

INTERNATIONAL MONETARY FUND

Statistics Department

Data Quality Assessment Framework (DQAF) For External Debt Statistics

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DATA QUALITY ASSESSMENT FRAMEWORK (DQAF) FOR EXTERNAL DEBT STATISTICS

INTRODUCTION

A. Purpose of the Framework

The main purpose of the Framework is to provide a flexible structure for the qualitative assessment of the external debt statistics (sometimes simply referred to as "statistics" in this Framework).

The Framework could be used in a variety of contexts, including the following:

- reviews performed in the context of IMF country work, e.g., the data module of the Reports on the Observance of Standards and Codes (ROSCs), technical assistance, and surveillance;
- self-assessments performed by national statistical offices, central banks, and other data producing agencies; and
- assessments by other groups of data users, such as financial market participants.

B. Structure of the Framework

The DQAF comprehensively covers the various quality aspects of data collection, processing, and dissemination. The Framework is organized in a cascading structure that progresses from the abstract/general to the more concrete/specific details.

The first level covers the **prerequisites** of quality and five **dimensions** of quality: assurances of integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility. Under the prerequisites and dimensions, there are **elements** (two-digit level) and **indicators** (three-digit level.)¹

At the next level, **focal issues** that are specific to the compilation of the statistics are addressed. Below each focal issue, **key points** identify quality features that may be considered in addressing the focal issues. The key points are meant to be suggestive, not exhaustive.

Box A provides a view of the cascading structure employed in the Framework.

The first three levels are common with other Data Quality Assessment Frameworks that have been developed to assess datasets. This design was implemented to ensure a common and systematic asse

developed to assess datasets. This design was implemented to ensure a common and systematic assessment across datasets. To date, frameworks have been developed for national accounts statistics, consumer price index, producer price index, government finance statistics, monetary statistics, balance of payments and international investment position statistics, external debt statistics, and income and poverty statistics.

C. Content of the Framework

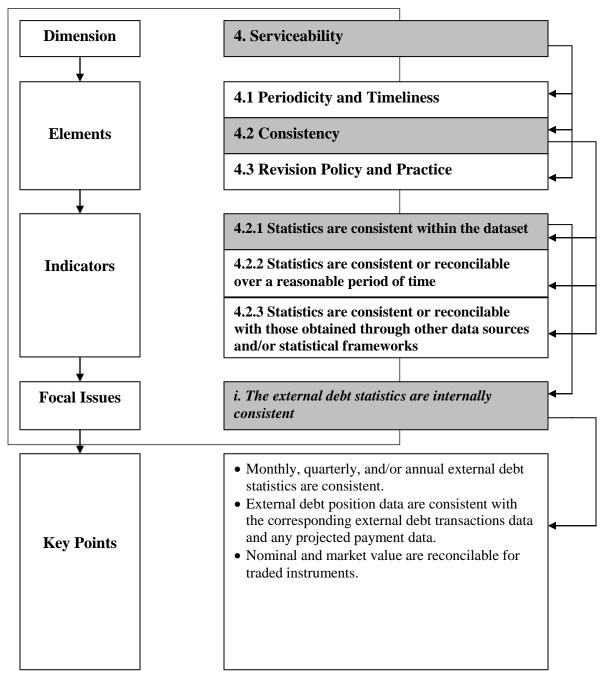
The elements and indicators within their respective dimensions are described below.

- **O. Prerequisites of quality**: Although not itself 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:
 - 0.1 legal and institutional environment,
 - 0.2 resources,
 - 0.3 relevance, and
 - 0.4 other quality management.
- **1. Assurances of integrity**: This dimension relates 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 ethical standards. The three elements for this dimension of quality are the following:
 - 1.1 professionalism,
 - 1.2 transparency, and
 - 1.3 ethical standards.
- **2. Methodological soundness**: This dimension covers the idea 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:
 - 2.1 concepts and definitions,
 - 2.2 scope,
 - 2.3 classification/sectorization, and
 - 2.4 basis for recording.
- **3. Accuracy and reliability**: This dimension covers the idea that statistical outputs sufficiently portray the reality of the economy. This dimension is also data specific, reflecting the sources used and their processing. The five elements of this dimension cover the following:
 - 3.1 source data,
 - 3.2 assessment of source data,
 - 3.3 statistical techniques,
 - 3.4 assessment and validation of intermediate data and statistical outputs, and
 - 3.5 revision studies.

- **4. Serviceability**: This dimension relates to the need that statistics are disseminated with an appropriate periodicity in a timely fashion, are consistent internally and with other major datasets, and follow a regular revision policy. The three elements for this dimension are as follows:
 - 4.1 periodicity and timeliness,
 - 4.2 consistency, and
 - 4.3 revision policy and practice.
- **5. Accessibility**: This dimension relates to the need for data and metadata to be presented in a clear and understandable manner on an easily available and impartial basis, that metadata are up-to-date and pertinent, and that a prompt and knowledgeable support service is available. This dimension has three elements, namely:
 - 5.1 data accessibility,
 - 5.2 metadata accessibility, and
 - 5.3 assistance to users.

Box A. The Cascading Structure of the Data Quality Assessment Framework, DQAF October 2012, for the External Debt Statistics: An Example

Using serviceability as the example of a dimension of quality, the box below shows how the framework identifies three elements that point toward quality. Within consistency, one of those elements, the framework next identifies three indicators. Specifically, for each indicator, focal issues are addressed through key points that may be considered in identifying quality.



0. Prerequisites of Quality

0.1 Legal and institutional environment

— The environment is supportive of statistics.

0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.

The primary responsibility for collecting, processing, and disseminating the statistics is clearly established.

- A law, such as a statistical law, or other formal provision (e.g., inter-agency protocol or executive decree, supranational legislation) assigns primary responsibility as well as the authority to an agency (agencies)² for the collection, processing, and dissemination of the statistics.
- Working arrangements are consistent with this assignment of responsibility.
- If more than one data producing agency is involved in producing parts of the statistics, arrangements are in place to promote consistency of methods and results.
- Conflicts or potential conflicts between the legal authority to produce the statistics and other laws or provisions (e.g., access to information law or bank secrecy laws) have been successfully resolved or reconciled with no major impairment to the data production.
- Oversight of the institution(s) responsible for collecting, processing, and disseminating statistics is conducted in order to ensure that statistical work accords with the laws or other provisions governing such work

0.1.2 Data sharing and coordination among data-producing agencies are adequate.

Arrangements or procedures exist to facilitate data sharing and coordination between the agency (agencies) with the primary responsibility for compiling the statistics and other data producing agencies.

- Procedures are in place to provide for the effective and timely flow of source data (e.g., administrative data as well as survey data) to the data-producing agency (agencies).
- Contacts (e.g., regular meetings and workshops) are maintained with other data producing agencies to promote a proper understanding of data requirements, to avoid duplication of effort, and to take into account reporting burden (e.g., by discussing changes to administrative processes before they take place.)

² See External Debt Statistics: Guide for Compilers and Users (Guide), paragraph 10.4.

0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only.

- i. The confidentiality of individual reporters' data is guaranteed and that guarantee is widely known.
- A law or other formal provision clearly states that individual data are to be treated as confidential, and shall not be disclosed or used for other than statistical purposes unless required by law or disclosure is agreed to in writing.
- In surveys and other statistical inquiries, respondents are informed of their rights and obligations with regard to the provision of information, and they are informed that the information they provide will be used for the purpose of producing statistics.
- ii. Procedures are in place to prevent disclosure of individual reporters' data.
- Rules and regulations to prevent disclosure include penalties against staff who disclose confidential data.
- Access to individual data is restricted to staff who require the information in the performance of their statistical duties.
- Special aggregation rules are used to prevent residual disclosure when aggregations of survey or other confidential data are disseminated.
- Staff review all data prepared for dissemination for possible indirect disclosure of individual data and design tables and outputs in a way that prevents disclosure.
- Where unit records are made available (e.g., for research purposes), the confidentiality of the individual data is protected (e.g., by making all records anonymous, or ensuring that access to data is bound by confidentiality provisions).
- Confidentiality of data is appropriately guarded during storage and during the process of the destruction of records.
- Steps are taken to secure the premises of the data producing agency and its computer systems to prevent unauthorized access to individual data.
- 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.
- i. A law or other formal provision provides for the reporting of information needed to compile the statistics.
- The data producing agency has the legal authority to collect data required to compile the statistics.

- Collection activity is consistent with the legal authority.
- If reporting is mandatory, penalties for noncompliance (including misreporting) act as an effective deterrent, even if such provisions rarely need to be employed.
- ii. Other mechanisms are in place to provide for adequate reporting of data for compiling the statistics.
- The data producing agency considers carefully response burden (e.g., by actively pursuing alternative avenues to obtain data, adapting questions to reporters' terminology and record-keeping systems, carefully designing new surveys, closely monitoring response burden, and periodically evaluating existing surveys).
- The data producing agency provides assistance to respondents in completing and submitting forms (e.g., by providing a point of contact).
- The data producing agency seeks to secure cooperation by creating goodwill (e.g., by registering and dealing with respondents' complaints, indicating the purpose of the data collection, informing of measures to limit response burden, raising awareness of the importance of good quality statistics, and providing respondents with data upon request).

0.2 Resources

— Resources are commensurate with needs of statistical programs.

0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.

- i. Staff resources for compiling the statistics are adequate to perform required tasks.
- Overall, the number of staff is adequate to perform the required tasks.
- The qualifications of the staff are adequate, with their skills maintained and developed to perform the required tasks.
- A core staff with adequate training is maintained and staff turnover is manageable.
- Salary levels are adequate for the nature of the work and competitive with public administration conditions in the country.

ii. Computing resources for compiling the statistics are adequate to perform required tasks.

- Overall, sufficient resources are allocated and best efforts are made to exploit the full
 potential of effective computing technology for compiling and disseminating the
 statistical series.
- Software utilized for compiling and analyzing the statistical series is effective, periodically updated, and well adapted to perform existing and emerging tasks.
- Hardware is distributed adequately to facilitate the efficient collection and processing of data, and management of databases.
- Adequate protection is provided for computer resources, including through provision of emergency back-up systems for retrieval of statistical series and updates in the event of natural disasters, accidents, and other unusual events.

iii. Physical facilities and other resources are adequate to perform required tasks.

- Office building provides adequate working facilities (e.g., lighting, heat, and cooling).
- Office furniture and equipment (e.g., desks, chairs, filing cabinets, telephones, and related equipment) are adequate to perform required tasks.
- Transportation arrangements (e.g., for data collection) are adequate.
- iv. Funding for compiling the statistics is adequate to perform required tasks.
- Funding is reasonably secure for the identified needs of the statistical program.
- Budgeting practices provide clear information to financing authorities (e.g., when reviewing priorities for improvements, cutbacks, or increase in certain elements of programs).
- The statistical budget process is amenable to planning for statistical developments (e.g., over a two- to three-year period).

0.2.2 Measures to ensure efficient use of resources are implemented.

- i. Management ensures that resources are used efficiently.
- Periodic reviews of staff performance are conducted.
- Efficiencies are sought through periodic reviews of work processes, e.g., seeking cost effectiveness of survey design in relation to objectives, and encouraging consistent concepts, classification and other methodologies across datasets.

- When necessary, the data producing agency seeks outside expert assistance to evaluate statistical methodologies and compilation systems.
- ii. Costing and budgeting practices are in place and provide sufficient information to management to make appropriate decisions.
- Resources used to compile the statistics are measured periodically (costing) and compared to other statistical programs.
- Budgeting procedures are used to help allocate resources.

0.3 Relevance

— Statistics cover relevant information on the subject field

0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.

- i. Specific actions are taken to ensure that current statistics meet needs of data users.
- Data users are consulted and/or kept informed of specific aspects of current data (e.g., usefulness in terms of detail, periodicity, and timeliness) through surveys, newsletters or seminars, with their feedback actively sought (e.g., e-mail address provided).
- ii. Mechanisms are in place to identify new and emerging data requirements.
- A structured and periodic process of consultation (e.g., users' advisory committee or working groups) takes place with policy departments/ministries and other principal data users, which include academia, the press, and/or other private sector representatives, to review the usefulness of existing statistics and to identify emerging data requirements.
- The data producing agency regularly participates in statistical meetings and seminars organized by international and regional organizations and by professional organizations (e.g., International Statistical Institute (ISI) and International Association for Official Statistics (IAOS)).
- The data producing agency undertakes studies to help identify new and emerging data requirements.

0.4 Other quality management

— Quality is a cornerstone of statistical work

0.4.1 Processes are in place to focus on quality.

i. There is recognition throughout the organization that quality builds trust and thus is a cornerstone of statistical work.

- Management is sensitive to all dimensions of data quality, and promotes a shared concern for quality throughout the organization (e.g., mission statement emphasizes importance of quality, managers are held accountable for achieving quality).
- Staff training programs emphasize the importance of quality and give staff an understanding as to how quality may be achieved.
- The organization provides an infrastructure for quality by recognizing trade-offs, economies of scale, and interrelations between datasets.
- The organization has implemented externally recognized processes or activities that focus on quality (e.g., Total Quality Management, ISO 9000, quality initiatives within the European Statistical System, and independent evaluations).
- Information is publicly available on the organization's commitment to quality, including information about trade-offs affecting the statistical work program.

0.4.2 Processes are in place to monitor quality during the planning and implementation of the statistical program.

- i. Measures are in place for a systematic monitoring and review of quality.
- Monitoring processes are in place to inform managers of the quality achieved for ongoing statistical activities (e.g., response rates, editing rates, revisions history, timeliness evaluations).
- Compiling areas have access to expert guidance on the quality of their statistics and on strategies for improving data production.
- Periodic reviews are undertaken to identify steps necessary to maintain quality requirements.
- Quality issues, such as the following, are addressed explicitly and taken into account in the work program planning process:
 - Quality improvements identified during ongoing monitoring and in periodic reviews;
 - Feedback from users on quality standards and on new and emerging data requirements; and
 - Trade-offs among the dimensions of quality (e.g., resources availability, timeliness, and accuracy/reliability).

1. ASSURANCES OF INTEGRITY

The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.

1.1 Professionalism

— Statistical policies and practices are guided by professional principles.

1.1.1 Statistics are produced on an impartial basis.

- i. The terms or conditions under which the statistics are produced are in accordance with professional independence.
- A law or other formal provision supports professional independence by, for example:
 - addressing the general need for the professional independence of the data-producing agency (e.g., the importance of professional independence in carrying statistical functions is clearly stated and recognized);
 - prohibiting interference from others, including other government agencies, in the compilation and/or dissemination of statistical information; and
 - ensuring that the choice, tenure, and reporting arrangements of the agency's head are supportive of the professional independence of the statistical agency (e.g., tenure does not usually coincide with that of current government; appointment and removal of head result from transparent processes with emphasis on professional qualifications and performance).
- If there is no law or formal provision to support professional independence,
 - traditions or cultures of professionalism are clearly recognized as essential to the credibility of statistical results (e.g., others, including other government agencies, understand the importance of noninterference); and
 - the choice, tenure, and reporting arrangements of the agency's head are supportive of the professional independence of the agency.

ii. Professionalism is actively promoted and supported within the organization.

- Recruitment and promotion are based on relevant aptitude and/or expertise in statistics (e.g., sampling techniques or in the subject matter area).
- Formal (using internal and outside experts) and on-the-job training in the methodology and compilation methods is provided, including participation in seminars, courses, and workshops arranged by regional and international organizations to further knowledge of statistical practices and providing easy access to professional literature.

- Processes and activities in the workplace promote a culture of professionalism (e.g., by
 professional accreditation of staff, peer review of statistical work, recognition of authors
 of methodological papers, organization of lectures and conferences, and the institutional
 support of professional bodies).
- Research and analysis (including rationale for the choice of methodologies) are encouraged and published subject to internal review and other processes to maintain the agency's reputation for professionalism.

1.1.2 Choice of data sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations

- i. The choices of data sources and statistical techniques are informed solely by statistical considerations.
- The choice of source data (e.g., among surveys, between surveys and administrative records, or between collected data and administrative records) is based on measurement objectives and data requirements.
- ii. Decisions about dissemination are informed solely by statistical considerations.
- Decisions to disseminate data are based solely on statistical considerations.
- Decisions about the timing, media, and other aspects of dissemination are based solely on statistical considerations.

1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.

- i. The data producing agency comments when its statistics are misinterpreted or misused.
- The data producing agency seeks to prevent misinterpretation or misuse of statistics by providing explanatory materials and briefings (e.g., to the media).
- There is a formal policy or well-established custom to deal with data misinterpretations or misuse of statistics.
- The data producing agency
 - monitors media coverage of its data ("clipping service"), and
 - comments publicly and in a timely manner on erroneous interpretations or misuse of the statistics in the media and in other fora.

1.2 Transparency

— Statistical policies and practices are transparent.

- 1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.
- i. Information is available to the public about the terms and conditions under which the statistical series are compiled and disseminated, including the obligation to compile and disseminate the statistics, the confidentiality of individual reporters' data, and other key features.
- Agency publications and/or websites reproduce material from the statistical law and other relevant documents about the terms and conditions under which official statistics are compiled and disseminated. These terms and conditions may refer to the obligation to compile and disseminate the statistics, the confidentiality of individual reporters' data, and other key features (e.g., the codes of conduct under which official statistics are compiled and disseminated, the approval process for data dissemination, the procedures to hire and remove the head of the data producing agency).
- In public speeches and other gatherings, the agency makes an active and ongoing effort to inform all interested parties about the terms and conditions under which it operates.
- Statistical publications identify where more information about the data producing agency and its products can be found.
- 1.2.2 Internal governmental access to statistics prior to their release is publicly identified.
- i. The public is made aware of internal government access to statistics prior to their release to the public.
- Internal government access to statistics prior to release is made public in terms of who has access, and how long before the dissemination access is given.
- 1.2.3 Products of statistical agencies/units are clearly identified as such.
- i. Statistical products are clearly identified so that the public is aware of what the data producing agency takes responsibility for.
- Data released to the public are clearly identified as the data producing agency's product (e.g., by name, logo, and insignia).
- In the case of joint publications, the part attributable to the data producing agency is identified (e.g., statistics are clearly distinguished from policy interpretation).
- The data producing agency requests attribution when its statistics are used or reproduced.

1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.

- i. Users of statistics are made aware in advance of major changes in methodology, source data, and statistical techniques.
- Advance notice is given to the public (e.g., articles in bulletins, briefings, or news releases) when major changes are introduced in methodology, sources, and statistical techniques.

1.3 Ethical standards

— Policies and practices are guided by ethical standards.

1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

- i. A clear set of ethical standards has been prepared.
- There are clear guidelines outlining correct behavior when the agency or its staff are confronted with potential conflict of interest situations.
- There are clear guidelines that make the connection between ethics and staff responsibilities (e.g., with respect to guarding against misuse and misrepresentation of statistics (see also 1.1.3)).
- A strong culture for maintaining ethical standards discourages political interference.
- ii. Staff are made aware of the ethical standards.
- Management acknowledges its status as a role model and is vigilant in following the standards.
- New staff are made aware of the standards when they join the organization.
- Staff are reminded periodically of the standards (e.g., in staff training, announcements to staff, or by requiring staff to periodically reaffirm ethical practices or adhere to conflict of interest policy).

2. METHODOLOGICAL SOUNDNESS

The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.

The methodological soundness dimension is assessed against the guidelines outlined in the most current edition of the *External Debt Statistics: Guide for Compilers and Users (Guide)* and the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)*. Although not preferred, the fifth edition of the *Balance of Payments Manual (BPM5)* could be used in equivalent detail to assess this dimension when economies have not yet implemented *BPM6*. The application of these guidelines would generally be evaluated at the level of the materially-significant external debt data categories (institutional sectors, maturity, and type of instruments). If these guidelines are not fully followed, the adoption or implementation of an appropriate "migration path" to the *Guide*'s framework would be evaluated.

2.1 Concepts and definitions

— Concepts and definitions used are in accord with internationally accepted statistical frameworks.

2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.

Concepts and definitions used to compile the external debt statistics are in broad conformity with guidelines outlined in the Guide and BPM6.

- In conformity with the *Guide*, the external debt position is defined as the "outstanding amount, at any given time, of those actual current, and not contingent, liabilities that require payment(s) of principal and/or interest by the debtor at some point(s) in the future and that are owed to nonresidents by residents of an economy" (see *Guide*, paragraph 2.3).
 - The future requirement to make payments (principal and/or interest) and not the form or timing of these payments determines whether a liability is debt or not (see *Guide*, paragraph 2.7). Therefore:

- Payments can be made in cash and other financial assets, nonfinancial assets including goods, and/or services;
- Payments can be made in all currencies of denomination (domestic or foreign currencies);³ and
- The timing of the future payments need not be known; e.g., payments might be at the demand of the creditor (noninterest-bearing demand deposits) or they may depend on certain events (the exercise of an embedded option).
- Interest payments are defined as the interest paid periodically by the debtor to the creditor for the use of the principal; all other payments of economic value that reduce the principal amount outstanding are known as principal repayments (see *Guide*, paragraph 2.5).
- Debt service refers to payments in respect of both principal and interest over a period of time.⁴
- Contingent liabilities (implicit and/or explicit) are excluded from the external debt position. Such liabilities are those for which one or more conditions must be fulfilled before the contingency becomes a current liability (see *Guide*, paragraph 2.10).
- External debt statistics are compiled following the immediate borrower concept, notably:
 - The debt is attributed according to the country of residence of the borrower, that differs from the country of residence of the lender;
 - When a resident borrows from a nonresident and on-lends the funds domestically, the resident has an external debt liability to the nonresident and a domestic claim on the resident that received the on-lent funds (see *Guide*, Appendix 1, Part 2, On-Lending of Borrowed Funds); and
 - Debt is attributed to the guarantor only if and when the guarantee is called (see *Guide*, paragraph 2.32).
- The concept of residence is in conformity with the *Guide* and *BPM6* and relates to an institutional unit that is resident of an economy where it has its strongest connection, expressed as its center of predominant economic interest in the economic territory of that economy (see *Guide*, paragraphs 2.15 to 2.24), for example:

³ Foreign currency debt includes foreign-currency-linked external debt; that is, external debt that is settled in domestic currency with the amounts to be paid linked to a foreign currency (see *Guide*, paragraph 6.13).

⁴ A debt-service payment schedule projects payments on the outstanding gross external debt position at the reference date (see *Guide*, paragraph 6.25).

- All units of the general government (e.g., embassies, military bases, etc.) are considered to be resident in their own economy;
- Corporations are considered to be residents of the economy in which they are located, irrespectively of the residency of the owners;
- Unincorporated site offices of major construction and similar projects—such as oil
 and gas exploration—that take over a year to complete and are carried out by
 nonresident enterprises are considered to be residents of the economy where work is
 performed, subject to the one-year guideline and other considerations (e.g., maintain
 a complete set of accounts, pay income taxes to the host country, etc.);
- Offshore enterprises—including those engaged in the assembly of components manufactured in other countries, those engaged in trade and financial operations, and those located in special zones—are considered to be residents of the economy in which they are located;
- Special purpose entities (SPE)⁵ or vehicles, international business companies, shell
 companies, and brass plate companies are always treated as separate institutional
 units if they are resident in a different territory to that of their owners.
- International organizations and supranational authorities (e.g., regional central banks' headquarters) are not considered residents of any national economy.
- A currency union central bank is an international organization, and thus a nonresident from the perspective of the national central banks.
- In conformity with the *Guide*, the institutional sectors breakdown groups institutional units with common economic objectives and functions: general government, central bank, deposit-taking corporations, except the central bank, and other sectors (see *Guide*, paragraph 3.2).
 - The general government sector consists of (a) government units that exist at each level—central,⁶ state, or local— of government within the national economy; (b) all social security funds operated at each level of government; (c) all nonmarket nonprofit institutions that are controlled and mainly financed by government units; and (d) government units that are located abroad and are largely exempt from the laws of the territory in which they are located, such as embassies, consulates, and military bases (see *Guide*, paragraph 3.7).
 - The central bank sector includes residents units: (a) central banks; (b) currency boards, and (c) government-affiliated agencies that are separate institutional units and primarily perform central bank activities (see *Guide*, paragraph 3.5).

⁵ These entities may have little or no physical presence in the economy in which they are legally incorporated or legally domiciled and any substantive work of the entity may be conducted in another economy.

⁶ Government units include budgetary and extra-budgetary units.

- The deposit-taking corporations, except the central bank sector encompasses institutions such as saving banks (including trustee saving banks and savings and loans associations), credit unions or cooperatives, traveler's check companies, and specialized banks, or other financial institutions if they take deposits or issue close substitutes for deposits. Post office saving banks or other government-controlled savings banks are also included if they are institutional units separate from the government (see *Guide*, paragraph 3.6).⁷
- The other sectors category comprises: (a) other financial corporations, (b) nonfinancial corporations, and (c) households and nonprofit institutions serving households sectors (NPISH) (see *Guide*, paragraphs 3.8 to 3.11).
 - The other financial corporations subsector comprises (a) money market funds (MMFs); (b) non-MMF investment funds; (c) other financial intermediaries except insurance corporations and pension funds; (d) financial auxiliaries; (e) captive financial institutions and money lenders; (f) insurance corporations; and (g) pension funds.
 - The nonfinancial corporations subsector consists of resident entities whose principal activity is the production of market goods or nonfinancial services.
 - The households and NPISH subsector comprises the resident household sector, consisting of households, and the NPISH subsector, consisting of such entities as professional societies, political parties, trade unions, charities, etc.
- For the presentation of the external debt statistics in a public-sector based approach and in line with the *Guide* (see *Guide*, paragraphs 5.5 and 5.6) and the *Government Finance Statistics Manual* 2012 (*GFSM 2012*, draft):
 - Public sector is defined as the general government, central bank, and those entities in the deposit-taking corporations, except the central bank, and other sectors that are public corporations.
 - Public corporations are defined as nonfinancial or financial corporations that are subject to control by government units, with control over the corporation defined as the ability to determine general corporate policy.
 - Publicly guaranteed private sector external debt is defined as external debt liabilities
 of the private sector, the servicing of which is contractually guaranteed for
 repayment by a public unit resident in the same economy as the debtor.
- In conformity with the *Guide* and *BPM6*, debt comprises the following debt instruments:

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⁷ While it is recommended in the *Guide* that the definition of the deposit-taking corporation, except the central bank sector be consistent with the *2008 SNA* and *BPM6*, it is recognized that it may differ from the IMF's *Monetary and Financial Statistics Manual (MFSM)* (see *Guide*, paragraph 3.6, footnote 8).

- Special drawing rights (SDRs) are international reserve assets created by the IMF and allocated to members to supplement existing official reserves. SDR allocations are recorded as the incurrence of a long-term debt liability of the member receiving them (because interest accrues) (see *Guide*, paragraph 3.45);
- Currency and deposits consist of notes and coin and deposits (both transferable and other) (see *Guide*, paragraph 3.30);
- Debt securities are negotiable instruments serving as evidence of debt and include bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, money market instruments, and similar instruments normally traded in the financial market (see *Guide*, paragraphs 3.22 to 3.24);
- Loans are instruments created through the direct lending of funds by a creditor (lender) to a debtor (borrower) through an arrangement in which the lender receives a nonnegotiable document or instrument (see *Guide*, paragraph 3.34);⁸
- Trade credits and advances consist of claims or liabilities arising from the direct extension of credit by suppliers for transactions in goods and services, and advance payments by buyers for goods and services and for work in progress; credit provided through deposit-taking corporations or other financial intermediaries is excluded from trade credit and advances and included under loans (see *Guide*, paragraph 3.41);
- Insurance, pension, and standardized guarantee schemes comprises (a) nonlife insurance technical reserves; (b) life insurance and annuity entitlements; (c) pension entitlements, claims of pension funds on pension managers, and entitlements to nonpension funds; and (d) provisions for calls under standardized guarantees (see *Guide*, paragraph 3.40).
- Other accounts payable-other covers accounts payable other than those in trade
 credit and advances and other instruments. It includes liabilities for taxes, purchase
 and sale of securities, securities lending fees, gold loan fees, wages and salaries,
 dividends, and social contributions that have accrued by not yet paid. It also includes
 prepayment of these items (see *Guide*, paragraph 3.42).
- Direct investment: intercompany lending covers borrowing and lending of funds—including debt securities and supplier credits (e.g., trade credit and advances)—among direct investors and related subsidiaries, branches, and associates (see *Guide*, paragraph 3.17). Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Control or influence may be achieved directly by owning equity that gives voting power in the enterprise, or indirectly by having voting power in another enterprise that has voting power in the enterprise (see *Guide*, paragraph 3.14);

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⁸ A loan that becomes negotiable should be reclassified as a debt security (see *Guide*, paragraph 3.35).

- The short-term/long-term attribution of external debt is made according to the original maturity of the instrument, defined as the period of time from when the liability is created to its final maturity date (see *Guide*, paragraph 2.60). Therefore:
 - Long-term debt is defined as debt with an original maturity of more than one year or with no stated maturity; and
 - Short-term debt is defined as debt repayable on demand or with an original maturity of one year or less. Short-term debt includes currency.
- The attribution of external debt by currency is primarily determined by the currency of denomination (see *Guide*, paragraph 6.13). Foreign currency debt is defined as debt in which the value of flows and positions is fixed in a currency other than the domestic currency. A sub-category of foreign currency debt is debt settled in foreign currency with amounts to be paid linked to a domestic currency. Domestic currency debt is debt payable in domestic currency, and not linked to a foreign currency. Foreign-currency-linked debt is classified and treated in the international accounts as being denominated in foreign currency (see *Guide*, paragraphs 6.13 and 7.23).
 - Domestic currency is that which is legal tender in the economy and issued by the monetary authority for that economy or for the common currency area to which the economy belongs. An economy that uses as its legal tender a currency issued by a monetary authority of another economy or of a common currency area to which it does not belong should classify the currency as a foreign currency, although domestic transactions are settled in this currency (see *Guide*, paragraphs 6.12).
- Debt forgiveness is defined as the voluntary cancellation of debt within a contractual arrangement between creditor in one economy and debtor in another economy (see *Guide*, paragraph 8.11). Therefore any unilateral repudiation of debt by the debtor is not recognized as debt forgiveness. Debt relief is defined as any form of debt reorganization that relieves the overall burden of debt (see *Guide*, Appendix 3).
- Deviations from the above concepts and definitions are kept under review (see also 5.2.1).

2.2 Scope

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— The scope is in accord with internationally accepted standards, guidelines, or good practices.

⁹ Short-term remaining maturity external debt is measured by adding the value of outstanding short-term debt (original maturity) to the value of outstanding long-term external debt (original maturity) due to be paid in one year or less (see *Guide*, paragraph 6.7).

¹⁰ The currency of denomination is determined by the currency in which the value of flows and positions is fixed as specified in the contract or other agreement between the parties; it is important for distinguishing transaction values and holding gains and losses. The currency of settlement may be different from the currency of denomination.

- 2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.
- i. The scope of the external debt statistics is broadly consistent with the guidelines outlined in the relevant Guide and BPM6.
- In principle, all debt owed by residents to nonresidents—as specified in the *Guide* and *BPM6*—is included in the external debt position. Equity liabilities and financial derivatives are excluded (see *Guide*, paragraph 2.11).
- In principle, all resident institutional units with debt to nonresidents are covered, including: general government (including territorial enclaves in the rest of the world, e.g., embassies), public corporations, incorporated or unincorporated affiliates¹¹ of nonresident corporations, offshore enterprises, SPEs, and other private sector institutional units (including households and small private enterprises).

• Debt includes:

- Debt securities issued (abroad or in the domestic market) by residents and owned by nonresidents:
- Perpetual bonds owned by nonresidents (although no principal is repaid);
- Convertible bonds owned by nonresidents (as bonds are converted into equity, so the debt is extinguished);
- Nonparticipating preferred shares owned by nonresidents (see *Guide*, Appendix 1, Part 1);
- Interest-free loans owed to nonresidents:
- Financial leases with nonresidents (treated as loans);
- Security repurchases agreements (repos) and gold swaps (which are treated as collateralized loans, and the securities or gold represent the collateral for cash) (see *Guide*, paragraph 3.37);
- Trade credits and advances to nonresidents;
- Deposits in domestic banks owed to nonresidents;
- Noncash debt to nonresidents:
- Intercompany lending between entities in a direct investment relationship;

¹¹ Affiliated enterprises are enterprises related through direct investment ownership structures, such as branches, subsidiaries, associates, and joint ventures (see *Guide*, Appendix 3).

- Outstanding debt owed to nonresidents arising from interest costs that have accrued and are not yet payable;
- Debt arrears of principal and interest (including interest on arrears) to nonresidents;
- Amounts owed to a nonresident for a service that has been provided but payment is not due;
- Debt from overdue obligations with nonresidents, even though the underlying instrument may not qualify as debt (e.g., an overdue obligation to settle a financial derivatives contract would, like any arrears, be debt because a payment is required) (see *Guide*, paragraph 2.11);
- Debt from dividends once the shares go ex-dividend until they are settled, even though equity securities are not debt (see *Guide*, paragraph 2.27);
- Debt to nonresidents created by the force of law (e.g., claims arising from taxes, penalties, and judicial awards at the time they are imposed) (see *Guide*, paragraph 2.4);
- Debt to nonresidents created by events that require future transfer payments (e.g. claims on nonlife insurance corporations, claims for damages not involving nonlife insurance corporations, and claims arising from lottery and gambling activities) (see *Guide*, paragraph 2.4);
- Debt liabilities of pension funds and life insurance corporations to their nonresident participants and policyholders (see *Guide*, paragraph 2.8);
- Debt liabilities of mutual funds or investment trusts to their nonresident creditors (see *Guide*, paragraph 3.19, footnote 17);
- Short-term debt to nonresidents; and
- All domestic and foreign currency debt owed to nonresidents.
- In principle, as specified in the *Guide* and *BPM6*, resident-nonresident liabilities that are excluded from the external debt position include:
 - Contingent debt (see *Guide*, paragraph 2.10); and
 - Positions in financial derivatives and equity securities and equity capital, which are nondebt liabilities (see *Guide*, paragraph 2.11).
- Deviations from the above scope are kept under review (see also 5.2.1).

2.3 Classification/Sectorization

— Classification/Sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.

2.3.1 Classification/Sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.

- i. Classification used for the external debt statistics are in broad conformity with guidelines outlined in the Guide and BPM6.
- Institutional units are classified and attributed to the relevant institutional sector according to the *Guide* and *BPM6*, and to the IMF data dissemination standards.
 - Special Data Dissemination Standard (SDDS) 12
 - External debt is classified into four institutional sectors in the debtor country; i.e. general government, central bank, deposit-taking corporations, except the central bank, and other sectors (see *Guide*, Box 4.1).
 - In economies in which some central banking functions are performed wholly or partly outside the central bank, particularly holding reserve assets, consideration should be given to compiling supplementary data for the monetary authorities;
 - External debt of other financial corporations (private and public controlled) other than deposit-taking corporations is classified under other sectors;
 - External debt of nonfinancial corporations (private and public controlled) is classified under other sectors; and
 - External debt of households and nonprofit institutions serving households (NPISH) is classified under other sectors.
 - Separate identification of direct investment intercompany lending liabilities between entities under direct investment relationships is preferred (see *Guide*, paragraph 3.14); otherwise, data are classified under general government, deposit-taking corporations, and/or other sectors (as it corresponds).

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¹² In February 2012, the IMF's Executive Board approved the SDDS Plus as a third tier of the Fund's Data Standards Initiative. No external debt data category is included in the SDDS Plus but to adhere to the SDDS Plus the adherent must be in observance of the SDDS.

- General Data Dissemination System (GDDS)
- External debt data are classified into public (inclusive of the general government, central bank, and public corporations) and publicly guaranteed debt, and private debt not publicly guaranteed (see *Guide*, Box 4.1). Separate identification of public sector external debt and publicly guaranteed private sector external debt is preferred (see *Guide*, paragraph 5.7).
- External debt is classified by type of instrument as specified in the *Guide* (see *Guide*, paragraphs 3.13 to 3.45) and *BPM6*.
 - Instruments are classified as follows: SDR allocations, currency and deposits, debt securities, loans, trade credit and advances, other debt liabilities, and direct investment-intercompany debt;
 - Debt securities issued with an original maturity of more than one year are classified as long-term and those with an original maturity of a year or less are classified as short-term (see *Guide*, paragraphs 3.22 to 3.23);
 - Loan liabilities of the deposit-taking corporations, except the central bank sector are classified separately from currency and deposits liabilities of this sector;
 - Interest costs that have accrued but are not yet payable are classified—to the extent possible—as part of the value of the underlying instrument; and
 - Intercompany debt liabilities between two affiliated financial intermediaries that are recorded under direct investment are limited to debt between captive financial institutions and money lenders, insurance and pension funds, and financial auxiliaries. All other intercompany debt liabilities are classified by type of instrument (such as loans, debt security, etc.) and attributed to the institutional sector of the debtor entity (see *Guide*, paragraph 3.20).
- External debt is classified by maturity according to the original maturity of the instrument as specified in the *Guide* and *BPM6*.
 - Debt repayable on demand is classified as short-term debt (see *Guide*, paragraph 2.60);
 - If information on maturity is not available, compilers make the short-term/long term attribution of external debt based on reasonable assumptions. For example, direct investment: intercompany lending is attributed to long-term maturity (see *Guide*, paragraph 7.5) and currency and deposits (see *Guide*, paragraph 3.30) are attributed to short-term maturity.
- Deviations from above classification systems are kept under review (see also 5.2.1).

2.4 Basis for recording

— Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.

2.4.1 Market prices are used to value transactions and positions. For some positions, proxies are used.

- i. Valuation for data recording follows the principle of market valuation outlined in Guide and BPM6.
- The valuation principles specified in the *Guide* and *BPM6* are:
 - At the reference date, external debt is valued at nominal value, and the part made up of debt securities valued at market value as well (see *Guide*, paragraph 2.33). The valuation principles are clearly stated in footnotes/explanatory notes of the relevant tables;
 - In determining the market value of a debt security, the market price for that instrument prevailing at the reference date to which the debt relates is obtained from an organized market in which the instrument is traded in considerable volume. In the absence of such a source, the market value is estimated by discounting future payments at an appropriate current market interest rate (see *Guide*, paragraph 2.36);
 - The market value of debt securities includes interest accrued but not yet payable. When market prices are quoted without such interest, adjustments to market prices are made (see *Guide*, paragraph 2.36); and
 - The value of external debt position is reduced to reflect the entire value of debt extinguished, irrespective of the valuation of the economic value provided as quid pro quo.
- Deviations from the above valuation principles are kept under review (see also 5.2.1).
- ii. Foreign currency debt is converted into unit of account following guidelines outlined in the Guide and BPM6.
- External debt in foreign currency is converted into the unit of account, such as domestic currency, using the mid-point between the buying and selling market (spot) exchange rates prevailing on the reference date to which the external debt position data relate (see *Guide*, paragraph 2.59). When the actual exchange rate is not available, the exchange rates for the nearest previous date are used.

- External debt payments may be required in a currency different from the unit of account used for presenting data in the debt-service payment schedule. For such external debt payments, projected payments should be converted to the unit of account using the market exchange rate (that is, the midpoint between the buying and the selling spot rates) prevailing on the reference date (see *Guide*, paragraph 6.27).
- Proper adjustments are made if a system of multiple official exchange rates exists (see *Guide*, paragraph 2.59).
- Deviations from the above valuation principles are kept under review (see also 5.2.1).

2.4.2 Recording is done on an accrual basis.

i. External debt transactions are recorded on an accrual basis.

- The principle determining the recognition of external debt and their time of recording is that of ownership. The debtor has an obligation to the creditor and the creditor owns a claim on the debtor (see *Guide*, paragraph 2.25).
- For all external debt bearing interest, interest is treated as accruing continuously, matching the cost and use of capital (see *Guide*, paragraph 2.28).
- If an accrual-recording basis is not used to record external debt data, compilers identify
 whether data are recorded on a due-for-payment recording basis or on a cash recording
 basis.
- Deviations from the above accrual accounting are kept under review (see also 5.2.1).

2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.

- i. The recording of external debt follows guidelines of the Guide and BPM6.
- In line with the recommendations of the *Guide* and *BPM6*, all external debt is recorded on a gross basis, separately from any related asset component.
- Defeasance does not affect the outstanding debt of the debtor as long as there has been no change in the legal obligations of the debtor (see *Guide*, Appendix 1).¹³
- Deviations from the above recording are kept under review (see also 5.2.1).

¹³ Defeasance is a technique by which a debtor removes liabilities from its balance sheet by pairing them with financial assets, the income and value of which are sufficient to ensure that all debt service payments are met.

3. ACCURACY AND RELIABILITY

Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.

The accuracy and reliability dimension would generally be evaluated at the level of the materially-significant external debt data categories (e.g., institutional sector, maturity, and type of instrument).

3.1 Source data

— Source data available provide an adequate basis to compile statistics.

3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.

- i. The data collection programs employed to compile the external debt statistics are adequate.
- The data sources are broadly sufficient to compile the external debt statistics, covering the full range of institutional sectors and financial instruments.
- The data sources are kept under continuous review to ensure that the data collection program is comprehensive.
- Sound debt recording systems are used to compile external debt statistics.

ii. Data collections based on surveys are adequate.

- A comprehensive and up-to-date business register provides the basis for sample surveys of business units engaged in external debt operations.
- Established procedures provide for frequently integrating new transactor units into the register(s) and accounting for mergers, cessation of operations, and other changes.
- In the absence of a statistical business register, other comprehensive frames are available (e.g., annual registers developed for licensing or other administrative purposes).
- Survey questionnaires are constructed according to sound design principles, they are reviewed periodically to take account of changed circumstances, and proposed changes are pre-tested to ensure effectiveness.
- Sample design ensures that the in scope population is represented properly.
- The sample selections are assessed regularly, especially in relation to maintaining acceptable levels of sample error.

- Benchmark collections are conducted, or other framework information is collected, with sufficient frequency, to ensure that the survey is effective.
- Surveys are conducted, mainly:
 - Surveys of deposit-taking corporations, other financial corporations, and nonfinancial corporations for data on their debt to nonresidents, including deposit liabilities and permanent debt of branches of foreign deposit-taking corporations, except the central bank;
 - Enterprise surveys for (a) debt securities issued abroad by the private sector, (b) external loan liabilities of the private sector, (c) trade credit and advances liabilities, (d) miscellaneous accounts payable and dividends once the shares go ex-dividend and until they are settled; and (e) direct investment: intercompany lending liabilities; and,
 - Surveys of custodians and/or investment dealers and brokers for domestically issued debt securities held by nonresidents.

iii. Data collections based on administrative data sources are adequate.

- Data from administrative records used to compile the external debt position are adequate, including:
 - Accounting records of the finance/other government department(s) for data on securities issued abroad by the general government units and external loan liabilities of the general government units;
 - Accounting records of the central bank for data on its deposit liabilities to nonresidents and loan liabilities to the IMF; and
 - Audited accounting records of the individual financial and nonfinancial public corporations for their external debt.
- Gaps in administrative records data in terms of detail and coverage are known and accounted for.
- iv. The data collection programs are sufficiently open and flexible to provide for new developments in sources.
- Periodic meetings are held with government officials, financial market participants, and the business community to identify new developments that need to be taken account in the external debt compilation system.
- The financial press and research papers are monitored for information on international transactions and transactors that need to be taken account in the external debt compilation system.

- The data producing agency's responsibilities for the collection of statistical information allow the agency to adapt as new developments emerge.
- The data producing agency consults with the supplying agencies to ascertain changes in administrative processes that may affect the statistics.
- International standards, guidelines, and practices are monitored for changes that need to be taken into account in the external debt compilation system.

3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.

- i. Source data are consistent with the definitions, scope, and classifications adopted by the compiling agency.
- Source data are consistent with the definitions, scope and classifications, and time of recording of external debt data. Pilot tests have been conducted to ensure that data collected will allow compilation of estimates according to international guidelines.
- Concept of residence and not nationality or currency is applied to determine deposittaking corporation's external debt, when deposit-taking corporation' balance sheets are used as source data.
- Administrative records used to compile external debt data provide reasonable approximations of the methodological requirements of the external debt statistics.
- Future external debt-service payment schedules relate only to outstanding debt, excluding any payments on undisbursed amounts.
- ii. Information is available on the extent to which supplementary data sources differ from international statistical guidelines.
- Information obtained from data sources is broadly in line with the recommendations of the *Guide*. If not, the data producing agency has enough information on deviations of the source data from requirements of the external debt statistics to make the necessary adjustments to conform to these guidelines.

3.1.3 Source data are timely.

- i. The data collection programs provide for the timely receipt of data.
- Data collection and processing timetables are adequate to meet timeliness and periodicity for disseminating the external debt statistics.
- Respondents are made aware of the deadlines set for reporting.
- Data collection is carefully monitored to ensure that non-respondents can be identified.

• The data producing agency employs rigorous follow-up procedures to ensure the timely receipt of respondents' data (e.g., by contacting the respondent).

3.2 Assessment of source data

- Source data are regularly assessed.
- 3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.
- i. Accuracy of the data from surveys is routinely assessed.
- Information about sampling errors for each of the surveys conducted is monitored on a regular basis. Information about non-sampling errors (survey operations, biases, over/under-coverage, misclassification, mismeasurement, processing errors, and nonresponse) is available.
- The effects of major changes to questionnaires on survey estimates are assessed.
- Source data are analyzed in the context of revisions. All material changes from available up-to-date data are incorporated into the external debt statement according to a revision cycle that prevents the accumulation of revisions over long periods of time.
- The procedures identify outliers and other atypical differences in periodic responses by individual survey units. Extreme values are confirmed with respondents, and records maintained on the confirmation.
- ii. Accuracy of the information from administrative data and other supplementary sources is routinely assessed.
- Source data from administrative records are regularly assessed.
- When necessary, source data are reviewed with the agency responsible for managing the specific debt liability.
- Auditing mechanisms, which are consistent with generally accepted good practices of public finance control, are implemented regularly.
- Information is available about the specific revision policies of source data followed by the individual reporters.
- Accuracy of monetary and financial statistics, government finance statistics, balance of
 payments and international investment position (IIP) statistics, and other supplementary
 sources used to compile external debt statistics is routinely assessed.

- The source data are analyzed in particular to check for:
 - Temporal consistency,
 - Consistency with other related source data

3.3 Statistical techniques

— Statistical techniques employed conform to sound statistical procedures.

3.3.1 Data compilation employs sound statistical techniques to deal with data sources.

- i. Data compilation procedures are sound.
- Data compilation procedures minimize processing errors such as coding, editing, and tabulation errors.
- Adjustments to unit records are made only when clearly warranted (e.g., unusual values are not replaced or modified unless clearly required), and can be identified in datasets.
- Periodic reviews of internal procedures are undertaken to ensure that the compilation process remains robust.
- ii. Appropriate measures are taken to adjust the source data.
- Procedures for imputation and adjustment for nonresponse are soundly based.
- Appropriate measures are undertaken when the non-sampling errors become large.
- Sound estimation techniques are employed to adjust data for missing observations in statistical collections.
- Estimations/imputations are derived appropriately, based on sample design.
- 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.
- i. Sound adjustments are employed to make source data consistent with external debt data requirements.
- Specific procedures are developed to adjust data from various sources to improve coverage, classification, and valuation and conform to guidelines set out in the relevant manual, for example:
 - Where position data are estimated from cumulating transactions data (not a preferred approach), an attempt is made to revalue the position data to include valuation and other changes (see *Guide*, paragraphs 12.50 to 12.71).

- When external debt is contracted by a resident agency and the funds are on-lent to another resident, the agency contracting the debt is recorded as debtor, and not the agency to which these funds are on-lent;
- When external debt is contracted by a resident agency but funds are disbursed directly by the creditor to a resident project implementing agency, the agency contracting the debt is recorded as debtor and not the project implementing agency;
- When arrears of principal and/or interest are recorded under short-term debt, adjustments are made to include these arrears in the original instrument;
- If accrual accounting is not reported by data sources, compilers make appropriate
 adjustments to approximate accrual (e.g., by applying income yields to the value of
 assets and liabilities using various types of the extrapolation techniques);
- A change in the terms of debt due to debt refinancing/rescheduling is recorded as the creation of a new debt with the original debt extinguished;
- Private sector external debt guaranteed by the public sector should be included in publicly guaranteed private sector external debt statistics only;
- Debt of residents issued in the domestic market should be included as external debt if owned by nonresidents;
- Debt of residents issued in foreign markets should be excluded from external debt if owned by residents;
- Debt securities are revalued to market prices using price information from the market that is updated on a frequent basis and is adjusted for any exclusion of accrual interest in the prices quoted;
- The capitalization of interest by a contractual arrangement with the creditor converts accrued interest costs into a new debt instrument or increases the principal amount outstanding (see *Guide*, Appendix 3); and
- Source data on debt securities in secondary markets, which are reported net of fees
 and commissions, are adjusted to a gross basis based on information on average
 commission rates obtained from a sample of securities dealers.

3.4 Assessment and validation of intermediate data and statistical outputs.

— Intermediate data and statistical outputs are regularly assessed and validated.

3.4.1 Intermediate results are validated against other information where applicable.

- i. Intermediate results are validated against other independent data sources.
- Intermediate results are checked across a wide range of data sources, including:

- Data received from the finance/other government department(s), project implementing agencies, planning agencies, and other source are used to assess accuracy of reported information on external debt position of nonfinancial public corporations;
- For high value external debt, borrowing data from commercial accounts of enterprises can be compared with the reported information; and
- Information reported in the financial press is used to verify high-value external debt.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

- i. The behavior of series is cross-checked with related series/indicators.
- The behavior of series is routinely assessed against related series, for instance:
 - The difference between the beginning and end-period value of external debt data for each liability category is equal to the sum of transactions, price changes, exchange rate changes, and other adjustments for that category (see *Guide*, Table 7.12);
 - Primary income balance of payments data could be compared with position data to see whether the implied rates of return on liabilities and assets are realistic; and
 - Movements of trade credit and advances liabilities are compared to time series on goods imports.

3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.

- i. Statistical discrepancies between external debt position data and other statistical outputs are investigated.
- Discrepancies with government finance statistics are investigated regularly for identifying errors or omissions in concepts, definitions, coverage, valuation, residence, and classification.
- Discrepancies with data on balance of payments transactions and IIP liabilities are investigated periodically.
- In the event of large unexplained changes in the external debt data, procedures for comparison with relevant data of other statistical outputs have been established for identifying errors or omissions as a source of fluctuations or discrepancies.
- ii. Bilateral comparisons/reconciliations are conducted with data of other countries and international organizations.

- Debt records are routinely compared with creditor statements, wherever applicable, and periodic requests to creditors are made to verify the status of the high value loans that they have extended to resident organizations.
- Bilateral data reconciliations are conducted with selected countries/creditors, and large differences are investigated. Differences in concepts and compilation methods are identified and are taken into account in the data comparisons.
- Data on selected external debt categories are compared with categories included in the Joint External Debt Hub (JEDH).¹⁴
- Coverage of debt securities issued in international markets is crosschecked against the international securities statistics of the Bank for International Settlements (BIS).¹⁵
- The locational banking statistics published by the BIS are used to check coverage of nonbank liabilities to nonresident banks domiciled in BIS reporting areas.
- Coverage of debt securities is compared against the results of the creditor data published by the Coordinated Portfolio Investment Survey (CPIS).¹⁶
- Coverage of direct investment: intercompany lending is compared against the results of the data published by the Coordinated Direct Investment Survey (CDIS).¹⁷

3.5 Revision studies

— Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.

3.5.1 Studies and analyses of revisions and/or updates are carried and used internally to inform statistical processes (see also 4.3.3).

- i. Revisions to the external debt statistics are periodically assessed.
- Studies assess the initial estimates against revised or final estimates over a given period of time and comprise:
 - studies of scale (frequency of revision and number of time series revised);
 - studies of direction and magnitude of revisions.

¹⁴ The Joint External Debt Hub (JEDH) brings together external debt data and selected foreign assets from international creditor/market and national debtor sources. Data on JEDH are available at http://www.jedh.org/.

¹⁵ BIS data are available at http://www.bis.org/statistics/index.htm.

¹⁶ CPIS data are available at http://cpis.imf.org/.

¹⁷ CDIS data are available at http://cdis.imf.org/.

- Studies of long-term trends in the revision pattern are conducted periodically to identify series that may be systematically biased.
- Studies investigate the sources of errors, omissions, and fluctuations in the data.
- ii. Measures are taken to incorporate the findings from revision studies in data compilation.
- Findings from revision studies (such as the pattern of availability of major data sources) are used to define the optimal revision cycle.
- Findings from revision studies are used to refine preliminary data and data collection programs for the subsequent periods (e.g., findings of persistent misreporting from enterprises are routinely analyzed and used in an internal quality control exercise).
- Time-series of revisions to output data are examined to identify the long-term trends in the revision patterns. Appropriate adjustments that reflect a predicted revision pattern are made at the time of initial estimates to enhance the accuracy of data.
- Adequate documentation on revisions is maintained and includes descriptions of causes of revisions, methods used to incorporate new data sources, and the way data are adjusted.

4. SERVICEABILITY

Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.

4.1 Periodicity and timeliness

— Periodicity and timeliness follow internationally accepted dissemination standards.

4.1.1 Periodicity follows dissemination standards.

i. The periodicity of the external debt statistics follows the IMF data dissemination standards (Special Data Dissemination Standard (SDDS) or General Data Dissemination System (GDDS)).

• $SDDS^{18}$

 Quarterly external debt position data, broken down by four institutional sectors (general government, central bank, deposit-taking corporations, except the central bank, and other sectors) are disseminated. Data disaggregated by maturity (short-

¹⁸ See *Guide*, Box 4.1. Dissemination of debt service schedule, domestic/foreign currency, and payments due in one year or less of external debt is encouraged by SDDS on a semi-annual, quarterly, and (again) quarterly periodicity, respectively (see 5.1.1.).

term and long-term) and provided on an original maturity basis and by type of instrument, as set out in *BPM6*.¹⁹

• GDDS²⁰

- Public and publicly guaranteed external debt position data, broken down by maturity, are disseminated quarterly;²¹
- The associated public and publicly guaranteed external debt service schedules are disseminated twice yearly with data for four quarters and two semesters ahead; and
- Private external debt not publicly guaranteed position data are disseminated with annual periodicity.

4.1.2 Timeliness follows dissemination standards.

i. The timeliness of the statistical series follows the IMF data dissemination standards (SDDS or GDDS).

SDDS

- Quarterly external debt position data are disseminated within one quarter after the reference date (see *Guide*, Box 4.1).

GDDS²²

- Quarterly public and publicly guaranteed external debt position data are disseminated within one to two quarters after the reference date;
- The associated public and publicly guaranteed external debt service schedules are disseminated within one to two quarters after the reference period; and
- Private external debt not publicly guaranteed position data are disseminated within six to nine months after the reference date.

4.2 Consistency

— Statistics are consistent within a dataset, over time, and with major datasets.

¹⁹ Separate identification of direct investment: intercompany lending liabilities between entities under direct investment relationship without institutional sector attribution is preferred (see *Guide*, Table 4.1). External debt statistics that are compiled on a *BPM5* basis should be assessed against the disaggregations by sector and by type of instrument, as set out in *BPM5*.

²⁰ See *Guide*, Box 4.1.

²¹ Additional breakdown into public sector and publicly guaranteed private sector debt is preferred (see *Guide*, Table 5.2).

²² See *Guide*, Box 4.1.

4.2.1 Statistics are consistent within the dataset.

- i. The external debt statistics are internally consistent.
- Monthly, quarterly, and/or annual external debt statistics are consistent.
- External debt position data are consistent with the corresponding external debt transactions data and any projected payments data.
- Nominal and market value are reconcilable for traded instruments.

4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.

- i. The external debt statistics are consistent over time.
- Consistent time series are available for an adequate period of time (at least five years).
- When changes in source data, methodology, or techniques are introduced, historical series are reconstructed as far back as reasonably possible.
- Detailed methodological notes identify and explain the main breaks and discontinuities in the external debt component time series, their causes, as well as adjustments made to maintain consistency over time.
- Unusual changes in economic trends are explained in the commentary included in the external debt statistics publication and in the database accessible to users.

4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.

- i. The external debt statistics are consistent or reconcilable with the national accounts, balance of payments, IIP, monetary and financial, and government finance.
- External debt position statistics are consistent with:
 - Related national accounts statistics (both stocks and flows);
 - External debt data included within the IIP;
 - Related transactions recorded in the balance of payments.
- Public sector/general government external debt data are consistent with related government finance statistics (both stocks and flows).
- The deposit-taking corporations sector and central bank liabilities in the external debt statistics are largely consistent with monetary and financial statistics (e.g., commercial

banks' loan liabilities to nonresidents, currency and deposits held by nonresidents at resident banks).

4.3 Revision policy and practice

— Data revisions follow a regular and publicized procedure.

4.3.1 Revisions and/or updates follow a regular and transparent schedule.

- i. The practice of revisions (e.g., from provisional estimates, weight updates, for changes in methodology) follows a predictable pattern of which users of statistics are informed.
- The revision cycle is predetermined and reasonably stable from year to year.
- The revision cycle is made known to the public.
- The reasons underlying the cycle (e.g., the availability of source data, the timing of revisions with related datasets, the timing for preparing important economic policy documents) are explained.
- Adequate documentation of revisions is included in the publication of the statistical series and in the database accessible to users.
- When revisions outside the regular cycle are called for (e.g., by the discovery of new source data, errors), they are made known to the public.

4.3.2 Preliminary and/or revised/updated data are clearly identified.

- i. Users are informed about the preliminary nature of the data.
- At the time of data dissemination, users are informed whenever data are preliminary.
- ii. Users are informed about the revised nature of the data.
- At the time of data dissemination, users are informed whenever data are revised.
- Sufficient back runs of data are provided after revisions have been published.

4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).

- i. Users are informed of results and studies of the revisions to the statistics.
- Revisions are measured, assessed, and explained in the external debt statistics publication and in the database accessible by users.

- Analysis of differences between the revised and preliminary data is published for major aggregates to allow an assessment of the reliability of the preliminary data.
- Major reclassifications or changes in external debt components are clearly identified through table footnotes. For example, major changes in the classification of external debt by institutional sector due to debt relief are clearly identified.

5. ACCESSIBILITY

Data and metadata are easily available and assistance to users is adequate.

5.1 Data accessibility

— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).

- i. The presentation of external debt data is commensurate with users' needs.
- The external debt statistics are disseminated according to the classifications recommended by the *Guide* and *BPM6*,²³ and with time series form.
- The statistics are disseminated in a clear manner, with charts and tables to facilitate analysis.
- Commentaries on current-period developments are included.
- ii. Supplementary external debt information encouraged by the IMF data dissemination standards (SDDS or GDDS, where applicable) are provided to users.
- SDDS²⁴

- Quarterly data on the domestic-foreign currency breakdown of the external debt position are disseminated within one quarter after the reference date;²⁵
- Data on future external debt-service payment schedules, in which the interest and principal components are separately identified, are disseminated twice yearly for the first four quarters and the following two semesters ahead within one quarter after the

²³ External debt statistics that are compiled on a *BPM5* basis should be assessed against the classifications recommended in *BPM5*.

²⁴ See *Guide*, Box 4.1. External debt statistics that are compiled on a *BPM5* basis should be assessed against the classifications recommended in *BPM5*.

 $^{^{25}}$ Additional breakdown by maturity (see *Guide*, Table 7.6) or by institutional sector and maturity (see *Guide*, Table 7.7) are preferred.

reference period.²⁶ Data can be broken down into institutional sector—general government, central bank, deposit-taking corporations, except the central bank, and other sectors,²⁷ and

 Quarterly data on principal and interest payments on external debt due in one year or less broken down into institutional sector—general government, central bank, deposit-taking corporations, except the central bank, and other sectors—and direct investment: intercompany lending are disseminated within one quarter after the reference period.

GDDS

 The debt-service schedule for private external debt not publicly guaranteed is disseminated annually within six to nine months after the reference period (see *Guide*, Box 4.1).²⁸

iii. Other supplementary information for external debt analysis and external debt vulnerability presented in line with the Guide is provided to users on a regular basis.

- Additional series are disseminated to meet a range of users' needs with various levels of detail
 - External debt data series for use in examining potential sources of vulnerability are
 disseminated on a regular basis; in particular, external debt by remaining maturity.
 Other series that might be compiled include the interest-rate composition of external
 debt, external debt by type of creditor, external debt on an ultimate risk basis, and
 net external debt; and
 - Detailed information on nondebt liabilities (financial derivatives, equity securities, and equity capital) that potentially could render an economy vulnerable to solvency and liquidity crises is disseminated.

5.1.2 Dissemination media and formats are adequate.

i. Statistics are disseminated in formats to suit users' needs.

 Statistics are disseminated in ways that facilitate re-dissemination in the media (e.g., information releases).

²⁶ While not encouraged, it is recognized that national practice might be to classify service charges related to a loan along with interest in the debt-service schedule (see *Guide*, paragraph 6.34).

²⁷ Direct investment: intercompany lending should be preferably disseminated separately from the four sectors. Alternatively, direct investment: intercompany lending should be reported under its relevant sector. Additional breakdown by instrument (see *Guide*, Table 7.2) are preferred.

²⁸ Breakdown by maturity and by institutional sector (see *Guide*, Table 5.1) for external debt position data, and breakdown by instrument and separate identification of the principal and interest components for debt-service payments schedules (see *Guide*, Table 7.3) are preferred.

- External debt positions data are available in formats consistent with the World Bank's Quarterly External Debt Statistics (QEDS) database.²⁹
- More comprehensive and/or detailed statistics are also disseminated in paper and/or electronic formats.
- Current statistics and longer time series can be accessed (perhaps for a fee) through an electronic database maintained by or on behalf of the data producing agency.

5.1.3 Statistics are released on the preannounced schedule.

- i. Statistics are released on the preannounced schedule.
- A schedule announces in advance the dates the statistics are to be released.
- The statistics are released punctually, that is according to the pre-announced schedule.

5.1.4 Statistics are made available to all users at the same time.

- i. The external debt statistics are made available to all users of statistics at the same time.
- The public is informed of the statistics being released and of the procedures to access them (e.g., Internet, publications).
- The statistics are made available to all interested users simultaneously.
- If the press is briefed in advance, embargoes are imposed to prevent early public disclosure.

5.1.5 Statistics not routinely disseminated are made available upon request.

- i. Statistics not routinely disseminated are made available to users upon request.
- In addition to the statistics routinely disseminated, other general statistics are made available upon request.
- Customized tabulations can be provided (perhaps for a fee) to meet specific requests.
- The availability of additional statistics and of the procedures for obtaining them are made known.

²⁹ Available at www.worldbank.org/geds.

5.2 Metadata accessibility

- *Up-to-date* and pertinent metadata are made available.
- 5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.
- i. The external debt statistics metadata give adequate information about the meaning of the data and about the methodology used to collect and process them.
- A comprehensive sources and methods document is published and updated regularly, and it includes the following:
 - Information on concepts, definitions, classifications, data sources, compilation methods, statistical techniques and other relevant methodological aspects and procedures;
 - Departures from internationally accepted standards, guidelines, or good practices;
 - Information on survey sources, such as survey characteristics (response rates, survey monitoring and studies of non sampling errors) and other survey features (method, sample frame, sample design and selection, estimation and imputation techniques, etc.), and on the nature of administrative data sources; and main linkages with related major data systems.
 - If consistency is achieved by deriving any component residually, this is identified in the notes accompanying external debt statistics.
 - Departures from internationally accepted standards, guidelines, and good practices are well documented in the metadata.
 - The SDDS/GDDS metadata, SDDS summary methodologies, and other related descriptions are reviewed and updated regularly.
 - The metadata are readily accessible (e.g., websites, statistical publications) and their availability is cross-referenced in data releases, and otherwise well publicized (e.g., in catalogs).
- 5.2.2 Levels of detail are adapted to the needs of the intended audience.
- i. Different levels of metadata detail are made available to meet users' requirements.
- General use information (e.g., a brochure) about the external debt and other external sector statistics (e.g., how to locate the data) is available and made public.
- More specialized information (e.g., background papers, working documents) is available and made public.

5.3 Assistance to users

— Prompt and knowledgeable support service is available.

5.3.1 Contact points are publicized.

- i. Adequate assistance is given to users of statistics.
- Prompt and knowledgeable service and support are available to users of statistics.
- All statistical releases identify contact points for enquiries by mail, telephone, facsimile, or by e-mail.
- Material to raise awareness on the use of statistics is available (e.g., for schools and research).
- Access points for clients to obtain statistical information are well advertised.
- Assistance to users is monitored and reviewed periodically (e.g., time of response to email requests).

5.3.2 Publications, documents, and other services, including information on any charges, are widely available.

- i. Publications and other services are available to users of statistics.
- Publications, documents, and other services to users are available, and updated regularly (e.g., each year if needed).
- The prices of the statistical products and services are clearly disclosed and assistance is provided in placing orders.