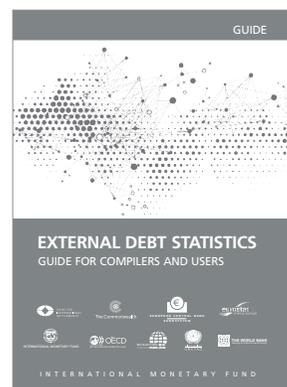
These manuals provide an overview of the conceptual and practical issues for compiling price indices and cover areas such as uses, source data, sampling, scope, valuation, classification, aggregation formulas, and the treatment of missing prices, seasonal goods, and quality change. STA is presently leading the update of the CPI manual.

Responding to the financial crises of the 1990s

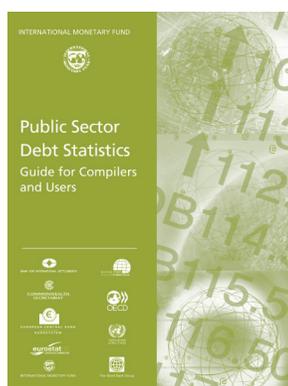
The mid- to-late 1990s witnessed the financial crises in Mexico and Asia. The changing international environment called not just for greater compatibility and transparency of economic and financial statistics across countries but also for a greater focus on specific aspects of economic performance, notably external debt, official reserves, and indicators of banking soundness.⁶ STA staff was called upon to develop international guidance on all these datasets.

⁶ IMF Working Paper The 15/88 "What has Capital Flow Liberalization meant for Economic and Financial Statistics" provides further background to these developments.

A *Grey Book* on External Debt had been published in the late 1980s,⁷ but it fell well short of a conceptual manual. Besides the definition was based on the concept of debt disbursed and outstanding, a backward looking concept, while it had become increasingly clear that the analytical interest was rather turning towards debt as an indicator for the sustainability of future payments obligations. This changed emphasis brought to the forefront concepts like residual maturity and payment schedules which until that time had not received so much attention in statistical manuals.

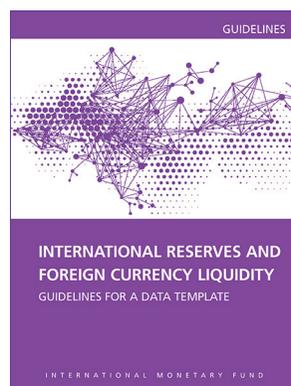


To develop a new Guide, the IMF reestablished the Task Force on Finance Statistics (TFFS), involving all international agencies with an interest in external debt statistics.⁸ In 2003 an *External Debt Guide (EDG)* was published with comprehensive conceptual and compilation guidance. It was updated in 2013 to take account of *BPM6* and *SNA 2008*. By 2016, over 120 countries reported data consistent with the *EDG* to the World Bank (host)/IMF quarterly joint external debt hub.



In the mid-2000s IMF policymakers became increasingly concerned about trends in public debt and the lack of consistent and comparable data across countries. As with external debt, STA brought the issue to the TFFS and in 2012, a *Public Sector Debt Statistics Guide (PSDSG)* was published that was consistent in its conceptual advice with both the *GFSM* and the *EDG*. By 2016 over 70 countries reported data consistent with the *PSDSG* to the World Bank (host)/IMF/OECD quarterly public sector debt statistics hub.

Another response to the Asian financial crises was the development of a *Reserves Template (RT)*. This unique statistical product combines position data on reserves with future and contingent foreign exchange drains and other data that could affect the level of reserves. The RT framework⁹ was adopted by the Executive Board as a requirement of the Special Data Dissemination



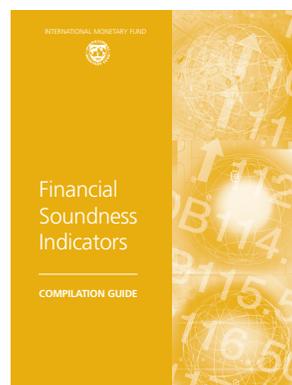
⁷ It was a joint publication by the Bank for International Settlements (BIS), IMF, OECD, and World Bank.

⁸ In addition to the four agencies that published the *Grey Book*, the TFFS involved the Commonwealth Secretariat, European Central Bank, Eurostat, Paris Club Secretariat, and United Nations Conference on Trade and Development (UNCTAD).

⁹ The RT framework was developed jointly by the IMF and a working group of the BIS's Committee on Global Financial System (CGFS), with extensive consultations with and input from other institutions like the European Central Bank.

Standard (SDDS)¹⁰ from April 2000. STA developed operational guidance, *Reserve Template Guidelines*, to support the compilation of these data, consulting widely. The *Guidelines* were updated in 2014. By 2016 over 80 countries reported RT data to the IMF’s online database.¹¹

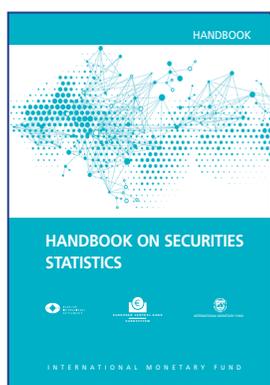
Following the crises of the late 1990s Fund staff brought together financial sector experts and statisticians to discuss the need for a set of *Financial Soundness Indicators* (FSIs). After an initial meeting and a survey of member countries a list of FSIs was presented to the IMF Executive Board in 2001, with STA agreeing to develop operational guidance.



It was immediately clear that these data were of a different nature as compared to other economic and financial statistics, and were based more on supervisory/commercial accounting than SNA concepts. In particular, whereas SNA based data are residence-based, FSI data are based on the concept of consolidated reports—that is, amalgamating resident and nonresident branches and subsidiaries with the parent, and perhaps even entities in other economic subsectors.

Given the compilation challenges, STA consulted with commercial accounting and supervisory experts as well as statisticians, completing the draft in 2004 with publication of the *Financial Soundness Indicators Compilation Guide* in 2006. An updated list of FSIs was presented to the IMF Executive Board in 2013 and a revised Compilation Guide is in preparation. By 2016, over 110 countries reported FSI data to the IMF’s on-line database.

Working with other International Organizations (IOs)



In drafting manuals and guides STA staff works closely with other IOs. Often committees and task forces are set up to coordinate the methodological work: STA sometimes chairs, such as the Committee on Balance of Payment Statistics or the TFFS; is part of a rotating chair system, such as the ISWGNA; or is a member contributing to the final product, such as the Task Force on Statistics of International Trade in Services.

Among the manuals and guides that have been developed by interagency committees and task forces and for which STA staff has been significant contributor are the *International Transaction in Remittances Guide* (2009), *Manual on Statistics*

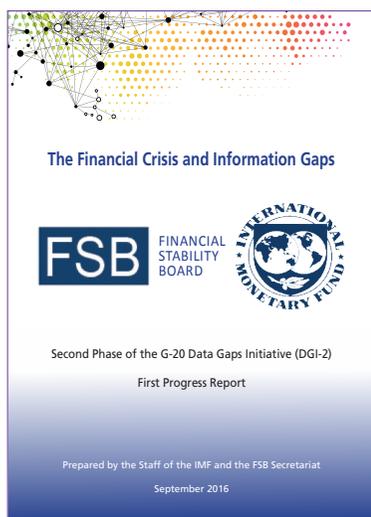
¹⁰ The SDDS is a data dissemination standard introduced with the IMF’s Executive Board approval in 1996. Countries can volunteer to subscribe, but thereafter must meet the requirements of the standard or their subscription can be terminated by the Executive Board.

¹¹ The RT data and other IMF datasets are available at data.imf.org

in International Trade in Services and International Merchandise Trade Statistics: Compilers Manual (2010), System of Environmental-Economic Accounting, 2012, Handbook on Residential Property Price Indices (2013), and the Handbook on Securities Statistics (2015).

STA approach to developing and updating manuals

STA staff is very conscious that the manual and guides they draft are for use by all IMF member countries. With a membership of 189 countries staff needs to ensure that as wide a range of views as possible are taken into account when drafting guidance, and that as wide a consensus as possible is reached. It is not realistic to expect every country to implement every aspect of the guidance but countries are expected to implement the analytical and presentational framework and the elements of the guidance that are particularly relevant for their economies.



To this end, the preparation of all manuals and guides involve groups or committees of internationally renowned experts in the field. Drafts are posted on the IMF website for worldwide comment and often regional seminars are held when a draft is close to final. Approval of the final version for publication is the responsibility of the Director of STA. IMF management and the IMF Executive Board are informed and traditionally the IMF Managing Director provides a foreword to the published version.

Staff also ensure that the English language used is precise and straightforward. This is supported by translation into a number of languages usually, Arabic, Chinese, French, Russian, and Spanish.

The question often arises as to why not continually update the manuals rather than having long periods between manuals. The answer is that considerable consultation and debate go into updating manuals and considerable time is needed by countries to implement. Nonetheless, when new issues arise, clarifications beyond dispute can be posted on the IMF websites as was done in 2013 with regard to the statistical treatment of the windfall profits from the sale of gold by the IMF. For issues requiring more fundamental amendments, an update to the manuals can be produced, as occurred with the methodology with regard to financial derivatives in the 1990s when that market was developing fast.



November 2016

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