

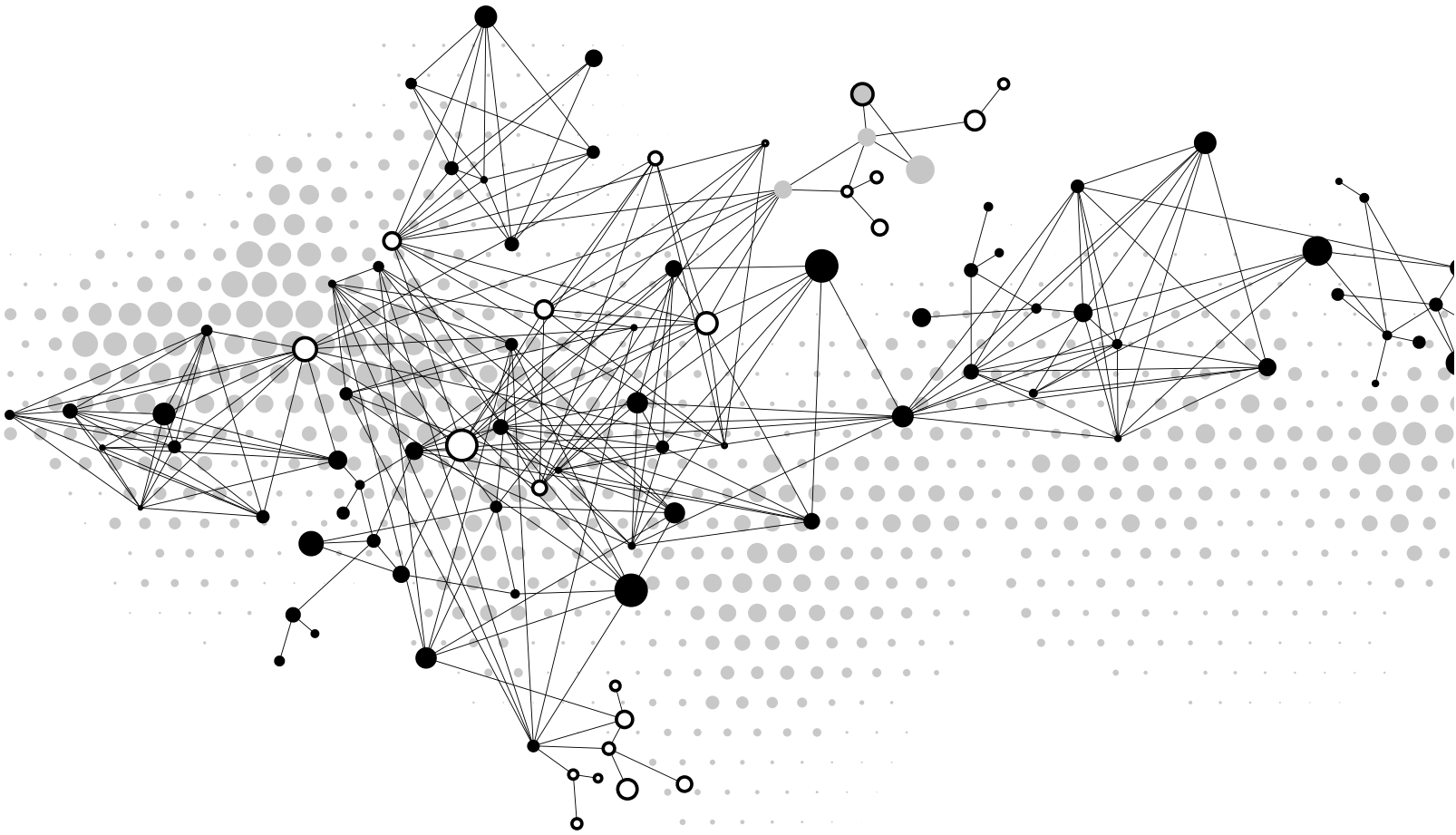


# EXTERNAL DEBT STATISTICS

## GUIDE FOR COMPILERS AND USERS







# EXTERNAL DEBT STATISTICS

## GUIDE FOR COMPILERS AND USERS



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## Foreword

This volume, *External Debt Statistics: Guide for Compilers and Users (Guide)*, has been prepared under the joint responsibility of the nine organizations in the Inter-Agency Task Force on Finance Statistics. The preparation of the *Guide* was based on the broad range of experience of our institutions in close consultation with national compilers of external debt, balance of payments, and international investment position statistics.

International financial crises in recent years and the associated external debt levels in many countries underscored the importance of reliable and timely statistics on external debt as a critical element for the early detection of countries' external vulnerability. Against this background, improving the quality and timeliness of key external debt data and promoting convergence of recording practices have been the focus in the preparation of the *Guide*. The *Guide* is a useful source of reference both for national compilers and users of external debt statistics.

The *Guide* updates the previous international guidelines on external debt statistics, *External Debt Statistics: Guide for Compilers and Users* published by our organizations in 2003. The concepts set out in the *Guide* are harmonized with those of the *System of National Accounts 2008* and the sixth edition of the IMF's *Balance of Payments and International Investment Position Manual*, published in 2009.

I recommend that countries adopt the *Guide* as the basis for compiling and disseminating external debt statistics.

Christine Lagarde  
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*International Monetary Fund*





# Preface

The need for comprehensive, internationally comparable, and reliable information on external debt to inform policymakers, financial markets, and other users of statistics has long been recognized. This was once again reinforced by the international financial crises that started in 2007. Because they carry obligations to make future payments, external debt liabilities have the potential to create circumstances that render an economy vulnerable to solvency and liquidity problems. Moreover, as experience has shown, external vulnerability can have widespread economic costs, and not just for the initially affected economy. It is clear, therefore, that external debt needs to be measured and monitored. To this end, the *External Debt Statistics: Guide for Compilers and Users (Guide)* provides guidance on (1) the concepts, definitions, and classifications of external debt data; (2) the sources and techniques for compiling these data; and (3) the analytical uses of these data. The *Guide* is intended to be of use to both compilers and users of external debt statistics.

## Evolution of This Guide

The previous international guidance on external debt statistics, *External Debt Statistics: Guide for Compilers and Users (2003 Guide)*<sup>1</sup> provided a comprehensive conceptual framework, derived from the *System of National Accounts 1993 (1993 SNA)* and the fifth edition of the IMF's *Balance of Payments Manual (BPM5)* for the measurement of gross external debt of the public and private sectors. However, since its publication the international statistical guidelines for national accounts and balance of payments statistics have been updated—the *System of National Accounts 2008 (2008 SNA)* and the sixth edition of the IMF's *Balance of Payments and International Investment Position Manual (BPM6)*.

Against this background, the *Guide* maintains but updates the conceptual framework introduced in the 2003 *Guide*. The changes include modifications in concepts, classification/sectorization, and/or clarifications to the methodological treatment.

The *Guide* is intended to provide clear and comprehensive guidance for the measurement and presentation of external debt statistics that can be applied consistently across the different sectors of an economy and across the different debt instruments used for borrowing. Thereafter, the *Guide* provides a scheme for classifying external debt by instruments and sectors that is developed into a presentation table for the gross external debt position. Data disseminated using this presentation table, and employing the concepts outlined earlier in the *Guide*, are essential for providing a comprehensive and informed picture of the gross external debt position for the whole economy. For countries in which there is a particular interest in public sector debt, the sector information can be rearranged to give focus to public and publicly guaranteed external debt, consistent with the approach used by the World Bank's Debtor Reporting System (DRS) and Quarterly Public Sector Debt Statistics (PSD) database. Such a presentation may be of central importance where public sector external debt is dominant, although vigilance in monitoring private sector debt liabilities is necessary because experience has shown that these may grow rapidly.

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<sup>1</sup>The 2003 *Guide* was prepared by the Bank for International Settlements (BIS), Commonwealth Secretariat (ComSec), European Central Bank (ECB), European Commission (Eurostat), International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), Paris Club Secretariat, United Nations Conference on Trade and Development (UNCTAD), and World Bank.

Further, from the evidence of the international financial crises, and from the experience of many countries, additional data series may be vital to assist in identifying potential vulnerability to solvency and liquidity problems arising from the gross external debt position. The important need for data on debt-maturity profiles, currency breakdowns, and short-term remaining maturity has been highlighted in international forums and, together with improving coverage of private-sector debt liabilities, has helped to motivate preparation of the *Guide*. So, the *Guide* provides additional conceptual guidance, and presentation tables, for data series such as the debt-service schedule (especially relevant for liquidity analysis), the currency composition of debt, and other series known from experience to be of analytical use. The *Guide* also explains the concept of net external debt—i.e., a comparison of the stock of external debt with holdings of external financial assets of similar instrument type—and integrates financial derivatives and contingent liabilities positions into external debt analysis. The World Bank's Quarterly External Debt Statistics (QEDS), developed in 2004 for subscribers of the Special Data Dissemination Standard (SDDS) and extended in 2008 to countries participating in the General Data Dissemination System (GDDS), closely follow the conceptual framework provided in the *Guide*.

Drawing on the broad range of experience in the international agencies involved in its production, the *Guide* provides advice on the compilation of external debt statistics and the analytical use of such data. This advice is not intended to be comprehensive but rather provides an overview of the issues. Because the *Guide* is primarily intended to be a source of reference for both compilers and users of external debt statistics, certain sections will be more relevant for some audiences than others. For instance, the first section discusses complex conceptual measurement issues and provides detailed advice as a source of reference—this guidance is intended particularly for the compiler. In contrast, the section on the use of external debt data is directed toward both users and compilers. It is hoped that by this approach, the *Guide* will contribute to better external debt statistics and an improved understanding of the complex issues involved in both compiling and analyzing them.

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The production of the *Guide* has been jointly undertaken by the international agencies that participate in the Inter-Agency Task Force on Finance Statistics (TFFS), in close consultation with national compilers of external debt and balance of payments and international investment position statistics. The TFFS is one of the interagency task forces formed under the aegis of the United Nations Statistical Commission and the Administrative Committee on Coordination—Sub-Committee on Statistical Activities and was set up in 1992. It was reconvened in 1998 to coordinate work among the participating agencies to improve the methodological soundness, transparency, timeliness, and availability of data on external debt and international reserve assets. The TFFS is chaired by the IMF, and the work on the *Guide* involved representatives from the Bank for International Settlements (BIS), the Commonwealth Secretariat (ComSec), the European Central Bank (ECB), the European Commission (Eurostat), the IMF, the Organization for Economic Co-operation and Development (OECD), the Paris Club Secretariat, the United Nations Conference on Trade and Development (UNCTAD), and the World Bank. The core participants in the TFFS’s work on the *Guide* are listed below (affiliations are those in effect at the time of preparation of the *Guide*). Their expert contributions and comments made possible the production of the *Guide*.

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Paris Club Secretariat	Ms. Clotilde L’Angevin, Secretary-General
UNCTAD	Mr. Balliram Baball, Training Coordinator/Senior Debt Management Expert
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# Abbreviations

AfDB	African Development Bank
BIS	Bank for International Settlements
<i>BOPSY</i>	<i>Balance of Payments Statistics Yearbook (IMF)</i>
<i>BPM5</i>	Fifth edition of the <i>Balance of Payments Manual (IMF)</i>
<i>BPM6</i>	Sixth edition of the <i>Balance of Payments Manual and International Investment Position Manual (IMF)</i>
<i>BPM6 Compilation Guide</i>	<i>Balance of Payments and International Investment Position Compilation Guide</i>
CACs	Collective action clauses
CBDMS	Computer-based debt-management system
CDIS	Coordinated Direct Investment Survey (IMF)
CDS	Credit default swaps
CIRRs	Commercial Interest Reference Rates (OECD)
ComSec	Commonwealth Secretariat
CP	Commercial paper
CPIS	Coordinated Portfolio Investment Survey (IMF)
CRS	Creditor Reporting System (OECD)
DAC	Development Assistance Committee (OECD)
DRS	Debtor Reporting System (World Bank)
DSA	Debt sustainability analysis
ECB	European Central Bank
<i>ESA95</i>	<i>European System of Accounts, ESA 1995</i>
<i>ESA2010</i>	<i>European System of Accounts, ESA 2010</i>
ESOs	Employees stock options
EU	European Union
FISIM	Financial intermediation service charge indirectly measured
GDDS	General Data Dissemination System
GDP	Gross domestic product
<i>GFSM</i>	<i>Government Finance Statistics Manual (IMF)</i>
HIPC	Heavily Indebted Poor Countries

IBRD	International Bank for Reconstruction and Development
IBS	International Banking Statistics (BIS)
IDA	International Development Association
IFMS	Integrated Financial Management System
<i>IFS</i>	<i>International Financial Statistics</i> (IMF)
IIP	International investment position
IMF	International Monetary Fund
ISIN	International security identification number
JEDH	Joint External Debt Hub
LIBOR	London interbank offered rate
LICs	Low income countries
MACs	Market access countries
MDRI	Multilateral Debt Relief Initiative
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i> (IMF)
MMFs	Money market funds
NIFs	Note issuance facilities
NNA	National numbering agency
NPISH	Nonprofit institutions serving households
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OTC	Over-the-counter [markets]
<i>PSDS Guide</i>	<i>Public Sector Debt Statistics: Guide for Compilers and Users</i>
QEDS	Quarterly External Debt Statistics (World Bank)
Repo	Repurchase agreement
RUFs	Revolving underwriting facilities
SDDS	Special Data Dissemination Standard
SDDS Plus	Special Data Dissemination Standard Plus
SDRs	Special drawing rights (IMF)
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>2008 SNA</i>	<i>System of National Accounts 2008</i>
SPE	Special purpose entity
TFFS	Inter-Agency Task Force on Finance Statistics
UNCTAD	United Nations Conference on Trade and Development



# 1

## Overview

### Purpose of the *Guide*

**1.1** The purpose of the *External Debt Statistics: Guide for Compilers and Users (Guide)* is to provide comprehensive guidance for the measurement and presentation of external debt statistics. The *Guide* also provides advice on the compilation of these statistics and on their analytical use. The intention is to contribute to both an improvement in, and a greater understanding of, external debt statistics. In doing so, the *Guide* is responding to the concerns of markets and policymakers for better external debt statistics to help assess external vulnerabilities at a time when increasing international capital flows are resulting in greater market interdependence. It is also responding to the users' interest in improving the availability and international comparability of external debt statistics.

### Conceptual Approach in the *Guide*

**1.2** The *Guide* provides a conceptual framework for compiling external debt statistics. The framework is derived from the *System of National Accounts 2008 (2008 SNA)* and the IMF's sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)*.<sup>1</sup> This approach facilitates consistency and comparability among external debt statistics and other macroeconomic statistics, such as balance of payments, the international investment position

(IIP), and national accounts.<sup>2</sup> Under this conceptual framework, external debt includes all liabilities as defined in the *2008 SNA* (excluding equity liabilities and investment fund shares, and financial derivatives and employee stock options [ESOs]) that are owed to nonresidents, and the total amount of such liabilities is presented as the gross external debt position.<sup>3</sup>

**1.3** Tables are provided for the presentation of the gross external debt position and related data, both for the whole economy and by sector of debtor. Using the concepts provided in Chapters 2 and 3, data compiled and presented in the format of the table in Chapter 4 provide a comprehensive and informed picture of the gross external debt position for the whole economy. Subsequently, in Chapter 5, the gross external debt position is presented in a table that highlights the role of the public sector, a table particularly relevant for economies where the public sector is centrally involved in external debt borrowing activity, as a borrower and/or guarantor.<sup>4</sup>

**1.4** Further, the *Guide* provides additional accounting principles to assist in compiling data series of analytical use in understanding the gross external debt position. The priority that individual economies give to compiling each of these data series will vary depending on circumstances. But such data series as the debt-service schedule (i.e., a schedule that provides

<sup>1</sup>The *2008 SNA* is a statistical framework that provides a comprehensive, consistent, and flexible set of macroeconomic accounts for policymakers, analysis, and research purposes. It has been produced under the auspices of the United Nations, the European Commission, IMF, OECD, and the World Bank. The *BPM6* was published by the IMF in 2009 and provides the standard framework for statistics on the transactions and positions between an economy and the rest of the world. The *2008 SNA* and *BPM6* were updated in parallel.

<sup>2</sup>The *Guide* is also consistent with the *Handbook on Securities Statistics Part 1: Debt Securities Issues* (2009), the *Handbook on Securities Statistics Part 2: Debt Securities Holdings* (2010), and the *Public Sector Debt Statistics: Guide for Compilers and Users* (2011).

<sup>3</sup>The 2003 version of the *Guide* was derived from the *1993 SNA* and *BPM5*. Thus, compilation systems developed to produce data based on the 2003 *Guide* can be statistical building blocks for the measurement and compilation of the gross external debt position outlined ahead.

<sup>4</sup>Further guidance for public sector debt statistics is provided in the *Public Sector Debt Statistics: Guide for Compilers and Users* (2011).

information on the expected amounts and timing of future payments), the foreign currency composition of external debt (i.e., an indication of the exposure of the economy to movements in the exchange rate), and the short-term remaining maturity (i.e., part of the gross external debt position that is expected to fall due in the coming year) can reveal essential information on potential external vulnerabilities facing an economy. Similarly, the *Guide* advises on the measurement and presentation of the net external debt position—gross external debt less external assets in the form of debt instruments. For economies whose private sector is active in international financial markets, this concept, and indeed, that of the net asset position of the IIP,<sup>5</sup> is particularly relevant in assessing sustainability of the external position.

## Structure of the *Guide*

1.5 The *Guide* is presented in three parts and includes nine appendices:

- I. Conceptual Framework—Chapters 2–9
- II. Compilation: Principles and Practice—Chapters 10–13
- III. Use of External Debt Statistics—Chapters 14 and 15

1.6 To facilitate the updating of relevant information, the external debt activities of the Inter-Agency Task Force on Finance Statistics (TFFS) member agencies<sup>6</sup> are presented at the TFFS Website ([www.tffs.org](http://www.tffs.org)) rather than in the *Guide*, as was the case in the 2003 version. These activities are presented in four sections: (1) data management systems, (2) data availability, (3) data quality, and (4) capacity building.

<sup>5</sup> The IIP of an economy is the balance sheet of the stock of external financial assets and liabilities, with the difference being the net asset (or liability) position. The IIP is described in Appendix 3 and its standard components are set out in Chapter 3. Linkages between external debt statistics, IIP, and the national accounts are presented in Appendix 4.

<sup>6</sup> The Bank for International Settlements (BIS); Commonwealth Secretariat (ComSec); European Central Bank (ECB); Eurostat; International Monetary Fund (IMF); Organization for Economic Cooperation and Development (OECD); Paris Club Secretariat; United Nations Conference on Trade and Development (UNCTAD); and the World Bank.

## Conceptual Framework

1.7 The structure of Part I is as follows:

- Chapter 2 provides a definition for gross external debt and explains in detail the accounting principles required for the measurement of the gross external debt position; Chapter 3 discusses the identification of institutional sectors and financial instruments.
- Chapter 4 sets out a table for the presentation of the gross external debt position; highest priority is given to institutional sectors, followed by maturity, and then type of debt instrument; Chapter 5 provides a table for the presentation of data on public and publicly guaranteed external debt.
- Chapter 6 provides further accounting principles for compiling additional data series of analytical use in understanding the gross external debt position; Chapter 7 provides further presentation tables (e.g., debt-service payment schedule and foreign currency debt tables).
- Chapter 8 discusses the dissemination of appropriate information on the impact of debt reorganization on external debt; Chapter 9 considers contingent liabilities and provides a table for the presentation of external debt on an ultimate-risk basis.

## Compilation: Principles and Practice

1.8 Chapter 10 provides an overview of compilation methods, and Chapters 11, 12, and 13 cover compilation methods for public sector external debt data; deposit-taking corporations and other sectors data; and data on debt securities, respectively.

## Use of External Debt Statistics

1.9 Chapters 14 and 15 cover the analytical use of external debt data. These chapters are included to help compilers place their work in context and to assist users in interpreting the range of information that can be available. Chapter 14 briefly describes debt-sustainability analysis and explains some of the most commonly used debt ratios. Chapter 15 highlights the need to analyze external debt data in a broad context.

## Appendices

**1.10** Appendix 1 provides detailed definitions and classifications of debt instruments and specific transactions. Appendix 2 discusses reverse security transactions and how they should be recorded in the gross external debt position. Appendix 3 provides a glossary of external debt terms. Appendix 4 describes the relationship between the external debt, the IIP, and the national accounts. Appendix 5 explains the

Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI). Appendix 6 presents the Data Quality Assessment Framework (DQAF) for external debt statistics. Appendix 7 explains the treatment of arrears in the gross external debt. Appendix 8 discusses the compilation of private sector external debt. Finally, Appendix 9 identifies the main changes in the *Guide* emerging from the adoption of *BPM6*.





# 2

## The Measurement of External Debt: Definition and Core Accounting Principles

### Introduction

**2.1** This chapter begins by presenting the definition of external debt consistent with the concepts of the 2008 SNA and BPM6. The definition of external debt is based on the notion that if a resident has a current liability to a nonresident that requires payments of principal and/or interest in the future, this liability represents a claim on the resources of the economy of the resident, and so is external debt of that economy. Such an approach provides a comprehensive measure of external debt across the range of debt instruments regardless of how they may be structured. The focus of the definition is on gross liabilities, i.e., excluding any assets.

**2.2** A common theme throughout the *Guide* is that analysis of the gross external debt position of an economy requires information that, as far as possible, is compatible with related data series both within and among countries. Compatibility enhances the analytical usefulness and the reliability of data by allowing interrelationships with other related macroeconomic data series to be examined and comparisons across countries to be undertaken on a clear and consistent basis. Also, compatibility encourages the rationalization of collection procedures, through the integration of domestic and external debt data (thus lowering of the costs of data production). For these reasons, this chapter introduces accounting principles for the measurement of external debt that are drawn from the 2008 SNA and BPM6.

### Definition of External Debt

**2.3** The *Guide* defines gross external debt as follows: *Gross external debt, at any given time, is the outstanding amount 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.*

### Outstanding and Actual Current Liabilities

**2.4** For a liability to be included in external debt, it must exist and be outstanding. The decisive consideration is whether a creditor owns a claim on the debtor. Debt liabilities are typically established through the provision of economic value, i.e., assets (financial or nonfinancial, including goods), services, and/or income—by one institutional unit, the creditor, to another, the debtor, normally under a contractual arrangement that specifies the terms and conditions of the payment(s) to be made.<sup>1</sup> Debt liabilities can also be created by the force of law<sup>2</sup> and by events that require future transfer payments.<sup>3</sup> Debt liabilities include arrears of principal and interest. Commitments to provide economic value in the future cannot establish debt liabilities until items change ownership, services are rendered, or income accrues; for instance, amounts yet to be disbursed under a loan or export credit commitment are not to be included in the gross external debt position.

<sup>1</sup>In many instances, such as cash purchases by households in shops, economic value is provided against immediate payment, in which instance no debt liability is created.

<sup>2</sup>These liabilities could include those arising from taxes, penalties (including penalties arising from commercial contracts), and judicial awards at the time they are imposed. However, in some instances an issue will arise about whether a government has jurisdiction to impose such charges on nonresidents.

<sup>3</sup>These include claims on nonlife insurance companies, claims for damages not involving nonlife insurance companies, and claims arising from lottery and gambling activity.

## Principal and Interest

**2.5** The amount the debtor owes to the creditor is known as the *principal amount*. The provision of economic value by the creditor, or the creation of debt liabilities through other means, establishes a principal liability for the debtor that, until extinguished, may change in value over time. For debt instruments, for the use of the principal, interest can (and usually does) accrue on the principal amount, resulting in an interest cost for the debtor. When this cost is paid periodically, as commonly occurs, it is known in the *Guide* as an interest payment. All other payments by the debtor to the creditor that reduce the principal amount outstanding are known as *principal payments*.

**2.6** For long-term debt instruments (i.e., with an original maturity of more than one year), interest costs paid periodically are defined as those to be paid by the debtor to the creditor annually or more frequently. For short-term debt instruments (i.e., with an original maturity of one year or less), interest costs paid periodically are defined as those to be paid by the debtor to the creditor before the redemption date of the instrument.

**2.7** The definition of external debt does not distinguish between whether the payments that are required are principal or interest or both. For instance, interest-free loans are debt instruments although no interest is paid, while perpetual bonds are debt instruments although no principal is to be repaid. In addition, while it may normally be expected that payments of principal and interest will be made in the form of financial assets, such as currency and deposits, the definition does not specify the form in which payments need to be made. For instance, payments could be made in the form of goods and services. It is the future requirement to make payments, not the form of those payments, that determines whether a liability is a debt instrument or not.

**2.8** Also, the definition does not specify that the timing of the future payments of principal and/or interest need be known for a liability to be classified as debt. In many instances, the schedule of payments is known, such as on debt securities and loans. However, in other instances the exact schedule of payments may not be known, e.g., the timing of payment might be at the demand of the creditor, such as non-interest-bearing demand deposits; the debtor may be in arrears, and it

is not known when the arrears will actually be paid; or the timing of a payment may depend on certain events, such as the exercise of an embedded put (right to sell) or call (right to buy) option. Once again, it is the requirement to make the payment that determines whether the liability is debt, rather than the timing of the payment. So, the liabilities of pension funds and life insurance companies to their nonresident participants and policyholders are regarded as debt of those institutions because at some point in time a payment is due, even though the timing of that payment may be unknown (see also paragraph 3.40).

## Residence

**2.9** To qualify as external debt, the debt liabilities must be owed by a resident to a nonresident. Residence is determined by where the debtor and creditor have their center of predominant economic interest—typically, where they are ordinarily located—and not by their nationality. The definition of residence is explained in more detail later in this chapter and is the same as in the *BPM6* and *2008 SNA*.

## Current and Not Contingent

**2.10** Contingent liabilities are not included in the definition of external debt. These are defined as arrangements under which one or more conditions must be fulfilled before a financial transaction takes place.<sup>4</sup> Contingent liabilities can be explicit or implicit.<sup>5</sup> Such liabilities may involve a legal contract specifying that one party is obliged to provide a payment or series of payments to another unit only if certain specified conditions prevail. However, from the viewpoint of understanding vulnerability, there is analytical interest in the potential impact of contingent liabilities on an economy and on particular institutional sectors, such as the general government or financial corporations. Of particular relevance is that the amount of external debt liabilities that an economy potentially faces may be greater than is evident from the compiled and published external debt data if cross-border guarantees have been given. Indeed, the *Guide* encourages countries to set up systems to monitor

<sup>4</sup>The exclusion of contingent liabilities does not mean that guaranteed debt is excluded but rather that the guaranteed debt is attributed to the debtor not the guarantor (unless and until the guarantee is called).

<sup>5</sup>For additional information regarding explicit and implicit contingent liabilities, see Chapter 9.



and disseminate data on explicit contingent liabilities, as is discussed in more detail in Chapter 9.

### Relationship with Instruments in the 2008 SNA

**2.11** From the viewpoint of the national accounts, the definition of external debt is such that it includes all liabilities recognized by the 2008 SNA—except for equity (both equity shares and other equity) and investment fund shares and financial derivatives and employee stock options (ESOs)—that are owed by residents to nonresidents. These liabilities, known as *debt liabilities*, comprise the following debt instruments: special drawing right (SDR) allocations; currency and deposits (including unallocated gold accounts); debt securities; loans; insurance; pension; and standardized guarantee schemes, trade credit and advances, and other accounts payable. Equity and investment fund shares, and other equity, are excluded from debt liabilities because they do not require the payment of principal or interest. For the same reason, financial derivatives, both forwards and options, and ESOs are excluded—no principal amount is advanced that is required to be repaid, and no interest accrues on any financial derivative instrument. Forward-type contracts (forwards), option contracts (options), and ESOs are described in more detail in Chapter 3. Nonetheless, an overdue obligation to settle a financial derivatives contract would, like any arrears, be a debt liability because a payment is required. Gold bullion held as monetary gold<sup>6</sup> is a financial asset included in the 2008 SNA but is not a debt instrument because it is, by convention, an asset without a corresponding liability.

### Core Accounting Principles

**2.12** This section considers the concepts of flows and positions, residence, time of recording, valuation, the unit of account and exchange rate conversion, and maturity. Unless otherwise specified, these concepts are applicable throughout the *Guide*.

### Flows and Positions

**2.13** *Flows* refer to economic actions and effects of events within a period, and *positions* refer to a level of financial assets or liabilities at a point in time. Flows

and positions are integrated so that all changes in positions between two points in time are fully explained by the recorded flows. The *Guide* focuses primarily on positions. Nonetheless, it is important where feasible to reconcile flows and positions, in part to ensure the reliability of the positions data.

**2.14** Flows reflect the creation, transformation, exchange, transfer, or extinction of economic value; they involve changes in the volume, composition, or value of an institutional unit's assets and liabilities. Flows consist of those that are associated with transactions and other flows. A transaction is an interaction between two institutional units that occurs by mutual agreement or through the operation of the law and involves an exchange of value or a transfer. Other flows are changes in the volume, value, or classification of an asset or liability that do not result from a transaction between a resident and a nonresident. These include, e.g., revaluations (holding gains and losses) on an asset or liability that arises from changes in their price and/or the exchange rates.

### Residence

**2.15** Debt liabilities of residents that are owed to nonresidents are to be included in the presentation of an economy's gross external debt position. Debt liabilities owed to residents are excluded. Hence the definition of residence is central to the definition of external debt. In the *Guide*, as in *BPM6* and the 2008 SNA, an institutional unit, i.e., an entity such as a household, corporation, government agency, and so on, that is capable, in its own right, of owning assets, incurring liabilities, and engaging in economic activities and in transactions with other entities, is a 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.

**2.16** To define *residence*, the terms *economy*, *economic territory*, and *center of predominant economic interest* also require definitions. An economy consists of all the institutional units that are resident in a particular economic territory. The most commonly used concept of an economic territory is the area under the effective economic control of a single government.<sup>7</sup> Economic

<sup>6</sup>For definition of monetary gold, see Appendix 1, Part 2.

<sup>7</sup>The definition of economic territory no longer has the requirement that persons, goods, and capital circulate freely as previously indicated in the *BPM5*.

territory can be any geographic area or jurisdiction for which statistics are required and includes<sup>8</sup> the land area, including islands, airspace, territorial waters, and territorial enclaves (such as embassies, consulates, military bases, scientific stations, information or immigration offices, aid agencies, and central bank representative offices with diplomatic status that have immunity from the laws of the host territory) physically located in other territories. Economic territory has the dimensions of physical location as well as legal jurisdiction, so that corporations created under the law of that jurisdiction are part of that economy. The economic territory also includes special zones, such as free trade zones and offshore financial centers. These are under the control of the government and are therefore part of the economy, even though different regulatory and tax regimes may apply. The economic territory excludes international organizations and enclaves of other governments that are physically located in the territory. Another type of economic territory is a currency or economic union.<sup>9</sup>

**2.17** An institutional unit has a center of predominant economic interest and is a resident unit of an economy when, from some location (dwelling, place of production, or other premises) within the economic territory of the economy, the unit engages and intends to continue engaging (indefinitely or for a finite but long period of time) in economic activities and transactions on a significant scale. The location need not be fixed as long as it remains within the economic territory. For statistical purposes, the conduct or intention to conduct economic activities for a year or more in an economic territory normally implies residence of that economy. The one-year period is used as an operational definition, and it is adopted to avoid uncertainty and facilitate international consistency.

**2.18** In essence, an institutional unit is a resident of the economy in which it is ordinarily located. Thus, a branch or subsidiary is resident in the economy in which it is ordinarily located, because it engages in economic activity and transactions from that location, rather than necessarily the economy in which its parent corporation is located. 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 and managed by nonresident enterprises will, in most instances, meet the criteria of resident entities in the economy in which they are located and so can have external debt (although the claims on the office by the parent might well represent an equity investment).<sup>10</sup> When a nonresident entity has substantial operations over a significant period in an economic territory, but no separate legal entity for those operations, a branch may be identified as an institutional unit. This unit is identified for statistical purposes because the operations have strong connection to the location of operations in all ways other than incorporation.

**2.19** The residence of enterprises in free trade and other offshore zones—including those engaged in the assembly of components manufactured elsewhere, those engaged in trade and financial operations, and those located in special zones—is attributed to the economies in which they are located. For instance, in some countries, banks (including branches of foreign banks) that are licensed to take deposits from and lend primarily or only to residents of other economies are treated as “offshore banks” under exchange control and/or other regulations. These banks usually face different supervisory requirements and may not be required to provide the same amount of information to supervisors as “onshore” banks. Nonetheless, the liabilities of the offshore banks should be included in the external debt statistics of the economy in which they are located, provided that the liabilities meet the definition of external debt.

**2.20** Similar issues can arise with special purpose entities (SPEs) or vehicles, international business companies, shell companies, shelf companies, and brass plate companies. These entities may have little or no physical presence in the economy in which they are legally incorporated or legally domiciled (e.g., registered or licensed), and any substantive work of the entity may be conducted in another economy.<sup>11</sup>

<sup>8</sup> See *2008 SNA*, paragraphs 4.10 and 26.26, and *BPM6*, paragraph 4.5.

<sup>9</sup> For references of currency and economic unions, see *BPM6*, Appendix 3.

<sup>10</sup> The classification of parent claims on unincorporated branches is discussed in more detail in Chapter 3, in the section on direct investment.

<sup>11</sup> Although there is no internationally standard definition of such companies, typical features of these entities are that their owners are not residents of the territory of incorporation, other parts of their balance sheets are claims on or liabilities to nonresidents, they have few or no employees, and they have little or no physical presence (see the entry for SPEs in Appendix 3).

In such circumstances, there might be debate about where the predominant center of economic interest for such entities lies. These entities are always treated as separate institutional units if they are resident in a different territory to that of their owners. The *Guide* attributes external debt to the economy in which the entity—that has the liabilities on its balance sheet and so on whom the creditor has a claim—is legally incorporated or, in the absence of legal incorporation, is legally domiciled. So, debt issues on the balance sheet of entities legally incorporated or domiciled in an offshore center are to be classified as external debt of the economy in which the offshore center is located. Any subsequent on-lending of the funds raised through such debt issues to a nonresident, such as to a parent or subsidiary corporation, is classified as an external asset of the offshore entity and external debt of the borrowing entity. In line with *BPM6*, a multiterritory enterprise is defined as an enterprise that has substantial activity in more than one economy, and it is run as an indivisible operation with no separate accounts or decisions, so that no separate branches can be identified. For multiterritory enterprises, it is necessary to prorate the enterprise's gross external debt position into the individual economies (see the treatment of the gross external debt position of multiterritory enterprises in Appendix 1, Part 2).

**2.21** In some economies, separate identification of the gross external debt (and external assets) of resident “offshore banks” and other “offshore entities” is necessary because of the potential size of their liabilities relative to the rest of the economy.

**2.22** In contrast, a nonresident may set up an agency in the resident economy usually to generate business in that economy. So, for instance, a resident agent may arrange for its parent foreign bank to lend funds to a fellow resident (the borrower). Unless the agent takes the transactions between the borrower and the creditor bank onto its own balance sheet, the borrower records external debt and not the agent. This is because the debtor/creditor relationship is between the lending bank and the borrowing entity, with the agent merely facilitating the transaction by bringing the borrower and lender together. If the agent does take the transactions onto its balance sheet, then it, not the final borrower, should record an external debt liability to its parent foreign bank.

**2.23** International organizations are entities established by formal political agreements among their members that have the status of international treaties; their existence is recognized by legal provisions in their member countries. International organization may be global or regional. International organizations are treated as not being resident of the territories in which they are located. This treatment is because they are generally exempted from, or are only partially subject to, national laws and regulations, and so they are not considered to be part of the national economy of the territory, or territories, in which they are located. The *Guide* attributes debt liabilities of an international financial organization as external debt of this institutional unit.

**2.24** A currency union central bank is an international financial organization that acts as a common central bank for a group of member countries. Such a bank has its headquarters in one country and usually maintains national offices in each of the member countries. Each national office acts as central bank for that country and is treated as a resident institutional unit in that country. The headquarters, however, is an international organization and is thus a nonresident from the perspective of the national central banks. However, for statistics relating to the economic territory of the whole group of member countries, the currency union central bank is a resident institutional unit of this economic territory.

### Time of Recording

**2.25** The guiding principle for whether claims and liabilities exist and are outstanding is determined at any moment in time by the principle of ownership. The creditor owns a claim on the debtor, and the debtor has a liability to the creditor.<sup>12</sup> The *Guide* recommends use of the accrual basis for recording of flows (transactions and other changes in financial assets and liabilities). The accrual basis matches the time of recording with the timing of events giving rise to the actual resource flows. The accrual basis provides the most comprehensive information because all resources flows are recorded, including nonmonetary transactions, imputed transactions, and other flows. Such comprehensive recording ensures the integra-

<sup>12</sup> Thus, the *Guide* does not recognize any unilateral repudiation of debt by the debtor.

tion of flows and stocks. The change of economic ownership is central in determining the time of recording on an accrual basis for transactions. A change in the ownership from the economic point of view means that all risks, rewards, and rights and responsibilities of ownership in practice are transferred.

**2.26** When a transaction occurs in financial assets, the date of the change of ownership (the value date), and so the day the position is recorded, is when both creditor and debtor have recorded the claim and liability, respectively, in their books. This date may actually be specified to ensure matching entries in the books of both parties. If no precise date can be fixed, the date on which the creditor acquires the financial claim or receives payment is decisive, e.g., loan drawings are entered in the accounts when actual disbursements are made, and so when financial claims are established and not necessarily when an agreement is signed.

**2.27** For other transactions, when a service is rendered, interest accrues, or an event occurs that creates a transfer claim (such as under nonlife insurance), a debt liability is created and exists until payment is made or forgiven. Although not usual, like interest, service charges can accrue continuously. Although equity securities are not debt instruments, dividends once the shares go ex-dividend are recorded as *other debt liabilities*<sup>13</sup> until they are settled.<sup>14</sup> Consistent with the accrual principle, an overdue obligation to settle a financial derivative contract is reclassified to a debt liability because of the change in the nature of the claim.

**2.28** The *Guide* recommends that interest costs accrue continuously on debt instruments, thus matching the cost of capital with the provision of capital. This recommendation is consistent with the approach taken in related international statistical manuals and in commercial accounting standards (see Box 2.1). For interest costs that accrue in a recording period, there are three measurement possibilities: (1) they are paid within the reporting period, in which instance there is no impact on the gross external debt posi-

tion; (2) they are not paid because they are not yet payable (referred to hereafter as “interest costs that have accrued and are not yet payable”), e.g., interest is paid each six months on a loan or security, and the gross external debt position is measured after the first three months of this period—in which instance the gross external debt position increases by the amount of interest costs that have accrued during the three-month period; and (3) they are not paid when due, in which instance the gross external debt position increases by the amount of interest costs that have accrued during the period and are in arrears at the end of the period.

### ***Interest costs that have accrued and are not yet payable***

**2.29** The *Guide* recommends including interest costs that have accrued and are not yet payable as part of the value of the underlying debt instruments, i.e., the accrual of interest costs not yet payable continuously increases the principal amount outstanding of the debt instrument until these interest costs are paid. This is consistent with the approach in the *BPM6* and the *2008 SNA*.

**2.30** When debt securities, such as bonds (including deep-discount and zero-coupon bonds), bills, and similar short-term securities are issued at a discount (or at a premium), the difference between the issue price and its face or redemption value at maturity is treated, on an accrual basis, as interest (negative interest) over the life of the instrument. When issued at a discount (premium), the interest costs that accrue each period are recorded as being reinvested in the debt security, increasing (decreasing) the principal amount outstanding. This approach can be described as the capitalization of interest; it is not a holding gain for the security owner.

### ***Arrears***

**2.31** Arrears occur when principal and/or interest payments are not made when due, such as on a loan. When arrears (including interest that accrues on arrears) occur, they should continue to be shown in the same debt instrument until the liability is extinguished. The nonpayment, when due, of principal and/or interest leaves the external debt position unchanged, as it already includes the accrued interest costs that are not paid (see paragraph 2.28).

<sup>13</sup> In the *Guide*, other debt liabilities include insurance, pension, and standardized guarantee schemes, and other accounts payable—other (see paragraph 3.3).

<sup>14</sup> The ex-dividend date is the date the dividends are excluded from the market price of shares.

**Box 2.1 The Choice of a Recording Basis: The Case for Accrual Accounting<sup>1</sup>****Meaning of the Term *Recording Basis***

In the context of a macroeconomic statistical system, recording bases are defined mainly according to the time at which transactions are recorded in that system. Alternative recording bases are possible because for many transactions, there can be a time lag between the change of ownership of the underlying item, the due date for payment, and the actual date for payment. Also, given the nature of the different recording bases, the transactions and positions captured by them will also differ. Thus, an important consideration in choosing a recording basis is the information intended to be conveyed in the statistical system. For external debt statistics, the intention is to provide users of these data with a comprehensive measure of external debt liabilities at the end of the reporting period and to allow them to identify the types of flows during the reporting period that affect the size and composition of these liabilities. Consequently, the *Guide* recommends the use of the accrual recording basis, for reasons explained below.

**Main Types of Recording Bases**

Three types of recording bases have most commonly been used in macroeconomic statistical systems: cash basis, due-for-payment basis, and accrual basis. In practice, variations on each of these main bases are often found.

With cash recording basis, transactions are recorded when a payment is made or received, regardless of when the assets involved change ownership. In its strictest form, only those transactions that involve cash as the medium of exchange are included (i.e., cash inflows and outflows). The positions recorded at the end of the reporting period in such a system are restricted to cash balances. Nevertheless, in practice, cash recording basis is often modified to include other balances such as debt balances. In other words, when cash is disbursed on a debt instrument, an outstanding debt position is recorded, and subsequent repayments of principal, in cash, reduce that outstanding debt. For cash recording basis, the times at which payments take place may diverge significantly from the economic activities to which they relate, and it is these underlying activities and transactions that this *Guide* and other macroeconomic statistical systems seek to portray. Moreover, cash recording basis does not apply to nonmonetary transactions.

A due-for-payment recording basis records transactions when receipts or payments arising from the transaction fall due, rather than when the cash is actually received or paid. If a payment is made before it is due, then the transactions are recorded when the cash payment is made. The due-for-payment basis can be considered as a modification of the cash basis. In addition to cash balances, the due-for-payment basis takes into account amounts due or overdue for payment. Typically, a due-for-payment recording basis will record debt

based on the redemption amount of the outstanding liability—the amount due for payment at maturity. This amount may differ from the amount originally disbursed for a variety of reasons, including discounts and premiums between the issue and redemption price, repayment of principal, and revaluation of the debt due to indexation. In addition, this recording basis will capture debt arising from some noncash transactions, such as arrears and the assumption of debt from one entity to another (e.g., to the general government).

On an accrual recording basis, transactions are recorded when economic value is created, transformed, exchanged, transferred, or extinguished. Claims and liabilities arise when there is a change of ownership. The accrual reporting basis thus recognizes transactions in the reporting period in which they occur, regardless of when cash is received or paid, or when payments are due. Gross external debt positions at the end of a reporting period depend on the gross external debt position at the beginning of the period, and transactions and any other flows that have taken place during the period.<sup>2</sup> The accrual recording basis records what an entity owes from the perspective of economic, not payment, considerations.

The different approaches of the three recording bases can be illustrated by the example of a loan, on which interest costs are paid periodically until the loan is repaid at maturity. The initial cash disbursement would be recorded in all three recording bases at the same time, i.e., when the disbursement is made. All three systems would record a debt liability.<sup>3</sup> However, on an accrual reporting basis, interest costs are recorded as accruing continuously, reflecting the cost of the use of capital, and increasing the outstanding amount of the debt liability during the life of the loan, until the interest costs become payable. However, on a cash or due-for-payment basis, no such increase would arise.

Interest payments and repayment of principal at maturity are recognized at the same time in all three systems, provided that these payments are made in the reporting period in which they are due. For positions, on a cash basis, only amounts disbursed in cash and repaid in cash are taken into account; on a due-for-payment basis, amounts disbursed and repaid in cash are recognized along with any outstanding liabilities arising from noncash transactions; the accrual recording basis, in contrast, recognizes all existing liabilities regardless of whether cash has been disbursed or repaid or whether payment is due or not.

**Measuring External Debt Positions*****Disadvantages of Cash and Due-for-Payment Bases***

Both the cash and the due-for-payment bases have deficiencies in providing a comprehensive measure of gross external debt positions.

<sup>1</sup> This box draws on Efford (1996), which was prepared in the context of the development of the *Government Finance Statistics Manual* (IMF, 2001).

<sup>2</sup> In the 2008 SNA, economic flows in financial assets and liabilities are limited to those financial assets and liabilities for which economic value can be demonstrated or observed.

<sup>3</sup> On the basis of the descriptions above of the cash, due-for-payment, and accrual reporting bases. For each reporting basis, there can be modifications of approach.

**Box 2.1 The Choice of a Recording Basis: The Case for Accrual Accounting (Concluded)**

The cash recording basis contains information “only” on debt transactions arising from cash transactions; noncash transactions are not covered (e.g., the provision of goods and services on which payment is delayed). Thus, it provides insufficient coverage of external debt. Though the due-for-payment basis, as an extension of the cash basis, includes noncash transactions such as indexation, it still provides an incomplete measure of external debt. For instance, on a due-for-payment recording basis, payments not yet due for goods and services already delivered are not considered debt (unless, e.g., there is a contractual agreement to extend trade credit). In addition, interest is not recorded until due for payment, regardless of whether interest is in the form of a discount to the face value on issuance or in the form of interest payments (i.e., paid periodically).

*Advantage of an Accrual Basis*

The accrual recording basis, which has long been used as the basis for commercial accounting, provides the most comprehensive information of the bases described, because it measures external debt based on whether a creditor has ownership of a financial claim on a debtor. The accrual basis provides the most consistent measure of external debt, both in terms of coverage and size, in that it is indifferent (1) to the form of payment—debt can be created or extinguished

through cash and/or noncash payments (i.e., through the provision of value); (2) to the time of payment—debt is created or extinguished dependent on the time at which ownership of a claim is established or relinquished; and (3) to whether the future payments required on existing liabilities are in the form of principal or interest.<sup>4</sup> As financial markets continue to innovate, this consistency of approach helps to ensure that the size and coverage of external debt is determined foremost by economic, and not payment, considerations.<sup>5</sup>

Finally, recording external debt on an accrual basis has the advantage of being consistent with other macroeconomic statistical systems, such as the *BPM6* and the *2008 SNA*, both of which employ an accrual basis of recording. These systems provide information on the types of economic flows during the reporting period that affect the size and composition of external debt. The *Government Finance Statistics Manual (GFSM 2001, IMF, 2001)* and the *Monetary and Financial Statistics Manual (MFSM, IMF, 2000)* are also on an accrual recording basis. Besides enhancing comparability of information across different sets of macroeconomic statistics for data users, the adoption of a common recording basis would also contribute to a reduction in compilation costs through the ability to use common data series in related statistical systems.

<sup>4</sup> In principle, under an accrual reporting basis, the external debt position at any one moment in time reflects past transactions and other economic flows, and, provided that the same valuation method is employed, equals the discounted value of future payments of interest and principal. For instance, if financial markets convert interest into principal, such as through stripped securities, the process of conversion has no impact on the measured external debt position because no new debt is created (although on a market value basis there could be valuation consequences arising from such a conversion).

<sup>5</sup> Although information on payment arrangements might well be valuable in its own right.

Arrears should continue to be reported from their creation, i.e., when payments are not made,<sup>15</sup> until they are extinguished, such as when they are repaid, rescheduled, or forgiven by the creditor. Data on arrears are important in their own right, and should be presented as memorandum items, where significant (see selected tables in Chapters 4, 5, and 7, and Appendix 7).

**2.32** If debt payments are guaranteed by a third party, and the debtor defaults, once the guarantee is called, the debt liability is attributed to the guarantor, and the

debt liability of the original debtor is extinguished. The original debtor often incurs a debt to the guarantor.<sup>16</sup>

**Valuation**

**2.33** The *Guide* recommends that debt instruments are valued at the reference date at nominal value, and, for debt securities, at market value as well.<sup>17</sup> The nominal value of a debt instrument is a measure of value from the viewpoint of the debtor because at any moment in time it is the amount that the debtor owes

<sup>15</sup> In some instances, arrears arise for operational reasons rather than from a reluctance or inability to pay. Nonetheless, in principle such arrears, when outstanding at the reference date, should be reported as arrears.

<sup>16</sup> Calling a guarantee may not imply that the debt liability of the original debtor is fully extinguished. There are guarantees that cover only the interest payments but not the principal; so if the guarantee is called, the debt liability of the principal of the original debtor is not extinguished.

<sup>17</sup> Valuation principles of financial assets and liabilities are discussed in detail in the *BPM6*, Chapter 3, and the *2008 SNA*, Chapter 3.

**Box 2.2 Valuation: Comparison Matrix**

Valuation	Definition	Comments
Nominal value	Outstanding principal amount, including interest accrued	Contractual interest rate. For deep-discount bonds and zero-coupon bonds, the outstanding principal amount increases in value over time by the implicit yield (interest rate) on the debt instrument at issuance, derived from the difference between the issue price and the redemption price.
Face value	Undiscounted amount of principal to be repaid	The face value may include interest costs that have not yet accrued, which is counter to the accrual principle.
Market value	Amount that willing buyers pay to acquire something from willing sellers	Before maturity, the market value of a debt instrument may be greater or less than the face value. As debt instruments approach maturity, market approaches face value.
Fair value	Amounts for which a financial asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction.	Approximate to market value. Valuation according to the market-value equivalent is needed for valuing financial assets and liabilities that are not traded in financial markets or that are traded only infrequently.

to the creditor. This value is typically established by reference to the terms of a contract between the debtor and creditor, and it is frequently used to construct debt ratios, such as those described in Chapter 14. The market value of a debt security is determined by its prevailing market price, which, as the best indication of the value that economic agents currently attribute to specific financial claims, provides a measure of the opportunity cost to both the debtor and the creditor.<sup>18</sup> It is the valuation principle adopted in the *BPM6* and *2008 SNA*. Box 2.2 presents a comparison matrix of the valuation methods.

**2.34 Nominal value** is the amount the debtor owes to the creditor, which comprises the outstanding principal amount, including any accrued interest. So the *nominal value* of a debt instrument reflects the value of the debt at creation plus any subsequent economic flows, such as transactions (e.g., repayment of principal), valuation changes (including exchange rate and other valuation changes other than market price changes), and any other changes. Conceptually, the nominal value of a debt instrument can also be calculated by discounting future interest and principal payments at the existing

contractual<sup>19</sup> interest rate(s)<sup>20</sup> on the instrument; these interest rates may be fixed rate or variable rate. For fixed-interest rate debt instruments and debt instruments with contractually predetermined interest rates, this principle is straightforward to apply because the future payment schedule and the rate(s) to apply are known,<sup>21</sup> but it is less straightforward to apply to debt instruments with variable interest rates that change with market conditions. The appendix at the end of this chapter provides examples of calculating the nominal value of a debt instrument by discounting future payments of interest and principal.

<sup>19</sup> Conceptually, the discount rate for debt instruments issued at a discount to the redemption value (such as deep-discount and zero-coupon bonds) should be that one at which the present value of future interest and principal payments equals the issue price of the bond, i.e., the yield on the security at issuance (the original yield-to-maturity rate) that is used to calculate the amount of accrued interest in each period (see the appendix at the end of this chapter).

<sup>20</sup> A single rate is usually used to discount payments due in all future periods. In some circumstances, using different rates for the various future payments may be warranted. Even if a single rate of discount is used, dependent on the time until due, a different discount factor applies to each payment, e.g., at a rate of discount of 10 percent, the discount factor for payments one year hence is 0.909 (or  $1/(1 + 0.1)$ ) and for payments two years hence is 0.826 (or  $1/(1 + 0.1)^2$ ), and so on. See also the example in Table 2.1.

<sup>21</sup> For a debt liability on which the interest rate steps up or down by contractually predetermined amounts over its life, the time profile of the discount factors to be applied to future payments would be nonlinear, reflecting these step changes.

<sup>18</sup> In the HIPC Initiative (see Appendix 5), a representative market rate is used to discount future payments. This provides another measure of opportunity cost and is specific to countries in that program.

**2.35** The *face value* of a debt instrument has been used to define nominal value in some instances, since the face value is the undiscounted amount of principal to be repaid. While of interest in showing amounts contractually due to be paid at a future date, the use of face value as nominal value in measuring the gross external debt position can result in an inconsistent approach across all instruments and is not recommended. For instance, the face value of deep-discount bonds and zero-coupon bonds includes interest costs that have not yet accrued, which is counter to the accrual principle.

**2.36** The *market value* of a debt security should be determined by its market price prevailing on the reference date to which the position relates. The market price is defined as the amount of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties and on the basis of commercial considerations only, sometimes called “at arm’s length.” The ideal source of a market price for a debt security is an organized or other financial market in which it is traded in considerable volume and the market price is listed at regular intervals. In the absence of such a source, market value can be estimated by discounting future payment(s) at an appropriate market rate of interest. If the financial markets are closed on the reference date, the market price that should be used is that prevailing on the closest preceding date when the market was open. In some markets the market price quoted for debt securities does not take account of interest that has accrued but is not yet payable (the “clean price”), but in determining market value these interest costs need to be included (the “dirty price”).

**2.37** The *fair value* of a debt instrument is its “market-equivalent” value and is defined as the amount for which a financial asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s-length transaction. It thus represents an estimate of what could be obtained if the creditor were to sell the financial claim.

### **Nonnegotiable debt instruments**

**2.38** The *Guide* recommends that debt instruments other than debt securities—such as loans, currency and deposits, and trade credit and advances—be

valued at nominal value only.<sup>22</sup> The nominal value of a debt instrument could be less than originally advanced if there have been repayments of principal, debt forgiveness, or other economic flows, such as those arising from indexation, that affect the value of the amount outstanding. The nominal value of a debt instrument could be more than originally advanced because of, e.g., the accrual of interest costs or other economic flows.

**2.39** For debt instruments that accrue no interest, e.g., liabilities arising because dividends on shares go ex-dividend, the nominal value is the amount owed. If there is an unusually long time<sup>23</sup> before payment is due on an outstanding debt liability on which no interest costs accrue, then the value of the principal should be reduced by an amount that reflects the time to maturity and an appropriate existing contractual rate, such as for similar debt instruments, and interest costs should accrue until actual payment is made.

**2.40** For some debt instruments, such as loans, the use of nominal values is partially influenced by pragmatic concerns about data availability and the need to maintain symmetry between debtors and creditors. In addition, because loans are not intended for negotiability, without an active market, estimating a market price can be somewhat subjective. Nominal value is also analytically useful because it shows actual legal liability and the starting point of creditor recovery behavior. In some instances, loans may be traded, often at discount, or a fair value may exist or would be possible to estimate. Loans that have become negotiable de facto should be reclassified under debt securities.

**2.41** Nonperforming loans are recorded at nominal value, which allows them to be compared with the total value of loans at nominal value (see Appendix 3,

<sup>22</sup> International statistical manuals consider that for nonnegotiable instruments, nominal value is an appropriate proxy for market value. Nonetheless, the development of markets, such as for credit derivatives linked to the credit risk of individual entities, is increasing the likelihood that market prices can be estimated even for nonnegotiable instruments. As these markets extend, consideration might be given to compiling additional information on market values of nonnegotiable debt.

<sup>23</sup> What constitutes an unusually long time in this context will depend on the circumstances. For instance, for any given time period, the higher the level of interest rates, the greater is the opportunity cost of delayed payment.



the “Nonperforming Loans” section). The value should include accrued interest not yet paid. Loans continue to be included in external debt until written off, forgiven, or reorganized. It is recognized that nominal value provides an incomplete view of the financial position, when the loans are nonperforming. Therefore, if significant, compilers may find it useful to separately identify the nominal value of nonperforming loans included in external debt.

**2.42** Deposits, trade credit and advances, and other nonnegotiable instruments are recorded at nominal value. Deposits at deposit-taking corporations in liquidation should be recorded at their nominal value until they are written off. If significant, separate identification of these deposits could be possible. The same treatment is applicable for any other cases of impaired deposits (i.e., where the deposit-taking corporation is not in liquidation but is insolvent).

**2.43** For some debt instruments, such as a loan, repayment may be specified in a contract in terms of quantities of commodities, other goods, and/or services to be paid in installments over a period of time. At inception, the value of the debt is equal to the principal advanced. The rate of interest, which will accrue on the principal, is that which equates the present value of the required future provision of the commodity or other good, given its current market price, to the principal outstanding. Conceptually, this type of contract is equivalent to the indexation of a loan to a narrow index (see paragraph 2.95). When payments are made in the form of the good or commodity, the value of the principal outstanding will be reduced by the market value of the good or commodity at the time the payment is made.

**2.44** In contrast, the value of the commodities, other goods, or services to be provided to extinguish a trade credit liability, including under barter arrangements, is that established at the creation of the debt, i.e., when the exchange of value occurred. However, as noted above, if there is an unusually long time before payment, the value of the principal should be reduced by an amount that reflects the time to maturity and an appropriate existing contractual rate, and interest costs should accrue until actual payment is made.

**2.45** The *Guide* recognizes the debt liabilities of insurance, pension funds, and standardized guar-

antee schemes to their nonresident participants and policyholders. These debt instruments are not traded on a market. They also do not always have a formula that can be applied to calculate a nominal value. However, the valuation principles that apply to these debt instruments are equivalent to market valuation. For life insurance, the debt liability is the value of the reserves held against the outstanding life insurance policies issued to nonresidents. The debt liability to nonresidents of nonlife insurance companies is the value of any prepayments of premiums by nonresidents and the reserves for the outstanding claims of nonresidents (both reported claims and claims incurred but not reported). The debt liability for a defined-benefit pension scheme is the present value of the promised benefits to nonresidents; while the debt liability for a defined-contribution scheme is the current market value of the fund’s assets prorated for the share of nonresidents’ claims vis-à-vis total claims.<sup>24</sup> The debt liabilities for standardized guarantee schemes is equal to the present value of expected calls under outstanding guarantees, net of any recoveries the guarantor expects to receive from the defaulting borrowers, a similar approach to that for nonlife insurance. In general, insurance companies and operators of pension funds and standardized guarantee schemes make actuarial estimates of their liabilities under these schemes. These estimates will be the usual source to compile statistics for these debt instruments.

**2.46** For arrears, the nominal value is equal to the value of the payments—interest and principal—missed, and any subsequent economic flows, such as the accrual of additional interest costs.

**2.47** For nonnegotiable debt instruments where the nominal value is uncertain, the nominal value can be calculated by discounting future interest and principal payments at an appropriate existing contractual rate of interest.

<sup>24</sup> In a defined-benefit scheme, the level of pension benefits promised by the employer to participating employees is guaranteed and usually determined by a formula based on participants’ length of service and salary. In a defined-contribution scheme, the level of contributions to the fund by the employer is guaranteed, but the benefits that will be paid depend on the assets of the fund.

### Box 2.3 General Methods for Estimating Market Value

When market-price data are unavailable for negotiable instruments, there are two general methods for estimating market value or, as it is sometimes called, fair value:

- Discounting future cash flows to the present value using a market rate of interest
- Using market prices of financial assets and liabilities that are similar

The first general method is to value financial assets and liabilities by basing market value on the present, or time-discounted, value of future cash flows. This is a well-established approach to valuation in both theory and practice. It calculates the market value of a financial asset or liability as the sum of the present values of all future cash flows. Market value is given by the following equation:

$$\text{Discounted present value} = \sum_{t=1}^n \frac{(\text{Cash flow})_t}{(1+i)^t}$$

where  $(\text{cash flow})_t$  denotes the cash flow in a future period  $(t)$ ,  $n$  denotes the number of future periods for which cash flows are expected, and  $i$  denotes the interest rate that is applied to discount the future cash flow in period  $t$ .

The method is relatively easy to apply in valuing any financial asset or liability if the future cash flows are known with certainty or can be estimated, and if a market interest rate (or series of market interest rates) is observable. However, acquiring the information on positive cash flows may not be straightforward for the compiler.

Directly basing market value on the market price of a similar financial instrument is a well-used technique when a market price is not directly observable, e.g., the market price of a bond with five-year remaining maturity might be given by the market price of a publicly traded five-year bond having comparable default risk. In other cases, it may be appropriate to use the market price of a similar financial instrument, but with some adjustment in the market value to account for differences in liquidity and/or risk level between the instruments.

In some cases, the financial asset or liability may possess some characteristics of each of several other financial instruments, even though its characteristics are not generally similar to any one of these instruments. In such cases, information on the market prices and other characteristics (e.g., type of instrument, issuing sector, maturity, credit rating, etc.) of the traded instruments can be used in estimating the market value of the instrument.

### Traded debt instruments

**2.48** The *Guide* recommends that debt securities be valued at both nominal and market value.<sup>25</sup> For a debt security, both nominal and market value can be determined from the value at creation and subsequent economic flows, except that market valuation takes account of any changes in the market price of the instrument, whereas nominal value does not.

**2.49** For debt securities for which the market price is not readily observable, by using a market rate of interest the present value of the expected stream of future payments associated with the security can be used to estimate market value. This and other methods of estimating market value are explained in Box 2.3. For unlisted securities, the price reported for accounting or regulatory purposes might be used, although this method is less preferable than those mentioned above. Similarly, for deep-discount or zero-coupon bonds, the issue price plus amortization of the discount could be used in the absence of a market price.

<sup>25</sup> This includes debt securities acquired under reverse transactions (see Table 4.6).

**2.50** If arrears are traded on secondary markets, as sometimes occurs, then a separate market value could be established.

**2.51** When securities are quoted on markets with a buy-sell spread, the midpoint should be used to value the instrument. The spread is an implicit service of the dealer, paid by buyers and sellers.

### Nondebt instruments

**2.52** Liabilities positions in equity (both equity shares and other equity) and investment fund shares, and financial derivatives and ESOs, are not included in the gross external debt position because they are not debt liabilities, but they are recognized by the *Guide* as memoranda data series that might be disseminated along with the presentation of the gross external debt position to enhance analytical usefulness (see Chapter 4, Memorandum Tables). These instruments are to be valued at market value.

**2.53** The market value of a forward financial derivatives contract is derived from the difference between the agreed-upon contract price of an underlying item and the prevailing market price (or market price

expected to prevail) of that item, times the notional amount, appropriately discounted. The notional amount—sometimes described as the nominal amount—is the amount underlying a financial derivatives contract that is necessary for calculating payments or receipts on the contract. This amount may or may not be exchanged. In the specific case of a swap contract, the market value is derived from the difference between the expected gross receipts and gross payments, appropriately discounted, i.e., its net present value. The market value for a forward contract can therefore be calculated using available information—market and contract prices for the underlying item, time to maturity of the contract, the notional value, and market interest rates. From the viewpoint of the counterparties, the value of a forward contract may become negative (liability) or positive (asset) and may change both in magnitude and direction over time, depending on the movement in the market price for the underlying item. Forward contracts settled on a daily basis, such as those traded on organized exchanges—and known as futures—have a market value, but because of daily settlement it is likely to be zero value at each end-period.

**2.54** The price of an option depends on the potential price volatility of the price of the underlying item, the time to maturity, interest rates, and the difference between the contract price and the market price of the underlying item. For traded options, whether they are traded on an exchange or not, the valuation should be based on the observable price. At inception the market value of a nontraded option is the amount of the premium paid or received. Subsequently nontraded options can be valued with the use of mathematical models, such as the Black-Scholes formulas, that take account of the factors mentioned above that determine option prices. In the absence of a pricing model, the price reported for accounting or regulatory purposes might be used. Unlike forwards, options cannot switch from negative to positive value, or vice versa, but they remain an asset for the owner and a liability for the writer of the option.

**2.55** For equity shares that are listed in organized markets or are readily negotiable, the value of outstanding stocks should be based on market prices. When actual market values are not available, an estimate is required. Alternative methods of approximating market value of shareholders' equity (either for

direct investment or portfolio investment) include the following: recent transaction price, net asset value, present value and price-to-earnings ratios, market capitalization method, own funds at book value, and apportioning global value (see *BPM6*, paragraphs 7.15–7.19, for a detailed description of these alternative methods of approximating market value of shareholders' equity).

**2.56** For equity related to direct investment, it is recognized that, in practice, balance sheet values of direct investment enterprises or direct investors are generally utilized to determine their value. If these balance sheet values are on a current market value basis, this valuation would be in accordance with the market value principle, but if these values are based on historical cost and not current revaluation, they would not conform to the principle. If historical cost from the balance sheets of direct investment enterprises (or investors) is used to determine the value of equity and investment fund shares (including reinvestment of earnings), compilers are also encouraged to collect data from enterprises on a current market value basis. Valuation according to the market value equivalent is needed for valuing other equity (see paragraph 2.55).<sup>26</sup> In instances where the shares of direct investment enterprises are listed on stock exchanges, the listed prices should be used to calculate the market value of shares in those enterprises.

### Unit of Account and Exchange Rate Conversion

**2.57** The compilation of the gross external debt position is complicated by the fact that the liabilities may be expressed initially in a variety of currencies or in other standards of value, such as SDRs. The conversion of these liabilities into a reference unit of account is a requisite for the construction of consistent and analytically meaningful gross external debt statistics.

**2.58** From the perspective of the national compiler, the domestic currency is the obvious choice for measuring the gross external debt position. A position denominated in domestic currency is compatible with the national accounts and most of the

<sup>26</sup> Positions in unlisted portfolio investment equity securities without an observable market price may be also valued using methods indicated in paragraph 2.55.

economy's other economic and monetary statistics expressed in that unit. Data expressed in an international unit of account (a foreign currency) may be needed in circumstances of high inflation, multiple exchange rates, and/or when the domestic currency is subject to significant exchange rate fluctuations. In addition, a standard or international unit of account is necessary to allow for aggregation on a global or regional basis and to facilitate international comparisons.<sup>27</sup>

**2.59** The most appropriate exchange rate to be used for conversion of external debt liabilities (and assets) denominated in foreign currencies into the unit of account is the market (spot) rate prevailing on the reference date to which the position relates. The midpoint between buying and selling exchange rates should be used. For conversion of debt in a multiple rate system,<sup>28</sup> the rate on the reference date for the actual exchange rate applicable to specific liabilities (and assets) should be used.

### Maturity

**2.60** For debt liabilities, it is recommended that the traditional distinction between long- and short-term maturity, based on the formal criterion of original maturity (i.e., the period of time from when the liability is created to its final maturity date) be retained. Long-term debt is defined as debt with an original maturity of more than one year or with no stated maturity. Short-term debt, which includes currency, is defined as debt repayable on demand or with an original maturity of one year or less. If an instrument has an original maturity of one year or less, it should be classified as short-term, even if the instrument is issued under an arrangement that is long-term in nature. For instance, a note issued under note issuance facilities (NIFs) or revolving underwriting facilities (RUFs) is a short-term instrument issued under a legally binding medium-term facility—a form of revolving credit (see Appendix 1).

<sup>27</sup> For instance the Quarterly External Debt Statistics (QEDS) database ([www.worldbank.org/qeds](http://www.worldbank.org/qeds)) and the Joint External Debt Hub (JEDH) ([www.jedh.org](http://www.jedh.org)) are compiled and disseminated in U.S. dollars. See Appendix 3 for information on these databases.

<sup>28</sup> A multiple exchange rate system is a scheme for which there are schedules of exchange rates, set by the authorities, used to apply separate exchange rates to various categories of transactions or transactors.

**2.61** In addition, the distinction between long- and short-term maturity on a remaining maturity basis is recommended. External debt on a short-term remaining maturity basis covers debt payments that fall due in one year or less and can be calculated by adding the value of outstanding short-term external debt (original maturity) to the value of outstanding long-term external debt (original maturity) due to be paid in one year or less. External debt on a long-term remaining maturity basis covers debt payments that fall due in over one year. This measure of maturity is discussed in more detail in Chapter 6.

### Appendix: Accrual of Interest Costs— How Should This Be Implemented?

**2.62** The *Guide* recommends including interest costs that have accrued and are not yet payable in the gross external debt position. This chapter's appendix presents the theoretical framework for the accrual of interest costs and a more detailed discussion on how to apply the accrual principle by type of instrument.

**2.63** Because the focus of the *Guide* is on position statistics, the debate about whether the rate at which interest should accrue on market-traded instruments should be based on the current market value of the debt (the “creditor approach”) or as stipulated in the original contract (the “debtor approach”) is not relevant.<sup>29</sup> This is because the market value position to be reported is based on the market price of the instrument, and that value should include any interest costs that have accrued and are not yet payable. Given this, unless otherwise stated, this chapter's appendix focuses on nominal value.

**2.64** At the outset, it is worth noting some key principles for applying the accrual of interest costs principle in both the nominal and market value presentations of external debt:

- All financial instruments bearing interest are included
- The accrual of interest costs can be calculated by the straight-line or compound interest method

<sup>29</sup> For additional information about the creditor/debtor approaches for defining and measuring interest rate for traded debt instruments see *BPM6*, paragraph 11.52. In the international accounts, interest is recorded following the debtor approach.

**Table 2.1 Present Value and the Accrual of Interest Costs: Example 1 (Simple Case)**

Present Value in 2013		2014	2015	2016	2017	2018
9.09	(9.54)*	$10/(1 + 0.1)$				
8.26	(8.66)		$10/(1 + 0.1)^2$			
7.52	(7.89)			$10/(1 + 0.1)^3$		
6.83	(7.16)				$10/(1 + 0.1)^4$	
6.21	(6.51)					$10/(1 + 0.1)^5$
<u>37.91</u>	<u>(39.76)</u>	<u><math>10/(1 + 0.1)</math></u>	<u><math>10/(1 + 0.1)^2</math></u>	<u><math>10/(1 + 0.1)^3</math></u>	<u><math>10/(1 + 0.1)^4</math></u>	<u><math>10/(1 + 0.1)^5</math></u>
+62.09	(65.12)					$100/(1 + 0.1)^5$
<u>=100.00</u>	<u>(104.88)</u>					

\* (9.54) = The present value of the payment six months after issuance of the debt instrument.

- All instruments issued at a discount are treated in a similar manner
- The accrual of interest costs also applies to variable-rate and index-linked instruments

### Theoretical Framework for the Accrual of Interest Costs

**2.65** Three examples, drawn from work undertaken by Statistics Canada (see Laliberté and Tremblay, 1996), are provided to illustrate the theoretical framework for the accrual of interest costs. These examples, and the discussion on accruing interest costs on a straight-line or compound basis that immediately follows, provide an explanation of the basic principles.

**2.66** The first example is that of a simple instrument that is issued and redeemed at the same price<sup>30</sup> and pays fixed annual interest at the end of each year. The second example is of an instrument issued at a price that is at a discount to the redemption price and that also makes annual interest payments. The third example is of an instrument issued at a discount that has no interest payments. These examples have general applicability throughout the *Guide*, in that they explain how future payments can be discounted to produce the external debt position at any moment in time.

<sup>30</sup> If an economy was disseminating a debt-service ratio with future interest and principal payments calculated using the current yield on debt, then if the market value of external debt rises, part of the future interest payments could become principal payments.

### Example 1: Present value and the accrual of interest costs—simple case

**2.67** In this simple example, a debt instrument is issued with a five-year maturity, a principal amount of \$100, and annual payments of \$10 each year as interest, i.e., the interest rate on the instrument is fixed at 10 percent a year. Given this, as seen in Table 2.1, in present value terms the payment of \$10 in a year's time is worth  $10/(1 + 0.1)$ , or 9.09; the payment of \$10 in two years' time is worth  $10/(1 + 0.1)^2$ , or 8.26; and so on. In present value terms, the principal amount advanced to be repaid at maturity is worth  $100/(1 + 0.1)^5$ , or 62.09. The present value for each payment is provided in the left-hand column, and it can be seen that the present value of all future payments equals the issue price of \$100.

**2.68** Because interest costs accrue at 10 percent a year on a continuous basis and are added to the principal amount, after six months of the first year the principal amount has increased. It equals the \$100 principal amount due to be paid at maturity, plus half of the year's interest payment, \$5 (calculated on a straight-line basis), or plus just under half, \$4.88 (calculated on a compound basis). Any payments of interest, or principal, would reduce the amount outstanding.

**2.69** Alternatively, the principal amount outstanding after six months could be calculated by discounting all future payments. The present value of each payment after six months is presented in parentheses in the left-hand column. After six months, each of the values in the left-hand column has increased because the payments are closer to being made, and time is being

Table 2.2 Present Value and the Accrual of Interest Costs: Example 2 (Discounted Principal)

Present Value in 2013		2014	2015	2016	2017	2018
7.27	(7.62)*	$8/(1 + 0.1)$				
6.61	(6.93)		$8/(1 + 0.1)^2$			
6.01	(6.30)			$8/(1 + 0.1)^3$		
5.46	(5.73)				$8/(1 + 0.1)^4$	
4.97	(5.21)					$8/(1 + 0.1)^5$
30.31	(31.79)	$8/(1 + 0.1)$	$8/(1 + 0.1)^2$	$8/(1 + 0.1)^3$	$8/(1 + 0.1)^4$	$8/(1 + 0.1)^5$
+62.09	(65.12)					100/(1 + 0.1) <sup>5</sup>
=92.40	(96.91)					

\* (7.62) = The present value of the payment six months after issuance of the debt instrument.

discounted at a rate of 10 percent a year. The discounted value of each payment after six months can be seen to sum to \$104.88, the same amount outstanding as with the compound approach to accruing interest costs. One practical advantage of maintaining a system that discounts each payment to its present value is that if the instrument is stripped (see paragraphs 2.85–2.88), i.e., all payments traded separately, the compilation system will already be prepared for such a situation.

**2.70** Unless there are early repayments that reduce the amount of principal outstanding—for instance, with certain types of asset-backed securities, partial repayments of principal could occur at any time—the amounts described above would be recorded in the gross external debt position, i.e., after six months with a contractual interest rate of 10 percent per annum, the amount outstanding would be \$104.88 (or \$105 on a straight-line basis).

**2.71** The rate relevant for discounting all the payments to a market value would be implicit in the market price, or to put it another way, the market value amount would equal future payments discounted at the current market rate of interest for that debt instrument. The market value of external debt should include any interest costs that have accrued and are not yet payable.

### **Example 2: Present value and the accrual of interest costs—discounted principal**

**2.72** The second example concerns the more complex case of instruments issued at a discount to the redemption value. These instruments will include securities

and any other instruments where the issue price is less than the redemption price.<sup>31</sup> In this instance, both the coupon payments and the difference between the issue price and the redemption price determine the rate at which interest costs accrue. Table 2.2 presents the calculations involving an instrument similar to that in the first example above, i.e., issued with the same 10 percent yield but “only” having annual interest payments of \$8. The difference between the 10 percent yield and the yield implied by coupon payments is reflected in the discount between the issue price and redemption price. Once again, from the left-hand column of the table it can be seen that discounting all the future payments by 10 percent, including the principal amount, provides the issue price of \$92.40.

**2.73** How is the accrual of interest costs calculated? Simply, interest costs accrue at a yield of 10 percent each year, of which \$8 is paid out in interest payments and the rest is reinvested (or capitalized) into the original principal amount. The principal amount grows from year to year, due to the continued reinvestment of interest costs that have accrued, and as a consequence, so does the absolute amount of interest costs that accrue each year. As with the first example, the present value of each payment after six months is

<sup>31</sup> For instruments issued at a discount, issue price is a generic term that means the value of principal at inception of the debt; redemption price is similarly a generic term that means the amount of principal to be paid at maturity. This is because some instruments are “issued” without a price as such (e.g., trade credit). In such instances, the issue price equals the economic value provided (i.e., of goods or services provided) and the redemption price equals the amount owed when the debt liability is due to be paid.

**Table 2.3 Present Value and the Accrual of Interest Costs: Example 3 (Zero-Coupon Instrument)**

Present Value in 2013	2014	2015	2016	2017	2018
$100/(1 + 0.1)$ = 62.09	$62.09(1 + 0.1)$ = 68.30	$62.09(1 + 0.1)^2$ = 75.13	$62.09(1 + 0.1)^3$ = 82.64	$62.09(1 + 0.1)^4$ = 90.90	$62.09(1 + 0.1)^5$ = 100

presented in parentheses in the left-hand column. In the position data, the amount outstanding can be seen to be \$96.91 after six months.

### **Example 3: Present value and the accrual of interest costs—zero-coupon instrument**

**2.74** The third example covers zero-coupon instruments. If the instrument is issued at discount and has no coupon, then the principal amount increases in value over time by the implicit yield on the security at issuance, derived from the difference between the issue price and the redemption price. In the example below, the zero-coupon instrument is issued at \$62.09 and is to be redeemed at \$100; the difference implies a 10 percent yield. As can be seen in Table 2.3, the principal amount grows each year because of the continued reinvestment of interest costs that accrue, and so after the first year the amount outstanding has increased by 10 percent to \$68.30, by a further 10 percent in year two to \$75.13, and so on, until redemption at \$100 at the end of year five.<sup>32</sup>

#### **Straightline or compound interest**

**2.75** In calculating the accrual of interest costs by a straight-line approach, an equal amount of the interest costs to be paid is attributed to each period, e.g., \$5 for the first six months in the first example above. For bonds with interest payments (i.e., annual or more frequent), on secondary markets the buyer of the bond pays to the seller the amount accrued since the last payment, according to a very simple arithmetic proportionality. For many international loans, debt-monitoring systems record the accrual of interest costs on a straight-line basis.

**2.76** However, the accrual of interest costs can also be calculated on a compound basis, i.e., continuously

adding the accrued interest costs not yet payable to the principal amount each period and applying to that amount the interest yield on the debt in order to calculate the interest costs for the next period. This method is the theoretically preferred approach because it relates the cost to the provision of capital and allows reconciliation between amounts accrued and the discounted value of future payments. Such an approach is commonly used when information on individual instruments owned by nonresidents is unknown, and so to calculate the accrual of interest costs, an average yield is applied to positions. Of course, in such instances the theoretical benefit of using a yield is offset by the approximation of applying an average yield to a range of instruments.

**2.77** Differences in methods may well have a small effect on the gross external debt position. However, as is evident from the first example, for each instrument the straight-line approach will overestimate the position in the short term. For fixed-rate instruments, this will be gradually “unwound” as the time of the interest payment approaches.

#### **Specific Instruments<sup>33</sup>**

##### **Fixed-rate instruments**

###### **Loans**

**2.78** For loans (except interest-free loans) interest costs are recorded as accruing continuously, increasing the value of the loan outstanding, until paid. When loans have been rescheduled and a new (moratorium) interest rate agreed between the debtor and creditor, interest costs should accrue on the rescheduled debt at the new moratorium interest rate.

<sup>32</sup> A worked example of accruing interest on a zero-coupon bond in the balance of payments is given in the *BPM6*, Box 11.2.

<sup>33</sup> This text has drawn upon that in Eurostat (2000), the *ESA95 Manual on Government Deficit and Debt*, and *BPM6*.

### *Deposits*

**2.79** For deposits, interest may be credited to the account (reinvested) at certain times, such as the end of a given period. In the *Guide*, interest costs accrue continuously and become part of principal on a continuous basis.

**2.80** For some deposits, such as time or savings deposits, a given rate of interest may be paid only under the condition of a minimum holding period. An early liquidation, if contractually allowed, is balanced by a reduction in the rate of interest paid to the holder. For recording the accrual of interest costs, the rate of interest to use is the maximum rate that the depositor could receive in the normal course of the contract (i.e., respecting the arrangements about maturity or notice). In the event if the arrangements are not fully respected, the amount of interest costs that accrued previously are corrected in line with the rate the depositor actually received. As the revised amount is in all likelihood globally very small compared with the total interest costs for deposits, for practical reasons the correction could be included in the last period of compilation (as opposed to revising back data).

### *Debt securities*

**2.81** For securities for which the issue and redemption prices are the same, interest costs accrue in the same manner as for loans, on a yield-to-maturity basis.

### *Instruments issued at a discount*

**2.82** Instruments for which the issue price is less than the redemption price are all treated in the same way. The method of accrual for instruments issued at a discount or premium was described in paragraph 2.30 and includes accruing any difference between the redemption price and the issue price as interest over the lifetime of the security (see also the examples in paragraphs 2.72 and 2.74).

**2.83** For short-term negotiable instruments,<sup>34</sup> issuance at a discount is very frequent. Generally these instruments are akin to zero-coupon bonds (see Example 3), and so the treatment of such instruments is the same. Without information on individual secu-

rities, one practical approach is to base estimates of the accrual of interest costs on average maturities and average rates of interest at issuance.

**2.84** External debt, particularly general government debt, could be issued in the form of fungible bonds (also named *linear bonds*). In this case, securities are issued under one similar “line” (in terms of coupon amounts and payment dates and final redemption price and maturity date) in tranches, generally issued during a rather short period but sometimes over a longer one. Each tranche is issued at a specific issue price according to the prevailing market conditions. Fungible bonds may be seen as a good example of instruments with two interest components: the coupon (representing the interest payment) and the difference between the issue price and redemption price. Thus, in principle each tranche should be identified separately because the nominal interest rate might well differ from tranche to tranche given the different market conditions that existed when they were issued. Once issued, however, the tranches may mix and so may not trade separately on secondary markets, nor be identified separately in portfolios. If so, it is necessary to estimate a weighted-average interest rate resulting from issuing different tranches, updated at each new issue, and apply this to the amount owed to nonresidents.<sup>35</sup>

### *Stripped securities*

**2.85** Stripped securities are securities that have been transformed from a principal amount with interest payments into a series of zero-coupon bonds, with a range of maturities matching the interest payment dates and the redemption date of the principal amount. The essence of stripping was described in the first example above: the coupon payment amounts are separately traded. In itself, the act of stripping does not affect the nominal value of the debt outstanding for the issuer of the securities that have been stripped.

**2.86** There are two types of stripping. First, if the stripped securities are issued by a third party, who has

<sup>34</sup> A negotiable financial instrument is one whose legal ownership is capable of being transferred from one unit to another unit by delivery or endorsement.

<sup>35</sup> A creditor might focus on the prevailing market interest rate, or the rate prevailing when they purchased the security, and hence might record the claim at a value different from that recorded by the debtor.



acquired the original securities and is using them to “back” the issue of the stripped securities, then new funds have been raised by the third party, with the interest rate determined at the time of issuance.

**2.87** On the other hand, if the owner of the original security has asked the settlement house or clearing house in which the security is registered to “issue” strips from the original security, the strips replace the original security and remain the direct obligation of the issuer of the original security. In the gross external debt position on a nominal value basis, it is unrealistic from a practical point of view to take into account the rate prevailing at the issuance of each strip. Rather, since stripping provides no additional funding to the issuer and there is no impact on the original cost of borrowing, fully determined at the issuance time (in the case of fixed-rate) or following rules that cannot be changed (in the case of variable-rate), it is assumed that stripping does not change the cost of borrowing. So, unlike other zero-coupon bonds, the interest rate used for calculating the accrual of interest costs for strips is not the rate prevailing at the time of stripping, but rather the original cost of borrowing, i.e., on the underlying security.

**2.88** In some countries, strips of interest payments may refer to coupons of several bonds, with different nominal amounts but paid at the same date. In this case, best efforts should be made to use the weighted-average nominal interest rate of the different underlying bonds to calculate the accrual of interest costs on the stripped securities.

### *Arrears*

**2.89** Interest costs that accrue on arrears (both principal and interest arrears) are known as *late interest*. For arrears arising from a debt contract, interest costs should accrue at the same interest rate as on the original debt, unless the interest rate for arrears was stipulated in the original debt contract, in which case this stipulated interest rate should be used. The stipulated rate may include a penalty rate in addition to the interest rate on the original debt. For other arrears, in the absence of other information, interest costs accrue on these arrears at the market rate of interest for overnight borrowing. Also, any additional charges relating to past arrears, agreed by the debtor and creditor at the time the arrears are rescheduled, and to be paid by the debtor to the creditor, should be regarded as an

interest cost of the debtor at the time the agreement is implemented. If an item is purchased on credit and the debtor fails to pay within the period stated at the time the purchase was made, any extra charges incurred should be regarded as an interest cost and accrue until the debt is extinguished.

### *Variable-rate instruments*

#### *Interest-rate-linked instruments*

**2.90** For loans, deposits, and securities, the same principles as with fixed-rate instruments apply, except that in the absence of firm information, the accrual of interest costs should be estimated and added to the gross external debt position, using the most recent relevant observation(s) of the reference index. Revisions to back data should be undertaken when the amount of interest costs that have accrued is known with certainty.

**2.91** In addition, if the interest rate can vary only under the condition of a minimum change in the index and/or within specific upward limits, any estimate of the accrual of interest costs should take account of any such conditions. If there is a link between the nature of the rate index and the frequency of interest payments, e.g., interest is indexed on a quarterly basis and is normally paid every quarter with a delay of one quarter—then the exact amount paid to the owners of the securities may well be known in advance and so can be accrued with certainty. This is known as interest being “predetermined.”

#### *Index-linked instruments*

**2.92** External debt might be indexed to indices other than interest rate indices. Examples include indexing to the price of a commodity, an exchange rate index, a stock exchange index, or the price of a specific security, and so on. Principal as well as interest payments may be indexed. The index can apply continuously over all or part of the life of the instrument. Any change in value related to indexation of interest is recorded as an interest cost and affects the principal amount outstanding until paid. The impact of the indexation of the principal amount is recorded as increasing (or decreasing) the principal amount on a continuous basis for the period during which the indexing is operative. The flows associated with indexation may be recorded as the accrual of interest

or as a holding gain or loss depending on the nature of the index (broad or narrow based, respectively).<sup>36</sup>

**2.93** The method of calculation is the same as that for variable-rate interest discussed above, i.e., the accrued amount should be estimated using the most recent relevant observation(s) of the reference index and added to the gross external debt position. For instance, if in the first example above interest payments were indexed, and movement in the index after six months suggested that interest payments would increase to \$12 a year, then the interest costs accrued to date would be \$6 on a straight-line basis (or \$5.80 on a compound basis) and the amount outstanding would be \$106 (\$105.80). Revisions to back data are undertaken when the amount of interest costs that have accrued is known with certainty.

**2.94** In contrast, positions in debt instruments with both the amount to be paid at maturity and interest payments indexed to foreign currency should be calculated using the same principles that apply to foreign-currency-denominated instruments, because they are treated as though they are denominated in that foreign currency.

**2.95** As mentioned above, a loan that is repayable in commodities or other goods in installments over a period of time (see paragraph 2.43) is conceptually equivalent to an indexed loan. At inception, the principal amount outstanding is the value of principal advanced. As the market price of the commodity or other good changes, so will the valuation of the principal amount because the value of the principal amount(s) to be paid has changed. Any payments made by the debtor in the form of commodities or goods (or cash) will reduce the principal amount outstanding by the value of the commodity or good provided. As with other debt instruments indexed to a narrow index, interest costs will accrue at the interest rate that equated at inception the market value of the commodities or other goods to be paid with the principal amount advanced.

**2.96** Index-linked instruments may include a clause for a minimum guaranteed redemption value. Any estimate of the accrual of interest costs should take account of such conditions. For instance, if strict

application of the index had the effect of reducing the amount outstanding to less than the minimum, it would not be relevant to record any reduction below the minimum guaranteed redemption value. Normally, the current market price of debt instruments takes into account such a clause.

### ***Instruments with grace periods of interest***

**2.97** Some debt instruments may have a grace period during which no interest payments are to be made. For those debt instruments for which the contract requires the accrual of interest during the grace period (i.e., the relevant interest rate that applies to the grace period is greater than zero), the accrual of interest should be recorded as specified in the contract, increasing the value of the principal.

**2.98** For loans and deposits, and other nonnegotiable instruments, if the debtor can repay the same amount of principal at the end of the grace period as at the beginning (i.e., the relevant interest rate that applies to the grace period is zero), no interest costs accrue during the grace period.<sup>37</sup> This remains true even if the rate of interest applied in a second and/or subsequent time period is adjusted (e.g., there is a step up), so that the final yield is roughly similar to normal conditions over the total life of the instrument. In other words, for loans and deposits with step-up interest, interest should accrue in any period at the contractual rate of interest for that period and not at the internal rate of return of the loan or deposit—the discount rate that makes the net present value of all cash flows of the loan equal to zero. This treatment applies to loans and deposits but not to debt securities. Box 2.4 presents examples of the recording of accrued interest on different types of loans, including loans with a single fixed interest rate, loans with step-up interest rates, loans with step-up interest rates where a zero interest rate applies to the first two steps, and loans that accrue interest but the payments are contractually deferred.

**2.99** For debt securities and other negotiable instruments, interest accrues even during the grace period, at the original yield to maturity. In other words, interest on debt securities with step-up interest should

<sup>36</sup> See *BPM6*, paragraphs 11.59–11.65 for a detailed description of these two approaches.

<sup>37</sup> If a prepayment fee or penalty is paid, it should be classified as a service fee (not interest) consistent with *BPM6*, paragraph 10.120.

**Box 2.4 Recording of Accrued Interest Costs on Loans**

The table below shows four examples of loans with a maturity of 5 years, a principal amount of 100 to be repaid at maturity, and an internal rate of return of 5%. The loans differ on the interest rates contractually agreed for each year; interest accrued during a year is to be paid at the end of that year.

Loan Examples				
	Example 1: Fixed interest rate	Example 2: Step-up interest rate	Example 3: Step-up interest rate with no interest charged in the first 2 years	Example 4: Fixed interest rate with interest of the first 2 years paid in the third year
<b>Maturity (years)</b>	5	5	5	5
<b>Principal</b>	100	100	100	100
<b>Interest rate: Year 1</b>	5%	0.5%	0% (no interest accrued)	5% (paid in year 3)
Year 2	5%	2%	0% (no interest accrued)	5% (paid in year 3)
Year 3	5%	6%	6.1%	5%
Year 4	5%	7.7%	8.5%	5%
Year 5	5%	10%	12%	5%
<b>Internal rate of return (IRR)</b>	5%	5%	5%	5%

Example 1 shows a loan with a fixed interest rate and Example 2 shows a loan with a step-up interest rate. Example 3 is a variant on Example 2 in that a zero interest rate applies to the first two steps of the loan (the loan contract in this example would specify that if the loan would be redeemed during the period when the zero interest rate applies, only the principal has to be reimbursed). Example 4 is different, as interest costs accrued in the first two years are paid in year 3 together with the interest costs accrued during year 3. In case of an early redemption in the first two years, the principal and the interest costs accrued but not yet paid would have to be redeemed.

The statistical recordings provided below are shown from the debtor perspective.

**Example 1: Fixed Interest Rate**

This is one of the most common types of loan contracts. In the first year (at the beginning of the year) the principal amount is disbursed to the debtor and recorded as a loan liability. In the same period, interest costs accrue at a rate of 5% and are recorded as interest payable transactions with the corresponding increase of the outstanding debt (accrued interest costs). The accrued interest costs are paid at the end of the year; therefore, the outstanding debt decreases accordingly. At the end of the first year, the loan position shows the same value as the principal amount (100). For the other years the same logic applies. At maturity the principal amount is repaid together with the interest costs accrued in that year.

Year	Cash flows (1) = (3)+(5)	Loan Liabilities Transactions				Loan liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued (4)	Interest costs paid (5)	
1	+95.00	+100.00	+100.00	+5.00	-5.00	+100.00
2	-5.00	0.00	0.00	+5.00	-5.00	+100.00
3	-5.00	0.00	0.00	+5.00	-5.00	+100.00
4	-5.00	0.00	0.00	+5.00	-5.00	+100.00
5	-105.00	-100.00	-100.00	+5.00	-5.00	0.00

**Box 2.4 Recording of Accrued Interest Costs on Loans (Concluded)****Example 2: Step-up Interest Rate**

The case of step-up interest rates implies a recording of different interest costs amounts. However, the same mechanism as in Example 1 applies.

Year	Cash flows (1) = (3)+(5)	Loan Liabilities Transactions				Loan liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued (4)	Interest costs paid (5)	
1	+99.50	+100.00	+100.00	+0.50	-0.50	+100.00
2	-2.00	0.00	0.00	+2.00	-2.00	+100.00
3	-6.00	0.00	0.00	+6.00	-6.00	+100.00
4	-7.70	0.00	0.00	+7.70	-7.70	+100.00
5	-110.00	-100.00	-100.00	+10.00	-10.00	0.00

**Example 3: Step-up Interest Rate (with One or More of the Steps Being Zero)**

This case shows a loan with step-up interest rates and with a zero interest rate in the first two years. The recording is similar to Example 2; however, during the first two years, the accrued interest costs amount to zero as a consequence of the zero interest rate.

Year	Cash flows (1) = (3)+(5)	Loan Liabilities Transactions				Loan liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued (4)	Interest costs paid (5)	
1	+100.00	+100.00	+100.00	0.00	0.00	+100.00
2	0.00	0.00	0.00	0.00	0.00	+100.00
3	-6.10	0.00	0.00	+6.10	-6.10	+100.00
4	-8.50	0.00	0.00	+8.50	-8.50	+100.00
5	-112.00	-100.00	-100.00	+12.00	-12.00	0.00

**Example 4: Postponement of the Payment of Accrued Interest Costs**

The last example shows a loan on which the accrued interest costs in the first two years are paid together with the interest costs accrued in the third year (i.e., the payment of interest costs are deferred). Accrued interest costs are recorded each year and added to the outstanding debt to be repaid, i.e., accrued interest costs not paid in the first two years increase the loan position at end-year. Since accrued interest costs are calculated on the increasing (outstanding) debt, the interest costs accrued in year 2 and year 3 are higher than in year 1. In the third year the cumulated accrued interest costs are fully paid and the outstanding debt returns to its principal value of 100. The remaining years are recorded similarly to Example 1.

Year	Cash flows (1) = (3)+(5)	Loan Liabilities Transactions				Loan liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued (4)	Interest costs paid (5)	
1	+100.00	+105.00	+100.00	+5.00	0.00	+105.00
2	0.00	+5.25	0.00	+5.25	0.00	+110.25
3	-15.76	-10.25	0.00	+5.51	-15.76	+100.00
4	-5.00	0.00	0.00	+5.00	-5.00	+100.00
5	-105.00	-100.00	-100.00	+5.00	-5.00	0.00

**Box 2.5 Recording of Accrued Interest Costs on Debt Securities**

The table below shows three examples of debt securities with a maturity of five years, a principal amount of 100 to be repaid at maturity, and a yield-to-maturity at inception of 5%. The debt securities differ on the coupon paid at the end of each period. Example 1 shows a debt security with a fixed coupon, Example 2 shows a debt security with a step-up coupon, and Example 3 is a variation on Example 2 in that the first two coupons are zero.

Debt Securities Examples			
	Example 1: Fixed coupon	Example 2: Step-up coupon	Example 3: Step-up coupon with zero coupon in the first 2 years
<b>Maturity (years)</b>	5	5	5
<b>Principal</b>	100	100	100
<b>Interest rate: Year 1</b>	5%	0.5%	0.0%
Year 2	5%	2%	0.0%
Year 3	5%	6%	6.1%
Year 4	5%	7.7%	8.5%
Year 5	5%	10%	12%
<b>Original yield-to-maturity</b>	5%	5%	5%

The statistical recordings provided below are shown from the debtor perspective (and interest is recorded following the debtor approach).

**Example 1: Fixed Coupon**

In the first year (at the beginning of the year) the debt security is issued at par value and recorded as a debt security liability. In the same period, interest costs accrue at the original yield-to-maturity of 5% and are recorded as interest payable transactions with the corresponding increase of the outstanding debt (accrued interest costs). The accrued interest costs (equal to the coupon in this example) are paid at the end of the year; therefore, the outstanding debt decreases accordingly. At the end of the first year, the debt security position shows the same value as the principal amount (100). For the other years the same logic applies. At maturity, the principal amount is repaid together with the interest costs accrued in that year.

Year	Cash flows (1) = (3)+(5)	Debt Security Liabilities Transactions				Debt security liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued <sup>1</sup> (4)	Coupon paid (5)	
1	+95.0	+100.0	+100.0	+5.0	-5.0	+100.0
2	-5.0	0.0	0.0	+5.0	-5.0	+100.0
3	-5.0	0.0	0.0	+5.0	-5.0	+100.0
4	-5.0	0.0	0.0	+5.0	-5.0	+100.0
5	-105.0	-100.0	-100.0	+5.0	-5.0	0.0

**Example 2: Step-up Coupon**

The case of step-up coupon implies a recording of different interest costs amounts. However, the same mechanism as in Example 1 applies. Interest costs accrue at the original yield-to-maturity of 5% and are recorded as interest payable transactions with the corresponding increase of the outstanding debt (accrued interest costs). Coupons (which in this example are different from the accrued interest costs) are paid at the end of the year; therefore, the outstanding debt decreases accordingly. In summary, in each period, the difference between the accrued interest costs and the coupon paid is reinvested (or capitalized) into the principal amount, with the corresponding change in the outstanding debt.

Year	Cash flows (1) = (3)+(5)	Debt Security Liabilities Transactions				Debt security liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued <sup>1</sup> (4)	Coupon paid (5)	
1	+99.5	+104.5	+100.0	+5.0	-0.5	+104.5
2	-2.0	+3.2	0.0	+5.2	-2.0	+107.7
3	-6.0	-0.6	0.0	+5.4	-6.0	+107.1
4	-7.7	-2.3	0.0	+5.4	-7.7	+104.8
5	-110.0	-104.8	-100.0	+5.2	-10.0	0.0

<sup>1</sup> Accrued interest costs (column 4) are calculated by applying the original yield-to-maturity rate (5%) to the outstanding debt at the end of the previous year (column 6).

**Box 2.5 Recording of Accrued Interest Costs on Debt Securities (Concluded)****Example 3: Step-up Coupon (with Zero Coupon in the First Two Years)**

This case shows a debt security with step-up coupon and with zero coupon in the first two years. The recording of accrued interest costs uses the same principles as Example 2.

Year	Cash flows (1) = (3)+(5)	Debt Security Liabilities Transactions				Debt security liabilities at end-year (6)
		Total (2) = (3)+(4)+(5)	Principal (3)	Interest costs accrued <sup>1</sup> (4)	Coupon paid (5)	
1	+100.0	+105.0	+100.0	+5.0	0.0	+105.0
2	0.0	+5.3	0.0	+5.3	0.0	+110.3
3	-6.1	-0.6	0.0	+5.5	-6.1	+109.7
4	-8.5	-3.0	0.0	+5.5	-8.5	+106.6
5	-112.0	-106.7	-100.0	+5.3	-12.0	0.0

In these three examples, it is assumed that there are no changes in the market interest rate during the lifetime of the security; therefore, the outstanding debt position at end-year (column 6) reflects both the nominal and the market value of the security. Changes in market interest rates will lead to changes in the market value of the security, which will be different from the nominal value recorded in these examples. Nevertheless, the recording of interest costs will be the same as in the examples.

accrue at the original yield-to-maturity rate over the life of the security.<sup>38</sup> Box 2.5 presents examples of the recording of accrued interest on different types of debt securities, including debt securities with a fixed coupon, debt securities with step-up coupons, and debt securities with step-up coupons where the first two coupons are zero.

***Instruments with embedded derivatives***

**2.100** Some instruments may have embedded derivatives that could, if exercised, affect the rate of interest. For such instruments, interest costs should accrue, and be included in the gross external debt position, as “normal.” If the financial derivative is exercised and so affects the interest rate, this should be reflected in the rate at which interest accrues, e.g., in a structured note

with a maximum interest rate, when, and as long as, the maximum is reached and so the financial derivative is “exercised,” interest costs should accrue at the maximum rate and no more. The market price of debt instruments should reflect the likelihood of the financial derivative being exercised.

***Foreign currency instruments***

**2.101** Interest costs should accrue (or not) in foreign currency on an instrument denominated in foreign currency, adding to the outstanding principal amount, until paid. The principal amount in foreign currency should be converted into the unit of account at the midpoint between the buying and selling market (spot) rates on the reference date to which the position relates.

<sup>38</sup> The original yield-to-maturity rate is the rate at which the present value of future interest and principal payments equals the issue price of the bond, i.e., the yield of the security at issuance.



# 3

## Identification of Institutional Sectors and Financial Instruments

### Introduction

**3.1** In the *Guide*, as in the *2008 SNA* and *BPM6*, institutional units and the instruments in which they transact are grouped into categories so as to enhance the analytical usefulness of the data. Institutional units are grouped into institutional sectors, and financial instruments are classified by their nature into instrument categories. However, the classifications of institutional sectors and financial instruments are determined by the analytical needs of external debt statistics and so can differ from other macroeconomic datasets.

**3.2** The institutional sector breakdown groups institutional units with common economic objectives and functions: *general government*, *central bank*, *deposit-taking corporations except the central bank*, and *other sectors*. These sectors are defined in this chapter, as are the subsectors of *other sectors*: other financial corporations, nonfinancial corporations, and households and nonprofit institutions serving households.

**3.3** On the classification of financial instruments, the *Guide* gives prominence to five categories of instruments in particular: debt securities, loans, currency and deposits, trade credit and advances, and special drawing rights (SDRs). There is also another *debt liabilities* category; this would include items such as insurance, pension, and standardized guarantee schemes, and other accounts payable—other. This chapter explains the nature of these types of financial instruments in the context of the *BPM6* functional categories from which they are drawn. Further, Appendix 1 defines specific financial instruments and transactions and provides classification guidance; it therefore should be consulted in conjunction with this chapter.

### Institutional Sectors

**3.4** The institutional sector presentations below are consistent with the *2008 SNA* and *BPM6*.<sup>1</sup>

**3.5** The *central bank* sector is identical to the definition of that subsector in the *2008 SNA*.<sup>2</sup> The central bank is the financial institution (or institutions) that exercises control over key aspects of the financial system. It carries out such activities as issuing currency, managing international reserves, transacting with the IMF, and providing credit to deposit-taking corporations.<sup>3</sup> If an institutional unit is mainly engaged in central banking activities, the entire unit is classified in the central bank sector. The central bank sector includes the following resident units: (1) central banks,<sup>4</sup> which in most economies are separately identifiable institutions that are subject to varying degrees of government control, engage in differing sets of activities, and are designated by various names (e.g., central bank, reserve bank, national bank, or state bank); (2) currency boards or independent currency authorities that issue national currency that is fully backed

<sup>1</sup> Institutional sectors are described in detail in Chapter 4 of both the *2008 SNA* and *BPM6*.

<sup>2</sup> The central bank is a subsector of the financial corporations sector in the *2008 SNA*.

<sup>3</sup> The central bank of a currency union is classified as a central bank in the data for the currency union as a whole; in the data of individual member states, it is part of the rest of the world sector.

<sup>4</sup> Many central banks regulate or supervise other deposit-taking corporations and other financial corporations, and these central bank activities also are included in the central bank sector. However, units that are affiliated with the government or with other sectors and are mainly engaged in regulating or supervising financial units are classified as financial auxiliaries rather than as units in the central bank sector. Private units that perform activities such as check-clearing operations are assigned to the other financial corporations subsector depending on their activities, rather than to the central bank.

by foreign exchange reserves; and (3) government-affiliated agencies<sup>5</sup> that are separate institutional units and primarily perform central bank activities. 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.<sup>6</sup>

**3.6** The *deposit-taking corporations, except the central bank* sector is identical with the corresponding subsector in the 2008 SNA.<sup>7</sup> Included are all resident units engaging in financial intermediation as a principal activity and having liabilities in the form of deposits payable on demand, transferable by check, or otherwise used for making payments, or having liabilities in the form of deposits that may not be readily transferable, such as short-term certificates of deposit, but that are close substitutes for deposits. Thus, in addition to commercial banks,<sup>8</sup> the deposit-taking corporations, except the central bank sector encompasses institutions such as savings banks (including trustee savings banks and savings and loan

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 savings banks or other government-controlled savings banks are also included if they are institutional units separate from the government. Deposit-taking corporations that engage exclusively (or almost exclusively) with nonresidents, often called *offshore banks* or *offshore banking units*, are included in the deposit-taking corporations sector, but they may be excluded from the money-issuing sector because their liabilities are not included in broad money.

**3.7** The *general government* sector is identical with the definition of that sector in the 2008 SNA. The government units of a country consist of those authorities and their agencies that are units established by political processes and exercise legislative, judicial, and executive authority over other institutional units within a given territorial area. The principal economic functions of a government are (1) to assume responsibility for the provision of goods and services to the community on a nonmarket basis, either for collective or individual consumption; (2) to redistribute income and wealth by means of transfer payments; and (3) to engage in nonmarket production. An additional characteristic of a government unit is that its activities must be financed primarily by taxation or other compulsory transfers. General government sector consists of government units that exist at each level—central, state, or local—of government within the national economy; all Social Security funds operated at each level of government; all nonmarket nonprofit institutions that are controlled and mainly financed by government units; and 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. Public corporations and unincorporated corporations that function as if they were corporations (called *quasi-corporations*) are explicitly excluded from the general government sector and are allocated to the financial corporation or nonfinancial corporation sectors, as appropriate. A quasi-corporation can be owned by a resident or nonresident entity but typically will keep a separate set of accounts from its parent or, if owned by a nonresident, be engaged in a significant amount of production in the resident economy over a long or indefinite period of time.

<sup>5</sup>In some countries, the central government may include units that engage in financial transactions that in other countries would be performed by the central bank. When the units in question remain financially integrated with central government and under the direct control and supervision of central government, they cannot be treated as separate institutional units. Moreover, monetary authority functions carried out by central government are recorded in the government sector and not the financial corporation sector (see 2008 SNA, paragraph 4.139).

<sup>6</sup>Monetary authorities encompass the central bank and certain operations usually attributed to the central bank but sometimes carried out by other government institutions or commercial banks, such as government-owned commercial banks. Such operations include the issuance of currency; maintenance and management of reserve assets, including those resulting from transactions with the IMF; and operation of exchange stabilization funds.

<sup>7</sup>In the IMF's *MFSM* (2000), other depository corporations are defined to include only those resident financial corporations (except the central bank) and quasi-corporations that are mainly engaged in financial intermediation and that issue deposits and close substitutes that are included in the national definition of broad money, which may exclude (include) institutional units that are included (excluded) within the 2008 SNA definition of deposit-taking corporations, except the central bank. Rather than as deposit-taking corporations, these excluded institutional units would be classified as other financial corporations (or vice versa). While it is recommended in the *Guide* that the definition of deposit-taking corporations, except the central bank be consistent with the 2008 SNA and *BPM6*, it is recognized that countries may rely on data from monetary surveys to compile external debt statistics for the banking sector.

<sup>8</sup>Also included are "universal banks" and "all-purpose" banks.



**3.8** The *other sectors* category comprises other financial corporations (i.e., other than deposit-taking corporations), nonfinancial corporations, and households and nonprofit institutions serving households (NPISHs) subsectors.

**3.9** The *other financial corporations* subsector comprises the following types of institutions, all of which are resident subsectors in the 2008 SNA:

- Money market funds (MMFs) are collective investment schemes that raise funds by issuing shares or units to the public. Because their proceeds are primarily invested in short-term money market securities such as treasury bills, certificates of deposit, and commercial paper, and they can provide unrestricted check writing privileges, their shares and units may be regarded as close substitutes for deposits.
- Non-MMF investment funds are collective investment schemes that raise funds by issuing shares or units to the public. Because their proceeds are predominantly invested in long-term financial assets and nonfinancial assets (usually real estate), their shares and units are generally not close substitutes for deposits.
- Other financial intermediaries, except insurance corporations and pension funds, consist of financial corporations or quasi-corporations that are engaged in providing financial services by incurring liabilities (in forms other than currency, deposits, or close substitutes for deposits) on their own account for the purpose of acquiring financial assets by engaging in financial transactions on the market and that are not included in any other subsector. The following financial intermediaries are classified in this subsector: (1) financial corporations engaged in securitization of assets; (2) underwriters and security and derivatives dealers (on own account); (3) financial corporations engaged in lending, including financial leasing, as well as personal or commercial finance; (4) central clearing counterparties that provide clearing and settlement of market transactions in securities and derivatives; (5) specialized financial corporations that assist other corporations in raising funds in equity and debt markets (sometimes called *investment banks*); and (6) any other specialized financial

corporations that provide short-term financing for corporate mergers and takeovers, export and import finance, factoring companies, and venture capital and development capital firms.

- Financial auxiliaries consist of all financial corporations that engage primarily in activities closely related to financial intermediation but that do not themselves perform an intermediation role, such as security brokers, loan brokers, and insurance brokers.<sup>9</sup>
- Captive financial institutions<sup>10</sup> and moneylenders consist of institutional units providing financial services other than insurance, where most of either their assets or liabilities are not transacted on open financial markets.
- Insurance corporations consist of incorporated, mutual, and other entities whose principal function is to provide life, accident, health, fire, and other types of insurance to individual institutional units or groups of units through the pooling of risk or reinsurance services to other insurance corporations.
- Pension funds are those that are constituted in such a way that they are separate institutional units from the units that create them and are established for purposes of providing benefits on retirement for specific groups of employees (and, perhaps, their dependents). These funds have their own assets and liabilities and engage in financial transactions on the market on their own account.

**3.10** The *nonfinancial corporations* subsector consists of resident entities whose principal activity is the production of market goods or nonfinancial services. This sector is defined consistently with the definition in the 2008 SNA. The sector includes all resident nonfinancial corporations; all resident nonfinancial quasi-corporations, including the branches or agencies

<sup>9</sup>Corporations that facilitate financial transactions, such as central clearing counterparties, stock exchanges, derivative exchanges, and repurchase agreement settlement institutions are financial intermediaries, if they generally act as principals to the counterparties to the underlying transactions; otherwise they are financial auxiliaries.

<sup>10</sup>For a list of units included in this subsector, see *BPM6*, paragraph 4.83.

Assets	Liabilities
<i>Equity and investment fund shares</i>	<i>Equity and investment fund shares</i>
Direct investor in direct investment enterprises	Direct investor in direct investment enterprises
Direct investment enterprises in direct investor (reverse investment)	Direct investment enterprises in direct investor (reverse investment)
Between fellow enterprises	Between fellow enterprises
<i>Debt instruments</i>	<i>Debt instruments</i> <sup>1</sup>
Direct investor in direct investment enterprises	Direct investor in direct investment enterprises
Direct investment enterprises in direct investor	Direct investment enterprises in direct investor
Between fellow enterprises	Between fellow enterprises

Source: *BPM6*.

<sup>1</sup>Instruments in these categories are debt liabilities to be included in gross external debt position.

of foreign-owned nonfinancial enterprises that are engaged in significant amounts of production on the economic territory on a long-term basis; and all resident nonprofit institutions that are market producers of goods or nonfinancial services.

**3.11** The *households and NPISHs* subsector comprises the household subsector, consisting of resident households, and the NPISHs subsector, consisting of such resident entities as professional societies, political parties, trade unions, charities, and so on. A household is defined as a group of persons who share the same living accommodations, who pool some or all of their income and wealth, and who consume certain types of goods and services collectively, mainly housing and food. NPISHs are entities mainly engaged in providing goods and services to households or the community largely free of charge or at prices that are not economically significant (and thus are classified as nonmarket producers). Those NPISHs that are controlled and mainly financed by government units are classified in the general government sector.

**3.12** In the presentation of the gross external debt position, *intercompany lending* liabilities under a direct investment relationship are separately identified. These data are not further broken down by institutional sectors. Equity liabilities arising from a direct investment, like all equity and investment fund shares liabilities, are excluded from external debt. These instruments are described in more detail in paragraph 3.18.

### Instrument Classification

**3.13** This section defines the types of financial instruments to be included in the presentation of the gross external debt position. They are defined in the

context of the *BPM6* functional categories<sup>11</sup>—direct investment, portfolio investment, financial derivatives (other than reserves) and ESOs, other investment, and reserve assets—from which they are drawn. This allows the compiler, if necessary, to derive the gross external debt position data from the IIP statement or to reconcile both statements.

**3.14** *Direct investment* (Table 3.1) 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.<sup>12</sup> 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. Accordingly, two ways of having control or influence are identified: (1) immediate direct investment relationships arise when a direct investor directly owns equity that entitles it to 10 percent or more of the voting power in the direct investment enterprise,<sup>13</sup> and (2) indirect direct investment relationships arise through the ownership of voting power in one direct investment enterprise that owns voting power in another enterprise or enterprises, i.e., an entity is able to exercise indirect control or influence through a chain of direct

<sup>11</sup>For additional information about *BPM6* functional categories, see *BPM6*, Chapter 6.

<sup>12</sup>The definition of direct investment is the same as in *BPM6* and in the *OECD Benchmark Definition of Foreign Direct Investment*, fourth edition (OECD, 2008, [www.oecd.org](http://www.oecd.org)).

<sup>13</sup>In practice, effective control or influence may arise in some cases with less than this percentage. Nevertheless, these definitions should be used in all cases for international consistency and to avoid subjective judgments.

investment relationships. In addition to direct investment relationships between two enterprises that arise because one enterprise controls or influences the other, there are also direct investment relationships between two enterprises that do not control or influence each other but that are both under the control or influence of the same investor (i.e., fellow enterprises).

**3.15** Direct investment is presented on an asset/liability basis and classified according to the relationship between the investor and the entity receiving the investment (direct investment enterprise). The three categories are (1) investment by the direct investor in its direct investment enterprise (whether in an immediate relationship or not), (2) reverse investment by a direct investment enterprise in its own immediate or indirect direct investor, and (3) investment between resident and nonresident fellow enterprises. These three categories reflect different types of relationships and motivations (see more detail in *BPM6*, Chapter 6).<sup>14</sup>

**3.16** Once established, all financial claims of the investor on the enterprise and vice versa, and all financial claims on, or liabilities to, affiliated enterprises are included under direct investment with two exceptions: financial derivatives and ESOs, and certain intercompany assets and liabilities between two affiliated financial intermediaries (see paragraph 3.20). Of the direct investment components, debt liabilities, when owed to nonresident affiliates, are included in the gross external debt position, but equity and investment fund shares are not.

**3.17** *Debt instruments* cover borrowing and lending of funds—including debt securities and suppliers' credits (e.g., trade credit and advances)—among direct investors and related subsidiaries, branches, and associates.<sup>15</sup> In the gross external debt position tables, debt liabilities are presented as *Direct investment: Intercompany lending*.

<sup>14</sup>Data on direct investment can also be presented according to the direction of the direct investment relationship (direct investment abroad and direct investment in the reporting economy) (see *BPM6*, paragraph 6.42).

<sup>15</sup>Debt instruments—other than SDRs and interbank positions—can potentially be included in direct investment. Insurance technical reserves are included in direct investment when the parties are in a direct investment relationship. The *Guide* recommends that borrowing for fiscal purposes through a nonresident entity owned or controlled by the government should be included in general government and not direct investment (see Appendix 1, Part 2 and Appendix 8, paragraph 8).

**3.18** *Equity and investment fund shares* (comprising equity and investment fund shares in branches, subsidiaries, and associates—except nonparticipating preferred shares, which are classified as debt instruments—reinvestment of earnings, and other capital contributions such as the provision of machinery) are not debt instruments; hence, they are not included in gross external debt position.

**3.19** In practice, it is sometimes difficult to distinguish whether the claims of a direct investor on a direct investment enterprise are debt instruments, which are classified as external debt, or equity and investment fund shares, which are not. Differentiation is particularly difficult when an enterprise is 100 percent owned by a direct investor, such as when the direct investment enterprise is a branch or an unincorporated enterprise. In these situations, the classification of capital could be the same as used in the direct investment enterprise's accounting records, i.e., when a claim of the direct investor on the direct investment enterprise is considered to be equity or shareholder funds in the accounting records of the direct investment enterprise, this claim is also considered equity and investment fund shares for external debt purposes. Subject to this condition: if liabilities are only to be repaid in the event that a profit is made by the direct investment enterprise, then the liabilities are classified as equity and investment fund shares. Similarly, in some instances the direct investor might fund local expenses directly and also receive directly the income arising from the output of the direct investment enterprise. The *Guide* regards such payments and receipts as the provision and withdrawal of equity and investment fund shares, respectively, in the direct investment enterprise by the direct investor.

**3.20** The positions of intercompany assets and liabilities between two affiliated financial intermediaries, including special purpose entities (SPEs), principally engaged in financial intermediation and that are recorded under direct investment are limited to (1) equity and investment fund shares, including reinvestment of earnings, and (2) debt between captive financial institutions and money lenders, insurance corporations, pension funds, and financial auxiliaries. Intercompany debt liabilities between other affiliated financial intermediaries are not classified as direct investment because they are not considered to be so strongly connected to the direct investment

relationship.<sup>16</sup> These debt liabilities are classified as portfolio or other investment by type of instrument, such as loans, debt securities, and so on, and are attributed to the institutional sector of the debtor entity. For this purpose, the affiliated financial intermediaries among whom debt liabilities are not included in direct investment are those grouped in the 2008 SNA into the following sectors or subsectors, respectively: (1) deposit-taking corporations, except the central bank; (2) MMFs; (3) non-MMF investment funds; and (4) other financial intermediaries, except insurance corporations and pension funds.

**3.21 Portfolio investment** (Table 3.2) includes securities, other than those included in direct investment and reserve assets. These instruments have the characteristic feature of negotiability<sup>17</sup> and are usually traded (or tradable) in organized and other financial markets, including over the counter (OTC) markets. When they are owed to nonresidents, debt securities are included in the gross external debt position. Equity securities, including share investments in mutual funds and investment trusts,<sup>18</sup> are not included in the gross external debt position.

**3.22 Debt securities issued with an original maturity of more than one year** are classified as long-term securities, even though their remaining maturity at the time of the investment may be less than one year. Long-term securities usually give the holder the unconditional right to a fixed money income or contractually determined variable money income (payment of interest being independent of the earnings of the debtor). With the exception of perpetual bonds, long-term securities also provide the unconditional right to a fixed sum in repayment of principal on a specified date or dates. Included among long-term securities are “asset-backed securities” and “collateralized debt obligations,” i.e., securities on which payments to

<sup>16</sup> Both affiliated parties must be one of the selected types of financial corporations for which debt positions are excluded from direct investment, but they do not need to be the same type.

<sup>17</sup> Negotiability means that legal ownership can be transferred from one unit to another by delivery or endorsement.

<sup>18</sup> A mutual fund or investment trust liability that requires payment(s) of principal and/or interest by the mutual fund or investment trust to the creditor at some point(s) in the future is to be recorded as a debt instrument and, if owed to nonresidents, included in the gross external debt position. The instrument classification would be dependent on the characteristics of the liability, e.g., as a deposit (see paragraph 3.30).

**Table 3.2 Standard Components of the IIP: Portfolio Investment**

Assets	Liabilities
<i>Equity and investment fund shares</i>	<i>Equity and investment fund shares</i>
Central bank	Deposit-taking corporations, except the central bank
Deposit-taking corporations, except the central bank	Other sectors
General government	Other financial corporations
Other sectors	Nonfinancial corporations, households, and NPISHs
Other financial corporations	<i>Debt securities<sup>1</sup></i>
Nonfinancial corporations, households, and NPISHs	Central bank
<i>Debt securities</i>	Long-term
Central bank	Short-term
Long-term	Deposit-taking corporations, except the central bank
Short-term	Long-term
Deposit-taking corporations, except the central bank	Short-term
Long-term	General government
Short-term	Long-term
General government	Short-term
Long-term	Other sectors
Short-term	Long-term
Other sectors	Short-term
Long-term	Other financial corporations
Short-term	Long-term
Other financial corporations	Short-term
Long-term	Nonfinancial corporations, households, and NPISHs
Short-term	Long-term
Nonfinancial corporations, households, and NPISHs	Short-term
Long-term	
Short-term	

Source: *BPM6*.

<sup>1</sup> Instruments in these categories are debt liabilities to be included in the gross external debt position.

creditors are explicitly dependent on a specific stream of income, e.g., future lottery receipts or a pool of nonnegotiable instruments (e.g., loans or export receivables); see Appendix 1 for more details on asset-backed securities.

**3.23 Debt securities issued with an original maturity of one year or less** are classified as short-term securities. These instruments generally give the holder the unconditional right to receive a stated, fixed sum of money on a specified date. Short-term securities are usually traded, at a discount, in organized markets; the discount is dependent on the interest rate and the time remaining to maturity. Examples of short-term

securities include treasury bills, commercial and financial paper, and bankers' acceptances. Like long-term securities, short-term securities can be "backed" by a specific stream of income or pool of nonnegotiable instruments.

**3.24** Further, where an instrument is provided by an importer to an exporter with such characteristics that it is negotiable in organized and other financial markets, such as a promissory note, it should be classified as a debt security—either long-term or short-term, depending on its original maturity—in the gross external debt position. Separate identification of the outstanding value of such instruments is also encouraged because of their role in financing trade (see also the description of trade-related credit in Chapter 6).

**3.25** *Equity and investment fund shares* cover all instruments and records acknowledging, after the claims of all creditors have been met, claims to the residual value of the corporation or quasi-corporation. Equity is treated as a liability of the issuing institutional unit. Shares, stocks, preferred stock or shares, participation, or similar documents—such as American Depository Receipts—usually denote ownership of equity. Investment funds shares are collective investment undertakings through which investors pool funds for investment in financial and nonfinancial assets or both. Shares of collective investment institutions (e.g., mutual funds and investment trusts) are also included. These securities are not debt instruments.

**3.26** *Financial derivatives (other than reserves) and ESOs* (Table 3.3) are financial assets and liabilities that have similar features, such as a strike price and some of the same risk elements. However, although both transfer risk, ESOs are also designed to be a form of remuneration. A financial derivative contract is a financial instrument that is linked to a specific financial instrument, indicator, or commodity and through which specific financial risks can be traded in financial markets in their own right. ESOs are options to buy the equity of a company, offered to employees of the company as a form of remuneration. As explained in paragraph 2.11, financial derivatives and ESOs are not debt instruments, but information on them can be relevant for external debt analysis.

**3.27** There are two broad types of financial derivatives: forward-type and option contracts. Under a *forward-type contract* (forward), the two counterparties agree

**Table 3.3 Standard Components of the IIP: Financial Derivatives (Other than Reserves) and Employee Stock Options (ESOs)**

Assets	Liabilities
<i>Financial derivatives (other than reserves) and ESOs<sup>1</sup></i>	<i>Financial derivatives (other than reserves) and ESOs</i>
Central bank	Central bank
Deposit-taking corporations, except the central bank	Deposit-taking corporations, except the central bank
General government	General government
Other sectors	Other sectors
Other financial corporations	Other financial corporations
Nonfinancial corporations, households, and NPISHs	Nonfinancial corporations, households, and NPISHs

Source: *BPM6*.

<sup>1</sup> Excludes financial derivatives that pertain to reserve assets management and are included in reserves assets data.

to exchange an underlying item—real or financial—in a specified quantity, on a specified date, at an agreed contract (strike) price or, in the specific instance of a swap contract, the two counterparties agree to exchange cash flows, determined with reference to the price(s) of, say, currencies or interest rates, according to prearranged rules. The typical requirement under a foreign exchange forward contract to deliver or receive foreign currency in the future can have important implications for foreign currency liquidity analysis and is captured in Table 7.9. Under an *option contract* (option), the purchaser of the option, in return for an option premium, acquires from the writer of the option the right but not the obligation to buy (call option) or sell (put option) a specified underlying item—real or financial—at an agreed contract (strike) price on or before a specified date. Throughout the life of the contract, the writer of the option has a liability and the buyer an asset, although the option can expire worthless; the option will be exercised only if settling the contract is advantageous for the purchaser. Typical derivatives instruments include futures (exchange traded forward contracts), interest and cross-currency swaps, forward rate agreements, forward foreign exchange contracts, credit derivatives, and various types of options.

**3.28** *Other investment* (Table 3.4) covers all financial instruments other than those classified as direct investment, portfolio investment, financial derivatives and ESOs, or reserve assets. When owed to nonresidents, all the components of other investment, except

Table 3.4 Standard Components of the IIP: Other Investment	
Assets	Liabilities
<i>Other equity</i>	<i>Other equity</i>
<i>Currency and deposits</i>	<i>Currency and deposits</i> <sup>1</sup>
Central bank	Central bank
Long-term	Long-term
Short-term	Short-term
Deposit-taking corporations, except the central bank	Deposit-taking corporations, except the central bank
Long-term	Long-term
Short-term	Short-term
General government	General government
Long-term	Long-term
Short-term	Short-term
Other sectors	Other sectors
Long-term	Long-term
Short-term	Short-term
Other financial corporations	Other financial corporations
Long-term	Long-term
Short-term	Short-term
Nonfinancial corporations, households, and NPISHs	
Long-term	
Short-term	
<i>Loans</i>	<i>Loans</i> <sup>1</sup>
Central bank	Central bank
Credits and loans with the IMF (other than reserves)	Credits and loans with the IMF (other than reserves)
Other short-term	Other short-term
Other long-term	Other long-term
Deposit-taking corporations, except the central bank	Deposit-taking corporations, except the central bank
Long-term	Long-term
Short-term	Short-term
General government	General government
Credits and loans with the IMF (other than reserves)	Credits and loans with the IMF (other than reserves)
Other short-term	Other short-term
Other long-term	Other long-term
Other sectors	Other sectors
Long-term	Long-term
Short-term	Short-term
Other financial corporations	Other financial corporations
Long-term	Long-term
Short-term	Short-term
Nonfinancial corporations, households, and NPISHs	Nonfinancial corporations, households, and NPISHs
Long-term	Long-term
Short-term	Short-term
<i>Insurance, pension, and standardized guarantee schemes</i>	<i>Insurance, pension, and standardized guarantee schemes</i> <sup>1</sup>
	Central bank
	Deposit-taking corporations, except the central bank
	General government
	Other sectors

Table 3.4 (Concluded)	
Assets	Liabilities
Central bank	Other financial corporations
Deposit-taking corporations, except the central bank	Nonfinancial corporations, households, and NPISHs
General government	
Other sectors	<i>Trade credit and advances</i> <sup>1</sup>
Other financial corporations	Central bank
Nonfinancial corporations, households, and NPISHs	Long-term
	Short-term
<i>Trade credit and advances</i>	Deposit-taking corporations, except the central bank
Central bank	Long-term
Long-term	Short-term
Short-term	General government
Deposit-taking corporations, except the central bank	Long-term
Long-term	Short-term
Short-term	Other sectors
General government	Long-term
Long-term	Short-term
Short-term	Other financial corporations
Other sectors	Long-term
Long-term	Short-term
Short-term	Nonfinancial corporations, households, and NPISHs
Other financial corporations	Long-term
Long-term	Short-term
Short-term	<i>Other accounts payable—other</i> <sup>1</sup>
Nonfinancial corporations, households, and NPISHs	Central bank
Long-term	Long-term
Short-term	Short-term
<i>Other accounts receivable—other</i>	Deposit-taking corporations, except the central bank
Central bank	Long-term
Long-term	Short-term
Short-term	General government
Deposit-taking corporations, except the central bank	Long-term
Long-term	Short-term
Short-term	Other sectors
General government	Long-term
Long-term	Short-term
Short-term	Other financial corporations
Other sectors	Long-term
Long-term	Short-term
Short-term	Nonfinancial corporations, households, and NPISHs
Other financial corporations	Long-term
Long-term	Short-term
Short-term	<i>Special drawing rights (allocations)</i> <sup>1</sup>
Nonfinancial corporations, households, and NPISHs	
Long-term	
Short-term	

Source: BPM6.

<sup>1</sup>Instruments in these categories are debt liabilities to be included in the gross external debt position.

other equity, are included in the gross external debt position, i.e., currency and deposits; loans; insurance, pension, and standardized guarantee schemes; trade credit and advances; other accounts payable—other; and SDR allocations.

**3.29** *Other equity*, included in other investments, is equity that is not in the form of securities, nor included

in direct investment or reserve assets. The ownership of many international organizations is not in the form of shares and so is classified as other equity (although equity in the Bank for International Settlements [BIS] is in the form of unlisted shares and is classified as portfolio investment). Ownership of currency union central banks is included in other equity. Other equity is not a debt instrument.

**3.30** *Currency and deposits* consists of notes and coins and deposits (both transferable and other).<sup>19</sup> Notes and coins represent claims of a fixed nominal value usually on a central bank or government; commemorative coins are excluded. Deposits<sup>20</sup> include all claims that are (1) on the central bank; deposit-taking corporations, except the central bank; and, in some cases, other institutional units; and (2) represented by evidence of deposit. Transferable deposits consist of all deposits that are exchangeable for bank notes and coins on demand at par and without penalty or restriction and directly usable for making payments by check, draft, giro order, direct debit/credit, or other direct payment facility. Other deposits comprise all claims, other than transferable deposits, represented by evidence of deposit, e.g., savings and fixed-term deposits; nonnegotiable CDs; sight deposits that permit immediate cash withdrawals but not direct third-party transfers; and shares that are legally (or practically) redeemable on demand or on short notice in savings and loan associations, credit unions, building societies, and so on. Unallocated accounts for precious metals (including unallocated gold accounts) are also deposit liabilities.<sup>21</sup>

**3.31** The nominal value of deposits is usually fixed in terms of the currency in which the deposits are denominated. In some cases, deposits may have their value expressed in terms of an index or linked to a commodity price (e.g., gold, oil, or share prices).

**3.32** When one party is a deposit-taking corporation and the other is not, and the nature of the liability is unclear, a possible convention is that an asset position of a deposit-taking corporation is classified as a loan by both parties. Similarly, a liability of a deposit-taking corporation to another type of entity is classified as a deposit by both parties. In some cases, the instrument classification of interbank positions may be unclear, e.g., because the parties are uncertain or one party considers it as a loan and the other a deposit. Therefore, as a convention to ensure symmetry, all interbank positions, other than

securities and accounts receivable/payable, are classified under deposits.

**3.33** The allocation of joint bank accounts, or other cases in which an account holder authorizes relatives to withdraw funds from the account, may be unclear. By convention, deposits of emigrant workers in their home economies that are freely usable by family members residing in the home economies are treated as being held by residents of the home economy. Similarly, deposits of emigrant workers in the host economy that are freely usable by family members residing in the home economies are treated as being held by a resident of the host economy. Compilers may adopt another treatment if better information is available.

**3.34** *Loans* include those financial assets created through the direct lending of funds by a creditor (lender) to a debtor (borrower) through an arrangement in which the lender either receives no security evidencing the transactions or receives a nonnegotiable document or instrument. Collateral, in the form of either a financial asset (such as a security) or nonfinancial asset (such as land or a building) may be provided under a loan transaction, although it is not an essential feature. In the gross external debt position, loans include use of IMF credit and loans from the IMF.

**3.35** If a loan becomes negotiable, it should be reclassified as a debt security. Given the significance of reclassification, there needs to be evidence of secondary market trading before a debt instrument is reclassified from a loan to a security. Evidence of trading on secondary markets would include the existence of market makers and frequent bid-offer spreads for the debt instrument. The *Guide* encourages the separate identification of the outstanding value of any such loans reclassified.

**3.36** Reverse security transactions and financial leases are two types of arrangements for which the change of ownership principle is not strictly adhered to.

**3.37** A reverse securities transaction is defined to include all arrangements whereby one party legally acquires securities and agrees, under a legal agreement at inception, to return the same or equivalent securities on or by an agreed date to the same party from whom they acquired the securities initially. If the security taker under such a transaction provides cash funds, and there is agreement to reacquire the same or equivalent securities at a predetermined price at

<sup>19</sup> It is recommended that all currency and deposits are included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>20</sup> Overnight deposits that are a liability to a nonresident are included in the gross external debt position (see Appendix 1, Part 2).

<sup>21</sup> An unallocated gold account owned by a monetary authority and held as a reserve asset is included within monetary gold.

the contract's maturity, this agreement is a security repurchase agreement (repos). Repos, securities lending with cash collateral, and sale/buybacks are all different terms for arrangements with the same economic purpose and involve the provision of securities as collateral for a loan.<sup>22</sup> The security provider acquires a repo loan liability and the security taker a repo loan asset. If no cash is provided, no loan transaction is reported. Under the collateralized loan approach, the security is assumed not to have changed ownership and remains on the balance sheet of the security provider. A similar recording procedure is adopted for transactions where gold rather than securities is provided as collateral (so-called gold swaps [cash provided] or gold loans [no cash provided]).

**3.38** If the security taker sells the security acquired under a reverse security transaction, it records a negative position in that security. This treatment reflects economic reality in that the holder of the negative position is exposed to the risks and benefits of ownership in an equal and opposite way to the party who now owns the security (see also Appendix 2). On-selling of gold by the gold taker, similarly reported as a negative holding, does not affect the gross external debt position because gold is an asset without any corresponding liability.

**3.39** A financial lease is a contract under which a lessor as legal owner of an asset conveys substantially all the risks and rewards of ownership of the asset to the lessee. In other words, the lessee becomes the economic owner of the assets (*BPM6*, paragraph 5.56). The lessee contracts to pay rentals for the use of a good for most or all of its expected economic life. The rentals enable the lessor over the period of the contract to recover most or all of the costs of goods and the carrying charges. While there is not a legal change of ownership of the good, under a financial lease the risks and rewards of ownership are, de facto, transferred from the legal owner of the good, the lessor, to the user of the good, the lessee. For this reason, under statistical convention, the total value of the good is imputed to have changed economic ownership. Therefore, the

debt liability at the inception of the lease is defined as the value of the good and is financed by a loan of the same value, a liability of the lessee. The loan is repaid through the payment of rentals (which comprise both interest and principal payment elements) and any residual payment at the end of the contract (or alternatively, by the return of the good to the lessor).

**3.40** *Insurance, pension, and standardized guarantee schemes* comprises (1) nonlife insurance technical reserves; (2) life insurance and annuity entitlements; (3) pension entitlements, claims of pension funds on pension managers, and entitlements to nonpension funds; and (4) provisions for calls under standardized guarantees. These reserves, entitlements, and provisions represent liabilities of the insurer, pension fund, or issuer of standardized guarantees and a corresponding asset of the policyholders or beneficiaries. The aggregate values of liabilities can be estimated actuarially because the company or fund has a pool of liabilities, but the value is less clear for the asset holders. The insurers, pension funds, and guarantors usually hold a range of assets to allow them to meet their obligations; however, these are not necessarily equal to the provision and entitlement liabilities.<sup>23</sup>

**3.41** *Trade credit 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 (or to be undertaken).<sup>24</sup> Long- and short-term trade credits are shown separately. Trade-related loans provided by a third party, such as a bank, to an exporter or importer are not included in this category but under loans (see Chapter 6 for a description of a wider concept of trade-related credit, which also captures other credits provided to finance trade activity, including through banks). Progressive payments (or stage payments) on high-value capital goods—such as ships, heavy machinery, and other structures that may take years to complete—do not give rise to trade credit and advances unless there

<sup>22</sup> Normally, the classification is a loan but can be a deposit if it involves liabilities of a deposit-taking corporation included in national measures of broad money (see also *BPM6*, paragraph 5.53). Appendix 2 provides more details about reverse security transactions.

<sup>23</sup> Insurance, pension, and standardized guarantee schemes liabilities can potentially be classified by maturity; however, if data are not available, a convention that they are all long-term can be adopted (see *BPM6*, paragraph 5.103).

<sup>24</sup> Trade credit and advances may arise from the direct extension of the financing under merchanting (see Appendix 1, Part 2).



is a difference in timing between the change in ownership of these high-value goods and the payments.

**3.42** *Other accounts receivable/payable—other* covers items other than other equity; currency and deposits; loans; insurance, pension, and standardized guarantee schemes; trade credit and advances; and SDR allocations. Such assets and liabilities include some arrears (see paragraph 3.43) and accounts receivable and payable, such as in respect of taxes, purchases and sales of securities, securities lending fees, gold loan fees, wages and salaries, dividends, and social contributions that have accrued but not yet been paid.<sup>25</sup>

**3.43** Arrears are defined as amounts that are past due-for-payment and unpaid. Arrears can arise both through the late payment of principal and interest on debt instruments (which are recorded in the original debt instrument) as well as through late payments for other instruments and transactions. For instance, a financial derivatives contract is not a debt instrument for reasons explained above, but if a financial derivatives contract comes to maturity and a payment is required but not made, arrears are created and recorded as other debt liabilities in the gross external debt position. Similarly, if goods and/or services are supplied and not paid for on the contract payment date or a payment for goods and/or services is made but the goods and/or services are not delivered on time, then arrears are created. These debt liabilities for late payments or late delivery of goods and/or services should be recorded as trade credit and advances in the gross external debt position.<sup>26</sup>

**3.44** A special circumstance may arise when the creditor has agreed in principle to reschedule debt, i.e., reorganize payments that are falling due, but the agreement has yet to be signed and implemented. In the meantime, payments due under the existing agreement are not made, and arrears arise, called *technical arrears*.<sup>27</sup> Such arrears might typically arise in the

context of Paris Club agreements between the time of the Paris Club rescheduling session and the time when the bilateral agreements are signed and implemented. If the agreement in principle lapses before the agreement is signed, then any accumulated arrears are no longer technical arrears.

**3.45** *Special drawing rights (SDRs)* are international reserve assets created by the IMF and allocated to members to supplement existing official reserves. SDRs are held only by the depositories of IMF members; a limited number of international financial institutions that are authorized holders; and the IMF itself, through the General Resources Account. SDR holdings (assets) represent unconditional rights to obtain foreign exchange or other reserve assets from other IMF members. SDRs allocated by the Fund to a member that is a participant in the SDR Department are a long-term liability of the member because upon termination of participation in, or liquidation of, the SDR Department, the member will be required to repay these allocations and because interest accrues. The holdings and allocations should be shown gross, rather than netted. SDR allocations are included in the gross external debt position (see also Appendix 1).

**3.46** *Reserve assets* (Table 3.5) are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets

**Table 3.5 Standard Components of the IIP: Reserve Assets**

Assets
<i>Monetary gold</i>
Gold bullion
Unallocated gold accounts
<i>Special drawing rights</i>
<i>Reserve position in the IMF</i>
<i>Other reserve assets</i>
Currency and deposits
Claims on monetary authorities
Claims on other entities
Securities
Debt securities
Short-term
Long-term
Equity and investment funds shares
Financial derivatives
Other claims

Source: *BPM6*.

<sup>25</sup> Accrued interest costs should be recorded with the financial asset or liability on which they accrue, not in other accounts receivable/payable. Nevertheless, for fees on securities lending and gold loan (which are treated as interest by convention), the corresponding entries are included in other accounts receivable/payable, rather than with the instrument to which they relate.

<sup>26</sup> A detailed discussion about the treatment and typology of arrears is presented in Appendix 7.

<sup>27</sup> If the creditor bills and the debtor pays on the basis of the new agreement, even though it is not signed, no arrears arise.

to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy and serving as a basis for foreign borrowing). Reserve assets must be foreign currency assets and assets that actually exist.<sup>28</sup> By definition, reserve assets are not included in the gross external debt position.

**3.47** *Reserve related liabilities* are defined as foreign currency liabilities of the monetary authorities that can be considered as direct claims by nonresidents on the reserve assets of an economy. They include (1) SDR allocations; (2) loans from the IMF to monetary authorities; (3) foreign currency loan and deposit liabilities of the monetary authorities to nonresidents (including those arising from foreign

currency swaps with other central banks, loans from the BIS, and from other deposit-takers); (4) foreign currency loan liabilities to nonresidents associated with securities that the monetary authorities have repoed out; (5) foreign currency securities issued by the monetary authorities and owed to nonresidents; and (6) other foreign currency liabilities of the monetary authorities to nonresidents, including foreign currency accounts payable and financial derivatives—recorded on a net basis (liabilities less assets)—settled in foreign currency and associated with, but not within the definition of, reserve assets (see above). Liabilities to residents and liabilities that are both denominated and settled in domestic currency are not included.

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<sup>28</sup>In addition to Chapter 6 in *BPM6*, see *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013), which also provides guidance on the measurement of official reserve assets.



# 4

## Presentation of the Gross External Debt Position

### Introduction

**4.1** This chapter provides a table for the presentation of the gross external debt position and related memorandum tables. Data compiled using the concepts and definitions outlined in the previous chapters and presented in the format of this table are essential to providing a comprehensive and informed picture of the gross position for the whole economy, and so their dissemination on a frequent basis is encouraged (see Box 4.1).

**4.2** In disseminating data on the gross external debt position, compilers are encouraged to provide methodological notes (metadata) explaining the concepts, definitions, and methods used in compiling the data. For any presentation of gross external debt position, it is particularly important for the compiler to clearly indicate whether debt securities are valued at nominal or market value<sup>1</sup> (see paragraph 2.33) and whether interest costs that have accrued but are not yet payable are included.

### Presentation Table

**4.3** The presentation of the gross external debt position on the basis of an “institutional-sector approach” is set out in Table 4.1.<sup>2</sup>

<sup>1</sup>Table 7.16 shows a reconciling of nominal and market valuation of debt securities.

<sup>2</sup>For SDDS subscribers, gross external debt position (Table 4.1) is relevant for the prescribed external debt data category. Debt-service payment schedule (Table 7.2), principal and interest payments on external debt due in one year or less (Table 7.5), and foreign currency and domestic currency denominated external debt position (Table 7.6) are relevant for the encouraged external debt information. For GDDS participants, the position data and debt-service payment schedule on the public and publicly guaranteed private sector external debt, and on the private sector external debt not publicly guaranteed, are presented in Table 5.1 and Table 7.3, respectively.

- The first level of disaggregation is by institutional sector. The primary disaggregation is by the four sectors of the compiling economy described in the previous chapter—*general government, central bank, deposit-taking corporations, except the central bank, and other sectors*.<sup>3</sup> A disaggregation of the other sectors into *other financial corporations, nonfinancial corporations, and households and nonprofit institutions serving households (NPISHs)* is provided.
- *Intercompany lending* between entities in a direct investment relationship is separately presented because the nature of the relationship between debtor and creditor is different from that for other debt, and this affects economic behavior. Whereas a creditor principally assesses claims on an unrelated entity in terms of the latter’s ability to repay, claims on a related entity may be additionally assessed in terms of the overall profitability and economic objectives of the multinational operation. The different types of intercompany lending liabilities under a direct investment relationship are presented.
- The second level of disaggregation is by the maturity of external debt—short-term and long-term on an original maturity basis. A maturity attribution is not provided for intercompany lending.<sup>4</sup>
- The third level of disaggregation is by type of debt instrument. The debt instruments are described in Chapter 3.

<sup>3</sup>In economies in which some central banking functions are performed wholly or partly outside the central bank, supplementary data for the monetary authorities sector (as defined in Chapter 3) could be considered.

<sup>4</sup>If a short-/long-term maturity attribution of intercompany lending data is available to the compiler on an original maturity basis, the *Guide* encourages dissemination of these data.

#### Box 4.1 SDDS and GDDS Specifications Regarding Dissemination of External Debt Statistics

In the aftermath of the 1994–1995 international financial crisis, the Interim Committee (now called the International Monetary and Financial Committee) of the IMF's Board of Governors endorsed the establishment of a two-tier standard to guide member countries in the provision of economic and financial data to the public. The first tier, named the Special Data Dissemination Standard (SDDS), was approved by the IMF's executive board on March 29, 1996. The other tier, named the General Data Dissemination System (GDDS), was approved on December 19, 1997.

The purpose of the SDDS is to guide IMF member countries in the provision to the public of comprehensive, timely, accessible, and reliable economic and financial statistics in a world of increasing economic and financial integration. The SDDS is geared toward those countries that have, or might seek, access to international capital markets. Subscription to the SDDS is voluntary. By subscribing to the SDDS, members undertake to provide the supporting information to the IMF and to observe the various elements of the SDDS.<sup>1</sup>

With respect to the external debt data category, the SDDS prescribes the dissemination of quarterly data for the whole economy with a one-quarter lag, covering four sectors (general government, monetary authorities, banking sector, and other sectors), which are based on *BPM5*. Data on a *BPM6* basis should be presented in equivalent detail. Direct investment: Intercompany lending should preferably be disseminated separately from the four sectors. Data are to be further disaggregated by maturity—short- and long-term—and provided on an original maturity basis and by instrument, as set out in *BPM5*. Data on a *BPM6* basis should be presented in equivalent sector, instrument, and maturity detail.

The SDDS encourages the dissemination of more detailed supplementary information on future *debt-service payments*, in which the principal and interest components are separately identified, twice yearly for the first four quarters and the following two semesters ahead, with a lag of one quarter. These data may be broken down into four sectors (general government, monetary authorities, banking sector, and other sectors). Data on a *BPM6* basis should be presented in

equivalent sector detail. Direct investment: Intercompany lending should preferably be disseminated separately from the four sectors. In addition, dissemination of data on gross outstanding external debt by *remaining maturity* is encouraged for principal and interest payments due in one year or less, disaggregated by the four sectors (general government, monetary authorities, banking sector, and other sectors) and Direct investment: Intercompany lending, with quarterly periodicity and quarterly timeliness. Data on a *BPM6* basis should be presented in equivalent sector detail. Finally, the dissemination of external debt data disaggregated by *currency* (domestic and foreign) with quarterly periodicity and timeliness is also encouraged.

The GDDS is a structured process focused on data quality that assists countries in adapting their statistical systems to meet the evolving requirements of the user community in the areas of economic management and development. Participating countries voluntarily commit to adhering to sound statistical practices in developing their statistical systems.

The data components for external debt in the GDDS include public and publicly guaranteed debt, the associated debt-service schedule, and private debt not publicly guaranteed. Recommended good practice would be that the public and publicly guaranteed debt position data, broken down by maturity—short- and long-term—be disseminated with quarterly periodicity and timeliness of one to two quarters after the reference date, with a further breakdown by instrument as set out in *BPM5* (or *BPM6* equivalent) encouraged. In addition, the associated debt-service schedules are recommended to be disseminated twice yearly, within three to six months after the reference period, and with data for four quarters and two semesters ahead, with a further breakdown into principal and interest encouraged. Position data on private external debt not publicly guaranteed with annual periodicity are recommended to be disseminated within six to nine months after the reference period, and the debt-service schedules for private external debt not publicly guaranteed are encouraged with the same periodicity and timeliness.

<sup>1</sup> On February 22, 2012, the IMF's Executive Board approved the SDDS Plus as an additional tier of the Fund's Data Standards Initiatives. The SDDS Plus builds on the SDDS to guide member countries on the provision of economic and financial data to the public in support of domestic and international financial stability. No changes to the external debt data category are included in the SDDS Plus (see <http://dsbb.imf.org/>).

**4.4** Total value of arrears and debt securities by sector are separately identified in memorandum items to Table 4.1. Arrears are recorded until the liability is extinguished and are presented in nominal value in the memorandum items. Such information is of particular analytical interest to those involved in external debt analysis, since the existence of arrears indicates the extent to which an economy has been unable to meet its external obligations.

**4.5** This *Guide* recommends that both nominal and market values be provided for debt securities (see paragraph 2.33). Nevertheless, most economies disseminate debt securities data only on a single valuation basis (either nominal or market value basis). As a consequence, inconsistencies may arise in macroeconomic analysis and cross-country data comparisons on external debt. To fully articulate the *Guide's* recommendation on the valuation basis, debt securities data

Table 4.1 Gross External Debt Position: By Sector

	End Period
<b>General Government</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Special drawing rights (allocations)	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Central Bank</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Special drawing rights (allocations)	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Other Sectors</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	

Table 4.1 (Continued)

	End Period
<b>Other Sectors, Long-term, continued</b>	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Other financial corporations</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Nonfinancial corporations</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Households and nonprofit institutions serving households (NPISHs)</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Gross External Debt Position</b>	

(Continued)

Table 4.1 (Continued)	
	End Period
<b>Memorandum Items</b>	
<b>Arrears: By Sector</b>	
General Government	
Central Bank	
Deposit-Taking Corporations, except the Central Bank	
Other Sectors	
Other financial corporations	
Nonfinancial corporations	
Households and nonprofit institutions serving households (NPISHs)	
Direct investment: Intercompany lending	
<b>Debt Securities: By Sector<sup>4</sup></b>	
General Government	
Short-term	
Long-term	
Central Bank	
Short-term	
Long-term	
Deposit-Taking Corporations, except the Central Bank	
Short-term	
Long-term	
Other Sectors	
Short-term	
Long-term	

should be valued in memorandum items to Table 4.1, either at market value if they are presented at nominal value in the table or at nominal value if they are presented at market value in the table.<sup>5</sup>

4.6 *BPM6* gives increased emphasis to the IIP statistics in international accounts compilation and analysis. Provided that debt securities are valued at market value, the gross external debt position as presented in the *Guide* equals the debt liabilities in the IIP statement, i.e., total IIP liabilities excluding all equity (equity shares and other equity) and investment fund shares and financial derivatives and employee stock option (ESO) liabilities, allowing comparability across datasets.

4.7 The chapter also presents six memorandum tables with data, which, depending on an economy's circumstances, can enhance the analytical usefulness of the data presented in the gross external debt position.

## Memorandum Tables

4.8 To enhance analytical usefulness, various memoranda data series might be presented along with the

<sup>5</sup>Debt securities in the memorandum items to Table 4.1 do not include those that may be included in *Direct investment: Intercompany lending*. However, if significant, additional information on these securities at both nominal and market value could be provided.

Table 4.1 (Concluded)	
	End Period
<b>Debt Securities: By Sector, continued</b>	
Other financial corporations	
Short-term	
Long-term	
Nonfinancial corporations	
Short-term	
Long-term	
Households and nonprofit institutions serving households (NPISHs)	
Short-term	
Long-term	

<sup>1</sup>It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup>Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup>Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term, and separately identified by sectors in memorandum items.

<sup>4</sup>Debt securities are valued at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table. Debt securities in the memorandum items do not include those that may be included in *Direct investment: Intercompany lending*.

presentation of the gross external debt position. The first memorandum table (Table 4.2) provides information on external debt arrears of the total economy. The second memorandum table provides information on the external debt position by short-term remaining maturity for the total economy. The next three memorandum tables—financial derivatives and ESOs, equity liabilities, and debt securities issued by residents who are involved in reverse security transactions between residents and nonresidents—present information on instruments that are not captured in the gross external debt position. The last memorandum table—guaranteed external debt—presents information on explicit contingent liabilities by sector (part of which are captured in the gross external debt position). These memorandum tables provide information on selected liabilities (current and/or contingent) that potentially could render an economy vulnerable to solvency and, particularly, liquidity risks.

## Arrears<sup>6</sup>

4.9 For some economies, arrears are very significant. For such economies, a further disaggregation of

<sup>6</sup>For additional information about the treatment of arrears in the gross external debt statistics, see Appendix 7.

**Table 4.2 Gross External Debt Position: Arrears by Sector<sup>1,2</sup>**

	End Period
<b>General Government</b>	
Principal	
Interest	
<b>Central Bank</b>	
Principal	
Interest	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
Principal	
Interest	
<b>Other Sectors</b>	
Principal	
Interest	
Other financial corporations	
Principal	
Interest	
Nonfinancial corporations	
Principal	
Interest	
Households and nonprofit institutions serving households (NPISHs)	
Principal	
Interest	
<b>Direct Investment: Intercompany Lending</b>	
Principal	
Interest	
Debt liabilities of direct investment enterprises to direct investors	
Principal	
Interest	
Debt liabilities of direct investors to direct investment enterprises	
Principal	
Interest	
Debt liabilities between fellow enterprises	
Principal	
Interest	
<b>Total Economy</b>	

<sup>1</sup> Valued at nominal value.

<sup>2</sup> Interest includes accrued interest on arrears of principal and interest.

arrears into arrears of principal and arrears of interest by institutional sector is encouraged. Also, if the amounts of technical and/or transfer arrears are significant, it is encouraged that data on these amounts be separately identified and disseminated by the compiling economy.

**4.10** A memorandum table for the presentation of position data on arrears on external debt by sector is provided in Table 4.2. The memorandum table presents arrears at nominal value because it is a measure of the overdue amount that the debtor owes to the

**Table 4.3 Gross External Debt Position: Short-Term Remaining Maturity—Total Economy**

	End Period
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Total Economy</b>	
<b>Memorandum Items</b>	
<b>Arrears (total, all sectors)</b>	
<b>Debt securities<sup>4</sup></b>	
Short-term debt securities on an original maturity basis	
Long-term debt securities obligations due for payment within one year or less	

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.

<sup>4</sup> Debt securities are valued at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table. Debt securities in the memorandum items do not include those that may be included in Direct investment: Intercompany lending.

creditor, typically according to the terms of the contract between the two parties.

### External Debt by Short-Term Remaining Maturity

**4.11** The *Guide* recommends that in the gross external debt position, the short-term/long-term maturity attribution be made on the basis of original maturity; in addition, the distinction between long- and short-term maturity on a remaining maturity basis is recommended (see paragraphs 2.60–2.61 and 6.6–6.7). Compiling information on external debt on a short-term remaining maturity basis helps in the assessment of liquidity risk by indicating that part of the gross external debt position that is expected to fall due in the coming year. A memorandum table for the presentation of gross external debt position data by short-term remaining maturity for the total economy is provided in Table 4.3. Short-term remaining

maturity external debt is presented by adding the value of outstanding short-term external debt (original maturity) to the value of outstanding long-term external debt (original maturity) due to be paid in one year or less.

**4.12** Total value of arrears (if applicable) and debt securities is separately identified in memorandum items to Table 4.3. Arrears are recorded until the liability is extinguished and are presented at nominal value in the memorandum items. Arrears are always short-term remaining maturity obligations, but the original maturity of the instrument could be short- or long-term.

**4.13** This *Guide* recommends that both nominal and market values be provided for debt securities (see paragraph 2.33). For this purpose, in memorandum items to Table 4.3, debt securities are valued either at market value if they are presented at nominal value in the table or at nominal value if they are presented at market value in the table.

### Financial Derivatives and Employee Stock Options (ESOs)

**4.14** A memorandum table for the presentation of position data on financial derivatives and ESOs<sup>7</sup> with nonresidents by sector is provided in Table 4.4. Because of the use of financial derivatives to hedge financial positions as well as to take open positions, these contracts can add to an economy's liabilities and, if used inappropriately, cause significant losses. However, in comparing financial derivatives data with external debt position data, the user should be aware that financial derivatives might be hedging asset positions, or a whole portfolio of assets and liabilities. In this regard, the net external debt position presentation in Chapter 7 is also relevant.

**4.15** Table 4.4 includes gross assets as well as gross liabilities because of the market practice of creating offsetting contracts and the possibility of forward-type instruments to switch from asset to liability positions, and vice versa, from one period to the next.

<sup>7</sup>If ESO data are unavailable, and it is unlikely that the amounts are significant, on de minimis grounds data should not be collected just to meet the requirements of this table.

**Table 4.4 Financial Derivatives and Employee Stock Options (ESOs) Positions with Nonresidents: By Sector**

	End Period
<b>Liabilities</b>	
General Government	
Central Bank	
Deposit-Taking Corporations, except the Central Bank	
Other Sectors	
Other financial corporations	
Nonfinancial corporations	
Households and nonprofit institutions serving households (NPISHs)	
<b>Assets<sup>1</sup></b>	
General Government	
Central Bank	
Deposit-Taking Corporations, except the Central Bank	
Other Sectors	
Other financial corporations	
Nonfinancial corporations	
Households and nonprofit institutions serving households (NPISHs)	
<b>Total Economy</b>	

<sup>1</sup>Excludes financial derivatives that pertain to reserve asset management and are included in reserve assets data.

For instance, a borrower hedging a foreign currency borrowing with a forward contract might find that the value of the hedge switches from asset to liability position from period to period depending on the movement in exchange rates. To present only the liability position in financial derivatives along with gross external debt would imply that the foreign currency borrowing was only hedged when the forward contract was in a liability position, so creating a misleading impression. Thus, financial derivatives liability positions should be considered alongside financial derivatives asset positions. If an economy includes financial derivatives in its reserve assets data, because they pertain to reserve asset management, these financial derivatives should be excluded from this memorandum item. Once a financial derivative reaches its settlement date, any unpaid overdue amount becomes debt, and thus is presented under other debt liabilities, short-term.

### Equity Liabilities

**4.16** Table 4.5 is a memorandum table for the presentation of position data on equity liabilities with nonresidents by sector, i.e., equity (both equity shares and



**Table 4.5 Equity Liability Positions with Nonresidents: By Sector**

	End Period
Deposit-Taking Corporations, except the Central Bank <sup>1</sup>	
Other Sectors <sup>1</sup>	
Other financial corporations	
Nonfinancial corporations	
Direct Investment: Equity and investment fund shares	
<b>Total Economy</b>	

<sup>1</sup> May include other equity liabilities (*BPM6*, paragraph 5.26).

other equity) and investment fund shares, with direct investment positions separately identified. Similar to financial derivatives positions, equity can add to an economy's liabilities and so could potentially be a source of vulnerability.

**4.17** In some instances, resident mutual funds are used as a vehicle by nonresident investors to acquire positions in domestic debt securities. If the nonresidents decide to sell these investments, the sales can have a direct impact on the domestic debt securities market. As explained in Chapter 3, such investments by nonresidents are classified as equity liabilities of the resident economy. Nonetheless, identifying equity investment in mutual funds, under other financial corporations in the table, might be considered. Further, if the amounts are significant and concentrated in mutual funds that are entirely or almost entirely owned by nonresidents, memoranda data on the investments of these mutual funds might also be disseminated.

### Resident-Issued Debt Securities Involved in Reverse Security Transactions

**4.18** In financial markets, activity in reverse security transactions is commonplace. It is one method of providing an investor with financial leverage in the debt markets, i.e., greater exposure to market price movements than the value of own funds invested. To understand the dynamics of this leverage activity and to track developments and hence potential vulnerability, a memorandum table is provided in Table 4.6 for the presentation of position data on debt securities issued by residents that are acquired from or provided to nonresidents under reverse security transactions (see paragraphs 3.37 and 3.38

**Table 4.6 Debt Securities Acquired Under Reverse Security Transactions<sup>1</sup>: Positions**

	End Period
Debt securities issued by residents and acquired by nonresidents from residents (+)	
Debt securities issued by residents and acquired by residents from nonresidents (-)	

<sup>1</sup> Reverse security transactions include all arrangements whereby one party (security taker) acquires debt securities and agrees, under a legal agreement at inception, to return the same or similar securities on or by an agreed date to the same party from whom it acquired the debt securities initially (security provider). The security taker must have full title to the debt securities such that they can be sold to a third party. These arrangements can include those known as repurchase agreements (repos), security lending, and sell/buybacks.

for the recording treatment). Such data would also help to interpret external debt, in particular security debt data when reverse security activity is significant and could be affecting the recorded position. For debt securities to be included in this memorandum table, the acquiring party (security taker) must have full title (legal ownership) to the debt securities such that they can be sold to a third party.

**4.19** In the table, the total value of debt securities issued by residents that have been acquired by nonresidents from residents under outstanding reverse security transactions, even if subsequently on-sold, is included with a positive sign. The total value of debt securities issued by residents that have been acquired by residents from nonresidents under outstanding reverse security transactions, even if subsequently on-sold, is included with a negative sign. This sign convention tracks the change of legal ownership of debt securities. Other things being equal, if nonresidents acquire these securities under reverse security transactions, the external debt security claims on the resident economy are greater than those recorded in the gross external debt position, whereas if residents acquire these debt securities from nonresidents under reverse security transactions, the external debt security claims on the resident economy are less than those recorded in the gross external debt position. Appendix 2 provides more information on reverse security transactions and explains how different types of reverse security transactions should also be recorded in the gross external debt position and in this memorandum table.

## Guaranteed External Debt Position

4.20 The *Guide* encourages the measurement and monitoring of contingent liabilities, especially of guarantees, and outlines some measurement techniques (see Chapter 9). The magnitude of these “off-balance-sheet” obligations in recent financial crises reinforced the need to monitor them. Consequently, a memorandum table for the presentation of position data on a narrow, albeit important, range of explicit contingent liabilities by sector of the guarantor is provided in Table 4.7. The memorandum table presents the value of guarantees of residents’ external debt liabilities (liabilities of a unit of a resident sector, the servicing of which is contractually guaranteed by a unit of another sector resident in the same economy as the debtor)<sup>8</sup> and cross-border guarantees (debt of nonresidents to other nonresidents that is contractually guaranteed by a resident entity and debt of a legally dependent nonresident branch of a resident unit that is owed to a nonresident).<sup>9</sup> In both instances, the *Guide* recommends that the contingent external debt liability should be valued in terms of the maximum exposure loss.

	End Period
<b>General Government</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Central Bank</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Other Sectors</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Other financial corporations</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Nonfinancial corporations</b>	
Resident debtor <sup>2</sup>	
Nonresident debtor <sup>3</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Nonresident debtor <sup>3</sup>	
<b>Total Guaranteed External Debt Position</b>	

<sup>1</sup>The maximum exposure loss of guarantees of resident's external debt liabilities and cross-border guarantees (see paragraphs 9.22–9.29).

<sup>2</sup>External debt liabilities of a unit of one resident sector, the servicing of which is contractually guaranteed by a unit of another sector resident in the same economy.

<sup>3</sup>Debt of nonresidents to other nonresidents that is guaranteed by a resident unit (inward risk transfer, column 2 in Table 9.3).

<sup>8</sup>These liabilities are captured/covered in the gross external debt position as debt of the sector of the original debtor, whereas in this memorandum table they are presented as contingent liabilities (guarantees) of the sector of the guarantor.

<sup>9</sup>Cross-border guarantees are included in Table 9.3, column 2, as inward risk transfer.



# 5

## Public and Publicly Guaranteed External Debt

### Introduction

**5.1** For countries in which the public sector is responsible for a large share of the external debt, it is particularly important to identify all the debt owed to nonresidents by this sector. This chapter provides tables for the presentation of the gross external debt position in which the role of the public sector is highlighted. The data for these tables should be compiled using the concepts outlined in Chapters 2 and 3, except the debt of resident entities should be attributed according to whether the debtor is publicly owned or not, and if not, by whether the debt instrument is guaranteed by a public sector unit. For convenience, this presentation is described as being a “public-sector-based approach” and is consistent with the framework of the World Bank’s Debtor Reporting System.

**5.2** In economies where public sector external debt is dominant, the presentation tables provided in this chapter could be the primary ones used for disseminating data. Indeed, in circumstances where the public sector is centrally involved in external debt borrowing activity, both as a borrower or guarantor, these tables are essential. As private sector debt becomes more important in the economy, more detailed breakdowns of private sector debt are required, such as provided in the previous chapter, but the presentation set out in this chapter would remain relevant for monitoring external debt liabilities of the public sector.

**5.3** Because the concepts and definitions for its measurement remain consistent throughout the *Guide*, the gross external debt position for the whole economy—depending on whether debt securities are valued at nominal or market value—should be the same regardless of whether the presentation tables in this

or the previous chapters are used to disseminate such data.

**5.4** In disseminating data, compilers are encouraged to provide methodological notes (metadata) explaining the concepts, definitions, and methods used in compiling the data. For any presentation of gross external debt position, it is particularly important for the compiler to indicate whether debt securities are valued at nominal or market value, and whether interest costs that have accrued but are not yet payable are included.

### Definitions

**5.5.** For the presentation of the external debt position in a “public-sector-based approach,” the first determination is whether a resident unit is in the public sector.<sup>1</sup> In comparison with the “institutional-sector approach” outlined in Chapter 3 and presented in Chapter 4, the public sector comprises the general government, the central bank, and those units in the deposit-taking corporations, except the central bank, and other sectors that are public corporations.<sup>2</sup> A public corporation is defined as a nonfinancial or financial corporation that is subject to control by government units, with control over a corporation defined as the ability to determine general corporate policy.<sup>3</sup>

<sup>1</sup>For more details, please refer to the World Bank’s *Debtor Reporting System Manual* (World Bank, 2000), available at [http://siteresources.worldbank.org/DATASTATISTICS/Resources/drs\\_manual.doc](http://siteresources.worldbank.org/DATASTATISTICS/Resources/drs_manual.doc).

<sup>2</sup>For more details on the definition of public sector, see the *Public Sector Debt Statistics: Guide for Compilers and Users* (PSDS Guide 2011), paragraph 2.17.

<sup>3</sup>General corporate policy refers to, in a broad sense, the key financial and operating policies relating to the corporation’s strategy objectives as market producer. See *2008 SNA*, paragraphs 4.77–4.80 for more details. For a definition of control of a corporation by a government unit, see *PSDS Guide* (2011), paragraph 2.17.

Because the arrangements for the control of corporations can vary considerably, it is neither desirable nor feasible to prescribe a definitive list of factors to be taken into account. The following eight indicators, however, will normally be the most important factors to consider: (1) ownership of the majority of the voting power, (2) control of the board or other governing body, (3) control of the appointment and removal of key personnel, (4) control of key committees of the entity, (5) golden shares and options (golden shares give the holder a decisive vote, even without a majority of shares), (6) regulation and control, (7) control by a dominant customer, and (8) control attached to borrowing from the government. It may be possible to exercise control through special legislation, decree, or regulation that empowers the government to determine corporate policy or to appoint directors. Any domestic institutional unit not meeting the definition of public sector is to be classified as private sector. In terms of institutional sector attribution, the classification of a public corporation as a central bank, deposit-taking corporation, except the central bank, other financial corporation, or nonfinancial corporation depends on the nature of the activity it undertakes.

**5.6** Publicly guaranteed private sector external debt is defined as the external debt liabilities of the private sector, the servicing of which is contractually guaranteed by a public unit resident in the same economy as the debtor.<sup>4</sup> The private sector can include resident units in the deposit-taking corporations, except the central bank, and other sectors. External debt of the private sector that is not contractually guaranteed by a public sector unit resident in the same economy is classified as private sector external debt not publicly guaranteed. If external debt of the private sector is partially guaranteed by a public sector unit resident in the same economy, such as if principal payments or interest payments alone are guaranteed, then only the present value of the payments guaranteed should be included within publicly guaranteed private sector external debt, with the nonguaranteed amount included within private sector external debt not publicly guaranteed.

<sup>4</sup>External debt for which guarantees are provided to the creditor by a public sector unit resident in a different economy from that of the debtor is not covered under this definition.

## Presentation of Public and Publicly Guaranteed External Debt Position

**5.7** The presentation of the gross external debt position on the basis of a “public-sector-based approach” is set out in Table 5.1.

- The first level of disaggregation is by sector. The primary disaggregation is between public and publicly guaranteed debt and private sector external debt not publicly guaranteed. Because of the nature of the relationship between debtor and creditor, intercompany lending between entities in a direct investment relationship is separately identified under each category, but when combined equals Direct investment: Intercompany lending for the total economy as presented in the previous chapter.
- The second level of disaggregation is by the maturity of external debt—short-term and long-term on the basis of original maturity. A maturity attribution is not provided for intercompany lending.<sup>5</sup>
- The third level of disaggregation is by type of debt instrument, as described in Chapter 3.

**5.8** Total value of arrears and debt securities by sector are separately identified in memorandum items to Table 5.1. Arrears are recorded until the liability is extinguished and are presented in nominal value in the memorandum items because such information is of particular analytical interest. This *Guide* recommends that both nominal and market values be provided for debt securities (see paragraph 2.33). For this purpose, in memorandum items to Table 5.1, debt securities are valued either at nominal value if they are presented at market value in the table or at market value if they are presented at nominal value in the table.

**5.9** Memoranda data series on a public sector basis on arrears, external debt by short-term remaining maturity, financial derivatives and ESOs, equity liabilities, debt securities acquired under reverse security transactions, and guaranteed external debt position could be provided along with Table 5.1. These memorandum tables are described in Chapter 4.

**5.10** Table 5.2 separates public sector external debt and publicly guaranteed private sector external debt.

<sup>5</sup>If a short-term/long-term maturity attribution of intercompany lending data is available to the compiler on an original maturity basis, the *Guide* encourages dissemination of these data.

**Table 5.1 Gross External Debt Position: Public and Publicly Guaranteed Private Sector Debt and Private Sector Debt Not Publicly Guaranteed**

	End Period
<b>Public and Publicly Guaranteed Private Sector External Debt</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Special drawing rights (allocations)	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Private Sector External Debt Not Publicly Guaranteed</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Gross External Debt Position</b>	
<b>Memorandum Items</b>	
<b>Arrears</b>	
Public and Publicly Guaranteed External Debt	
Private Sector External Debt Not Publicly Guaranteed	
<b>Debt securities<sup>4</sup></b>	
Public and Publicly Guaranteed External Debt	
Short-term	
Long-term	
Private Sector External Debt Not Publicly Guaranteed	
Short-term	
Long-term	

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable—other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term, and separately identified by sectors in memorandum items.

<sup>4</sup> Debt securities are valued at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table. Debt securities in the memorandum items do not include those that may be included in Direct investment: Intercompany lending.

**Table 5.2 Gross External Debt Position: Public Sector Debt and Publicly Guaranteed Private Sector Debt**

	End Period
<b>Public Sector External Debt</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Special drawing rights (allocations)	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Publicly Guaranteed Private Sector External Debt</b>	
<b>Short-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Total</b>	
<b>Memorandum Items</b>	
<b>Arrears</b>	
Public Sector External Debt	
Publicly Guaranteed Private Sector External Debt	
<b>Debt securities<sup>4</sup></b>	
Public Sector External Debt	
Short-term	
Long-term	
Publicly Guaranteed Private Sector External Debt	
Short-term	
Long-term	

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term, and separately identified by sectors in memorandum items.

<sup>4</sup> Debt securities are valued at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table. Debt securities in the memorandum items do not include those that may be included in Direct investment: Intercompany lending.

**Table 5.3 Gross External Debt Position: Public Sector Debt, Publicly Guaranteed Private Sector Debt, and Private Sector Debt Not Publicly Guaranteed**

	End Period
<b>Public Sector External Debt<sup>1</sup></b>	
Short-term <sup>2,3</sup>	
Long-term	
<b>Publicly Guaranteed Private Sector External Debt<sup>1</sup></b>	
Short-term <sup>2,3</sup>	
Long-term	
<b>Private Sector External Debt Not Publicly Guaranteed<sup>1</sup></b>	
Short-term <sup>2,3</sup>	
Long-term	
<b>Gross External Debt Position</b>	
<b>Memorandum Items</b>	
<b>Arrears</b>	
Public Sector External Debt	
Publicly Guaranteed Private Sector External Debt	
Private Sector External Debt Not Publicly Guaranteed	

<sup>1</sup>Includes Direct investment: Intercompany lending liabilities.

<sup>2</sup>It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>3</sup>Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term, and separately identified by sectors in memorandum items.

Such a separation allows identification of external debt owed by the public sector and—combined with the information on private sector debt not publicly

guaranteed in Table 5.1—external debt of the private sector. Further, if a public guarantee of private sector external debt is invoked, then the external debt previously recorded under publicly guaranteed private sector external debt in Table 5.2 will subsequently be recorded under public sector external debt. Table 5.2 presents the same levels of disaggregation (by sector, original maturity, and type of debt instrument) and memorandum items as Table 5.1.

**5.11** Table 5.3 presents the gross external debt position separately identifying the public sector debt, publicly guaranteed private sector debt, and private sector debt not publicly guaranteed broken down by original maturity (short-term and long-term). The nominal value of arrears by sector is separately identified in the memorandum item to Table 5.3.

**5.12** Further, as defined in paragraphs 5.5 and 5.6, public sector data can be attributed to general government, central bank, depositary-taking corporations, except the central bank, and other sectors, while private sector information can be attributed to deposit-taking corporations, except the central bank and other sectors. In this regard, it is recommended that if detailed records are kept, the institutional sector of the debtor be identified, so as to allow an economy that is presenting data on a public sector basis to also compile data on an institutional sector basis.



# 6

## Further External Debt Accounting Principles

### Introduction

**6.1** Data compiled and presented using the concepts and definitions described in the previous chapters provide comprehensive coverage and an informed picture of the gross external debt position for the whole economy and/or the public sector. However, such data do not provide a complete picture of emerging vulnerabilities to solvency and liquidity risk. For instance, the currency and interest rate composition of external debt liabilities, and the pattern of future payments, might all be potential sources of vulnerability. To assist in compiling additional data series of analytical use in understanding the gross external debt position, this chapter provides further accounting principles. These principles, as well as those described in earlier chapters, are drawn upon to provide illustrative presentation tables in the next chapter.

**6.2** This chapter discusses further accounting principles under three broad headings:

- Sectors, maturity, and instruments
- Specific characteristics of external debt
- Principles for the compilation of debt-service and other payment schedules

### Sectors, Maturity, and Instruments

#### Creditor Sectors

**6.3** Information on the nonresident creditor sector that owns external debt is disseminated by many economies, although obtaining accurate information on the nature of the creditor (residency and sector) for negotiable debt may be challenging for compilers. The sectors defined in Chapter 3 (general government, central bank, deposit-taking corporations, except the central bank, and other sectors) and in Chapter 5 (public and private sectors) are creditor and

debtor sectors. Other commonly identified creditor sectors are multilateral (international) organizations<sup>1</sup> and official creditors.

**6.4** Multilateral organizations are entities established by political agreements among member countries that have the status of international treaties. Multilateral organizations are accorded appropriate privileges and immunities and are generally not subject to, or are only partially subject to, the laws and regulations of the economies in which the organizations are located. Typically these organizations provide financial intermediation services at an international level, channeling funds between lenders and borrowers in different economies<sup>2</sup> and/or nonmarket services of a collective nature for the benefit of members. As creditors, multilateral organizations are sometimes also referred to as official multilateral creditors.

**6.5** Official creditors are public sector creditors, including multilateral organizations. External debt owed to official creditors might also include debt that was originally owed to private creditors but that was guaranteed by a public entity in the same economy as the creditor (e.g., an export credit agency). Official bilateral creditors are official creditors in individual countries. This category of creditor is particularly relevant in the context of Paris Club discussions. The Paris Club is an informal group of official bilateral creditors which seeks to find coordinated and sustainable solutions to external public debt payment difficulties facing some of its debtors. It provides debt relief treatments to debtor countries through debt

<sup>1</sup>Multilateral organizations are referred to as international organizations in *BPM6* (see *BPM6*, paragraphs 4.103–4.107).

<sup>2</sup>Examples of multilateral organizations involved in financial intermediation (also known as financial international organizations or institutions) are currency union central banks, the IMF, World Bank Group, BIS, and regional development banks.

flow rescheduling and/or stock operations. It is not a formal institution, and it does not have a legal status (see Box 8.2).

## Remaining Maturity

**6.6** While it is recommended that in the gross external debt position the short-term/long-term maturity attribution be made on the basis of original maturity (i.e., the period of time from when the liability was created to its final maturity date), there is also analytical interest in attribution on the basis of remaining maturity (i.e., the period of time from the reference date until the debt payments fall due).<sup>3</sup> Remaining-maturity measures (sometimes referred to as *residual-maturity measures*) provide an indication of when payments will fall due, and so of potential liquidity risks facing the economy. Particularly important is information on payments coming due in the near term.

**6.7** The *Guide* recommends that short-term remaining maturity be measured by adding the value of outstanding short-term external debt (original maturity) to the value of outstanding long-term external debt (original maturity) due to be paid in one year or less. These data include all arrears. Conceptually, at the reference date the value of outstanding long-term external debt (original maturity) due to be paid in one year or less is the discounted value of payments to be made in the coming year, both interest and principal.<sup>4</sup> The value of outstanding long-term (original maturity) debt due to be paid over one year ahead is classified as long-term debt on a remaining-maturity basis.

**6.8** The information content provided is one reason for recommending such an approach. Short-term debt on an original maturity basis is identifiable from the gross external debt position. Measuring the value of outstanding long-term external debt (original maturity) falling due in one year or less may raise practical difficulties, in which instance, one proxy measure that might be used is the undiscounted value

of principal payments on long-term external debt obligations (original maturity basis) due to mature in one year or less. This proxy measure is incomplete in its coverage of interest payments falling due in the coming year but can be compiled using the principles for projecting payments in a debt-service schedule (see paragraphs 6.25–6.26).<sup>5</sup>

## Trade-Related Credit

**6.9** In the *Guide*, trade credit and advances as presented in the gross external debt position is defined in Chapter 3—the direct extension of credit by suppliers of goods and services to their customers and advances for work that is in progress (or is yet to be undertaken) and prepayment by customers for goods and services not yet provided—consistent with the 2008 SNA and BPM6. To assist in compiling additional data series, this chapter introduces a wider concept of trade-related credit, which also captures other credits provided to finance trade activity, including through banks. It is defined as including trade credit and advances, trade-related bills (see paragraphs 6.10–6.11), and credit provided by third parties to finance trade, such as loans from a foreign financial or export credit institution to the buyer. A table for presenting data on trade-related credit is provided in the next chapter.

**6.10** A particularly difficult issue of classification arises from trade bills drawn on the importer and provided to the exporter, which are subsequently discounted by the exporter with a financial institution. These instruments might be regarded by the importer as the direct extension of credit by the exporter, but once discounted they become a claim by a third party on the importer. Where an instrument is provided to the exporter with such characteristics that it is negotiable in organized and other financial markets, such as a promissory note, it should be classified as a security in the gross external debt position and included

<sup>3</sup>For practical reasons, the maturity date of the debt instrument may be used as a proxy.

<sup>4</sup>For those economies that do not wish to include interest costs that have accrued but are not yet payable in the gross external debt position for all instruments, the nominal value of outstanding long-term external debt at the reference date that is due to be paid in one year or less is the sum of principal payments on this debt to be made in the coming year, except where the debt is in the form of securities issued at a discount, in which instance the principal amount to be paid will exceed the nominal amount outstanding at the reference date.

<sup>5</sup>Some countries that have debt primarily in the form of instruments on which principal is paid only at maturity attribute the full value of each long-term (original maturity) debt instrument on a remaining basis by when the instrument is due to mature. However, from the viewpoint of liquidity risk analysis, this method is imperfect, because payments coming due in the near term, such as interest and partial payments of principal, are not captured within short-term remaining-maturity debt if the debt instrument has a maturity date further than a year ahead.



in the concept of trade-related credit. In principle, a supplier may also sell trade claims other than trade bills to a factoring company, in which instance the claim is reclassified from trade credit and advances to other debt liabilities (other accounts payable—other) in the gross external debt position and is included in the concept of trade-related credit.

**6.11** If the importer's bill has been endorsed (or "accepted") by a bank in the importer's own economy in order to make the bill acceptable to the exporter, it is known as a bankers' acceptance, classified as a security in the gross external debt position, and included in the concept of trade-related credit. Bankers' acceptances are to be classified as a financial

### Box 6.1 Trade-Related Credit

In analyzing activity in international trade in goods and services, information on trade-related credit is essential. Past evidence has demonstrated that trade patterns can be severely disrupted by changes in the provision of trade-related credits. Assessment of conditions of trade finance is complicated by the absence of organized markets and the proprietary nature of customer relationships. Against this background, the IMF has launched a trade finance survey covering major banking institutions.

**Trade finance:** Trade finance covers a spectrum of payment arrangements between importers and exporters: *Open-account financing* allows importers to repay exporters directly after receipt of goods; *bank-intermediated trade finance* allows importers or exporters to shift some of the nonpayment or nonperformance risk to banks (e.g., by issuing or confirming the letter of credit) or to obtain bank financing to allow the exporter to receive payment before the importer is required to make it; and *cash-in-advance arrangements* are where importers pay for goods before they are shipped. Members of Berne Union (BU), such as export credit agencies and private export credit insurers, also participate in trade finance markets in a manner similar to commercial banks. Multilateral development bank programs also play a role by providing a secondary guarantee or liquidity to banks. *Trade credit and advances* in the *Guide* and in *BPM6* refers to open-account financing and cash-in-advance arrangements. Trade-related lending by banks is included under loans and other off-balance-sheet items that do not give rise to financial assets (e.g., letters of credit; see *BPM6*, paragraphs 5.9 and 5.13).

Trade Finance Arrangements				
Cash in Advance 19%–22% \$3–\$3.5 trillion	Bank Trade Finance 35%–40% \$5.5–\$6.4 trillion	Open Account (38%–45%, \$6–\$7.2 trillion)		
		Credit Covered by BU members \$1.25–\$1.5 trillion	Arm's-Length Non-Guaranteed	Intra-Firm

\$15.9 trillion in global merchandise trade (2008 IMF estimate)

Source: IMF staff estimates, IMF-BAFT surveys of commercial banks, and BU data.

### Basic Information on Trade Finance Survey

Surveys	Period Through	Respondents (number)	Countries (number)
1	Dec–08	40	n.a.
2	Mar–09	44	23
3	Jul–09	88	44
4	Mar–10	93	53
5	Dec–10	118	34
6	Aug–11	63	n.a.
7	Dec–11	337	91

**Survey design:** The design of the initial survey benefited from inputs from the European Bank for Reconstruction and Development (EBRD) and Hong Kong and Shanghai Banking Corporation (HSBC). The second survey benefited from inputs from a cosponsor, the Bankers' Association for Finance and Trade, now merged with International Financial Services Association (BAFT-IFSA). The third survey benefited from inputs from the Banking Commission of the International Chamber of Commerce (ICC), which has been building an expertise by conducting its own survey, ICC Global Survey on Trade Finance, annually since 2009. The design of the fifth survey benefited from the IMF survey experts in the Technology and General Services Department. The seventh survey, a collaboration with ICC, ICC-IMF Market Snapshot January 2012, was made substantially shorter, both in length and during in the field, to swiftly assess the rapidly changing market sentiment of the last quarter of 2011.

**Box 6.1 Trade-Related Credit (Concluded)**

**Implementation:** The surveys were distributed primarily to membership of BAFT-IFSA, the Latin American Federation of Banks (FELEBAN), ICC, and others that international financial institutions and private entities were able to reach out to. In particular, the EBRD, the Asian Development Bank, the Inter-American Development Bank, the African Development Bank (AfDB), and the International Finance Corporation provided valuable assistance in distributing surveys to relevant financial institutions. The number of respondents varied significantly, depending on the methods used to collect the data and to reach out to respondents, as well as the length and complexity of the surveys.

**Content:** In each of the surveys, except for the seventh survey, banks were asked (1) to compare the state of their trade finance business across different time periods, including volumes, prices, and relative default probabilities; (2) to assess the impact of banking regulatory changes (in particular Basel II and III); and (3) to share their expectations about likely near-term industry developments (as with many such surveys, there is the risk of bias coming from self-selection). The results of the first four surveys are discussed in Trade and Trade Finance in the 2008–09 Financial Crisis (IMF working paper WP/11/16).

liability of the bank (or, if not a bank, the financial institution that has endorsed the bill) because they represent an unconditional claim on the part of the holder and an unconditional claim on the bank. However, national practices and variations in the nature of these acceptances may suggest flexibility in the application of this guideline.

## Specific Characteristics of External Debt

### Currency Composition

**6.12** 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.<sup>6</sup> All other currencies are foreign currencies. Under this definition, an economy that uses as its legal tender a currency issued by a monetary authority of another economy—such as U.S. dollars—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. SDRs are considered to be foreign currency in all cases, including for the economies that issue the currencies included in the SDR basket.

**6.13** The attribution of external debt by currency is primarily determined by the currency of denomination.<sup>7</sup> 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. Accordingly, all cash flows are determined using the currency

of denomination and, if necessary, converted into the domestic currency or another unit of account for the purpose of settlement or compilation of accounts. Foreign-currency-linked debt is debt that is settled in domestic currency but with the amounts to be paid linked to a foreign currency. Foreign-currency-linked debt is classified and treated in the international accounts as being denominated in foreign currency. Domestic currency debt is debt that is payable in the domestic currency and not linked to a foreign currency. Domestic-currency-linked debt is debt that is settled in a foreign currency but with the amounts paid linked to the domestic currency. By convention, domestic-currency-linked debt is included with foreign currency debt in this *Guide*. In the unusual instance of interest payments being denominated in a foreign currency but principal payments denominated in a domestic currency, or vice versa, only the present value of the payments denominated in a foreign currency need be classified as foreign currency debt (and similarly for foreign-currency-linked debt). Unallocated gold accounts and other unallocated accounts in other precious metals giving title to claim the delivery of gold or other precious metals are treated as debt denominated in foreign currency.

**6.14** In attributing external debt by type of foreign currency—U.S. dollar, euro, Japanese yen, and so on—

<sup>6</sup>In this context, a common currency area is one to which more than one economy belongs and which has a central bank with the legal authority to issue the same currency within the common currency area. To belong to this area, the economy must be a member of the central bank.

<sup>7</sup>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 holdings gains and losses. The currency of settlement may be different from the currency of denomination. Using a currency in settlement that is different from the currency of denomination simply means that a currency conversion is involved each time a settlement occurs (*BPM6*, paragraphs 3.98–3.103).

the currency in which payments are denominated is the determining criterion. Some types of foreign currency borrowing are denominated in more than one currency. However, if the amounts to be paid on such borrowing are linked to one specific currency, the borrowing should be attributed to that currency. Otherwise, compilers are encouraged to disaggregate such multicurrency borrowing by the component currencies. If, for any reason at the time the data are compiled for a particular reference date, the amounts attributable to each currency at that date are not known with precision, the borrowing should be attributed to each type of currency using the latest firm information available to the compiler—such as the currency attribution at the previous reference date together with any known payments in specific currencies made during the subsequent period—and revised once firm information for the new reference date is known.

## Interest Rates

### *Variable- and fixed-rate external debt*

**6.15** Variable-rate external debt instruments are those on which interest costs are linked to a reference index, e.g., LIBOR (London interbank offered rate), or the price of a specific commodity, or the price of a specific financial instrument that normally changes over time in a continuous manner in response to market pressures. All other debt instruments should be classified as fixed-rate. Interest on external debt that is linked to the credit rating of another borrower should be classified as fixed-rate because credit ratings do not change in a continuous manner in response to market pressures; interest on external debt that is linked to a reference price index should be classified as variable-rate, provided the price(s) that are the basis for the reference index are primarily market determined.

**6.16** The classification of an instrument can change over time if, say, it switches from fixed to variable rate. For instance, interest may be fixed for a certain number of years and then becomes variable. While a fixed rate is paid, the instrument is to be classified as fixed-rate debt, and when it switches to variable rate, it is classified as variable-rate debt.<sup>8</sup> If interest is linked

to a reference index or commodity price or financial instrument price but is fixed unless the reference index or price passes a particular threshold, it should be regarded as fixed-rate. However, if thereafter interest becomes variable, then it should be reclassified as a variable-rate instrument. Alternatively, if interest is variable-rate until it reaches a predetermined ceiling or floor, it becomes fixed-rate debt when it reaches that ceiling or floor.

**6.17** Index-linked debt instruments are classified as being variable-rate.<sup>9</sup> For these instruments, the principal or coupons or both are indexed to some variable, e.g., to a general or specific price index. Because index-linked instruments have variable aspects, a debt instrument is classified as variable-rate if the indexation applies to the principal or coupons or both (notwithstanding the treatment of interest<sup>10</sup>). Therefore, if principal only is indexed, such debt is to be classified as variable-rate regardless of whether interest is fixed or variable provided that the reference index meets the criterion above, i.e., it normally changes over time in a continuous manner in response to market pressures.

### *Average interest rates*

**6.18** The average interest rate is the weighted-average level of interest rates on the outstanding gross external debt as at the reference date. The weights to be used are determined by the value in the unit of account of each borrowing as a percentage of the total, e.g., for the general government sector, the weight given to the interest rate on each external debt instrument equals the value in the unit of account of that debt as a percentage of total external debt for the general government sector. Similarly, the weight given to the average level of interest rates for the general government sector when calculating the average interest rate for the whole economy is equal to the total value in the unit of account of general government external debt as a percentage of total economy-wide external debt.

**6.19** The relevant interest rate level for each debt instrument is affected by whether it has a fixed- or

<sup>8</sup> For vulnerability analysis purposes, it is common practice to treat instruments that switch from fixed to variable rate as variable-rate debt. For debt whose interest can switch from fixed to variable rate, compilers could provide additional information in notes to the corresponding classification tables, where significant.

<sup>9</sup> Nevertheless, foreign-currency-linked instruments are treated as being denominated in the foreign currency (see paragraph 6.13), rather than indexed to it.

<sup>10</sup> Two approaches that can be followed to determine the interest accrual in each accounting period when the amount to be paid at maturity is index-linked are discussed in *BPM6*, paragraphs 11.59–11.65.

variable-linked interest rate. If the interest rate is contractually fixed, then this rate should be used, taking account of any discount and premium at issuance. If the rate of interest had been variable in the past but is now fixed, the current fixed-rate should be used. For variable-rate instruments, the rate of interest on each instrument should be the rate accruing on the reference day. In other words, usually variable rates of interest are reset on a periodic basis, and it is the level of the interest rate applicable on the reference day that should be used. If the interest rate is reset on the reference date, that rate should be reported and not the previous interest rate. If for any reason the variable rate is not observable, then the level of the reference index or appropriate price on the reference date, or, if the link is to a change in the reference index, the recorded change for the relevant period up to the reference date, or the closest relevant time period available, together with any existing additional margin the borrower needs to pay, should be used to calculate the interest rate level.

**6.20** For calculating the weighted average of interest rates agreed on new borrowing during the period, the interest rates recorded would be those established at the time of the borrowing. If the interest rate is contractually fixed, then this rate should be used. For variable-rate borrowing, the rate of interest on each instrument should be that which is accruing on the day the claim is established. The weights to be used in compiling average interest rate data are determined by the value in the unit of account of each borrowing, on the date the claim was established, as a percentage of the total borrowed during the period.

### Location of Securities Issuance

**6.21** Debt securities issued by a resident of the same economy in which the security is issued are to be classified as domestically issued, regardless of the currency of issue. All other issues are to be classified as internationally issued. Regardless of location of issue, any security owned by nonresidents and issued by residents of a given economy is to be classified as part of the external debt of that economy. If there is uncertainty over the location of issue, then the following criteria should be taken into account in descending order of preference to determine whether a resident of the economy has issued a domestic or an international debt security:

- The debt security is listed on a recognized exchange in the domestic economy (domestic issue) or in a foreign economy (international security)
- The debt security has an International Security Identification Number (ISIN) with a country code the same as the legal domicile of the issuer and/or is allocated a domestic security code by the domestic national numbering agency (domestic security); or the debt security has an ISIN code with a country code different from that where the issuer is legally domiciled and/or has a foreign security code issued by a foreign national numbering agency (international security)
- The security is issued in a domestic currency (domestic issue), as defined in paragraph 6.12, or in a foreign currency (international issue)

### Concessional Debt

**6.22** There is no unique definition of concessionality, and the *Guide* does not provide or recommend one. Nevertheless, it is generally accepted that concessional loans occur when units lend to other units at a contractual interest rate intentionally set below the market interest rate that would otherwise apply. Concessionality does not only relate to interest rates below market but to the whole package of concessional terms to the borrowing unit, including maturity and subsidies from third parties. The degree of concessionality can be enhanced with grace periods and frequencies of payments and maturity periods favorable to the debtor. The definition of the OECD's Development Assistance Committee (DAC)<sup>11</sup> is commonly used. Under the DAC definition, concessional lending (i.e., lending extended on terms that are substantially more generous than market terms) includes (1) official credits with an original grant element of 25 percent or more using a 10 percent rate of discount (i.e., where the excess of the face value of a loan from the official sector over the sum of the discounted future debt-service payments to be made by the debtor is 25 percent or more using a 10 percent rate of discount), and (2) lending by the soft window of the World Bank, major regional development banks, and the IMF.

<sup>11</sup> The OECD's DAC was created in 1960. Its membership at the time of writing the *Guide* comprised 24 countries and the Commission of the European Union.

**6.23** The IMF uses a methodology for calculating loan concessionality in which the discount rates used are computed in a manner that is closely aligned with the methodology employed in the OECD's Arrangement on Officially Supported Export Credits. Specifically, a debt is concessional if it includes a grant element of at least 35 percent (or more in certain cases), calculated as follows: the grant element of a debt is the difference between the present value of debt and its nominal value, expressed as a percentage of the nominal value of the debt. The present value of debt at the time of its contracting is calculated by discounting the future stream of payments of debt service due on this debt. The discount rates used for this purpose are the currency-specific commercial interest reference rates (CIRRs), published by the OECD.

**6.24** All external debt not classified as concessional should be classified as nonconcessional.

### Debt-Service and Other Payment Schedules

**6.25** A payment schedule provides a projection of future payments, at a reference date, based on a certain set of assumptions that are likely to change over time. A debt-service payment schedule projects payments on the outstanding gross external debt position at the reference date and helps in the assessment of liquidity risk by allowing the data user, and debtor, to monitor whether a bunching of payments is developing regardless of the original maturity of the debt instrument. For the debtor, early warning of such bunching might allow countervailing action to be taken. However, the availability of detailed information on the characteristics of the debt instrument is crucial; in practice, the availability of the necessary information will depend on the level of details of the data sources used by the compiler.

**6.26** Because the projection of a payment schedule requires assumptions to be made, to assist compilers, some guidance is provided below on the assumptions to apply. In compiling payment schedules, the *Guide* encourages the compiler to make best efforts in projecting payments. Consistent with the definitions in paragraph 2.5, in the debt-service payment schedule, interest payments are periodic payments of interest

costs, while principal payments are all other payments that reduce the principal amount outstanding.<sup>12</sup>

### Projected Payments of Foreign Currency External Debt

**6.27** 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 (i.e., the midpoint between the buying and the selling spot rates) prevailing on the reference date (i.e., the last day before the start of the forward-looking period). In other words, if a debt-service payment schedule is drawn up for external debt outstanding on an end-calendar-year reference date, then the exchange rate prevailing at the end of the calendar year (on the last day of that year) should be used.<sup>13</sup> Some compilers may find it useful to prepare supplementary projected payments to take into account fluctuations in exchange and interest rates, where relevant.

**6.28** For borrowing in multicurrencies, payments should be projected with reference to the component currencies of the borrowing and to the market exchange rates (the midpoint between the buying and the selling spot rates) prevailing on the reference date. For World Bank currency pool loans, future payments should be projected in U.S. dollar equivalent terms on the basis of the pool units to be "paid" on each due date and the pool unit value at the reference date, and

<sup>12</sup>Guidance on the recording of the SDR allocations in debt-service payment schedule tables is provided in paragraph 7.16.

<sup>13</sup>From a theoretical viewpoint, and given that the debt-service payment schedule is making projections, forward rates may be considered the best estimate of exchange rates for specific dates in the future. However, while such an approach might well be readily applied in many instances for shorter-term debt in major currencies, there may be a lack of readily observable forward rates for longer-term borrowing and for "smaller" currencies, thus leading to possible inconsistent approaches between economies and different maturity periods. Also, there always remains uncertainty about the future course of interest and currency rates. The *Guide* takes the view that projections of future payments of external debt linked to currency and interest rate movements should be based on end-period spot rates, rather than, say, forward rates, because this approach is more transparent, easier to compile, and more readily understandable to users than projections based on rates in forward markets—even though it is recognized that the use of a single day's exchange rate to convert payments to be made over a forward period could be misleading if temporary factors affect the exchange rate for that day.

then converted into the unit of account, if this is not the U.S. dollar,<sup>14</sup> at the market exchange rate (the midpoint between the buying and the selling spot rates) prevailing on the reference date.

### Receiving or Paying Foreign Currency Under a Financial Derivatives Contract

**6.29** Consistent with the foreign-currency-conversion approach adopted throughout the *Guide*, the amounts of foreign currency contracted to be paid and received under a financial derivatives contract that is current and outstanding at the reference date should be converted to the unit of account using the market exchange rate (the midpoint between the buying and the selling spot rates) prevailing on the reference date (the last day before the start of the forward-looking period).

### Projected Interest Payments on Deposits

**6.30** Interest on deposits that is payable once a year or more frequently is projected as a future interest payment. Interest payments on deposits should be projected on the basis of those deposits that are outstanding on the reference date, using interest rates current on the reference date, unless there are contractual reasons to assume otherwise.

**6.31** Interest on deposits that are withdrawable on demand or subject to a notice of withdrawal, and are not subject to a maturity date, should be projected into the future,<sup>15</sup> whereas those interest payments on deposits with a maturity date should be projected only to that maturity date. Payments on deposits for which notice of withdrawal has been given should be projected on the assumption that these deposits will be withdrawn on the due date, and no assumption of reinvestment should be made unless there are explicit instructions from the depositor that indicate otherwise.

<sup>14</sup> Currency pool loans are loans that are committed in U.S. dollar equivalent terms and converted into pool units, the base unit the borrower owes, through a conversion rate—pool unit value—that is calculated on the basis of the relationship between the U.S. dollar and the component currencies in the pool. When pool units are to be repaid, they are converted back into the dollar-equivalent amount using the prevailing pool unit value. Currency pool loans are described in more detail in Appendix 1, Part 1.

<sup>15</sup> In principle, the future could be indefinite, but compilers are encouraged to make some commonsense assumptions about the average maturity of deposits with no stated maturity.

### Projected Payments of Index-Linked External Debt, Including Variable-Rate Interest

**6.32** Interest and principal payments on external debt may be linked to a reference index that changes over time—for instance, a variable reference interest rate index, a commodity price, or another specified price index. For such payments, projected payments should be estimated using the level of the reference index on the last day before the start of the forward-looking period, or if the link is to a change in the reference index, the recorded change for the relevant period up to the last day before the start of the forward-looking period, or the closest relevant time period available.<sup>16</sup> If the margin over the reference index is subject to change, then the margin on the last day before the start of the forward-looking period should be used. For debt payable in commodities or other goods, future payments are valued using the market price of a commodity or good as at the reference date, with the split between principal and interest payments based on the implicit interest rate at inception (see paragraph 2.95).

### Projected Payments on Loans Not Fully Disbursed

**6.33** No payments should be projected for loans that are not yet disbursed. If loans have been partially disbursed, payments should be projected only for those funds that have been disbursed. If the payment schedule in the loan contract is based on the assumption that all funds are disbursed but only partial disbursement has occurred by the reference date, then, in the absence of any other information that clearly specifies the payment schedule arising from funds that have been disbursed, it is recommended that the payment schedule in the loan contract should be prorated by the percentage of the loan that has been disbursed, e.g., if half of the loan has been disbursed, then half of each payment in the loan schedule should be reported in the debt-service schedule.<sup>17</sup>

<sup>16</sup> As in the case of projected payments of foreign currency external debt, the *Guide* takes the view that projections of future payments of index-linked external debt should be based on end-period spot reference indexes, rather than, say, forward reference indexes (see footnote 13).

<sup>17</sup> For prudent debt-management purposes, in some national practices, even if only partially disbursed, the full amounts foreseen in the payment schedule of the loan are projected for each period until the external debt outstanding at the reference date is fully repaid. Under this “truncated” approach, if half the amount is disbursed on the reference date, the loan is “repaid” in half the time that is expected in the loan schedule, thus “front-loading” the debt-service schedule.

### Projected Payments of Service-Related Debts

**6.34** In the *Guide*, if a payment to a nonresident for a service that has been provided is outstanding at the reference date, it is classified as an external debt liability.<sup>18</sup> Given this, any future payments for services-related debt—such as fees, charges, and commissions that have already been provided by the reference date but not yet been paid—are classified as principal payments, within trade credit and advances (unless they are classified as debt liabilities to direct investment enterprises/direct investors/fellow enterprises, in Direct investment: Intercompany lending). Any projection of fees that depend on moving reference amounts, such as undrawn commitments, should be based on the reference amount at the reference date. 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.<sup>19</sup>

### Projected Payments of External Debt with the Provision for Early Repayment

**6.35** An external debt liability may include a provision that allows the creditor to request early repayment. For instance, the creditor may have an option to redeem the debt early through a put (sell) option. In principle, projected payments can be estimated both without and with reference to this embedded put option. For instance, a ten-year bond with a put option after five years can be assumed at inception to have a repayment date of ten years and payments recorded up until that date. Alternatively, for this bond the earliest possible date for repayment of five years could be assumed, with projected payments finishing at that time. The preference in the *Guide* is to project debt-service payments on the basis of the original maturity (ten years in the example) but to provide additional information on payments based on the earliest repayment date (five years in the example). But it is recognized that national practice may be to estimate projected payments on bonds with embed-

ded put options only until the option date (five years in the example), with additional information on the projected payments on the bond up until the original maturity date (ten years in the example).<sup>20</sup>

### Projected Payments of Credit-Linked External Debt

**6.36** Payments of interest and/or principal may be linked to the credit rating of another borrower(s), such as in a credit-linked note. In these instances, the credit rating of the other borrower(s) on the last day before the start of the forward-looking period should be used to project payments.

### Projected Payments Arising from Reverse Transactions

**6.37** Under the recording approach for reverse transactions—the collateralized loan approach—a security provider records a loan liability when cash funds are involved. In the debt-service payment schedule, the security provider records the full amount of the loan to be paid at maturity under principal. If the reverse transaction has an “open” maturity,<sup>21</sup> the loan should be recorded as on-demand, under the immediate time category in the presentation of the debt-service payment schedule, unless there is clear evidence to suggest otherwise.

### Projected Payments on Financial Leases

**6.38** Projected payments on financial leases must be divided into interest and principal payments. The amount of interest payments can be calculated using the implicit rate of interest on the loan, with all other payments recorded as principal payments. Conceptually, at inception, the implicit rate of interest on the loan is that which equates the market value of the good provided at the time of lease initiation—the value of the loan—with the discounted value of future payments in rentals over the life of the lease, including any residual value of the good to be returned (or purchased) at the maturity of the lease.

<sup>18</sup>The provision of services should be recorded on an accrual basis in each accounting period (i.e., services should be recorded as they are rendered, not when payments are made—see *BPM6*, paragraph 3.47). When a service is rendered, a debt liability is created and exists until payment is made (see paragraph 2.27).

<sup>19</sup>The *Guide* recommends that financial intermediation services indirectly measured (FISIM) when applicable are to be included with interest in the debt-service payment schedule.

<sup>20</sup>The debtor might have an option to call (buy back) external debt early, which would also result in a drain on liquidity. But unlike the put option for the creditor, this drain is unlikely to be exercised except at a convenient time for the debtor. Consequently, in assessing vulnerability, information on external debt containing put options is more significant.

<sup>21</sup>“Open” maturity is where both parties agree daily to renew or terminate the agreement. Such an arrangement avoids settlement costs if both parties wish to renew the reverse transaction on a continuing basis.







# 7

## Further Presentation Tables of External Debt

### Introduction

**7.1** This chapter introduces presentation tables that facilitate a more detailed examination of the potential liquidity and solvency risks to the economy that might arise from the acquisition of external liabilities. These tables provide information that supplements that included in the gross external debt position presented earlier in the *Guide*. More specifically, this chapter provides presentation tables on:

- External debt by short-term remaining maturity (Table 7.1)
- Debt-service payment schedule (Tables 7.2–7.5)
- Foreign and domestic currency external debt (Tables 7.6–7.9)
- Interest rates and external debt (Tables 7.10 and 7.11)
- External debt by creditor sector (Table 7.12 and 7.13)
- Net external debt position (Table 7.14)
- Reconciliation of external debt positions and flows (Table 7.15)
- Traded debt instruments (Tables 7.16 and 7.17)
- Cross-border trade-related credit (Table 7.18)

**7.2** For any individual economy, the relevance of any table in this chapter will depend upon the circumstances facing it, so the *Guide* does not provide a list of priorities for compiling the tables ahead. Indeed, the tables are provided as flexible frameworks to be used by countries in the long-term development of their external debt statistics. Nevertheless, experience suggests that data on debt-maturity profiles and currency breakdowns are essential to a comprehensive analysis of external vulnerability for any economy. For the IMF's data dissemination standards, the tables for

the debt-service payment schedule—Tables 7.2 and 7.5 (SDDS) and Table 7.3 (GDDS)—are relevant, as is the table on foreign currency and domestic currency debt, Table 7.6 (SDDS).<sup>1</sup>

**7.3** Because the concepts for its measurement remain consistent throughout the *Guide*, the gross external debt position for each institutional sector and for the total economy should be the same regardless of the presentation table employed, provided that the same approach to valuing debt securities is adopted throughout. In addition, because the concepts remain consistent, if necessary, compilers can combine different characteristics of external debt in presentations other than those set out below. In disseminating data, compilers are encouraged to provide methodological notes (metadata) explaining the concepts and methods used in compiling the data.

**7.4** Throughout this chapter, except where stated otherwise, the first level of disaggregation by row is by debtor sector, followed (where relevant) by maturity on an original maturity basis. In the tables, the institutional sector presentation is provided, but the presentations can also be provided on a public sector basis, as set out in Chapter 5. Because of the particular importance of both measures, the debt-service payment schedule is presented on both an institutional (Tables 7.2 and 7.5) and a public sector basis (Tables 7.3 and 7.4).

### External Debt by Short-Term Remaining Maturity

**7.5** Gross external debt position data by short-term remaining maturity for the total economy is presented in memorandum Table 4.3. In addition, Table 7.1 is

<sup>1</sup>Box 4.1 provides the precise requirements for the external debt category of the IMF's data dissemination standards.

<b>Table 7.1 Gross External Debt Position: Short-Term Remaining Maturity—By Sector</b>	
	<b>End Period</b>
<b>General Government</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Central Bank</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Other Sectors</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Other financial corporations</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	

<b>Table 7.1 (Concluded)</b>	
	<b>End Period</b>
<b>Other Sectors, continued</b>	
<b>Nonfinancial corporations</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Households and nonprofit institutions serving households (NPISHs)</b>	
<b>Short-term debt on an original maturity basis</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2,3</sup>	
<b>Long-term debt obligations due for payment within one year or less</b>	
Currency and deposits <sup>1</sup>	
Debt securities	
Loans	
Trade credit and advances	
Other debt liabilities <sup>2</sup>	
<b>Direct Investment: Intercompany Lending<sup>4</sup></b>	
<b>Short-term on an original maturity basis</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Long-term debt obligations due for payment within one year or less</b>	
Debt liabilities of direct investment enterprises to direct investors	
Debt liabilities of direct investors to direct investment enterprises	
Debt liabilities between fellow enterprises	
<b>Total Short-Term External Debt (remaining maturity basis)</b>	
<b>Memorandum Items</b>	
<b>Arrears: By Sector</b>	
General government	
Central bank	
Deposit-taking corporations, except the central bank	
Other sectors	
Direct investment: Intercompany lending	
<b>Debt securities by Sector: Short-term on a remaining maturity basis<sup>5</sup></b>	
General government	
Central bank	
Deposit-taking corporations, except the central bank	
Other sectors	
<b>Reserve related liabilities</b>	

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term, and separately identified by sectors in memorandum items.

<sup>4</sup> If data on intercompany lending on a short-term remaining maturity basis are available.

<sup>5</sup> Debt securities are valued at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table. Debt securities in the memorandum items do not include those that may be included in Direct Investment: Intercompany Lending.

### Box 7.1 High-Frequency Debt-Monitoring Systems

To enable authorities to monitor developments in short-term capital flows as a source of external vulnerability, a number of countries, with the help of IMF staff, have developed monitoring systems that generate timely high-frequency data on the liabilities of domestic banks to foreign banks. This box briefly sets out the rationale for such systems, their coverage, the institutional considerations, and the use of these data.

#### Rationale and Design Objective

High-frequency debt-monitoring systems are intended to monitor developments in short-term financial flows, which are a major source of external vulnerability and an important factor in crisis prevention and/or resolution. Such systems are designed to obtain high-quality data within very short time intervals (typically, a day).

#### Coverage

Given these objectives, high-frequency debt-monitoring systems are typically limited to cover consolidated interbank transactions of domestic banks, including their offshore branches and subsidiaries, vis-à-vis foreign banks. The core set of instruments that are typically covered include short-term interbank credits, trade credit lines, payments falling due on medium- and long-term loans, and receipts and payments related to financial derivatives. Reporting institutions usually provide data on amounts due and paid in the reporting period, new lines extended, interest spreads over LIBOR, and maturities. With regard to country classification, individual banks are attributed to the country in which their headquarters is located.

#### Institutional Considerations

Monitoring systems have been tailored to the specific circumstances of individual countries. However, there are

certain minimum requirements—in general, a capacity to collect, process, and communicate high-quality data with short lags. Key factors in the success of such systems include close coordination between the authorities and banks, which may be facilitated by preexisting reporting requirements, and the proportion of external financial flows being channeled through the domestic banking system (and, if relevant, other reporting institutions). Although a capacity must be developed to respond promptly to questions, and to identify and approach banks about emerging problems, the authorities need to be sensitive to concerns that private sector participants might misinterpret requests for information.

#### Use and Interpretation of Data

The information provided permits the tracking of roll-over rates, changes in exposure, and the terms of external obligations, which help to assess changes in international capital market conditions and creditors' assessments of the borrowing country. (It may also reveal differing assessments of different institutions within the country.) Interpretation of the data involves considerable judgment, requiring analysis of supply-and-demand-side factors in order to shed more light on the agents' motivations behind the monitored transactions and, thus, the soundness of a country's external position. Supply-side considerations include factors such as shifts in creditor bank strategies, banking sector or country risk, and institutional/regulatory changes in the source country. Demand for interbank lines may be affected, e.g., by fluctuations of imports or an increase/decrease in the reliance on local financing sources, such as foreign currency time deposits.

provided for presenting gross external debt position data by short-term remaining maturity further disaggregated by institutional sector. Information on the total short-term debt of the total economy, both on an original and remaining maturity basis, as well as by sector, is of analytical interest (see Box 7.1). For compiling the data for this table, direct investment: intercompany lending should be attributed to long-term maturity, unless detailed information is available to provide data on a short-term remaining maturity basis.

**7.6** Compiling such information helps in the assessment of liquidity risk by indicating that part of the gross external debt position that is expected to fall due in the coming year. Also, by separately indicating short-term debt on an original maturity basis from debt on a long-term basis falling due in the coming year, the presentation provides additional information

content, such as the extent to which high short-term remaining maturity data is due (or not) to significant debt payments expected on long-term debt (original maturity basis).

**7.7** Total value of arrears (if applicable) and debt securities by sector are separately identified in memorandum items to Table 7.1. Arrears are recorded until the liability is extinguished, and are presented in nominal value in the memorandum items.<sup>2</sup> This *Guide* recommends that both nominal and market values be provided for debt securities (see paragraph 2.33). For this purpose, in memorandum items to Table 7.1, debt

<sup>2</sup>Therefore, if applicable, any debt instruments listed under short-term debt on an original maturity basis and long-term obligations due for payment within one year or less in Table 7.1 may include arrears.

securities are valued either at market value if they are presented at nominal value in the table, or at nominal value if they are presented at market value in the table.

**7.8** Reserve related liabilities (on a remaining maturity basis) are also separately identified in the memorandum items to Table 7.1. This information is of analytical interest to assess reserve assets data (see paragraph 3.47).

**7.9** The concept of short-term remaining maturity can also be applied to other tables in this chapter, such as those relating to foreign-currency external debt.

### Debt-Service Payment Schedule

**7.10** Like the short-term remaining maturity presentation table, as mentioned in the previous chapter, a debt-service payment schedule supports the assessment of liquidity risk.

**7.11** Table 7.2 gives a presentation of a debt-service payment schedule. The data to be presented in this table are projected future payments of interest and principal on gross external debt outstanding on the reference date.<sup>3</sup> The data should not cover projected future payments on external debt not yet outstanding. Direct investment: intercompany lending is separately identified, although it is recognized that sometimes the payments schedule on debt liabilities between related enterprises might not always be known with precision.

**7.12** In the table, the columns are time periods of one year and less, over one year to two years, and over two years. The time frame in the table could be extended. Annual payment data for each year from two years up to five years ahead would help to identify potential significant payment amounts well in advance. Some countries provide annual data for each year out to 10 or 15 years.

**7.13** Subperiods are presented within the time periods of one year or less, and over one year to two years:

in the one year or less period, quarterly subperiods are presented together with an “immediate” category (see paragraph 7.14); in the over one year to two years time period, semiannual (semester) subperiods are presented. The column “more than 0 to 3” months covers payments of up to three months (excluding those payments falling under “immediate”); the column “more than 3 to 6” months covers payments due in more than three months up to six months; the column “more than 6 to 9” months covers payments due in more than six months up to nine months; the column “more than 9 to 12” months covers payments due in more than nine months up to 12 months; the column “more than 12 to 18” months covers payments due in more than 12 months up to 18 months; the column “more than 18 to 24” months covers payments due in more than 18 months up to 24 months.

**7.14** The time period of one year or less includes a subperiod of “immediate” that covers all debt that is payable on demand, e.g., certain types of bank deposits, as well as debt that is past due (arrears, including interest on arrears). Debt that is technically due immediately is different in nature from debt due in one year or less because the actual timing of payment on debt due immediately is uncertain. Without an “immediate” time period specified, there is a possibility that an analytically misleading impression could be given by the data for short-term debt—some of this debt might not be repaid for some time.

**7.15** For public debt managers, the monitoring of the debt-service payment schedule for public and publicly guaranteed private sector debt is essential for debt-management strategy and to ensure that payments are made on a timely basis. Table 7.3 provides a debt-service payment schedule that presents debt-service payments on a public sector basis but is otherwise identical to Table 7.2. Table 7.4 presents a debt-service payment schedule for public and publicly guaranteed private sector external debt, with no instrument breakdown. Subperiods are presented within time periods of one year or less, over one year to two years, and over two years (each year from over two years up to five years ahead, and for two five-year groups, and data for over 15 years). The time frame of Table 7.4 can also be applied to the other tables that present a debt-service payment schedule (Tables 7.2 and 7.3).

<sup>3</sup>Debt-service payments can also be projected on the basis not only of outstanding debt on the reference date, but additionally on debt not yet, but expected to be, outstanding, e.g., loans that have been agreed but not disbursed and short-term debt that might be assumed to be renewed. This *Guide* does not provide guidance for projecting payments on expected disbursements because its focus is on outstanding, not projected, debt.

Table 7.2 Debt-Service Payment Schedule—By Sector

	For Outstanding External Debt as at End Period						
	One year or less (months)				More than one year to two years (months)		More than two years
	Immediate <sup>1</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	
<b>General Government</b>							
<b>Special drawing rights (allocations)</b>							
Principal							
Interest							
<b>Currency and deposits</b>							
Principal							
Interest							
<b>Debt securities</b>							
Principal							
Interest							
<b>Loans</b>							
Principal							
Interest							
<b>Trade credit and advances</b>							
Principal							
Interest							
<b>Other debt liabilities<sup>2,3</sup></b>							
Principal							
Interest							
<b>Central Bank</b>							
<b>Special drawing rights (allocations)</b>							
Principal							
Interest							
<b>Currency and deposits</b>							
Principal							
Interest							
<b>Debt securities</b>							
Principal							
Interest							
<b>Loans</b>							
Principal							
Interest							
<b>Trade credit and advances</b>							
Principal							
Interest							
<b>Other debt liabilities<sup>2,3</sup></b>							
Principal							
Interest							
<b>Deposit-Taking Corporations, except the Central Bank</b>							
<b>Currency and deposits</b>							
Principal							
Interest							
<b>Debt securities</b>							
Principal							
Interest							
<b>Loans</b>							
Principal							
Interest							
<b>Trade credit and advances</b>							
Principal							
Interest							
<b>Other debt liabilities<sup>2,3</sup></b>							
Principal							
Interest							
<b>Other Sectors</b>							
<b>Currency and deposits</b>							
Principal							
Interest							
<b>Debt securities</b>							
Principal							
Interest							
<b>Loans</b>							
Principal							
Interest							
<b>Trade credit and advances</b>							
Principal							
Interest							
<b>Other debt liabilities<sup>2,3</sup></b>							
Principal							
Interest							
<b>Other financial corporations</b>							
<b>Currency and deposits</b>							
Principal							
Interest							
<b>Debt securities</b>							
Principal							
Interest							

(Continued)

	For Outstanding External Debt as at End Period							
	One year or less (months)					More than one year to two years (months)		More than two years
	Immediate <sup>1</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	More than 18 to 24	
<b>Other financial corporations, continued</b>								
<b>Loans</b>								
Principal								
Interest								
<b>Trade credit and advances</b>								
Principal								
Interest								
<b>Other debt liabilities<sup>2,3</sup></b>								
Principal								
Interest								
<b>Nonfinancial corporations</b>								
<b>Currency and deposits</b>								
Principal								
Interest								
<b>Debt securities</b>								
Principal								
Interest								
<b>Loans</b>								
Principal								
Interest								
<b>Trade credit and advances</b>								
Principal								
Interest								
<b>Other debt liabilities<sup>2,3</sup></b>								
Principal								
Interest								
<b>Households and nonprofit institutions serving households (NPISHs)</b>								
<b>Currency and deposits</b>								
Principal								
Interest								
<b>Debt securities</b>								
Principal								
Interest								
<b>Loans</b>								
Principal								
Interest								
<b>Trade credit and advances</b>								
Principal								
Interest								
<b>Other debt liabilities<sup>2,3</sup></b>								
Principal								
Interest								
<b>Direct Investment: Intercompany Lending</b>								
Debt liabilities of direct investment enterprises to direct investors								
Principal								
Interest								
Debt liabilities of direct investors to direct investment enterprises								
Principal								
Interest								
Debt liabilities between fellow enterprises								
Principal								
Interest								
<b>Gross External Debt Payments</b>								
Principal								
Interest								
<b>Memorandum Items</b>								
<b>Securities with Embedded Options<sup>4</sup></b>								
<b>General Government</b>								
Principal								
Interest								
<b>Central Bank</b>								
Principal								
Interest								
<b>Deposit-Taking Corporations, except the Central Bank</b>								
Principal								
Interest								
<b>Other Sectors</b>								
Principal								
Interest								

<sup>1</sup> Immediately available on demand and/or immediately due (including arrears and interest on arrears).

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.

<sup>4</sup> Include only those securities that contain an embedded option with a date on which or after which the debt can be sold back to the debtor.

**Table 7.3 Debt-Service Payment Schedule: Public and Publicly Guaranteed Private Sector Debt and Private Sector Debt Not Publicly Guaranteed**

	For Outstanding External Debt as at End Period							
	One year or less (months)					More than one year to two years (months)		More than two years
	Immediate <sup>1</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	More than 18 to 24	
<b>Public and Publicly Guaranteed Private Sector External Debt</b>								
<b>Special drawing rights (allocations)</b>								
Principal								
Interest								
<b>Currency and deposits</b>								
Principal								
Interest								
<b>Debt securities</b>								
Principal								
Interest								
<b>Loans</b>								
Principal								
Interest								
<b>Trade credit and advances</b>								
Principal								
Interest								
<b>Other debt liabilities<sup>2,3</sup></b>								
Principal								
Interest								
<b>Direct Investment: Intercompany Lending</b>								
Debt liabilities of direct investment enterprises to direct investors								
Principal								
Interest								
Debt liabilities of direct investors to direct investment enterprises								
Principal								
Interest								
Debt liabilities between fellow enterprises								
Principal								
Interest								
<b>Private Sector External Debt Not Publicly Guaranteed</b>								
<b>Currency and deposits</b>								
Principal								
Interest								
<b>Debt securities</b>								
Principal								
Interest								
<b>Loans</b>								
Principal								
Interest								
<b>Trade credit and advances</b>								
Principal								
Interest								
<b>Other debt liabilities<sup>2,3</sup></b>								
Principal								
Interest								
<b>Direct Investment: Intercompany Lending</b>								
Debt liabilities of direct investment enterprises to direct investors								
Principal								
Interest								
Debt liabilities of direct investors to direct investment enterprises								
Principal								
Interest								
Debt liabilities between fellow enterprises								
Principal								
Interest								

(Continued)

**Table 7.3 Debt-Service Payment Schedule: Public and Publicly Guaranteed Private Sector Debt and Private Sector Debt Not Publicly Guaranteed (Concluded)**

	For Outstanding External Debt as at End Period							
	One year or less (months)					More than one year to two years (months)		More than two years
	Immediate <sup>1</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	More than 18 to 24	
<b>Gross External Debt Payments</b>								
Principal								
Interest								
<b>Memorandum Items</b>								
<b>Securities with Embedded Options<sup>4</sup></b>								
<b>Public and Publicly Guaranteed Private Sector External Debt</b>								
Principal								
Interest								
<b>Private Sector External Debt Not Publicly Guaranteed</b>								
Principal								
Interest								

<sup>1</sup> Immediately available on demand and/or immediately due (including arrears and interest on arrears).

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.

<sup>4</sup> Include only those securities that contain an embedded option with a date on which or after which the debt can be sold back to the debtor.

**Table 7.4 Debt-Service Payment Schedule: Public and Publicly Guaranteed Private Sector Debt**

	For Outstanding Public and Publicly Guaranteed Private Sector External Debt as at End Period												
	One year or less (months)					More than one year to two years (months)			More than two years				
	Immediate <sup>1</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	More than 18 to 24	3	4	5	More than 5 to 10	More than 10 to 15	More than 15
<b>Public Sector External Debt</b>													
Principal													
Interest													
<b>Publicly-Guaranteed Private Sector External Debt</b>													
Principal													
Interest													
<b>Total</b>													
Principal													
Interest													

<sup>1</sup> Immediately available on demand and/or immediately due (including arrears and interest on arrears).

7.16 The SDR debt-service payment schedule in these tables is presented as follows: interest should include interest payments on SDR allocations. The SDR allocation reported for the most recent period in the gross external debt position data should be

included as principal in the “more than two years” column in Tables 7.2 and 7.3, and in the “more than 15” years column in Table 7.4. For the purpose of these tables, interest payments are not shown in the “more than two years” column in Tables 7.2 and 7.3,



and in the “more than 15” years column in Table 7.4. For debt sustainability analysis (DSA) purposes (see Chapter 14), the repayment of SDR allocations (principal) is excluded from the debt-service payment schedule, and interest payments on SDR allocations are included, only in the circumstance, and only to the extent (amount), that interest payments on SDR allocations exceed interest receipts on SDR holdings. SDR allocations should also be excluded for the purpose of the calculation of the average maturity of the gross external debt position because they are long-term debt liabilities, which maturity cannot be anticipated.

**7.17** When securities contain an embedded option with a date on which or after which the debt can be put (sold) back to the debtor by the creditor, as explained in the previous chapter, the preference of the *Guide* is that projected payments in Tables 7.2 to 7.4 be estimated without reference to these embedded put options, but that memorandum items on projected payments be provided assuming early repayment at the option date.

**7.18** If national practice is to estimate projected payments on bonds with embedded put options only until the option date, additional memorandum information could be provided on the projected payments on the bond up until the original maturity date.

**7.19** Other embedded options might not include a set date, but their exercise may be dependent on certain conditions occurring, such as a credit rating downgrade, or in the instance of a convertible bond, the price of equity reaching a certain level. While no memorandum item is provided for these instruments, where significant, additional data could be compiled on the value and type of this external debt. In particular, and if significant, credit-linked note instruments should be separately identified in a memorandum item. In some economies, there may be interest in historical debt-service data, i.e., past payments of principal and interest on long-term borrowings, including prepayments of debt.

**7.20** To address the analytical need for detailed data on external debt payments coming due in the next 12 months, Table 7.5 presents the principal and interest payments due in one year or less on the outstanding external debt, broken down by institutional sec-

**Table 7.5 Gross External Debt Position: Principal and Interest Payments Due in One Year or Less—By Sector<sup>1</sup>**

	For Outstanding External Debt as at End Period
<b>General Government</b>	
Principal	
Interest	
<b>Central Bank</b>	
Principal	
Interest	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
Principal	
Interest	
<b>Other Sectors</b>	
Principal	
Interest	
<b>Direct Investment: Intercompany Lending<sup>2</sup></b>	
Principal	
Interest	
<b>Total</b>	
Principal	
Interest	

<sup>1</sup>Including debt immediately available on demand and/or immediately due (including arrears and interest on arrears).

<sup>2</sup>Direct Investment: Intercompany Lending should preferably be disseminated separately from the four sectors. Alternatively, Direct Investment: Intercompany Lending should be reported under its relevant sector.

tor. This table is a simplified version of, but not a substitute for, the debt-service payment schedule presented in Table 7.2.

## Foreign Currency and Domestic Currency External Debt

**7.21** Experience suggests that information on the currency composition of the gross external debt position is necessary for monitoring an economy’s potential vulnerability to solvency and liquidity risk. For instance, a depreciation of the exchange rate can increase the burden of foreign currency debt liabilities in domestic currency terms for the resident debtor (although there may be beneficial effects, such as an improvement in the competitiveness of an economy’s exports of goods and services), while payments on foreign currency debt can cause downward pressure on the domestic exchange rate and/or outflows of foreign currency from the economy. Some of the impact can be offset through the use of financial derivatives and natural

**Table 7.6 Gross External Debt Position: Foreign Currency and Domestic Currency Denominated Debt**

	End Period
<b>Foreign currency<sup>1</sup></b>	
Short-term	
Long-term	
<b>Domestic currency</b>	
Short-term	
Long-term	
<b>Unallocated</b>	
<b>Gross External Debt Position</b>	

<sup>1</sup> Includes foreign-currency-linked debt.

hedges such as foreign currency assets and income, but, unlike the domestic currency, the domestic monetary authority cannot create additional foreign currency.

**7.22** Four tables are provided to help users understand the risks to the economy of foreign currency external debt. Table 7.6 is a simple foreign currency/domestic currency split of the gross external debt position; Table 7.7 is similar to Table 7.6 but provides detailed breakdown by institutional sector, maturity, and type of debt instrument; Table 7.8 provides more information on the foreign currency external debt position; and Table 7.9 provides information on foreign currency payments.

### Domestic Currency/Foreign Currency Split of the Gross External Debt Position

**7.23** Table 7.6 provides information on the foreign currency and domestic currency split by currency of denomination of the gross external debt position for the total economy.<sup>4</sup> The definition of foreign currency debt in this table includes both foreign currency<sup>5</sup> and foreign-currency-linked debt (see paragraph 6.13). Foreign-currency-linked debt is included with foreign currency debt because a depreciation of the exchange rate can increase the burden of foreign-currency-linked debt liabilities in domestic currency terms for the resident debtor. In recognition that for some sectors, such as non-financial corporations and households, there may be difficulties in obtaining comprehensive data on the

<sup>4</sup>The currency of settlement may be different from the currency of denomination (see paragraph 6.13), and if significant, attribution of external debt by currency of settlement can be presented as a separate subcategory.

<sup>5</sup>Including external debt payable in a foreign currency, but with the amounts to be paid linked to a domestic currency.

domestic currency/foreign currency split, the table includes an “unallocated” category.

**7.24** A special case arises where an economy uses as its legal tender a currency issued by a monetary authority of another economy, such as U.S. dollars, or of a common currency area to which the economy does not belong. While this currency is to be classified as a foreign currency, it has some of the attributes of a domestic currency because domestic transactions are settled in this currency. With this in mind, information could be separately provided on external debt payable in and/or linked to a foreign currency used as legal tender in the domestic economy, and other foreign currency external debt.

**7.25** Table 7.6 is based on the original maturity concept; data could also be compiled on a remaining-maturity basis. If significant, the foreign currency debt could be disaggregated into external debt that is payable in foreign currency and external debt that is payable in domestic currency, but with the amounts to be paid linked to a foreign currency (foreign-currency-linked debt). Further disaggregation of the table into institutional sectors and instruments is provided in Table 7.7.<sup>6</sup>

### Gross Foreign Currency External Debt

**7.26** For those economies with significant gross foreign currency external debt, Table 7.8 presents more detailed information on the position. This table provides an attribution of foreign currency (including foreign-currency-linked external debt) by major foreign currency: U.S. dollars, euros, and Japanese yen. Further individual currencies could be added. Dissemination of this detailed information is encouraged because it provides further information on the exposure to exchange rate movements to that set out in Tables 7.6 and 7.7.

**7.27** Table 7.8 could be extended to also include foreign currency and foreign-currency-linked debt owed by each resident sector to each other resident institutional sector. While such debt is beyond the definition of external debt, it can result in cross-institutional sector transfers of income when there are movements

<sup>6</sup>This table is similar to *BPM6* supplementary Table A9-III-2a on currency composition of debt liabilities to nonresidents by sector and instrument.

**Table 7.7 Gross External Debt Position: Foreign Currency and Domestic Currency Denominated Debt by Sector**

	Foreign currency	Domestic currency	Unallocated	Total
<b>General Government</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Special drawing rights (allocations)				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Central Bank</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Special drawing rights (allocations)				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Deposit-Taking Corporations, except the Central Bank</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Other Sectors</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Direct Investment: Intercompany Lending</b>				
Debt liabilities of direct investment enterprises to direct investors				
Debt liabilities of direct investors to direct investment enterprises				
Debt liabilities between fellow enterprises				
<b>Gross External Debt Position</b>				

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.

Table 7.8 Gross External Foreign Currency and Foreign-Currency-Linked Debt Position

	End Period				
	Total	U.S. dollar	Euro	Yen	Other
<b>General Government</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Central Bank</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Deposit-Taking Corporations, except the Central Bank</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Other Sectors</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Other financial corporations</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Nonfinancial corporations</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Households and nonprofit institutions serving households (NPISHs)</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Direct Investment: Intercompany Lending</b>					
Debt liabilities of direct investment enterprises to direct investors					
Debt liabilities of direct investors to direct investment enterprises					
Debt liabilities between fellow enterprises					
<b>Gross External Foreign Currency and Foreign-Currency-Linked Debt Position</b>					
<b>Memorandum Items</b>					
<b>Financial Derivatives: Notional Value of Foreign Currency and Foreign-Currency-Linked Contracts with Nonresidents<sup>2</sup></b>					
<b>To Receive Foreign Currency</b>					
General government					
Forwards					
Options					
Central Bank					
Forwards					
Options					
Deposit-taking corporations, except the Central Bank					
Forwards					
Options					
Other sectors					
Forwards					
Options					
Other financial corporations					
Forwards					
Options					
Nonfinancial corporations					
Forwards					
Options					
Households and nonprofit institutions serving households (NPISHs)					
Forwards					
Options					
<b>To Pay Foreign Currency</b>					
General government					
Forwards					
Options					
Central Bank					
Forwards					
Options					
Deposit-taking corporations, except the Central Bank					
Forwards					
Options					
Other sectors					
Forwards					
Options					
Other financial corporations					
Forwards					
Options					
Nonfinancial corporations					
Forwards					
Options					
Households and nonprofit institutions serving households (NPISHs)					
Forwards					
Options					

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Excludes financial derivatives that are included in reserve assets data, i.e., financial derivatives that pertain to the management of reserve assets are integral to the valuation of such assets, are settled in foreign currency, and are under the effective control of the monetary authority.

in the domestic exchange rate vis-à-vis foreign currencies, thus affecting economic activity and financial stability. However, if such data are added to the data on nonresident claims, it should be remembered that if, e.g., a resident bank funds a foreign currency loan to a resident corporation by borrowing from a nonresident, the foreign currency liabilities would appear in both the resident/resident and resident/nonresident data.

**7.28** In the special case where an economy uses as its legal tender a foreign currency, borrowing in this currency from nonresidents could be separately identified in the table.

**7.29** A memorandum item is provided in Table 7.8 for the notional value—the amount underlying a financial derivatives contract that is necessary for calculating payments or receipts on the contract—of foreign currency and foreign-currency-linked financial derivatives contracts with nonresidents both to receive and pay foreign currency, and by type of currency.<sup>7</sup> A financial derivatives contract to purchase foreign currency with domestic currency is classified as a financial derivative to receive foreign currency. If, instead, the contract is to purchase domestic currency with foreign currency at a future date, this is a financial derivative to pay foreign currency. Similarly, an option to buy foreign currency (sell domestic currency) is classified as a financial derivative to receive foreign currency, and vice versa. Determining the currency of denomination is not always clear in financial derivative contracts to purchase or sell foreign currency using domestic currency. The decisive factor in determining whether the financial derivative is to be classified as receiving or paying foreign currency is the exposure to currency movements, so if payment of a financial derivatives contract is linked to a foreign currency even though payment is required in domestic currency, the financial derivative is to be classified as a contract to pay foreign currency, and vice versa.

**7.30** Through the use of financial derivatives, the economy could become more, or less, exposed to exchange rate risk than is evidenced in the gross

foreign currency external debt data. In this context, the notional value data, by providing a broad indication of the potential transfer of price risk underlying the financial derivatives contract, are analytically useful.

**7.31** The notional amount is comparable with the values for debt instruments; for instance, if a foreign currency debt instrument is issued and the proceeds sold for domestic currency with an agreement to repurchase the foreign currency with domestic currency at a future date—known as a currency or for ex swap—the notional amount of the financial derivative is equal to the amount swapped. Therefore, these amounts provide an indication of the scale of activity by institutional sectors in foreign currency financial derivatives; the extent to which institutional sectors might be covering the foreign currency risk of their borrowing; and/or the extent to which institutional sectors may be exposed to foreign currency risk through financial derivatives contracts. Table 7.8 distinguishes between forwards and options and so can be used to indicate their relative shares of total foreign currency financial derivatives.

**7.32** A breakdown of positions by institutional sector into forwards (including swaps) and options is provided because of their different characteristics. Notably, forwards often involve the delivery or receipt of the notional amount of foreign currency underlying the contract, whereas the settlement of an option is likely to involve only a net settlement of the market value.<sup>8</sup>

**7.33** If a single financial derivatives contract both pays and receives foreign currency, the notional amount should be included under both pay and receive foreign currency. Not only does this ensure completeness of reporting, it also allows for the possibility of attributing financial derivatives contracts by type of currency. If a financial derivatives contract requires the payment or receipt of foreign currency in return for something other than a currency (e.g., a commodity), the notional amount should be included under either the receipt or payment of the foreign currency, as appropriate. If these contracts are significant, they could be separately identified.

<sup>7</sup>For those economies that use a foreign currency, such as the U.S. dollar, as legal tender, information on the notional value of foreign currency derivatives to receive and pay this foreign currency, such as U.S. dollars, could be presented.

<sup>8</sup>According to data published semiannually by the Bank for International Settlements, market values of foreign currency options are typically around 2 to 4 percent of the notional amount.

### Projected Payments in Foreign Currencies Vis-à-Vis Nonresidents

7.34 Table 7.9 sets out a foreign currency payment schedule, and a memorandum item of selected foreign currency and foreign-currency-linked external asset positions. It provides an idea of the future potential drains of foreign currency resources from the economy to nonresidents, along with the external foreign currency assets that may be available to meet such drains in the short term. While there is always difficulty in ascertaining the extent to which it might be possible to use assets to meet outstanding debt obligations as they come due, the memorandum item provides a broad approximation of the concept of foreign currency liquidity by listing selected asset types that would most likely be available in the short term. Only obligations to and claims on nonresidents are to be included in this table.

7.35 The deposit-taking corporations, except the central bank, other financial corporations, and non-financial corporations are presented in the table, but not the central bank and general government sectors because a framework for the dissemination of similar, but not identical, data for these two sectors is provided by the Data Template on International Reserves and Foreign Currency Liquidity.<sup>9</sup> However, the table could be extended to cover these sectors.

7.36 The rows in the table present types of foreign currency payments (and receipts); the time period columns are defined identically to those in the debt-service schedule (Table 7.2).<sup>10</sup> Because the focus is

<sup>9</sup>This is a template on international reserves and foreign currency liquidity that was introduced as a prescribed component of the SDDS in March 1999 by the IMF's Executive Board. The template provides a considerably greater degree of transparency on international reserves and foreign currency borrowing by the authorities than previously shown. Details are provided in the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013), see [www.imf.org/external/np/sta/ir/IRProcessWeb/dataguide.htm](http://www.imf.org/external/np/sta/ir/IRProcessWeb/dataguide.htm). These guidelines—originally issued in 2001—ensure consistency with the adoption of *BPM6* and to address some clarifications that were needed to reflect IMF experience with economies that report data in the Reserves Data Template.

<sup>10</sup>This table could be extended to also include foreign currency payments and receipts to each other resident institutional sector. However, as mentioned in paragraph 7.27, combining resident/nonresident and resident/resident foreign currency data could result in double counting (e.g., payments on a foreign currency loan by a resident corporation that was funded by a domestic bank from abroad).

on foreign currency drains, all payments in domestic currency, even if linked to a foreign currency, are excluded. Foreign currency external debt payments are those payments that are included in the debt-service payment schedule and are required in foreign currency (i.e., settled in foreign currency). The requirements to deliver and receive foreign currency from nonresidents under forward contracts include only contractual agreements to deliver and receive the nominal (notional) amounts of foreign currency underlying forward contracts such as forward foreign exchange contracts and cross-currency swaps, on contracts current and outstanding at the reference date.

7.37 This item is not intended to include projected net settlements of financial derivatives contracts involving foreign currency, because such amounts are not required under the contract and are not known until the time of settlement.<sup>11</sup> Consequently, contracts such as options and nondeliverable forwards that require only net settlement are not covered by this table. However, such contracts contribute relatively little to the value of foreign currency delivered under financial derivatives because the settlement amounts are much smaller than the notional amount and because these types of contracts have a relatively small share of the market.

7.38 The memorandum item in Table 7.9 covers positions in (and not payments of) foreign currency and foreign-currency-linked debt instruments that represent claims on nonresidents—a subcategory of the debt assets presented in the net external debt table (see Table 7.14)—plus foreign currency and foreign-currency-linked equity securities. The instruments in the table are selected on the assumption that they represent assets that might be available to meet a sudden drain of foreign exchange, i.e., as mentioned above, they provide an approximation of the concept of foreign currency liquid assets. All short-term

<sup>11</sup>As set out in paragraph 6.29, future requirements to pay/receive foreign currency under forward derivatives contracts are to be converted into the unit of account at the market (spot) rate on the reference date, i.e., consistent with the foreign-currency-conversion approach adopted throughout the *Guide*. Consequently, any gains or losses in the unit of account on these financial derivatives contracts are not reflected in this table, but would be reflected in the market value data to be reported in the financial derivatives memorandum table, Table 4.4, and in the net external debt position table set out later in this chapter (see Table 7.14).

**Table 7.9 Schedule of Projected Payments Settled in Foreign Currency Vis-à-Vis Nonresidents: Selected Institutional Sectors<sup>1</sup>**

	For External Debt and Derivatives Contracts Outstanding as at End Period							
	One year or less (months)					More than one year to two years (months)		More than two years
	Immediate <sup>2</sup>	More than 0 to 3	More than 3 to 6	More than 6 to 9	More than 9 to 12	More than 12 to 18	More than 18 to 24	
<b>Deposit-Taking Corporations, except the Central Bank</b>								
Foreign currency external debt payments								
Requirements under forward financial derivatives contracts								
To deliver foreign currency								
To receive foreign currency								
<b>Other Financial Corporations</b>								
Foreign currency external debt payments								
Requirements under forward financial derivatives contracts								
To deliver foreign currency								
To receive foreign currency								
<b>Nonfinancial Corporations</b>								
Foreign currency external debt payments								
Requirements under forward financial derivatives contracts								
To deliver foreign currency								
To receive foreign currency								
<b>Memorandum Item</b>								
<b>Selected Foreign Currency and Foreign-Currency-Linked External Asset Positions</b>						<b>Positions as at End Period</b>		
<b>Deposit-Taking Corporations, except the Central Bank</b>								
Short-term								
Currency and deposits								
Debt securities								
Loans								
Trade credit and advances								
Other debt assets <sup>3</sup>								
Long-term								
Equities								
Debt securities								
<b>Other financial corporations</b>								
Short-term								
Currency and deposits								
Debt securities								
Loans								
Trade credit and advances								
Other debt assets <sup>3</sup>								
Long-term								
Equities								
Debt securities								
<b>Nonfinancial corporations</b>								
Short-term								
Currency and deposits								
Debt securities								
Loans								
Trade credit and advances								
Other debt assets <sup>3</sup>								
Long-term								
Equities								
Debt securities								

<sup>1</sup> Payments that are settled in foreign currency regardless of the currency of denomination.<sup>2</sup> Immediately available on demand or immediately due (including arrears and interest on arrears).<sup>3</sup> Other debt assets comprise insurance, pension, and standardized guarantee schemes, and other accounts receivable-other in the IIP statement.

Table 7.10 Gross External Debt Position: Interest Rate Composition					
	End Period				
	Fixed-rate-linked		Variable-rate-linked		Total
	Amount	Percent of total	Amount	Percent of total	
<b>General Government</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Central Bank</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Deposit-Taking Corporations, except the Central Bank</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Other Sectors</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Other financial corporations</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Nonfinancial corporations</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Households and nonprofit institutions serving households (NPISHs)</b>					
Short-term <sup>1</sup>					
Long-term					
<b>Direct Investment: Intercompany Lending</b>					
Debt liabilities of direct investment enterprises to direct investors					
Debt liabilities of direct investors to direct investment enterprises					
Debt liabilities between fellow enterprises					
<b>Gross External Debt Position</b> (percentage of total external debt)					
<b>Memorandum Items (to include if significant)</b>					
<b>Notional Value of Financial Derivatives: Single-Currency Interest Rate-Related Contracts<sup>2</sup></b>					
<b>To receive fixed-rate-linked payment</b>					
General Government					
Central Bank					
Deposit-Taking Corporations, except the Central Bank					
Other sectors					
Other financial corporations					
Nonfinancial corporations					
Households and nonprofit institutions serving households (NPISHs)					
From direct investors, direct investment enterprises, and fellow enterprises					
<b>To receive variable-rate-linked payment</b>					
General Government					
Central Bank					
Deposit-Taking Corporations, except the Central Bank					
Other sectors					
Other financial corporations					
Nonfinancial corporations					
Households and nonprofit institutions serving households (NPISHs)					
From direct investors, direct investment enterprises, and fellow enterprises					

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Excludes financial derivatives that pertain to reserve asset management and are included in reserve assets data.



instruments (defined on an original maturity basis) are included along with those long-term instruments (original maturity basis) that are negotiable (equity and debt securities). Foreign-currency-linked assets are included to ensure consistency with the foreign currency and foreign-currency-linked external debt position data presented in Table 7.8. Indeed, foreign currency liabilities might be hedged by foreign-currency-linked assets, and vice versa. If foreign-currency-linked assets become significant, they could be separately identified.

## Interest Rates and External Debt

### Interest Rate Composition of External Debt

**7.39** As with the currency composition, experience suggests that information on the interest rate composition of the gross external debt position can be necessary for monitoring an economy's potential vulnerability to solvency and liquidity risk. For instance, economies with high amounts of variable-rate debt are vulnerable to a sharp increase in interest rates. Hence, Table 7.10 provides a presentation of the amounts of the gross external debt position, both in relative and absolute terms, on which interest is fixed-rate and variable-rate. Along with the value, for each cell the percentage contribution to external debt is presented. In this table, the purchase of a separate financial derivatives contract, which might alter the effective nature of the interest cash payments, does not affect the classification of the underlying instrument (see next paragraph).<sup>12</sup>

**7.40** A memorandum item is provided on the notional (or nominal) value of single-currency financial derivatives contracts with nonresidents for instances where the amounts involved are significant. These are broken down into contracts to receive fixed-rate-related cash payments and receive variable-rate-related cash payments. For instance, if all sectors reported that their external debt was all fixed-rate-linked but they had entered into derivatives contracts with nonresidents to swap all their interest payments into variable-rate-related payments, then the memorandum item would

show that despite the apparent exposure of the economy to fixed-rate interest rates, it is actually exposed to variable rates.

**7.41** In financial derivatives markets, interest rate contracts are typically referenced to a variable-rate index. To receive variable-rate-linked is to pay fixed-rate-linked, and vice versa. A financial derivative that receives variable-rate-linked is one that would have an increasing positive value, or a decreasing negative value, as the variable rate specified in the contract increases; similarly, a financial derivative that receives fixed-rate-linked has an increasing positive value, or a decreasing negative value, as the variable rate specified in the contract decreases.

### Average Interest Rates

**7.42** There is analytical interest in average interest rates on external debt. While financial derivatives contracts might arguably render these data less relevant than otherwise, these data provide information on the borrowing costs of the economy and can be used to help estimate debt-service interest rate payments, or be used to cross-check those data. In addition, concessionality of borrowing can be imputed. Information on average interest rates on direct investment borrowing is of value because, often for tax reasons, average interest rates on this debt can vary widely. Information on average interest rates on short- and long-term original maturity instruments, by institutional sector, could additionally be provided.

**7.43** In addition to weighted-average interest rates on outstanding external debt, Table 7.11 could be used to present data on the weighted-average level of interest rates agreed on new borrowing during the period.

**Table 7.11 Gross External Debt Position: Average Interest Rates**

	End Period
<b>General Government</b>	
Central Bank	
Deposit-Taking Corporations, except the Central Bank	
Other Sectors	
Other financial corporations	
Nonfinancial corporations	
Households and nonprofit institutions serving households (NPISHs)	
<b>Direct Investment: Intercompany Lending</b> (from direct investors, direct investment enterprises, and fellow enterprises)	
<b>Total Economy</b>	

<sup>12</sup>If debt whose interest is linked to a reference index or commodity/financial instrument price and which is fixed unless the reference index or price passes a particular threshold is significant—see paragraph 6.16 for the classification of these debt instruments. Additional information could be provided in notes to the tables.

## External Debt by Creditor Sector

7.44 Tables 7.12 and 7.13 present external debt position data by creditor sector. Table 7.12 provides for the presentation of creditor sector data for five non-resident creditor sectors: multilateral organizations, general government (excluding multilateral organizations), central bank,<sup>13</sup> deposit-taking corporations

(except the central bank), and other sectors. Traditionally, this information has been most readily available for nonnegotiable instruments and has been essential when undertaking debt-reorganization discussions. More broadly, information on creditor sectors has been compiled because different types of creditors may respond to changing circumstances differently,

**Table 7.12 Gross External Debt Position: By Debtor and Creditor Sectors**

	Creditor Sectors (End Period)					
	Multilateral organizations <sup>1</sup>	General government <sup>1,2</sup>	Central bank <sup>1</sup>	Deposit-taking corporations, except the central bank	Other sectors	Total
<b>General Government</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Central Bank</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Deposit-Taking Corporations, except the Central Bank</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Other Sectors</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Other financial corporations</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Nonfinancial corporations</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Households and nonprofit institutions serving households (NPISHs)</b>						
Short-term <sup>3</sup>						
Long-term						
<b>Gross External Debt Excluding Direct Investment</b>						
Short-term						
Long-term						
<b>Direct Investment: Intercompany Lending</b>						
Debt liabilities of direct investment enterprises to direct investors						
Debt liabilities of direct investors to direct investment enterprises						
Debt liabilities between fellow enterprises						
<b>Gross External Debt Position</b>						

<sup>1</sup>For the multilateral organizations, general government, and central bank creditor sectors, short-term lending, on an original maturity basis, may be insignificant, under which circumstances a short-term/long-term split may not be necessary.

<sup>2</sup>Excluding multilateral organizations.

<sup>3</sup>It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>13</sup>This category excludes multilateral monetary institutions such as the IMF, which are included under multilateral organizations, but includes regional central banks.

and this can have implications for the economic situation of an economy.

7.45 Most economies may face practical difficulties in identifying owners of debt securities.<sup>14</sup> Economies might attribute the value of all debt securities to “other sectors” as the creditor sector. If so, this assumption should be clearly identified in any presentation of data because it may be only very broadly reliable; for instance, monetary authorities hold significant quantities of cross-border securities as part of their foreign exchange reserves. An alternative approach would be to have a separate column for debt securities and exclude holdings of such securities from all the “sector” columns, as presented in Table 7.13.

7.46 Table 7.12 can be rearranged and extended as appropriate. One possibility is to divide the creditor sector information between official and other creditors. The official creditors could be further subdivided by multilateral and official bilateral creditors, and the latter could distinguish between Paris Club member creditors and non-Paris Club creditors; the disaggregation is presented in Table 7.13. Also, official bilateral debt could be separated between concessional and nonconcessional debt.

7.47 Because direct investment liabilities do not fall naturally into this presentation, totals are drawn before and after direct investment: intercompany lending. In addition, the “other sectors” as creditor sectors are not subdivided into other financial corporations, nonfinancial corporations, and households and NPISHs, since this would create an additional degree of difficulty in obtaining this creditor information. On the other hand, as private sector capital flows increase, and these creditor sectors become more significant, there could be analytical interest in identifying their claims separately. In particular, if significant, separate identification of the other financial corporations could be presented.

## Net External Debt Position

7.48 As an economy increasingly integrates with the rest of the world, so analysis of the external liability position, and gross external debt position in particular, needs to take into account positions in external

<sup>14</sup>Chapter 13 of the *Guide* discusses the compilation of debt securities.

**Table 7.13 Public and Publicly Guaranteed Private Sector External Debt Position—By Debtor and Creditor Sectors**

	End Period
<b>Public Sector External Debt<sup>1</sup></b>	
<b>Multilateral creditors<sup>2</sup></b>	
Short-term	
Long-term	
<b>Official bilateral creditors<sup>2</sup></b>	
Short-term	
Long-term	
<b>Deposit-taking corporations, except the central bank, creditors</b>	
Short-term	
Long-term	
<b>Other creditors</b>	
Short-term	
Long-term	
<b>Debt securities' holders<sup>3</sup></b>	
Short-term	
Long-term	
<b>Publicly Guaranteed Private Sector External Debt<sup>1</sup></b>	
<b>Multilateral creditors<sup>2</sup></b>	
Short-term	
Long-term	
<b>Official bilateral creditors<sup>2</sup></b>	
Short-term	
Long-term	
<b>Deposit-taking corporations, except the central bank, creditors</b>	
Short-term	
Long-term	
<b>Other creditors</b>	
Short-term	
Long-term	
<b>Debt securities' holders<sup>3</sup></b>	
Short-term	
Long-term	
<b>Total</b>	
<b>Memorandum Items</b>	
<b>Paris Club member creditors</b>	
<b>Public sector external debt</b>	
Short-term	
Long-term	
<b>Publicly guaranteed private sector external debt</b>	
Short-term	
Long-term	

<sup>1</sup>It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup>For the multilateral organizations, general government, and central bank creditor sectors, short-term lending, on an original maturity basis, may be insignificant, under which circumstances a short-term/long-term split may not be necessary.

<sup>3</sup>If debt securities are attributed to the debt securities' holders category, the holdings of such securities are excluded from all the other creditor sectors.

assets. Indeed, for risk-management purposes, entities may well manage external liabilities and assets in an integrated manner. On the other hand, there is difficulty in ascertaining the extent to which assets might be usable to meet outstanding debt liabilities.

Table 7.14 provides a presentation of net external debt position data, placing gross external debt in the context of claims on nonresidents in the form of debt instruments.

**7.49** The rows in Table 7.14 are structured as in the gross external debt position table (Table 4.1), except for “unallocated gold accounts included in monetary gold,” which are debt assets of the monetary authority (general government or central bank). The columns present gross external debt, gross external assets in debt instruments, and net debt position. A total of net external debt position plus the net financial derivatives position (this position is valued at market value and should include the position in financial derivatives held as reserve assets) is drawn at the bottom of the table. Because of their different characteristics, information distinguishing forwards (including futures and swaps) and options within financial derivatives is encouraged.<sup>15</sup>

**7.50** The data on external assets in the form of debt instruments to be included in this table are the same as presented in the IIP, with short- and long-term defined on an original maturity basis. The net external debt position is equal to gross external debt less gross external assets in debt instruments.

**7.51** Provided that debt securities are valued at market value, the net external debt position in this table equals the net IIP position, excluding all equity (equity shares and other equity) and investment fund shares assets and liabilities, all financial derivatives and ESOs assets and liabilities, and gold bullion.<sup>16</sup> While no memorandum item is provided for debt securities, if presented at nominal value in Table 7.14, additional data should be compiled on their market value (disaggregated by sector and maturity as presented in the memorandum

<sup>15</sup>Cross border liabilities in ESOs are likely to be insignificant compared to financial derivative positions and, if available, can be included with financial derivatives (options). If significant, ESOs could be separately recorded under the appropriate institutional sector.

<sup>16</sup>Monetary gold consists of gold bullion and unallocated gold accounts. Gold bullion has no counterpart liability; however, the counterpart liability of unallocated gold accounts is in deposits. In principle, the gold bullion element of monetary gold should be excluded from the calculation of net debt. However, in practice, the total amount of monetary gold may have to be used in the net debt calculation because compilers may not be able to exclude the gold bullion element (*BPM6*, paragraphs 5.74–5.77).

	End Period		
	Gross external debt position (1)	External assets in debt instruments (2)	Net external debt (3) = (1) – (2)
<b>General Government</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>	n.a.		
Debt securities			
Loans			
Trade credit and advances			
Unallocated gold accounts included in monetary gold <sup>2</sup>			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Special drawing rights			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Central Bank</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>	n.a.		
Debt securities			
Loans			
Trade credit and advances			
Unallocated gold accounts included in monetary gold <sup>2</sup>			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Special drawing rights			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Deposit-Taking Corporations, except the Central Bank</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Other Sectors</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			

(Continued)

Table 7.14 Net External Debt Position: By Sector  
(Continued)

	End Period		
	Gross external debt position (1)	External assets in debt instruments (2)	Net external debt (3) = (1) – (2)
<b>Other Sectors, continued</b>			
<b>Other financial corporations</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Nonfinancial corporations</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Households and nonprofit institutions serving households (NPISHs)</b>			
<b>Short-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3,4</sup>			
<b>Long-term</b>			
Currency and deposits <sup>1</sup>			
Debt securities			
Loans			
Trade credit and advances			
Other debt instruments <sup>3</sup>			
<b>Direct Investment:</b>			
<b>Intercompany Lending</b>			
Debt of direct investment enterprises to direct investors			
Debt of direct investors to direct investment enterprises			
Debt between fellow enterprises			
<b>Total (3)</b>			

Table 7.14 (Concluded)

Financial Derivatives	Position in Financial Derivatives at End of Period
<b>Liabilities (4)</b>	
General Government	
Forwards	
Options	
Central Bank	
Forwards	
Options	
Deposit-Taking Corporations, except the Central Bank	
Forwards	
Options	
Other sectors	
Forwards	
Options	
Other financial corporations	
Forwards	
Options	
Nonfinancial corporations	
Forwards	
Options	
Households and nonprofit institutions serving households (NPISHs)	
Forwards	
Options	
<b>Assets (5)</b>	
General Government	
Forwards	
Options	
Central Bank	
Forwards	
Options	
Deposit-Taking Corporations, except the Central Bank	
Forwards	
Options	
Other sectors	
Forwards	
Options	
Other financial corporations	
Forwards	
Options	
Nonfinancial corporations	
Forwards	
Options	
Households and nonprofit institutions serving households (NPISHs)	
Forwards	
Options	
<b>Net External Debt Position plus Financial Derivatives (6)</b>	
(6) = (3) + (4) – (5)	

n.a., not applicable.

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Monetary gold includes elements of a debt instrument (unallocated gold accounts) and a nondebt instrument (gold bullion). In principle, the gold bullion element of monetary gold should be excluded from the calculation of net external debt. However, in practice, the total amount of monetary gold may have to be used in the net external debt calculation because compilers may not be able to exclude the gold bullion element.

<sup>3</sup> Other debt instruments comprise insurance, pension, and standardized guarantee schemes, and other accounts receivable/payable—other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>4</sup> Arrears are recorded in the original debt instrument rather than in other debt instruments, short term.

item on debt securities to Table 4.1). This approach facilitates comparability with other macroeconomic statistics, including the IIP statement.

### Reconciliation of External Debt Positions and Flows

7.52 Between any two end-periods, the change in the gross external debt position can be disaggregated into component flows. These are financial transactions, valuation changes (exchange rate changes and other price changes), and other changes in volume. Such a disaggregation helps the compiler to reconcile and verify data, and it provides useful analytical information to the user of data (e.g., the extent to which changes in the gross external debt position since the previous period are due to transactions, valuation changes, and/or revisions to the previous period data).

7.53 The reconciliation of gross external debt positions at two different reference dates is set out in Table 7.15. This presentation emphasizes how changes in the external debt position result from transactions, valuation changes, and other changes in volume during the reference period. In this table, the first column is the gross external debt position at the beginning of the period, followed by the transactions during the period. Because the conceptual approach taken in the *Guide* is consistent with *BPM6*, the balance of payments transaction data can be used in the transactions column. The next two columns are valuation changes (holding gains and losses) on debt liabilities: exchange rate changes and other price changes.<sup>17</sup> These changes assume greater importance with increased volatility of prices in security and exchange rate markets. A nominal valuation presentation of debt securities would exclude any changes in value arising from market prices. Before the position at the end of the period, a fifth item of “other changes in volume” is included. These changes include reclassifications of external debt, such as when entities switch from one institutional sector to another, and when the nature of a debt instrument changes, an example being of an instrument moving from a specific type (say, a loan) to direct investment: intercompany lending, when the

relationship between the creditor and debtor becomes that of direct investment.

### Debt Securities

#### Reconciliation of Nominal and Market Value

7.54 The *Guide* recommends that debt securities be valued in the gross external debt position at nominal and market value. While the market value takes into account fluctuations in market prices, the nominal value does not. Market prices change over time for a number of reasons, including changes in market interest rates, changes in investor perception of the creditworthiness of the debtor, and changes in market structure (such as might affect market liquidity).

7.55 The divergence in the market and nominal value of debt securities at one moment in time, and over time, is of analytical value. For this reason, Table 7.16 provides a framework for reconciling nominal and market valuation of debt securities included in the gross external debt position. Debt securities are presented in the table broken down by institutional sector and maturity. It is intended that data be presented in absolute amounts in the same unit of account used to present the gross external debt position.

#### Location of Debt Securities Issuance

7.56 Information on the location of issuance of debt securities issued by residents and owned by nonresidents can also be of analytical value. For instance, such data provide an indication of the motivation of debtors and creditors—whether residents are attracting foreign investors by issuing securities in their markets; and of possible liquidity risk—securities issued in international markets may be harder to refinance in the event of an external shock to the economy. In addition, in the absence of information on foreign currency debt, these data can provide a broad idea of the foreign currency/domestic currency attribution of debt securities; for instance, internationally issued debt is likely to be foreign-currency-linked. From a compilation viewpoint, data on securities issued in international markets might well be captured in a different manner from that of issues in the domestic market.

7.57 A presentation for these data is provided in Table 7.17. The rows distinguish debt securities issued by

<sup>17</sup>In addition to market price changes, this column covers other non-exchange-rate valuation changes, e.g., changes in the value of pension fund liabilities to nonresident participants and policyholders arising from revaluations.

Table 7.15 Gross External Debt Position: Reconciliation of Positions and Flows						
	Position at beginning of period	Changes in Position Due to				Position at end of period
		Transactions	Exchange rate changes	Other price changes	Other changes in volume	
<b>General Government</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Special drawing rights (allocations)						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Central Bank</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Special drawing rights (allocations)						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Deposit-Taking Corporations, except the Central Bank</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Other Sectors</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						

(Continued)

Table 7.15 Gross External Debt Position: Reconciliation of Positions and Flows (Concluded)						
	Position at beginning of period	Changes in position due to				Position at end of period
		Transactions	Exchange rate changes	Other price changes	Other changes in volume	
<b>Other Sectors, continued</b>						
<b>Other financial corporations</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Nonfinancial corporations</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Households and nonprofit institutions serving households (NPISHs)</b>						
<b>Short-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2,3</sup>						
<b>Long-term</b>						
Currency and deposits <sup>1</sup>						
Debt securities						
Loans						
Trade credit and advances						
Other debt liabilities <sup>2</sup>						
<b>Direct Investment: Intercompany Lending</b>						
Debt liabilities of direct investment enterprises to direct investors						
Debt liabilities of direct investors to direct investment enterprises						
Debt liabilities between fellow enterprises						
<b>Gross External Debt Position</b>						

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable-other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.



**Table 7.16 Gross External Debt Position: Debt Securities—Reconciliation of Nominal and Market Value**

	Nominal Value Position at End of Period <sup>1</sup>	Difference with Market Value	Market Value Position at End of Period <sup>1</sup>
<b>General Government</b>			
Short-term			
Long-term			
<b>Central Bank</b>			
Short-term			
Long-term			
<b>Deposit-Taking Corporations, except the Central Bank</b>			
Short-term			
Long-term			
<b>Other Sectors</b>			
Short-term			
Long-term			
<b>Other financial corporations</b>			
Short-term			
Long-term			
<b>Nonfinancial corporations</b>			
Short-term			
Long-term			
<b>Households and non-profit institutions serving households (NPISHs)</b>			
Short-term			
Long-term			
<b>Total</b>			
Short-term			
Long-term			

<sup>1</sup> Arrears (if applicable) are included in the original debt instrument.

**Table 7.17 Gross External Debt Position: Resident-Issued Debt Securities Owned by Nonresidents—Location of Issuance**

	End Period
<b>Domestically issued</b>	
Short-term	
General government	
All other sectors	
Long-term	
General government	
All other sectors	
<b>Internationally issued</b>	
Short-term	
General government	
All other sectors	
Long-term	
General government	
All other sectors	
<b>Total</b>	

general government from those issued by all other sectors. The separate identification of government issues reflects the government's important and special role, in most economies, as a borrower. Depending on the extent of security issuance by the other institutional sectors, a further disaggregation of issues, such as for deposit-taking corporations, might also be of analytical interest. The maturity attribution is on an original maturity basis, although the table can also be presented on a remaining maturity basis.

**7.58** Consistent with the concepts set out in the *Guide*, Table 7.17 only covers information on non-resident ownership of resident-issued securities. However, there might also be interest in presenting data on resident as well as nonresident ownership of resident-issued securities, both in domestic and in international markets. By including additional columns for resident- and nonresident-owned securities, the table can be extended to cover such information.

### Cross-Border Trade-Related Credit

**7.59** In addition to presenting data by type of instrument, another approach is to present data by the type of use of the borrowing. In this regard, of special interest is information on cross-border trade-related credits by debtor and creditor sector, i.e., credits that finance trade. Such credit is directly linked to activity in the real economy. Table 7.18 provides a model for presenting data on borrowing used to finance trade, with the disaggregation by, first, maturity (original basis) and, second, institutional sector. In presenting these data, trade-bills could be separately identified, both because of the analytical interest in such data and to help with reconciliation with creditor-based statistics.

**7.60** The debtor sectors are presented in rows, and the creditor sectors in columns. The rows and column for direct investment: intercompany lending relate only to the provision of trade-related credit between affiliated parties, i.e., those transactions classified under direct investment in the balance of payments, and not the provision of trade-related credit by unrelated parties to direct investment entities. The maturity attribution is on an original maturity basis.

Table 7.18 Gross External Debt Position: Cross-Border Trade-Related Credit					
Debtor Sector	Creditor Sector (End of Period)				
	General government	Deposit-taking corporations, except the central bank <sup>1</sup>	Other sectors	Direct Investment: Intercompany Lending	Total
<b>Short-term</b>					
General government				n.a.	
Central bank				n.a.	
Deposit-taking corporations, except the central bank				n.a.	
Other Sectors				n.a.	
Direct investment: Intercompany lending	n.a.	n.a.	n.a.		
<b>Long-term</b>					
General government				n.a.	
Central bank				n.a.	
Deposit-taking corporations except the central bank				n.a.	
Other sectors				n.a.	
Direct investment: Intercompany lending	n.a.	n.a.	n.a.		
<b>Total</b>					

n.a., not applicable.

<sup>1</sup> It is recommended that any cross-border trade-related debt to central banks be included within this category, unless the central banks are significant creditors, in which instance, they should be separately identified.



# 8

## Debt Reorganization

### Introduction

**8.1** Debt-reorganization transactions are a feature of external debt activity (see Box 8.1). Economies sometimes face difficulties in meeting their external debt obligations, or debtors may want to change the repayment profile of their external obligations for different reasons, including reducing the risk of future payment difficulties or reducing the cost of borrowing. In this context, they may undertake debt restructuring and debt conversions. This chapter defines debt reorganization, discusses the various types of debt-reorganization operations, and provides guidance on how they affect the measurement of the gross external debt position. Further, this chapter defines debt relief and recommends the measurement and presentation of statistics on debt reduction, which is also defined.

**8.2** Reference is made in the chapter to the recording of debt-reorganization transactions in the measured flow data of the balance of payments, the OECD's DAC system, and the World Bank's Debtor Reporting System (DRS). Full details of such recording approaches are set out in *BPM6* (IMF, 2009),<sup>1</sup> the OECD's *Handbook for Reporting Debt Reorganization on the DAC Questionnaire* (OECD, 2000),<sup>2</sup> and the *Debtor Reporting System Manual* (World Bank, 2000).<sup>3</sup>

### Definitions

**8.3** Debt reorganization (also referred to as debt restructuring) is defined as arrangements involving

both the creditor and the debtor (and sometimes third parties) that alter the terms established for servicing an existing debt. Types of debt reorganization include debt forgiveness, rescheduling, refinancing, conversion, prepayments, and assumption. Governments are often involved in debt reorganization, as a debtor, creditor, or guarantor, but debt reorganization can also involve the private sector, such as through debt exchanges.

**8.4** A creditor can also reduce debt through debt write-offs—a unilateral action that arises, for instance, when the creditor regards a claim as unrecoverable, perhaps because of bankruptcy of the debtor, and so no longer carries it on its books. This is not debt reorganization as defined in the *Guide* because it does not involve a bilateral arrangement. Similarly, a failure by a debtor economy to honor its debt obligations (default, moratorium, etc.) is not debt reorganization.

**8.5** Generally, debt reorganization is undertaken to provide some debt relief to the debtor and can address liquidity and/or sustainability problems arising from future and current payment obligations. Debt relief results where there is (1) a reduction in the present value of these debt-service obligations; and/or (2) a deferral of the payments due, thus providing smaller near-term debt-service obligations (this can be measured, in most cases, by an increase in the duration of these obligations, i.e., payments become weighted more toward the latter part of the debt instrument's life). However, if debt reorganization results in changes in present value and duration that are countervailing in their impact on the debt burden, then there is no debt relief, unless the net impact is significant, such as could occur if there was a deep reduction in present value (together with a small decrease in duration) or a sharp increase in duration (together with a small increase in present value).

<sup>1</sup> *BPM6* Appendix 2 discusses the various types of debt reorganization and how they are recorded in the balance of payments and the international investment position.

<sup>2</sup> At the time of writing the *Guide*, the OECD was in the process of converging the various sets of directives into one set.

<sup>3</sup> See also Appendix 3 and [www.tffs.org](http://www.tffs.org) for more information on the Debtor Reporting System.

**8.6 Debt reduction** is defined as the reduction in the nominal value of external debt arising from a debt-reorganization arrangement, excluding any payments of economic value made by the debtor to the creditor as part of the arrangement. This is the definition to be used for compiling data to be presented in Table 8.1—debt reduction arising from debt reorganization. Debt reduction in present value terms is defined as the reduction in the present value of debt-service obligations arising from a debt reorganization, as calculated by discounting the projected future payments of interest and principal both before and after the reorganization at a common interest rate and comparing the difference. To illustrate the difference between debt reduction and debt reduction in present value terms, if the contractual rate of interest is reduced with no impact on the nominal value of external debt, no debt reduction is recorded, but there is debt reduction in present-value terms.

**8.7 Debt swaps** are exchanges of debt, such as loans or securities, for a new debt contract (debt-to-debt swaps), or exchanges of debt-for-equity, debt-for-exports, or debt-for-domestic currency, such as to be

used for projects in the debtor country (also known as debt conversion).<sup>4</sup> This definition is intended to include debt-for-development swaps where economic value is provided by the debtor to the creditor for use in development projects in the debtor's economy.

## Types of Debt Reorganization

**8.8** The four main types of debt reorganization are:

- A reduction in the amount of, or the extinguishing of, a debt obligation by the creditor via a contractual arrangement with the debtor. This is *debt forgiveness*, as described in *BPM6* and the DRS, and is also classified as debt forgiveness in the DAC system if it is in the framework of a bilateral agreement and there is a development/welfare motive.
- A change in the terms and conditions of the amount owed, which may result, or not, in a reduction in burden in present-value terms. Depending on the nature of the transaction undertaken, the reorganization is described as *debt rescheduling* or *refinancing* (or debt exchanges). Included

**Table 8.1 Nominal Value Debt Reduction Arising from Debt Reorganizations: by Debtor and Creditor Sectors**

	Debt position before debt reorganization (1)	Debt reduction due to:					Debt position after debt reorganization (7) = (1) – (2)
		Total (2) = (3) + (4) + (5) + (6)	Debt forgiveness (3)	Debt rescheduling and refinancing (4)	Debt conversion and pre-payment (5)	Debt assumption (6)	
Public sector external debt <i>Of which:</i> Multilateral Official bilateral Commercial bank <sup>1</sup> Debt securities							
Publicly guaranteed private sector external debt <i>Of which:</i> Multilateral Official bilateral Commercial bank <sup>1</sup> Debt securities							
Private sector external debt not publicly guaranteed <i>Of which:</i> Multilateral Official bilateral Commercial bank <sup>1</sup> Debt securities							

<sup>1</sup> Excluding debt securities.

<sup>4</sup> A debt swap should be distinguished from a financial derivative swap. The financial derivative swap involves two parties agreeing to swap future cash flows, while a debt swap involves the exchange of the debt instrument itself for economic value.

are transactions that change the type of debt instrument owed—e.g., loan for bond swaps—but are not debt-forgiveness transactions.

- The creditor exchanges the debt claim for something of economic value, other than another debt claim, on the same debtor. This includes *debt conversion*, such as debt-for-equity swaps, debt-for-real estate swaps, and debt-for-nature swaps,<sup>5</sup> and debt prepayment or debt buybacks for cash.
- A new debtor assumes the former debtor's outstanding liability to the creditor and is liable for repayment of the debt. This is *debt assumption* where a third party is also involved.

**8.9** Debt-reorganization packages may involve more than one type, e.g., most debt-reorganization packages involving debt forgiveness also result in a rescheduling of the part of the debt that is not forgiven or canceled.

**8.10** For clarification purposes, in discussing the statistical treatment of debt reorganization, each of the four types of debt reorganization is considered separately. This has a number of advantages: each type of debt reorganization raises different statistical issues, hence encouraging a type-by-type approach; present international statistical guidelines, on which the guidelines in this chapter are based, are more advanced for some types of debt reorganization than for others; and there is interest in the different types of debt reorganization, so there is an analytical benefit, where possible, in separately measuring and reporting any debt reduction resulting from their application.

## Debt Forgiveness

**8.11** Debt forgiveness is defined as the voluntary cancellation of all or part of a debt obligation within a contractual arrangement between a creditor in one economy and a debtor in another economy.<sup>6</sup> More specifically, the contractual arrangement cancels or

forgives all or part of the principal amount outstanding, including interest arrears (interest that fell due in the past) and any other interest costs that have accrued. Debt forgiveness does not arise from the cancellation of future interest payments that have not yet fallen due and have not yet accrued.

**8.12** If the debt reorganization effectively changes the contractual rate of interest—such as by reducing future interest payments but maintaining future principal payments, or vice versa—it is classified as debt rescheduling. However, in the specific instance of zero-coupon securities, a reduction in the principal amount to be paid at redemption to an amount that still exceeds the principal amount outstanding at the time the arrangement becomes effective could be classified as either an effective change in the contractual rate of interest, or as a reduction in principal with the contractual rate unchanged. Unless the bilateral agreement explicitly acknowledges a change in the contractual rate of interest (in which case the change should be recorded as debt rescheduling), such a reduction in the principal payment to be made at maturity should be recorded as debt forgiveness.

## Recommended treatment

### *External debt position and debt reduction*

**8.13** Debt forgiveness reduces the gross external debt position by the value of the outstanding principal that has been forgiven. Any reduction in principal is recorded under the appropriate debt instrument when it is received, i.e., when both the debtor and creditor record the forgiveness in their books. Where possible, debt forgiveness in nominal terms should be separately identified and recorded under debt reduction in Table 8.1.

**8.14** If forgiveness relates to payments on debt obligations that are past due and are yet to be paid, i.e., arrears of interest and principal, a reduction in the gross external debt position under the appropriate debt instrument is recorded. Forgiveness of interest costs that have accrued during the period or amounts disbursed in the current recording period has no impact on the gross external debt position at the end of the period because any increase in the outstanding value of the debt instrument is matched by the debt forgiveness. However, any such forgiveness should be reported under debt reduction in Table 8.1.

<sup>5</sup>Some agreements described as debt swaps are equivalent to debt forgiveness from the creditor together with a commitment from the debtor country to undertake a number of development, environmental, etc., expenses. These transactions should be considered under debt forgiveness, as counterpart funds are not provided to the creditor.

<sup>6</sup>This includes forgiveness of some or the entire principal amount of a credit-linked note due to an event affecting the entity on which the embedded credit derivative was written, and forgiveness of principal that arises when a type of event contractually specified in the debt contract occurs, e.g., forgiveness in the event of a type of catastrophe.

**8.15** A special case of debt forgiveness is where the creditor provides a grant to the debtor that is used to pay the debt-service payments as they fall due. In such instances, the gross external debt position is only affected when debt-service payments are made, i.e., the same as for all debt instruments being serviced. Nonetheless, such assistance is recorded in the table as debt reduction when the debt-service payments are made.

### *Flow data*

**8.16** In flow terms, debt forgiveness is recorded in the balance of payments as a capital transfer receipt of the debtor economy (capital transfer payment of the creditor economy), and in the DAC system and the DRS as a debt-forgiveness grant. The counterpart transaction in the balance of payments and DAC is an offsetting entry for the amount of principal owed. When debt forgiveness is in the form of a grant by the creditor to the debtor (as in the previous paragraph), no transaction is recorded in the DRS; the amount forgiven is reflected as a reduction in the position data.

### **Debt Rescheduling and Refinancing**

**8.17** Debt rescheduling and refinancing involve a change in an existing debt contract and/or replacement by a new debt contract, generally with extended debt service payments.<sup>7</sup> Debt rescheduling is a bilateral arrangement between the debtor and the creditor that constitutes a formal deferment of debt-service payments and the application of new and extended maturities to the deferred amount. This is achieved through a change of the terms and conditions of the existing contracts. The new terms of rescheduling normally include one or more of the following elements: extending repayment periods, reductions in the contracted interest rate, adding or extending grace periods for the repayment of principal, fixing the exchange rate at favorable levels for foreign currency debt, and rescheduling the payment of arrears, if any. Rescheduling may or may not result in a reduction in the present value of debt, as calculated by discounting the old and new payment schedule by a common interest rate.

**8.18** Refinancing of a debt liability involves the replacement (in full or partial) of an existing debt

instrument or instruments, including arrears, with a new debt instrument or instruments. For instance, the public sector may convert various export credit debt it is owed into a single loan. Refinancing may involve the exchange of one type of debt instrument, such as a loan, for another, such as a bond. Some debt-refinancing arrangements feature new money facilities (see paragraph 8.54). Also, refinancing can be said to have taken place when countries with private sector bond creditors exchange existing bonds for new bonds through exchange offers (rather than a change in terms and conditions).

**8.19** Rescheduling (for instance, under a Paris Club agreement) can be characterized as flow or stock rescheduling. A flow rescheduling typically refers to a rescheduling of specified debt service falling due during a certain period and, in some cases, of specified arrears outstanding at the beginning of that period. A stock rescheduling involves principal payments that are not yet due, and arrears, if any, and like a flow rescheduling, can include both an element of debt forgiveness and a rescheduling of the amounts not reduced.<sup>8</sup>

**8.20** *Debt service moratorium extended by creditors* is a special case of debt rescheduling that involves an individual creditor permitting the debtor a formal suspension of debt service payments falling due within a given period. Debt service moratorium may be granted in the event of natural disasters, such as the moratorium granted to tsunami-affected countries in 2005, and usually involves formal exchange of letters but not necessarily a formal bilateral agreement. As the intention of the action is to provide the debtor with short-term debt relief, debt service moratorium extended by creditors should be classified as debt rescheduling, provided there is some formal process that demonstrates agreement on behalf of both the debtor and creditor, such as the exchange of letters, to delay payment. In such instances, arrears are not created.

**8.21** *Debt service falling due between Paris Club agreed minute date and specified implementation date* is another special case of debt rescheduling.

<sup>7</sup> Debt rescheduling may involve a new debt contract or an amendment to the existing debt contract that changes the debt-service payments schedule.

<sup>8</sup> Flow treatments aim at closing the debtor country's financing gap. Stock treatments apply not only to the payments due over a given period of time, but to the entire position of certain debts. The aim of agreements covering debt positions is to provide a country with a final Paris Club treatment (called an "exit treatment").

Under Paris Club debt rescheduling arrangements, creditor countries as a group usually agree in the non-binding “Agreed Minute” that they sign, that payment terms and conditions of applicable debt falling due before the specified effective (implementation) date of the Paris Club bilateral agreement might not be paid on schedule. However, interest continues to accrue based on the existing loan terms, but payments are not made, up until the point when there is a formal bilateral agreement. When such payments fall due, they are considered technical arrears (see paragraph 3.44) and are treated in the debtor economy as rescheduled short-term debt.

### **Recommended treatment**

#### **External debt position**

**8.22** Any agreed change in the terms of a debt instrument is to be recorded as the creation of a new debt instrument, with the original debt extinguished at the time both parties record the change in terms in their books. If no precise time is determined, the time at which the creditor records the changes in its books is decisive. If the rescheduling of obligations due beyond the current period is linked to the fulfillment of certain conditions by the time the obligations fall due (such as multiyear Paris Club rescheduling), entries are recorded only in the period when the specified conditions are met. Whether the gross external debt position—both under debt rescheduling and debt refinancing—increases, decreases, or remains unchanged depends on whether the value of the new instrument(s) is respectively greater than, smaller than, or the same as the original debts being replaced. This is the case regardless of the valuation method employed to measure external debt instruments.<sup>9</sup> In other words, both before and after a debt rescheduling, the value of the gross external debt position is simply determined by the value of outstanding external debt liabilities of residents owed to nonresidents at the reference date.

**8.23** As explained in Chapter 2, and as the examples in that chapter illustrated, the stock of external debt

at any moment in time can be calculated by discounting future payments at a specified rate of interest. This interest rate can be the contractual rate (for nominal value), or a market rate for the specific borrower (for market value), or another rate. Using these different rates to discount payments will provide different position data for the same payment schedule. Debt reduction in present-value terms arising from rescheduling might be calculated using any of these rates, e.g., in the HIPC Initiative, a market-based rate is used.

**8.24** If, as part of official and private debt-reduction packages, loans denominated in foreign currency are swapped for debt securities denominated in the domestic currency, the difference between the value of the loan and the value of the debt security in the domestic currency will be reflected in the gross external debt position. The extinguishment of the old debt liability, the loan, results in a decrease in the value of short-term or long-term loans, as appropriate, while an increase in debt securities is recorded.

#### **Flow data**

**8.25** In the transaction data in the balance of payments, both the extinguishment of the old debt liability and the creation of the new debt(s) are recorded. In the DAC system these flows are also recorded, except when the category of debt does not change, in which case only the capitalization of interest gives rise to a new flow. The DRS does not record these transactions in flow data (but they are reflected in the position data). In the balance of payments, the transaction is recorded at the value of the new debt instrument and any difference between the value of the old and new debts is treated as a valuation change,<sup>10</sup> such as in the case of exchanges of Brady bonds (see Box 8.1) for new global bonds. However, when nonmarketable debt owed to official creditors is involved, any reduction in the nominal value of debt is recorded as debt forgiveness.<sup>11</sup>

<sup>9</sup> If external debt is lower or higher because at the time of rescheduling it was agreed between the debtor and creditor that the amount of late interest on arrears was to be more or less than that which accrued, back data of the gross external debt position should not be revised to reflect this agreement, provided that the accrual of interest costs on arrears in past periods was in line with the contract(s) that existed at that time.

<sup>10</sup> Both the integrated IIP statement and the integrated external debt position statement (i.e., the statement that emphasizes how changes in the position result from valuation changes, and other changes in volume during the reference period—see Table 7.16), reflect the transactions extinguishing the old debt instrument and creating the new debt instrument along with any valuation change recorded as revaluations.

<sup>11</sup> See *BPM6*, paragraphs A2.12–A2.13 and A2.16–A2.19.

### Box 8.1 Sovereign Debt Restructuring with Private Creditors\*

Sovereign debt restructurings have been a pervasive phenomenon, amounting to more than 600 cases in 95 countries between 1950 and 2010. One-third of these external debt restructurings were debt exchanges with private creditors (commercial banks and bondholders) and about two-thirds have been Paris Club agreements for official bilateral debt (see Box 8.2). There have also been debt restructuring operations under the Heavily Indebted Poor Countries (HIPC) and MDRI initiatives, which provided extensive relief and debt forgiveness (see Appendix 5).

In terms of restructuring debt, sovereign bonds have a number of characteristics that distinguish them from other types of debt instruments:

- First, there is usually a wider range of investors than for nonnegotiable external debt instruments, and hence, various investor groups all with potentially different investment motivations, e.g., the investment motivations of retail—nonfinancial institution—investors may be different from those of financial institutions

#### Sovereign Debt Restructuring by Type of Creditor

	Private creditors		Official creditors	
Creditor	Commercial banks	Bondholders	Bilateral (governments)	Multilateral (World Bank, IMF)
Restructuring vehicle	London Club (creditor committees)	Exchange offers	Paris Club	Preferential treatment; restructuring only for poorest countries

Ninety percent of the debt exchanges with private creditors affected bank loans, while the remaining 10 percent were sovereign bond restructurings.

The process of debt renegotiations between governments and commercial banks is typically labeled as “London Club” restructuring (see Box 8.2). Despite its name, the London Club is neither a statutory institution based in London nor a well-organized club. Instead, the term loosely describes the case-by-case restructuring routine developed between major Western banks and developing country governments in the late 1970s and early 1980s. Notwithstanding legal, coordination, and logistical issues, holdouts, and inter-creditor disputes, there have been more than 100 restructurings between 1980 and 1990 under the umbrella of the London Club.

The Brady Plan was launched in March 1989 to address debtor insolvency and commercial bank exposure. The plan signaled a shift in the official policy stance on debt restructuring from short-term relief to face value reductions in debt to restore debtor solvency. It had three key elements: first, banks exchanged their loans for sovereign bonds; second, creditors were offered a menu of options in respect of instruments with different terms and implications for present value and face value reductions; and third, it provided for the capitalization of the interest arrears that were not written off by commercial banks. There were 17 deals (mostly in Latin America) between 1989 and 1997 under this plan; debtor countries normalized their relations with creditors, and the agreements also allowed them to regain access to capital markets.

#### Sovereign Bond Restructuring

The restructuring of a country's sovereign bonded external debt (Eurobonds and Brady bonds) began with Pakistan at the end of 1999, following the extension of the “comparability of treatment” principle to bondholders in Pakistan's agreement with the Paris Club in January 1999. A new generation of sovereign bond debt restructurings has since extended to a number of emerging market countries such as the Ukraine (2000), Russia (2000), Ecuador (2000 and 2009), Moldova (2002), Uruguay (2003), Dominican (2004), Argentina (2005), Dominican Republic (2005), Grenada (2005), Belize (2007), Seychelles (2010), and Cote d'Ivoire (2010).

Sovereign bonds are typically restructured through an exchange offer. This involves identifying bondholders, verifying their claims, preparing an exchange offer (most likely after consultation with the bondholders), launching the exchange offer, waiting for bondholder participation, and exchanging the debt.

- Second, market prices are invariably quoted. Thus, those investors that mark-to-market frequently—having borne the market-value loss in the secondary market price of the to-be-exchanged bonds, or having purchased at a low market value—might well compare the present value of the exchange offered (discounting payments at a particular interest rate) with the current market price of the to-be-exchanged bonds; in the simplest case, if the present value of the exchange bond is higher than the market price of the original bond, the holder of the to-be-exchanged bond has an incentive to tender his bonds in the exchange
- Finally, most Eurobonds have cross-default clauses or cross-acceleration clauses in their covenants, thus, perhaps, making it impossible for a sovereign debtor to pick and choose which bondholders are repaid and which are not, so markets debate the issue of whether a restructuring of external bonded debt needs to be comprehensive across other foreign currency debt instruments as well.

The consequence of the above is that successful bond restructuring—mostly bond exchanges—has involved the debtors exchanging securities at a premium to the market price, although well below the face value, or providing other “sweeteners” to encourage bondholders to participate. Bonds with the larger percentage of retail investors have tended to pay a higher premium. But, as with creditors for other types of debt instruments, a key consideration of creditors in any restructuring is whether the sovereign borrower is facing a liquidity or solvency problem, or neither.

Sovereign bond restructurings have not always been smooth, and in some cases negotiations have been protracted. It is often argued that the presence of Collective Action Clauses (CACs) can facilitate creditor-debtor negotiations in a restructuring situation, since they reduce the hurdle of having to achieve unanimity on a restructuring agreement (via the majority restructuring clause) and can limit the potential threat of litigation from “holdout” creditors. However, the actual use of CACs in past debt restructurings shows mixed results (see Das, Papaioannou, and Trebesch, 2012). CACs specify how creditors are represented in negotiations, define majority voting procedures to alter the financial terms of the outstanding instruments, and can limit the incentive or ability of individual creditors to initiate litigation against the debtor. The use of CACs is now a well-established market practice for international bond issues.

\* This box is mainly based on Das, Papaioannou, and Trebesch (2012), “Sovereign Debt Restructurings 1950–2010: Literature Survey, Data, and Stylized Facts,” IMF Working Paper 12/203.



### Debt reduction

**8.26** The *Guide* recommends that debt reduction arising from debt rescheduling and debt refinancing—i.e., a reduction in the nominal amount outstanding, excluding any external debt-service payments made by the debtor as part of the arrangement—be measured and presented as in the debt-reduction table provided in this chapter. If the new external debt liability is denominated in a different currency from that of the external debt liability it is replacing, then any debt reduction should be determined using the market exchange rate between the two currencies prevailing on the transaction date (i.e., the midpoint between the buying and selling spot rates).

**8.27** In many instances of debt rescheduling, the method by which debt relief is provided is more complex than a simple reduction in nominal amount outstanding. For instance, a debt might be rescheduled with the same nominal value, but with a lower interest rate or with extended maturities. By simply comparing the nominal amounts outstanding before and after the rescheduling, no debt reduction would be evident, but there may be debt reduction in present value terms, calculated by discounting future debt-service payments, both on the old and new debts, at a common rate. In such circumstances, a key issue is which rate to use. In debt-reorganization operations such as those under the HIPC Initiative and similar arrangements, debt reduction in present-value terms is calculated using an interest rate equal to a market-based so-called risk-neutral rate, such as the OECD's CIRRs.<sup>12</sup> In other cases, debt reduction in present value may be based on a rate that includes a risk premium, reflecting the creditor's assessment of the value of the claim (this is generally the case for the restructuring of claims held by private creditors).

**8.28** Also, in some debt rescheduling, such as with concessional Paris Club agreements (Box 8.2), creditors are offered a choice between different options, one of them being a partial debt reduction, the other being a rescheduling at a reduced interest rate (debt reduction

in present value terms). Some creditors may forgive part of the claims and reschedule the outstanding part at the appropriate market rate (“debt-reduction” option), whereas other creditors reschedule the whole claim at a lower interest rate (“debt-service-reduction” option), resulting in a debt reduction in present value equivalent to the one granted by creditors that chose the “debt-reduction” option. Table 8.2 shows the variety and evolution of Paris Club debt-rescheduling terms.

**8.29** Because of the complexities involved, and the different interest rates that may be employed, international statistical standards have not developed to the point where there is general agreement on how to measure and make comparable the different methods of providing debt reduction in present-value terms.

**8.30** Given the above, the *Guide* provides no recommended guidance on measuring and presenting debt reduction arising from debt rescheduling and refinancing in present-value terms. Nonetheless, economies that undergo debt rescheduling and refinancing are encouraged to disseminate (1) the total nominal amounts involved; (2) the amount of debt reduction in present-value terms they have achieved—the difference between the present values (using a common interest rate) of the rescheduled/refinanced debt-service payments before and after rescheduling/refinancing (present-value method);<sup>13</sup> and (3) detailed information on how the amount of the present-value reduction was calculated, including the interest rate(s) used.

**8.31** Similarly, no guidance is provided for measuring debt relief in terms of an increase in duration because of the difficulty in measuring such relief and presenting it in a manner that is comparable with other forms of debt reorganization.

### Debt Conversion and Debt Prepayments

**8.32** External debt conversion is an exchange of debt—typically at a discount—for a nonexternal debt claim, such as equity, or for counterpart funds that can be used to finance a particular project or policy. Debt-for-equity, debt-for-nature, and debt-for-development swaps are all examples of debt conversion. A debt prepayment is the repurchase, usually at a discount (in which case prepayments are referred to as buybacks), by a debtor economy (or on its behalf) of

<sup>12</sup>These rates are determined monthly for 15 currencies on the basis of secondary market yields on government bonds. These data are published monthly on the Internet at [www.oecd.org/](http://www.oecd.org/). For the HIPC Initiative, debt denominated in currencies for which no CIRR is available, if the currency is pegged to another currency such as the U.S. dollar, the CIRR for the latter should be used; in the absence of an exchange rate arrangement, as well as for the units of account used by various multilateral institutions, the SDR CIRR should be applied.

<sup>13</sup>The payment schedule for both the original and rescheduled debt could also be provided as memorandum information.

### Box 8.2 Paris Club and Commercial Bank Debt Relief

The Paris Club has developed procedures for the collective rescheduling of official bilateral debt since the 1950s, when Argentina approached bilateral creditors. Between 1956 and 2011, 426 agreements were reached with 89 different countries, and debt treated in the framework of Paris Club agreements amounted to \$563 billion. The Paris Club is an ad hoc organization of creditor countries (mainly OECD members) that responds to requests for debt relief with respect to debt owed (contracted or guaranteed) by the government and/or the public sector of the debtor country to creditor countries or their appropriate institutions: officially guaranteed export credits and bilateral loans.

Debts to Paris Club official creditors are generally restructured through the Paris Club. Debts to commercial banks are typically restructured through consortia of commercial banks (often called London Club). Noninsured supplier credits and debts to governments that do not participate in the Paris Club are normally restructured through bilateral negotiations.

#### Paris Club

The French Treasury maintains a permanent secretariat, and a senior official serves as chairman. There are 19 permanent members; nonmember creditor countries may be invited to take part in meetings for the treatment of the debt of a specific debtor country if they have significant claims on that country. The Club meets every month in Paris, both for discussion of debt issues among the permanent members and for the restructuring of the debt of a specific debtor country.

Two types of “treatment” may be implemented by the Paris Club:

- A flow treatment of usually both scheduled amortization and interest payments falling due during the consolidation period—the period over which debt relief will be given
- A stock treatment of the outstanding principal at a given date

Paris Club negotiations result in a multilateral framework agreement (Agreed Minute), which must be followed up with bilateral implementing agreements with each creditor.

At the beginning of the debt-relief process, Paris Club creditor countries will establish a “cutoff date.” This means that all loan contracts signed after that date normally will not be eligible for debt relief by the Paris Club. The aim is to help the debtor country reestablish its creditworthiness by paying new obligations on their original schedules. Even though debt relief may extend over many years through a succession of Paris Club agreements, the cutoff date will usually remain unchanged, although under the Evian approach (see later in this box) this policy is evolving.

It was increasingly recognized in the 1980s that some low-income countries with high external debt were facing solvency as well as liquidity problems. Over the years, the Paris Club has provided increasingly concessional rescheduling terms to low-income countries. The level of debt reduction on commercial claims was gradually increased from Toronto terms (1988—33.33 percent debt reduction) to London terms (1991—50 percent debt reduction) to Naples terms (1995—50 percent to 67 percent debt reduction) to Lyon terms (1996—80 percent debt reduction) and to Cologne terms (1999—90 percent reduction or more if needed

under the HIPC Initiative). The evolution of Paris Club terms is presented in Table 8.2.

In 1996, the debt initiative for HIPCs was established, leading for the first time to multilateral creditors providing debt relief to a country. The Paris Club provides its debt-relief effort in the context of the HIPC Initiative through the use initially of Lyon terms, and now of Cologne terms. The HIPC Initiative demonstrated the need for creditors to take a more tailored approach when deciding on debt treatment for debtor countries.

In October 2003, Paris Club creditors adopted the “Evian Approach” with the aim of tailoring treatments to the need of non-HIPC debtors. Debt sustainability considerations are taken into account in accordance with the IMF’s standard debt sustainability framework, and the Paris Club’s response is adapted to the financial situation of debtor countries. The Evian approach aims to contribute to global efforts to make the resolution of financial crises more orderly, timely, and predictable.

A country benefiting from Paris Club debt relief commits to seek at least similar restructuring terms from its other external creditors (other than multilateral creditors, which only provide debt relief to countries eligible for assistance under the HIPC Initiative). This applies to non-Paris Club bilateral creditors, who generally negotiate with the debtor country on a bilateral basis, as well as private creditors (suppliers, banks, bondholders, etc.).

Paris Club agreements may include a debt-swap provision, within a limit usually set at 20 percent of commercial claims. Paris Club creditors on a bilateral basis conduct debt-swap operations.

#### Commercial bank debt relief

Multilateral debt relief is much more difficult to organize for commercial banks than for official creditors. While a national export credit insurer can negotiate on behalf of any individual creditor, there is no way to consolidate national commercial bank claims. Rather, each creditor bank must approve the resulting agreement and, for loan syndication, the number is often in the hundreds.

The pattern of negotiations was established in a 1970 agreement between the Philippines and its commercial bank creditors. Creditor banks form a committee (sometimes known as the London Club) of about a dozen people who represent the major creditor banks. The composition of the committee—which can be completely different from case to case—takes into account the nationality of the banks in the consortium so that the negotiations can make provision for the different tax and regulatory systems that affect banks of different countries. The committee negotiates an “agreement in principle” with debtor country representatives. After all creditor banks approve this agreement, it is signed. It takes effect when certain requirements are met, such as payment of fees and of arrears. As with the rescheduling of debts to official creditors, banks provide debt relief normally in the context of a debtor country’s adjustment program supported by an IMF arrangement. Unlike with Paris Club creditors, there is no “cutoff” date.

Commercial bank agreements restructure principal; consolidation of original interest costs is rare. Like Paris Club agreements, consolidation of short-term debt is also unusual (but when a major portion of arrears has arisen from short-term debt, there is often no option but to restructure). Among the initiatives for reducing the commercial debt burden was the Brady Plan (1989).



all or part of its external debt. It may be undertaken on the secondary market or through negotiations with creditors.

### **Debt conversion**

**8.33** Rather than exchanging debt for debt, countries might enter into a debt conversion process—the legal and financial transformation of an economy’s liability. Typically, debt conversions involve an exchange of external debt in foreign currency for a nondebt obligation in domestic currency, at a discount. In essence, external debt is prepaid, and the nature of the claim on the economy is changed. An example is a foreign currency debt-for-equity swap, which results in debt claims on the debtor economy being reduced, and nonresident investments in equity investments increased. Debt-for-equity swaps often involve a third party, usually a nongovernmental organization or a corporation, which buys the claims from the creditor and receives shares in a corporation or local currency (to be used for equity investment) from the debtor. Other types of debt swaps, such as external debt obligations for exports (debt for exports), or external debt obligations for counterpart assets that are provided by the debtor to the creditor for a specified purpose, such as wildlife protection, health, education, and environmental conservation (debt for sustainable development), are also debt conversions.

### **Prepayments and buybacks**

**8.34** Prepayments consist of a repurchase, or early payment, of debt at conditions that are agreed upon between the debtor and the creditor, i.e., debt is extinguished in return for a cash payment agreed upon between the debtor and the creditor. When a discount is involved relative to the nominal value of the debt, prepayments are referred to as buybacks. In addition, debtors may enter the secondary market and repurchase their own debt because market conditions are such that it is advantageous financially to do so. However, debt reduction arising from this latter type of buyback is not considered debt reorganization and should not be recorded in the debt reduction Table 8.1 unless the transaction is agreed upon between the debtor and the creditor (see paragraph 8.39).

### **Recommended treatment**

#### **External debt position**

**8.35** For both debt conversions and debt prepayments, a reduction in the gross external debt position is recorded to the value of the debt instruments that are extinguished, irrespective of the value of the counterpart claim (or assets) being provided. This reduction in gross external debt position should be recorded at the time when the debt instrument is extinguished; more accurately, the gross external debt position no longer includes debt that has ceased to exist.

#### **Flow data**

**8.36** In the transaction data in the balance of payments, the reduction in the outstanding debt instrument is recorded at the value of the counterpart claim (or assets). Any difference between the value of the debt being extinguished and the corresponding claims or funds provided is recorded as a valuation change in position data in the integrated IIP statement (as well as in the integrated external debt position statement—the statement that emphasizes how changes in the position result from transactions, valuation changes, and other changes in volume during the reference period—see Table 7.15). For instance, if the market value of the equity is lower than the value of the old debt, a valuation adjustment is recorded in the integrated position statement under the instrument that is being extinguished. An exception arises when nonmarketable debt owed to official creditors is involved, and the counterpart claim (assets) has a lower value than the debt, in which instance both the debt instrument and the counterpart claim (or assets) are separately valued, and any difference in value is recorded as debt forgiveness (a capital transfer) in the balance of payments. The DAC system employs a similar approach, except that all differences in value are classified as transactions and not as valuation changes provided that they are the result of bilateral negotiation and there is a development motive for the operation. The DRS records both the reduction in the nominal value of the debt instrument and the value at which the debt was repurchased, allowing the discount to be measured.

#### **Debt reduction**

**8.37** Where official debt is exchanged for equity or counterpart funds to be used for development purposes, the difference between the value of the

debt being extinguished and the counterpart claim or funds provided is classified as debt reduction.<sup>14</sup> This includes cases where the buyback of debt is by a third party, such as a nongovernmental organization or a corporation, which then sells the debt back to the debtor at a discount, under a deal that is arranged under a bilateral arrangement between the debtor and government creditor.

**8.38** In other cases, replacing a debt instrument with another type of claim may only be the recognition of reality. In other words, and particularly for marketable instruments, the price at which the debtor is willing to repurchase the debt may be greater than the price at which the debt previously traded. So, if the creditor purchased the security at the lower market price, the creditor might be making a holding gain.

**8.39** The *Guide* recommends that in measuring and presenting data on debt reduction from such transactions, a distinction is made between (1) collaborative arrangements arising from discussions between the creditor(s) and debtor; and (2) buybacks that are initiated by the debtor through purchases in the secondary market. When buybacks arise from collaborative arrangements, any difference between the value of the counterpart claims (or assets) provided by the debtor and the nominal amount bought back should be recorded as debt reduction in Table 8.1. Debt reduction arising from buybacks in the secondary market initiated by the debtor should not be recorded as debt reduction in the table.<sup>15</sup>

**8.40** For both public and private sector transactions, if external debt and the counterpart claims (or assets) are denominated in different currencies, any debt reduction should be determined using the market exchange rate between the two currencies prevailing on the transaction date (the midpoint between the buying and selling spot rates).

### Debt Assumption

**8.41** Debt assumption is a trilateral agreement between a creditor, a former debtor, and a new debtor

under which the new debtor assumes the former debtor's outstanding liability to the creditor and is liable for repayment of the debt. The activation of a guarantee is an example of debt assumption. If the original debtor defaults on its debt obligations, the creditor may invoke the contract conditions permitting the guarantee from the guarantor to be called. The guarantor unit then must either repay the debt or assume responsibility for the debt as the primary debtor and the liability of the original debtor is extinguished. Governments can be the debtor that is defaulting or the guarantor—the unit that must assume responsibility for the debt in case of default.

### *Recommended treatment*

#### *External debt position and debt reduction*

**8.42** Debt assumption is recorded in the transaction and position data when the creditor invokes the contract conditions permitting a guarantee to be called. If debt assumption arises under other circumstances, it is recorded when the liability is actually removed from the debtor's balance sheet, and the corresponding entries made in the new debtor's balance sheet, and not necessarily the time when agreement was reached to make the debt assumption. The recording by the entity assuming the debt has to be made in one time period: the successive dates of repayment previously foreseen in the context of the former debt are not relevant.

**8.43** After it has been assumed, the debt, which was originally a liability of the former debtor, becomes a liability of the new debtor. The debt may carry the same terms as the original debt, or new terms may come into force because the guarantee was invoked. The amount to be recorded by the new debtor is the full amount of the outstanding debt that is assumed. No debt reduction is recorded, unless there is an agreement with the creditor to reduce the external debt. The recording of positions depends on whether the two entities—the entity assuming the debt and the original debtor—are located in the same economy or not, and whether or not the entity that assumes the debt receives a financial claim on the original debtor in respect of the debt that has been assumed. In many cases it is likely that the entity assuming the debt and the original debtor are resident in the same economy. If the original and new debtors are from

<sup>14</sup>In the DAC system it is classified as other action on debt, and in the DRS it is classified as debt reduction.

<sup>15</sup>Only debt buybacks that are part of a comprehensive debt treatment and that meet certain criteria can be recorded as official development assistance (ODA) in DAC statistics. Any discount provided in standalone buybacks is not reportable as ODA.

different institutional sectors in the same economy, the external debt of the institutional sector of the original debtor is reduced, and the external debt of the institutional sector of the new debtor increased; however, the gross external debt position of the economy remains unchanged.

**8.44** However, if the assuming entity is in a different economy from the original debtor, then the external debt of the assuming economy (new debtor) is increased, and the external debt of the original debtor reduced by the full amount of the outstanding debt that is assumed. The terms of the debt assumption may include a legal obligation for the original debtor to pay back to the new debtor the amount of debt assumed. If so, the original debtor economy would record this new liability in the external debt position, under the relevant debt instrument(s),<sup>16</sup> and thus its gross external debt position would remain unchanged. If no claim was established, then no new liability is recorded in the external debt position of the original debtor. Every transfer of liabilities between a quasi-corporation and its owner is reflected in the value of its equity stake.<sup>17</sup>

### *Flow data*

**8.45** If the entity assuming the debt and the original debtor are resident in the same economy, then no balance of payments transactions are recorded. If both entities are resident in different economies, the debt-assuming economy would record the creation of the new liability to the creditor. Thereafter, the transactions in the balance of payments depend upon whether the assuming economy obtains a claim on the original debtor and, if not, the relationship between the two entities—whether the original debtor was in a direct investment relationship with the entity in the assuming economy or not. If a claim on the original debtor is established, the new debtor records an increase in a debt claim on the original debtor. If no claim is established, a capital transfer (debt forgiveness) from the assuming debtor economy to the original debtor

economy is recorded,<sup>18</sup> unless the new and original debtors are in a direct investment relationship, under which circumstances an increase (or decrease) in equity is recorded.<sup>19</sup> The DRS system will record a transfer of liability as the reduction in the stock position of the original debtor and an increase in the stock position of the new debtor, if the entity assuming the debt and the original debtor are resident in the same economy. If both entities are resident in different economies, and a claim is established between the original and the new debtor, the debt assumption will be recorded in the original debtor's economy as a reduction in the stock position of the amount owed to the original creditor and an increase in the stock position of the new creditor. DAC statistics include guarantees—when they are invoked—as debt assumption.<sup>20</sup>

## **Presentation of Data on Debt Reduction**

**8.46** In Table 8.1, as far as possible, economies should present information on debt reduction according to the sector of the debtor (public-sector-based approach) and by type of creditor. Additionally, the table captures information on debt reduction arising from debt reorganization of debt securities.

**8.47** Also, data could be presented by type of debt reorganization under which the debt reduction was given: (1) debt rescheduling; (2) debt forgiveness; (3) debt conversion and debt prepayments; and (4) debt assumption. Where a debt-relief package includes elements of more than one type, separately identifying each type is encouraged, e.g., if a part of the debt is to be repaid for cash, a prepayment should be recorded; if part of the debt is cancelled, debt forgiveness should be recorded; if the repayment terms of part of the debt are changed, a debt rescheduling should be recorded. But, if it is not possible to provide separate identification,

<sup>16</sup>The debt-assuming economy would record an increase in its financial assets by the same amount.

<sup>17</sup>If the original debtor was in a direct investment relationship with the entity in the assuming economy, an increase in the direct investor's equity (or decrease if the parent is the original debtor) would be recorded in the direct investment enterprise.

<sup>18</sup>Unless the original debtor no longer exists, in which case the original debt of the debtor to the creditor is written off in both their accounts (an other volume change is recorded in the IIP statement), a capital transfer from the debt-assuming party to the creditor is recorded as the corresponding entry to the creation of the liability.

<sup>19</sup>See *BPM6*, paragraphs 8.42–8.45 and A2.48–A2.53, for a description of these transactions.

<sup>20</sup>In DAC statistics, the public sector in a donor country can provide guarantees to the private sector within the donor country. If the guarantee is invoked, then the official sector takes over the debt and can count this as ODA (depending on debt relief provided).

all debt reduction should be included along with the dominant type of reorganization in the package.

**8.48** In Table 8.1, debt reduction should be recorded at the time when the external debt is reduced. If all debt reduction occurs at one time, debt reduction should be recorded at that time rather than when the debt-service payments would have fallen due. However, it is recognized that national practices may differ in this regard, and if the latter approach is followed, it should be recorded in a note to the presentation of the debt-reduction data.

**8.49** Debt reorganization might also be phased over a period of time, such as under multiphase contracts, performance-related contracts, and when debt reduction is dependent on contingent events. In such circumstances, debt reduction is recorded when the change in debt-service payment schedule of the debtor takes effect; for instance, if debt reduction occurs when the debt-service payments fall due, then this is the time when the debt reduction is recorded.<sup>21</sup>

**8.50** As noted above, the exchange rate used to calculate debt reduction should be the market rate on the transaction date (the midpoint between the buying and selling spot rates).

**8.51** It is recommended that methodological notes accompany the presentation of debt-reduction statistics. Inter alia, these notes should cover each type of debt reorganization.

**8.52** In Table 8.1, debt reduction is measured only in nominal value terms. This is because the analytical usefulness of presenting debt-reduction data in market-value terms is uncertain. For instance, when an economy faces payment difficulties (which is systematically the case when the country receives debt reduction), its debt is generally valued at a deep discount, since the market is still uncertain about the prospects of payment. In such circumstances, debt reorganization can result in the new debt having a higher value than the old debt. Similarly, in most cases (and in all multilateral agreements, such as those of the Paris Club or the London Club, shown in Box 8.2, or the HIPC Initiative), debt relief aims to restore the creditworthiness of the debtor country, thus increasing the

possibility of repayment of existing debts and hence raising their market value. While there may be analytical interest in measuring the effect of debt reorganization on the value of outstanding debt, i.e., the amount by which the market value rises, changes in the nominal amount outstanding rather than the market value is the preferred approach to measuring debt reduction arising from debt reorganization.

## Other Transactions Related to Debt Reorganization

### Borrowing for Balance of Payments Support

**8.53** Borrowing for balance of payments support refers to borrowing (including bond issues) by the government or central bank (or by other sectors on behalf of the authorities) to meet balance of payments needs.<sup>22</sup> In the external debt statement, unlike the analytical presentation of the balance of payments, no special “below-the-line” recording of these borrowings or their advance repayment is required. Such borrowing is not considered debt reorganization because it does not alter the terms established for servicing an existing debt.

### New Money Facilities

**8.54** Some debt-reorganization packages feature new money facilities (new loan facilities that may be used for the payment of existing debt-service obligations). Nevertheless, as these new loan facilities do not alter the terms established for servicing an existing debt, these loans are not considered debt reorganization. In the gross external debt position, outstanding drawings by the debtor on new money facilities are usually recorded under long-term loans. If the existing debt liabilities remain outstanding, they should continue to be reported in the gross external debt position, until they are repaid. New money facilities are not to be recorded as debt reduction.

### Debt Payments on Behalf of Others

**8.55** Rather than assume the debt, a government may decide to repay a specific borrowing or make a specific payment on behalf of another institutional unit, without the guarantee being called or the debt

<sup>21</sup> In DAC statistics the debt reduction is recorded when the bilateral agreement legally comes into force.

<sup>22</sup> Borrowing for balance of payments support is described more fully in *BPM6*, paragraphs A1.14 and A1.15.

being taken over. In this case, the debt stays recorded solely in the balance sheet of the other institutional unit, the only legal debtor. As the existing debt remains extant, and the terms remain unaltered, this is not considered debt reorganization, and the debt remains external debt of the economy if the creditor is a nonresident. Such a situation may occur where the debtor is experiencing temporary financial difficulties rather than permanent financial problems.

**8.56** If the transfer provided to repay the debt creates a new liability in the form of a government claim on the debtor, this is classified as external debt only if the government and other institutional unit are residents of different economies (and the debtor is not a quasicorporation of the government). As with debt assumption, a capital transfer or direct investment–equity transaction is recorded if no claim is established by the paying economy. The payment of the debt service is not recorded as a payment of interest or principal by the paying economy because the payments are not related to a liability in its balance sheet.

### Defeasance

**8.57** Defeasance is a technique by which a debtor exactly matches debt service outflows from a set of its liabilities with financial assets with the same debt service inflows, and removes both the asset and liabilities from its balance sheet. Although a debtor may wish to regard the defeased debt as being effectively extinguished, the *Guide* does not recognize defeasance as affecting the debt of the debtor as long as there has been no change in the legal obligations of the debtor, i.e., the debt should continue to be shown on the gross external debt position. If a separate unit is created to hold the assets and liabilities, the outstanding

external debt position of the original debtor economy is reduced, if the second unit is resident of another economy. In this case, the transactions by which the assets and liabilities are moved to the second institutional unit are recorded in the balance of payments. If the two units are resident in the same economy but are classified in different sectors, while the gross external debt position remains unchanged, the sector classification of the debtor changes (a reclassification in other changes in volume account is recorded).

### Debt Write-Offs

**8.58** A creditor can unilaterally decide to write off debt owed to it, and so no longer carries it on its books. This unilateral action arises, for instance, when the creditor regards a claim as unrecoverable, perhaps because of bankruptcy of the debtor. As mentioned in paragraph 8.4, this is not debt reorganization as defined in the *Guide* because it does not involve a bilateral arrangement. The creditor records the reduction in its financial assets and the debtor records the corresponding debt liability reduction in its external debt position. No transactions are recorded, and the change in positions in both, the external debt position of the debtor economy as well as the external financial assets position of the creditor economy, is accounted for through “other changes in volume” in the reconciliation of gross external debt positions at two different reference dates. A failure by a debtor economy to honor its debt obligations (default, moratorium, etc.) is also a unilateral decision that is not considered debt reorganization (see paragraph 8.4). However, in contrast to debt write-offs, such failure involves no debt reduction in the external debt position of the debtor country, and gives rise to arrears.





# 9

## Contingent Liabilities

### Introduction

**9.1** The financial crises of the 1990s highlighted the shortcomings of conventional accounting systems in capturing the full extent of financial exposures arising from traditional “off-balance-sheet” obligations, such as contingent liabilities, and from financial derivatives contracts. The discovery of the magnitude and role of these obligations in these crises reinforced the need to monitor them. This chapter focuses on contingent liabilities.<sup>1</sup> Guidelines for monitoring financial derivatives positions were provided earlier in the *Guide*.

**9.2** Contingent liabilities have gained prominence in the analysis of public finance and the assessment of the financial position of the public sector, because while “invisible” in good times, they may result in costly fiscal surprises. An increased monitoring of contingent liabilities, which might impose substantial fiscal costs and impair fiscal sustainability, helps countries safeguard their fiscal position. Further, the increasing awareness of international markets to the relevance of contingent liabilities in assessing sovereign creditworthiness calls for more transparency.

**9.3** Contingent liabilities are complex arrangements, and no single measurement approach can fit all situations; rather, comprehensive standards for measuring these liabilities and for better disclosure of information are still evolving. Indeed, experience has shown that contingent liabilities are not always fully covered in accounting systems,<sup>2</sup> although an increasing number of countries are disseminating information on contingent liabilities in their national publications.

**9.4** Creating and maintaining a reliable inventory of contingent liabilities is essential for managing them. In providing information on contingent liabilities, it is

important to ensure that the information is meaningful and understandable. To encourage the monitoring and measurement of contingent liabilities, with a view to enhancing transparency, this chapter provides some measurement approaches, after first defining contingent liabilities and then providing some reasons for their measurement. More specifically, also provided is a table for the dissemination of external debt data on an “ultimate risk” basis, i.e., adjusting residence-based external debt data for certain cross-border risk transfers.

### Definition

**9.5** Contingent liabilities are obligations that arise from a particular discrete event(s) that may or may not occur. They can be explicit or implicit. A key aspect of such liabilities, which distinguishes them from current financial liabilities (and external debt), is that one or more conditions or events must be fulfilled before a financial transaction takes place.

**9.6** In macroeconomic statistics, contingent liabilities are not recognized on the balance sheet as financial assets or liabilities prior to the condition(s) being fulfilled (see *2008 SNA*, paragraph 3.40 and *BPM6*, paragraph 5.10). An exception is made for standardized guarantees where, although each individual arrangement involves a contingent liability, the number of similar guarantees is such that an actual liability is established for the proportion of guarantees likely to be called (see *2008 SNA*, paragraph 3.40).

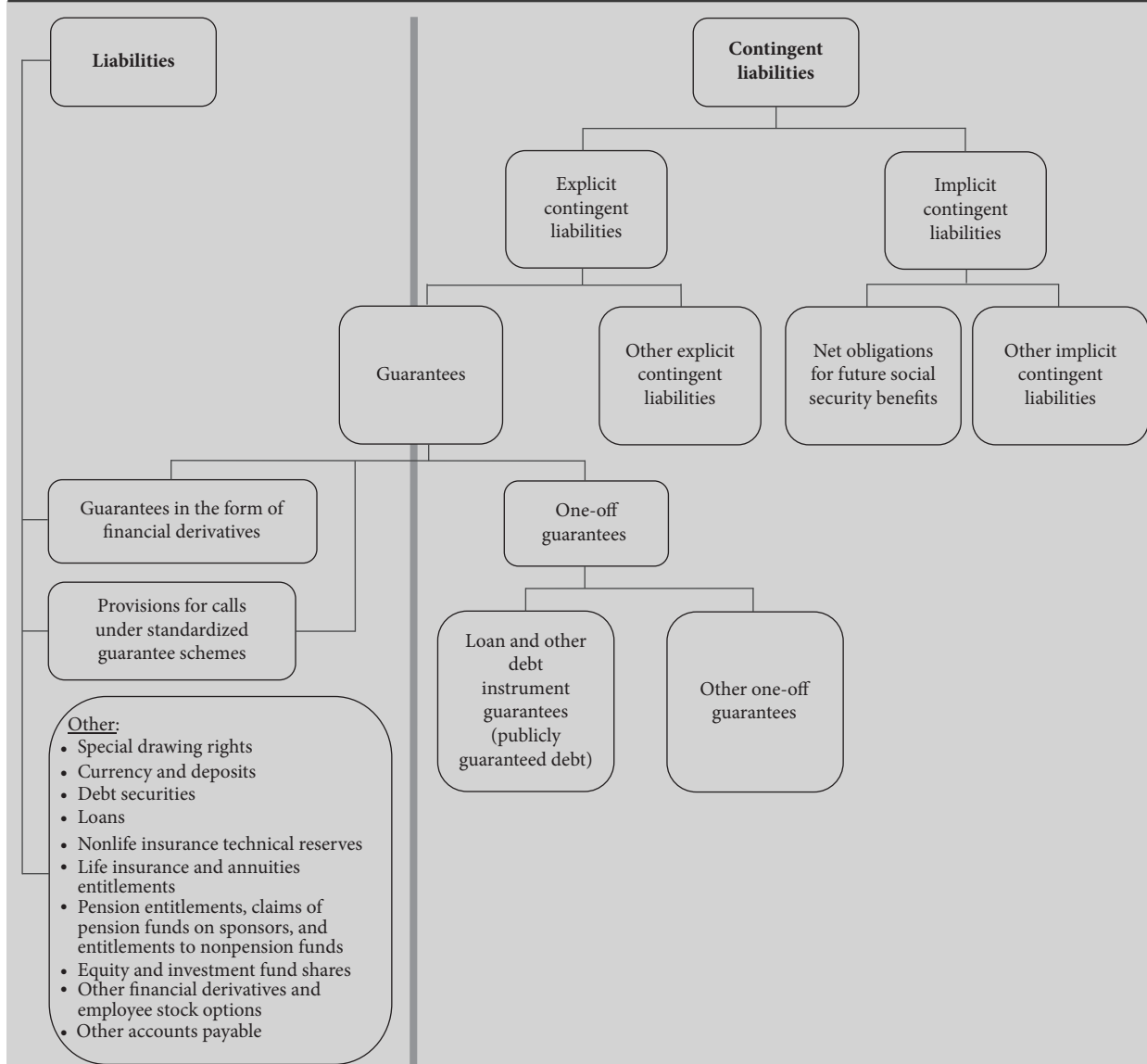
**9.7** Figure 9.1 provides an overview of the boundary between liabilities and contingent liabilities in macroeconomic statistics.<sup>3</sup>

<sup>1</sup> This chapter draws on work at the World Bank and at the IMF.

<sup>2</sup> See paragraphs 9.20 and 9.21, and Table 9.2.

<sup>3</sup> The *Government Finance Statistics Manual* (IMF, 2001) recommends the treatment of liabilities for nonautonomous unfunded employer pension schemes as “liabilities,” while the *SNA* allows for some flexibility (see *2008 SNA*, paragraphs 17.191–17.199).

Figure 9.1 Overview of Liabilities and Contingent Liabilities in Macroeconomic Statistics



Source: Based on the *PSDS Guide*.

**9.8** A distinction is made between explicit and implicit contingent liabilities. In all macroeconomic statistical systems, explicit contingent liabilities are defined as legal or contractual financial arrangements that give rise to conditional requirements to make payments of economic value. The requirements become effective if one or more stipulated conditions arise. Implicit contingent liabilities do not arise from a legal or contractual source, but are recognized after a condition or event is realized. While the focus of this chapter is largely on explicit contingent liabilities, the importance of implicit contingent liabilities is also discussed below. Table 9.1 provides a practical way of classifying the types of potential liabilities of the central government.

### Explicit Contingent Liabilities

**9.9** Explicit contingent liabilities are those defined by the *2008 SNA* as contractual financial arrangements that give rise to conditional requirements, i.e., the requirements become effective if one or more stipulated conditions arise, to make payments of economic value.<sup>4</sup> In other words, explicit contingent liabilities arise from a legal or contractual arrangement. The contingent liability may arise from an existing debt—such as an institution guaranteeing payment to a

<sup>4</sup> *The European System of Accounts: ESA 2010* defines contingent liabilities in a similar way.

Table 9.1 Fiscal Risk Matrix with Illustrative Examples<sup>1</sup>

Liabilities	Direct (obligation in any event)	Contingent (obligation if a particular event occurs)
<b>Explicit</b> Government liability as recognized by a law or contract	External and domestic sovereign borrowing (loans contracted and securities issued by central government) Budgetary expenditures Budgetary expenditures legally binding in the long term (government employment-related salaries and pensions)	<b>Guarantees</b> Central government guarantees for nonsovereign borrowing and obligations issued to subnational governments and public and private sector entities (development banks) Umbrella central government guarantees for various types of loans (mortgage loans, agriculture loans, small business loans) <sup>2</sup> Trade and exchange rate guarantees issued by the central government Guarantees on borrowing by a foreign sovereign government Central government guarantees on private investments <b>Other explicit contingent liabilities</b> Central government insurance schemes not included under standardized guarantee schemes Potential legal claims, which are claims stemming from pending court cases Indemnities (commitments to accept the risk of loss or damage another party might suffer) Uncalled capital (obligation to provide additional capital on demand to an entity of which it is a shareholder, e.g. official international financial institutions)
<b>Implicit</b> Obligations that may be recognized when the cost of not assuming them could be unacceptably high	Net obligations for future public pensions (excluding government employment-related pensions) <sup>3</sup>	<b>Net obligations for future social security benefits other than net obligations for future public pensions (excluding government employment-related pensions)</b> <b>Other implicit contingent liabilities</b> Bailouts of public enterprises, financial institutions, subnational governments, and private firms that are either strategically important or “too big to fail” Liability cleanup in entities under privatization Investment failure of a nonguaranteed pension fund Default of central bank on its obligations (foreign exchange contracts, currency defense, balance of payment stability) Bailouts following a reversal in private capital flows Environmental recovery, disaster relief, etc.

Source: Adapted from Polackova Brixí (1999).

<sup>1</sup> The liabilities listed refer to the fiscal authorities, not the central bank.

<sup>2</sup> However, guarantees issued by governments on export credits or student loans are standardized guarantees; provisions for calls under these guarantees are recognized as actual liabilities in the *Guide*, in line with the 2008 SNA and BPM6.

<sup>3</sup> Excluding all government employment-related pensions (civil service pensions) and any public pension schemes for which a reserve was set aside to meet the entitlements; these should be recorded as explicit direct liabilities.

third party; or arise from an obligation to provide funds—such as a line of credit, which once advanced creates a claim; or arise from a commitment to compensate another party for losses—such as exchange rate guarantees.

**9.10** Explicit contingent liabilities can take a variety of forms, although guarantees are the most common; however, not all contingent liabilities are guarantees

(see Box 9.1). Examples of explicit contingencies in a form other than guarantees include: (a) potential legal claims, which are claims stemming from pending court cases; (b) indemnities, which are commitments to accept the risk of loss or damage another party might suffer; and (c) uncalled capital, which is an obligation to provide additional capital, on demand, to an entity of which it is a shareholder

### Box 9.1 Types of Guarantees

Three classes of guarantees are considered in the *2008 SNA* and *BPM6*: guarantees that meet the definition of a financial derivative, standardized guarantees, and one-off guarantees.

*Guarantees that meet the definition of financial derivatives* protect, on a guarantee-by-guarantee basis, the lender against certain types of risk arising from a credit relationship by paying the guarantor a fee for a specified period. The guarantees covered are such that experience in the market allows the guarantor to apply standard master legal agreements or to make a reasonable estimate of the likelihood of the borrower defaulting and to calculate suitable terms for the financial derivative. These financial derivatives are referred to as credit derivatives, which are nondebt financial assets or liabilities—not contingent assets or liabilities. For instance, credit default swaps are included in financial derivatives as options (see *BPM6*, paragraphs 5.68 and 5.93, Appendix 1, Part 1 of this *Guide*).

*Standardized guarantees* are defined as those that are not provided by means of a financial derivative (such as credit default swaps), but for which the probability of default can be well established. These guarantees cover similar types of credit risk for a large number of cases. Examples include guarantees issued by governments on export credit or student loans. Generally, it is not possible to estimate precisely the risk

of any one loan being in default, but it is possible to make a reliable estimate of how many out of a large number of such outstanding loans will default. This default rate establishes a debt liability—not a contingent liability—which is referred to as “provision for calls under standardized guarantee schemes” (see *BPM6*, paragraphs 5.68 and 5.93, and Appendix 1, Part 1 of this *Guide*).

*One-off guarantees* occur in situations in which the conditions of the loan or of the security that is guaranteed are so particular that it is not possible for the degree of risk associated with it to be calculated with any degree of precision. These guarantees are not recognized as economic assets until their activation, i.e., when the event occurs that makes the guarantor responsible for the liability. These are contingent assets until activated. In most cases, a one-off guarantee is considered a contingent debt liability of the guarantor. Debt under one-off guarantees continues to be attributed to the debtor, not the guarantor, unless and until the guarantee is called. However, one-off guarantees granted by governments to corporations in financial distress that have a very high likelihood of being called are treated as if they were activated at inception (see *BPM6*, paragraph 5.68 and Appendix 3 of this *Guide*).

(such as an international financial institution). Some of the more common explicit contingent liabilities are set out below.

#### **Loan and other payment guarantees**

**9.11** Loan and other payment guarantees are commitments by one party to bear the risk of nonpayment by another party—the guarantor guarantees the servicing (principal and/or interest) of the existing debt of other unit(s). Guarantors are only required to make a payment if the debtor defaults. Some of the common types of risks that are assumed by guarantors are commercial risk or financial performance risk of the borrower; market risk, particularly that arising from the possibility of adverse movements in market variables, such as exchange rates and interest rates; political risk, including risk of currency inconvertibility and nontransferability of payments (also called transfer risk), expropriation, and political violence; and regulatory or policy risk, where implementation of certain laws and regulations is critical to the financial performance of the debtor.<sup>5</sup> Loan and

other payment guarantees usually increase the initial debtor’s access to international credit markets and/or improve the maturity structure of borrowing.

#### **Credit guarantees and similar contingent liabilities**

**9.12** Lines of credit and loan commitments provide a guarantee that undrawn funds will be available in the future, but no financial liability/asset exists until such funds are actually provided. Undrawn lines of credit and undisbursed loan commitments are contingent liabilities of the issuing institutions; namely, banks. Letters of credit are promises to make payment upon the presentation of prespecified documents.

#### **Contingent “credit availability” guarantees or contingent credit facilities**

**9.13** Underwritten note issuance facilities (NIFs) provide a guarantee that a borrower will be able to issue short-term notes and that the underwriting institution(s) will take up any unsold portion of the notes. Only when funds are advanced by the underwriting institution(s) will an actual liability/asset be created. The unutilized portion is a contingent liability.

**9.14** Other note guarantee facilities providing contingent credit or backup purchase facilities are revolving

<sup>5</sup>Regulatory or policy-based guarantees are especially relevant in infrastructure financing. For more details and country-specific examples, see Irwin and others (1997).

underwriting facilities (RUFs), multiple options facilities (MOFs), and global note facilities (GNFs). Bank and nonbank financial institutions provide backup purchase facilities. Again, the unutilized amounts of these facilities are contingent liabilities.

### Implicit Contingent Liabilities

**9.15** Implicit contingent liabilities do not arise from a legal or contractual source, but are recognized after a condition or event is realized, e.g., ensuring systemic solvency of the banking sector might be viewed as an implicit contingent liability of the central bank or the central government.<sup>6</sup> Likewise, covering the obligations of subnational (state and local) governments or the central bank in the event of default might be viewed as an implicit contingent liability of the central government. Implicit contingencies may be considered political or moral obligations that sometimes arise from expectations that government would intervene in the event of any exceptionally important crisis or disaster, and may be recognized when the cost of not assuming them is believed to be unacceptably high.<sup>7</sup>

**9.16** The relative importance of various types of contingent liabilities is country-specific, but implicit contingent liabilities can be costly. For instance, the fiscal cost of support for the financial system can be very high.<sup>8,9</sup>

**9.17** Although implicit contingent liabilities are important in macroeconomic assessment, fiscal burden, and policy analysis, implicit contingent

liabilities are even more difficult to measure than explicit contingent liabilities. Also, until measurement techniques are developed, there is a danger of creating moral hazard risks in disseminating information on implicit contingent liabilities of the type set out in Table 9.1. Thus, the rest of this chapter focuses only on the measurement of explicit contingent liabilities.

### Why Measure Contingent Liabilities?

**9.18** By conferring certain rights or obligations that may be exercised in the future, contingent liabilities can have a financial and economic impact on the economic entities involved. When these liabilities relate to cross-border activity, and they are not captured in conventional accounting systems, it can be difficult to accurately assess the financial position of an economy—and the various institutional sectors within the economy—vis-à-vis nonresidents.

**9.19** Analysis of the macroeconomic vulnerability of an economy to external shocks requires information on both external debt obligations and contingent liabilities. Experience has shown that contingent liabilities are not always fully covered in accounting systems. Moreover, there is an increasing realization, when assessing macroeconomic conditions, that contingent liabilities of the government and the central bank can be significant, e.g., fiscal contingent claims

<sup>6</sup>The central government may intervene in the banking sector especially for recapitalization. A case in point is Indonesia, where the government's domestic debt increased from practically nothing, in the period before the crisis (mid-1997), to 500 trillion Indonesian rupiah by the end of 1999, mostly due to the issuance of bonds to recapitalize the banking system. The increase in the government's stock of domestic debt was accompanied by a rise in its assets, which were received in exchange for issuing bank-restructuring bonds. See also Blejer and Shumacher (2000).

<sup>7</sup>See Cebotari, *Contingent Liabilities: Issues and Practice* (IMF, 2008).

<sup>8</sup>For instance, Laeven and Valencia (2010) present comprehensive data on the characteristics of systemic banking crises over the period 1970–2009, including the associated economic and fiscal costs. The cost of each crisis is estimated using three metrics: direct fiscal costs, output losses, and the increase in public sector debt relative to GDP. The economic cost of the 2007–2009 banking crises—concentrated in high-income countries—was on average much larger than that of past crises, both in terms of output losses and increases in public debt. The median output loss (computed as deviations of actual output from its trend) was 25 percent of GDP in most recent crises (2007–2009), compared to a historical median of 20 percent of GDP, while the median increase in public debt (over the three-year period following the start of the crisis) is

24 percent of GDP in 2007–2009 crises, compared to a historical median of 16 percent of GDP. These differences, in part, reflect an increase in the size of financial systems, the fact that the 2007–2009 crises were concentrated in high-income countries, and possibly differences in the size of the initial shock to the financial system. At the same time, direct fiscal costs to support the financial sector were smaller, 5 percent of GDP in 2007–2009 crises, compared to 10 percent of GDP for past crises, as a consequence of relatively swift policy action and the significant indirect support the financial system received through expansionary monetary and fiscal policy, the widespread use of guarantees on liabilities, and direct purchases of assets that helped sustain asset prices (see Laeven and Valencia, *Resolution of Banking Crises: The Good, the Bad, and the Ugly*, IMF WP/10/146). Natural disasters and terrorist-related events have also been very costly, with economic losses sometimes reaching 200 percent of GDP (e.g., Hurricane Ivan in Grenada in 2004, see Cebotari [2008]).

<sup>9</sup>Also, a sovereign debt restructuring may impair the financial position of domestic or foreign institutions to a degree that this threatens financial stability and raises pressures for bank recapitalization and official sector bailouts (see *Sovereign Debt Restructurings 1950–2010: Literature Survey, Data, and Stylized Facts*, Das, Papaioannou, and Trebesch, IMF Working Paper/12/203).

**Table 9.2 Treatment of Contingent Liabilities under Statistical and Accounting Standards: Recognition as Liabilities and Data Reporting Requirements<sup>1</sup>**

	Recognition of Contingent Liabilities as Liabilities	Data Reporting on Contingent Liabilities
Cash Accounting (IPSAS 19)	Only when the contingency is called and cash payments need to be made.	Encouraged. Under cash accounting standards no disclosure—meaning reported in notes or narratives that are regarded as an integral part of the financial statement—is currently required by IPSAS, but supplementary disclosure in line with that under accrual standards is recommended.
Accrual Accounting (IPSAS 19)	The expected cost of contractual contingent liabilities, such as guarantees and legal claims, should be recognized—meaning formally recorded in the financial statements of the government as a liability—if: (i) it is more likely than not (50 percent) that the event will occur; and (ii) the amount of the obligation can be measured with sufficient reliability. Liabilities that do not satisfy these criteria should not be recognized.	The disclosure of the nature of contractual contingent liabilities in the notes to financial statements is required as long as the possibility of the payment is not remote (i.e., loss more likely than not, or loss less than likely but more than remote) for both contingent liabilities recognized as balance sheet liabilities and contingent liabilities not recognized on the balance sheet.
Statistical Reporting (the <i>Guide</i> )	A liability is recognized only if and when the contingency actually materializes, and is matched by a claim, i.e., the creditor owns a claim on the debtor.	Private sector debt owed to nonresidents and guaranteed by the public sector—through a contractual arrangement—should be presented in tables based on a public-sector-based approach (Chapter 5).  Debt of nonresidents, not owned by residents, guaranteed by a resident entity may be presented in Table 9.3 (column 2).  Data on a narrow range of contingent liabilities are presented in a memorandum table in Chapter 4. This table covers external debt of one sector guaranteed by another sector, and the cross-border provision of guarantees.  In all these instances, it is recommended that the contingency be valued in terms of the maximum exposure loss (full face value).

<sup>1</sup> Contingent liabilities in the table correspond to the definition used in this chapter, not to their accounting definition (see paragraph 9.21, footnote 10).

can clearly have an impact on budget deficits and financing needs, with implications for economic policy. Recognizing the implications of contingent liabilities for policy and analysis, the *2008 SNA* (paragraph 11.24) states:

Collectively, such contingencies may be important for financial programming, policy, and analysis. Therefore, where contingent positions are important for policy and analysis, it is recommended that information be collected and presented as supplementary data. Even though no payments may eventually be due for contingent liabilities, the existence of a high level of them may indicate an undesirable level of risk on the part of those units offering them.

## Measuring Contingent Liabilities

### Treatment of Contingent Liabilities

**9.20** Data dissemination of contingent liabilities based on contractual obligations (i.e., explicit contingent liabilities) is already recommended under international statistical standards. Table 9.2 summarizes the treatment of contingent liabilities under statistical and accounting standards in relation to their recognition as liabilities and their data reporting requirements.

**9.21** The *Guide* does not recognize contingent liabilities within external debt, recognizing a liability only if and when the liability actually materializes and is matched by a claim, i.e., the creditor owns a claim

### Box 9.2 Disclosing the Contingent Liabilities: Country Examples

Contingent liabilities are disclosed in an increasing number of countries, either in budget documents or other fiscal reports sent to parliament. New Zealand and Australia were pioneers in disclosing contingent liabilities, a practice that was subsequently picked up in a few other OECD countries, and in several emerging markets (Brazil, Chile, Colombia, Indonesia, Peru, and South Africa). The type of contingent liabilities disclosed varies across countries, in part reflecting their relative significance. Information on explicit loan guarantees (whether to public enterprises, financial institutions, private companies, or students) is reported by virtually all countries disclosing contingent liabilities. Disclosure of guarantees related to public-private partnerships (PPPs)-type arrangements, such as minimum revenue guarantees or exchange rate guarantees, is generally more limited (Chile, Colombia, Indonesia, Peru, and the United Kingdom). Other types of contingent liabilities are also reported, including those from pension guarantees (Chile and the United States); deposit guarantees (Chile and the United States); litigation (Australia, Brazil, Colombia, Indonesia, New Zealand, and the United States); liabilities of

the central bank (Australia and Chile); and natural disasters (Indonesia).

When contingent liabilities can be quantified, their fiscal significance is reported through a variety of measures. These include: (1) the face value or the maximum loss under guarantees; (2) the expected cost of the guarantees; or (3) the unexpected cost of the guarantee, i.e., the most government can lose at, e.g., a 95 to 99 percent confidence level (the so-called cash flow at risk). The latter two measures are reported either as expected annual payments over a certain time span or as the net present value of these payments.

Most countries do not disclose implicit contingent liabilities. It would generally be inappropriate to quantify and report implicit obligations as explicit contingent liabilities, since this would reinforce moral hazard if the private sector interprets this disclosure as a commitment or as an indication that the government is likely to provide future financial assistance. When such considerations are not at play or when the country has a clear history of taking on implicit liabilities, these are sometimes discussed in the context of contingent liability reports.

Note: See detailed information on country practices in Cebotari (2008).

on the debtor. International Public Sector Accounting Standards (IPSAS) for the public sector, which do not require a matching creditor claim for the recognition of liability, recognize on an accrual basis contractual contingent liabilities such as guarantees and legal claims at the moment of initiation if: (1) the probability that the contingency will occur and hence a payment would have to be made is more than 50 percent; and (2) these payments can be reasonably measured.<sup>10,11</sup>

<sup>10</sup>In IPSAS, contingent liabilities that meet these criteria and are recognized in financial statements are called “provisions” (defined as liabilities of uncertain timing and amount), with the remaining contingent liabilities defined as “contingent liabilities.” A shortcoming of this approach is that, from an economic point of view, drawing a distinction between probable and improbable losses is not always useful; a 10 percent chance of losing \$10 million is worse than a 90 percent chance of losing \$1 million.

<sup>11</sup>Increasingly, international accounting standard setters are requiring explicit contingent liabilities to be recognized at fair value. The rationale is that the contractual obligation itself is not conditional and therefore is a liability in full right. The uncertainty about future events is reflected in the valuation of the liability recognized, rather than whether it is recognized or not. This approach is consistent with the methods already used in Sweden and the United States, where an estimate of the expected payment is made for all guarantees (see Cebotari [2008]).

## Measuring the Value of Contingent Liabilities

**9.22** Contingent liabilities give rise to obligations that may be realized in the future, but because of their complexity and variety, establishing a single method for measuring them may not be appropriate. Several alternative ways of measuring contingencies are outlined below. The relevance of each will depend on the type of contingency being measured and the availability of data.

**9.23** A first step in accounting for contingent liabilities is for economic entities to record all such contingent liabilities as they are created, such as with an accrual-based reporting system. But how should such liabilities be valued?

**9.24** The various ways in which the value of explicit contingent liabilities could be measured include: (1) the face value or maximum loss;<sup>12</sup> (2) the expected costs, which can also be viewed as the most government can lose at an about

<sup>12</sup>In the case of guarantees covering deep-discount bonds and zero-coupon bonds, the maximum loss should be measured by the nominal value of the security at the reference period.

50 percent confidence level; (3) unexpected (or tail risk) costs, i.e., the most government can lose at, e.g., a 95 to 99 percent confidence level (also called cash flow at risk); or (4) the market value of the guarantee.

### **Face value**

**9.25** The first approach is to record contingent liabilities at full face value or maximum exposure loss. Thus, a guarantee covering the full amount of a loan outstanding would be recorded at the full nominal value of the underlying loan. The face value approach is by far the most commonly used by countries. This approach does not require quantification of probabilities that the contingent guarantee would be called. It is also a convenient measure in cases when individual contingent liabilities are disclosed, given that the provision of the estimated expected loss could either give rise to moral hazard (if the beneficiary of the guarantee infers that the guarantor is prepared to sustain a loss on the guarantee) or could damage the guarantor's case in courts or in negotiations. Hence, many countries report the face value in the case of guarantees or insurance programs (Australia, New Zealand, the United States, and Chile) or of lawsuits (Chile, Colombia, and the United States).<sup>13</sup>

**9.26** Only a few countries provide information on the nature and scope of unquantifiable risks (Australia, Canada, and New Zealand). These risks include various indemnities (e.g., against prosecution for public officials or unauthorized disclosure of confidential information), land claims, costs of decontaminating defense sites, potential future litigation, legal challenges against legislation, insurance against terrorist acts, and others.

**9.27** For instance, the New Zealand government routinely publishes the maximum potential loss to the government of quantifiable and nonquantifiable contingent liabilities,<sup>14</sup> including guarantees and indemnities, uncalled capital to international institutions,

and potential settlements related to legal proceedings and disputes.

**9.28** Likewise, the Australian government identifies quantifiable and nonquantifiable contingencies.<sup>15</sup> In addition, it identifies "remote" contingent losses (mostly guarantees), including nonquantifiable "remote" contingencies. The Indian government regularly reports the direct guarantees provided by the central government on external borrowings of public sector enterprises, development financial institutions, and nonfinancial private sector corporations.<sup>16</sup> The guarantees are presented by sector and at nominal value.

**9.29** The maximum potential loss method has an obvious limitation: there is no information on the likelihood of the contingency occurring. Especially for loan and other payment guarantees, the maximum potential loss is likely to exceed the economic value of the contingent liability because there is no certainty that a default will occur (i.e., the expected probability of default is less than unity). Theoretically, a better approach is to measure both the maximum possible loss and the expected loss, but calculating the expected loss requires estimating the likelihood of losses, which can be difficult.

### **Estimating expected cost or market value**

**9.30** Several alternative methods of valuing the expected loss exist. These range from relatively simple techniques requiring the use of historical or market data, to quantitative models, such as complex options-pricing techniques and simulations.

**9.31** The expected or unexpected costs measures require, in addition to the face value, an assessment of the probability that the guarantees would be called. For estimating expected losses, a judgment would need to be made as to whether there was at least a 50 percent probability that a guarantee would be called. Some countries disclose the expected losses under various probabilities and types of guarantees (Chile, Colombia, and Peru) and some also disclose "unexpected" losses (Chile at a 95 percent confidence level,

<sup>13</sup> See Table 5 in Cebotari (2008) for detailed country practices.

<sup>14</sup> New Zealand Treasury, Budget Economic and Fiscal Update (Wellington, annual). As the name suggests, nonquantifiable contingent liabilities cannot be measured and arise from either institutional guarantees that have been provided through legislation or from agreements and arrangements with organizations.

<sup>15</sup> Aggregate Financial Statement (Australia, annual).

<sup>16</sup> See the Ministry of Finance's annual publication on external debt, *India's External Debt: A Status Report*.



Colombia at a 99 percent level).<sup>17</sup> Another way to deal with the difficulty of quantifying probabilities for a variety of possible outcomes, is to provide a *range of estimated losses*, e.g., as done by the United States in the case of some lawsuits.

**9.32** Simulation models can be used as a method for estimating the expected or unexpected cost measures. For instance, these models estimate the probability distribution of losses from a guarantee by simulating, rather than assuming, the evolution of relevant risk factors underlying the guarantee. This distribution is then used to price the guarantees (estimate the expected loss) and also allows estimation of the maximum losses that may occur at a given confidence level (e.g., the maximum payments at a 95 percent confidence level means that the probability of higher payments [than these maximum ones] being called is 5 percent). These models are employed for valuing guarantees associated with demand behavior, such as infrastructure guarantees (e.g., road concessions with revenue guarantees).

**9.33** Calculating probabilities requires detailed market information, but such information is often unavailable. This is particularly true in situations of market failure or incomplete markets. A financial marketplace is said to be complete when a market exists with an equilibrium price for every asset in every possible state of the world. Other means are then required to estimate the probability to value a contingency. One possibility is to use historical data on similar types of contingent operations, e.g., if the market price of a loan is not observable, but historical data on a large number of loan guarantees and defaults associated with those guarantees are available, then the probability distribution of the default occurrences can be used to estimate the expected cost of a guarantee on the loan. This procedure is similar to that employed by the insurance industry to calculate insurance

premiums. Rating information on like entities is often used to impute default value on loan guarantees as well. The U.S. Export-Import Bank employs this method for valuing loan guarantees that it extends.

**9.34** Bank regulatory guidelines established by the Basel Committee on Banking Supervision also draw on historical data to measure risks in banks' off-balance-sheet activities and could be used in the absence of good market information for calculating probabilities. For traditional off-balance-sheet items like credit contingent liabilities, the so-called Basel II guidelines provide "credit conversion factors" which, when multiplied with the notional principal amount, provide an estimate of the expected "payout" from the contingent liability. The conversion factors are derived from the estimated size and likely occurrence of the credit exposure, as well as the relative degree of credit risk. Thus, stand-by letters of credit have a 100 percent conversion factor; the unused portion of commitments with an original maturity of over one year is 50 percent; and RUFs, NIFs, and similar arrangements are assigned a 50 percent conversion factor as well.

**9.35** If the expected loss can be calculated, the loss(es) can be valued in present-value terms—expected present value. In other words, since any payment will be in the future and not immediate, the expected future payment streams could be discounted using a market rate of interest faced by the guarantor, i.e., the present value. As with all present-value calculations, the appropriate interest rate to use is crucial. A common practice with government contingent liabilities is to use a risk-free rate like the treasury rate. Under this present-value approach, when a guarantee is issued, the present value of the expected cost of the guarantee could be recorded as an outlay or expense (in the operating account) in the current year and included in the position data, such as a balance sheet.

**9.36** *Market-value measures* use market information to value a contingency. This methodology can be applied across a wide range of contingent liabilities, but it is particularly useful for valuing loan and other payment guarantees, on which the following discussion focuses. This methodology assumes that comparable instruments with and without guarantees are observable in the market and that the market has fully assessed the risk covered by the guarantee. Under this method, the value of a guarantee on a financial

<sup>17</sup>The expected loss is the average loss, i.e., the mean of a loss distribution. The unexpected loss is the difference between the total exposure at the target risk tolerance level and the expected loss; for instance, total exposure at the 99 percent confidence level represents the level of loss where a larger loss has a 1 percent chance of occurring. In the banking industry, expected losses are referred to as the "normal" losses that occur frequently as part of everyday business, whereas unexpected losses are the "unusual" losses that occur rarely and have a high severity.

instrument is derived as the difference between the price of the instrument without a guarantee and the price inclusive of the guarantee. In the context of a loan guarantee, the nominal value of the guarantee would be the difference between the contractual interest rate ( $ip$ ) on the unguaranteed loan and the contractual interest rate ( $ig$ ) on the guaranteed loan times the nominal value of the loan ( $L$ ):  $(ip - ig)L$ . The market value of the guarantee would use market, not contractual, rates.<sup>18</sup>

**9.37** Yet another approach to valuing contingent liabilities applies *option-pricing techniques* from finance theory.<sup>19</sup> With this method, a guarantee can be viewed as an option: a loan guarantee is essentially a put option written on the underlying assets backing the loan.<sup>20</sup> In a loan guarantee, the guarantor sells a put option to a lender. The lender, who is the purchaser of the put option, has the right to “put” (sell) the loan to the guarantor. For instance, consider a guarantee on a loan with a nominal value of  $F$  and an underlying value of  $V$ . If  $V - F < 0$ , then the put option is exercised and the lender receives the exercise price of  $F$ .<sup>21</sup> The value of the put option at exercise is  $F - V$ . When  $V > F$ , the option is not exercised. The value of the guarantee is equivalent to the value of the put option. If the value of the credit instrument on which a guarantee is issued is below the value at which it can be sold to the guarantor, then the guarantee will be called.

**9.38** Although the option-pricing approach is relatively sophisticated, it is being applied in the pricing of guarantees on infrastructure financing and interest and principal payment guarantees.<sup>22</sup> But standard option pricing has its limitations as well. This is because the standard option-pricing model assumes an exogenous stochastic process for underlying asset prices. However, it can be argued that the very

presence of a guarantee (especially a government guarantee) can affect asset prices.<sup>23</sup>

## Recommended Measures

**9.39** The *Guide* encourages the measurement and monitoring of contingent liabilities, especially of guarantees, and has outlined some measurement techniques. However, it is recognized that comprehensive standards for measuring contingent liabilities are still evolving. Consequently, only the recording of a narrow, albeit important, range of contingent liabilities is specified ahead: the value of guarantees of residents’ external debt liabilities (including guarantees of domestic private sector external debt by the public sector), and the cross-border provision of guarantees. In both instances, it is recommended that the contingency should be valued in terms of the maximum exposure loss (full face value).

### *Guarantees of residents’ external debt liabilities*

**9.40** Table 4.7 summarizes the value of guarantees of residents’ external debt liabilities by sector of the guarantor—liabilities of a unit of a resident sector, the servicing of which is contractually guaranteed by a unit of another sector resident in the same economy as the debtor<sup>24</sup>—and cross-border guarantees given by residents.<sup>25</sup>

**9.41** In Chapter 5, the dissemination of data on publicly guaranteed private sector debt—i.e., the value of private sector debt that is owed to nonresidents and is guaranteed by the public sector through a contractual arrangement—is discussed.

### *Ultimate risk*

**9.42** Table 9.3 shows a format that presents external debt according to an “ultimate” risk concept—augmenting residence-based data to take account of the extent to which external debt is guaranteed by residents for nonresidents. Countries could potentially have debt liabilities to nonresidents in excess of

<sup>18</sup> For further discussion of market-value methods see Towe (1990) and Mody and Patro (1996).

<sup>19</sup> An option agreement is a contract giving the holder the right, but not the obligation, to buy (i.e., call) or sell (i.e., put) a specified underlying asset at a pre-agreed price (the exercise or strike price), either at a fixed point in time (the *European option*) or at a time chosen by the holder until maturity (the *American option*).

<sup>20</sup> Robert C. Merton (1977) was the first to show this.

<sup>21</sup> In options, the exercise price (or strike price) is the fixed price at which the owner of an option can purchase (in the case of a call) or sell (in the case of a put) the underlying item.

<sup>22</sup> See Irwin and others (1997) and Borensztein and Pennacchi (1990).

<sup>23</sup> See Sundaresan (2002) for a detailed exposition on this issue.

<sup>24</sup> These liabilities are covered in the gross external debt position as debt of the sector of the original debtor, whereas in Table 4.7 they are presented as contingent liabilities (guarantees) of the sector of the guarantor.

<sup>25</sup> Cross-border guarantees given by residents are included in Table 9.3, column 2, as inward risk transfer.

Table 9.3 Gross External Debt Position: Ultimate Risk Basis

	End Period			
	Gross External Debt (1)	Inward risk transfer (+) (2)	External Debt (ultimate-risk basis) (3)	Memorandum item: Outward risk transfer (4)
<b>General Government</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Special drawing rights (allocations)				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Central Bank</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Special drawing rights (allocations)				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Deposit-Taking Corporations, except the Central Bank</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Other Sectors</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				

Table 9.3 Gross External Debt Position: Ultimate Risk Basis (Concluded)

	End Period			
	Gross External Debt (1)	Inward risk transfer (+) (2)	External Debt (ultimate-risk basis) (3)	Memorandum item: Outward risk transfer (4)
<b>Other Sectors, continued</b>				
<b>Other financial corporations</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Nonfinancial corporations</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Households and nonprofit institutions serving households (NPISHs)</b>				
<b>Short-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2,3</sup>				
<b>Long-term</b>				
Currency and deposits <sup>1</sup>				
Debt securities				
Loans				
Trade credit and advances				
Other debt liabilities <sup>2</sup>				
<b>Direct Investment: Intercompany Lending</b>				
Debt liabilities of direct investment enterprises to direct investors				
Debt liabilities of direct investors to direct investment enterprises				
Debt liabilities between fellow enterprises				
<b>Gross External Debt Position</b>				

<sup>1</sup> It is recommended that all currency and deposits be included in the short-term category unless detailed information is available to make the short-term/long-term attribution.

<sup>2</sup> Other debt liabilities comprise insurance, pension, and standardized guarantee schemes, and other accounts payable—other in the IIP statement. In the absence of information to make the short-term/long-term attribution, it is recommended that insurance, pension, and standardized guarantee schemes be classified as long term.

<sup>3</sup> Arrears are recorded in the original debt instrument rather than in other debt liabilities, short term.

those recorded as external debt on a residence basis if their residents provide guarantees to nonresidents that might be called. Also, branches of domestic institutions located abroad could create a drain on the domestic economy if they ran into difficulties and their own head offices needed to provide funds. Indeed, the latter circumstances arose for some economies during the global crisis of 2008–2009.

**9.43** In Table 9.3, residence-based external debt data (column 1) is increased by the amount of debt of nonresidents, not owned by residents, that is guaranteed by a resident entity (inward risk transfer, column 2). Column 3 is the adjusted external debt exposure of the economy. The table is set out in this manner so that external debt on an ultimate-risk basis can be related back to the gross external debt position measured on a residence basis.

**9.44** The intention of column 2 is to measure any additional external debt risk exposures of residents arising from contingent liabilities. The definition of contingent liabilities adopted is deliberately narrow. To be included in this definition of contingent liabilities, the debt must exist, so lines of credit and similar potential obligations are not included. The data on the inward transfer of risk cover only the debt of a nonresident to a nonresident on which, and as part of the agreement between debtor and creditor, payments are guaranteed to the creditor(s) by a resident entity under a legally binding contract. The guarantor will most commonly be an entity that is related to the debtor (e.g., the parent of the debtor entity), and debt of a legally dependent nonresident branch of a resident entity that is owed to a nonresident. If debt is partially guaranteed, such as if principal payments or interest payments alone are guaranteed, then only the present value of the amount guaranteed should be included in columns 2 or 4. To avoid double counting the same

external debt risk exposure, the following should be excluded from column 2: all debt liabilities of nonresident branches to other nonresident branches of the same parent entity; and any amounts arising from external debt borrowings of nonresidents that were guaranteed by a resident entity and on-lent by the nonresident borrower to that same resident entity or any of its branches. This guidance is not intended to exclude debt exposures of residents from the ultimate risk concept, as defined above, but to ensure that they are counted only once.

**9.45** External debt is the liability of the debtor economy. However, as a memorandum item, the amount of external debt of the economy that is guaranteed by nonresidents is also presented (outward risk transfer, column 4). The data on the transfer of risk outward covers only external debt on which, and as part of the agreement between debtor and creditor, payments are guaranteed (or partially guaranteed) to the creditor(s) by a nonresident under a legally binding contract. The guarantor will most commonly be an entity that is related to the debtor (e.g., the parent of the debtor entity), and external debt of a resident entity that is a legally dependent branch of a nonresident entity.

**9.46** No reallocation of risk is made because of the provision of collateral by the debtor, or because a debt instrument is “backed” by a pool of instruments or streams of revenue originating from outside of the economy. Because the intention of Table 9.3 is to monitor the potential risk transfer from the debtor side, no reallocation of risk is made if the risk transfer is initiated from the creditor side, without any involvement of the debtor, e.g., the creditor has paid a premium to a guarantor, such as an export credit agency unrelated to the debtor, to insure against payment default or has purchased a credit derivative that transfers credit risk exposure.





# 10

## Overview of Data Compilation

### Introduction

**10.1** External debt statistics can be compiled from a variety of sources, using a range of methods. Statistics can be collected from the debtor, from the creditor, or indirectly through information from financial intermediaries in the form of surveys, regulatory reports, and/or from other government administrative records. But a precondition for reliable and timely statistics is that the country has a strong and well-organized institutional setting for the compilation of statistics on public debt—so that all public and publicly guaranteed debt is well monitored and managed—and private debt, and for the compilation of aggregate external debt statistics.<sup>1</sup> To this end, the institutional setting should ensure that: (1) the responsibility for collecting, processing, and disseminating the statistics is clearly specified; (2) data sharing and coordination among data-producing agencies are adequate; (3) individual reporters' data are kept confidential and used for statistical purposes only; and (4) statistical reporting is supported through legal mandate and/or measures to encourage response.

**10.2** This chapter considers some of the important institutional issues that need to be addressed when undertaking the compilation of external debt statistics, and the strategies that need to be considered as the regulatory environment for financial transactions changes. In particular, it emphasizes the need for a coordination of effort among official agencies, with one agency having overall responsibility for compiling and disseminating external debt statistics for the

whole economy, and for appropriate legal backing for statistics collection.<sup>2</sup>

**10.3** Subsequent chapters provide practical guidance on how external debt statistics might be compiled. They are not intended to be comprehensive. Indeed, some elements of external debt statistics are easier to compile than others. For instance, compiling external debt statistics on, say, a government's foreign-currency loan from a group of nonresident banks is more straightforward than, say, collecting information on nonresident ownership of a government's domestic bond issues. But both sets of statistics are required. It is particularly difficult to obtain statistics on nonresident ownership of debt securities, especially instruments that are not registered—so-called bearer instruments—and so a separate chapter (Chapter 13) is devoted to this issue.

### Coordination Among Official Agencies

**10.4** If the responsibility for debt compilation is shared among several agencies, it should be clearly established which agency has the primary responsibility for compiling external debt statistics. Responsibility could be assigned through a statistical law or other statutory provision, interagency protocols, executive decrees, memorandums of understanding,

<sup>1</sup> See *Effective Debt Management*, UNCTAD/GID/DMS/15 (1993) and *Private Sector External Debt: Main Issues and Challenges to Monitoring*, UNCTAD, DRI, 2002.

<sup>2</sup> The IMF's Data Quality Assessment Framework (DQAF) for external debt statistics provides a flexible structure for the qualitative assessment of the external debt statistics. It comprehensively covers the various quality aspects of data collection, processing, and dissemination. The first level covers the prerequisites of quality in which, among others, the legal and institutional environment is assessed (see detailed information on the External Debt DQAF in Appendix 6). See also the *European Statistics Code of Practice* (Eurostat) and the *ECB Statistics Quality Framework* (SQF, ECB) for the application of quality assurance procedures for the statistics compilation.

etc. In addition, clear arrangements or procedures should exist to facilitate data sharing and coordination among the agency with the primary responsibility for compiling external debt statistics and the other data producing agencies.

**10.5** The *Guide* does not recommend which institution within an economy should be responsible for compiling and disseminating external debt statistics. This is dependent on the institutional arrangements within the economy. Nonetheless, it is likely that the main compiling agency is the central bank, the ministry of finance, an independent debt-management office, or a national statistical agency.<sup>3</sup> One approach is to establish the agency in charge of compiling data for the balance of payments and International investment position (IIP) as the main compiling agency for external debt, so promoting consistency among these three related sets of data. Indeed, as noted in Chapter 7, reconciliation of external debt statistics with the financial account of the balance of payments provides a good consistency check, as well as analytically useful information.

**10.6** In whatever way the statistics are to be collected and compiled—and invariably a range of methods and approaches will be adopted—the process will be resource intensive. Thus, where there is more than one agency involved in the compilation of external debt statistics, there should be a cooperative effort, avoiding duplication of effort, and ensuring as far as possible consistency of approach across related data series. With modern computerized techniques, different units can be connected through computer networks facilitating the specialization of the different institutions concerned, without hindering data reporting and compilation. In this regard, procedures to ensure, as far as possible, smooth and timely flows of data between data compiling agencies are essential.

**10.7** It is important to ensure that there are well-established contacts between the staff of the different agencies, so that any problems or difficulties can be dealt with in an expeditious manner, and that there

is an avoidance of duplication of data coverage in the different institutions. One way of encouraging cooperation, developing contacts, and resolving problems that arise is to hold regular meetings among staff of the various agencies at the working level. Not only could these meetings help resolve problems that might be arising, but there would also be an opportunity to notify each other of upcoming developments and possible future enhancements or changes to collection systems. This type of cooperation helps ideas to spread and improvements to be made, allows institutions to understand each other's position, and helps build important personal contacts.

**10.8** Also, if external debt statistics are collected by different agencies, there are a number of considerations that must be borne in mind. First, the concepts and methodologies used and instruments presented should be consistent, or at least reconcilable. So, in merging together various sources, the main compiling agency must ensure that other contributing agencies are aware of and supply statistics that are consistent with core concepts, methodologies, and presentation requirements (such as residence, valuation, etc.) as outlined in the *Guide*. Indeed, the main compiling agency should develop expertise in these standards and, in a sense, act as their guardian within the economy. Also, there are other presentations outlined in the *Guide* that policymakers and other users may encourage compilers to disseminate, or that may need to be compiled to meet international commitments. The data compilers in the main compiling agency will need to ensure that statistics supplied by the other agencies meet the requirements for these other presentations—both in terms of the coverage as well as the periodicity and timeliness on which these statistics have to be provided.

**10.9** Further, it is recommended that, as far as possible, comparison of figures with creditors be carried out on a regular basis, at least once a year, although the compiling agency will need to check whether the creditor data are being compiled on the same basis as the national data. This comparison can be undertaken either on an individual instrument basis (e.g., individual government loans) by the agency responsible for compiling these statistics or at an aggregate level using international datasets, such as the Bank for International Settlements (BIS) International Banking Statistics and the Joint External Debt Hub (JEDH,

<sup>3</sup> A national statistical agency may be a user of the debt data, in the sense that the data are communicated by the ministry of finance and/or the central bank to the national statistical agency for publication.



see [www.jedh.org](http://www.jedh.org))—a database jointly developed by the BIS, International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), and the World Bank—that brings together external debt data from international creditor/market sources and national/debtor sources (see Appendix 3 for information on this database).

**10.10** There should be mechanisms to ensure that the compiled external debt data continue to meet the needs of policymakers and other users. Meetings could be periodically convened with policymakers and other data users to review the comprehensiveness of the external sector statistics and to identify any emerging data requirements. New initiatives could be discussed with policy departments and statistical advisory group(s); such discussions provide scope for seeking additional resources. From these discussions, and in consultation with both users and other compiling agencies, the main compiling agency might devise a strategic plan to improve the quality and coverage of external debt statistics.

## Resources

**10.11** Resource allocation decisions are the preserve of the authorities in each economy and should be periodically reviewed. Nonetheless, the authorities are encouraged to provide at least adequate resources to perform existing tasks, i.e., adequate staff, financial, and computing resources. In particular, key staff should be knowledgeable and well versed in external debt concepts and compilation methods, including the *Guide*, and a core contingent of trained external debt statisticians should be retained at any point in time. Instructions for performing existing tasks should be maintained. New compilers could be provided formal and on-the-job training in external debt compilation methods, including international statistical standards and system procedures for handling and processing of data.

## Legal Backing for Data Collection

**10.12** When the authorities closely regulate foreign borrowing, external debt data may well be a by-product of the regulatory system. But as liberalization of financial flows proceeds, the comprehensiveness of information from regulatory reports may be reduced, and it may become harder to identify entities engaged in

external debt transactions. So the need to approach the private sector directly for statistical purposes increases. Without appropriate legal backing, it may be very difficult to acquire the required information from private sector entities.

**10.13** Obtaining appropriate legal support for statistics collection could be a complicated and lengthy process likely to be undertaken infrequently. Given this, a first step should be to determine whether there is any existing legal support for statistics collection that could be employed to acquire the required information. If not, and it is considered necessary to seek additional legal support, the need may well run wider than “just” the collection of external debt data. Indeed, in an environment of liberalization, a comprehensive review of the sources of statistical information and the legal support needed might be required.

**10.14** The terms of legal backing for the collection of statistical information vary from country to country, depending, not least, on the institutional arrangements and the historical development of statistical gathering. Nonetheless, some elements typically covered include:

- The designation of the type of entities that the compiling agency can approach for data (e.g., entities in the private business sector) and for what purpose (e.g., to monitor economic activity and financial transactions)
- The boundaries of the compiling agency’s responsibilities, without being so restrictive that the agency does not have the freedom to adapt as a new development emerges (e.g., financial derivatives)
- The possibility of imposing penalties on respondents for nonresponse, which should be accompanied by an appropriate legal mechanism for enforcement<sup>4</sup>
- A clear statement that information supplied by individual entities would not be separately disclosed and would only be published in the form of statistical aggregates (except, perhaps, where explicit permission is given from an individual

<sup>4</sup>Consideration might also be given to the possibility of imposing penalties on respondents for misreporting (i.e., intentionally providing incorrect data).

entity to disclose information), along with appropriate penalties for the compiling agency and, in particular, individual employees, if such information is disclosed

- A prohibition on the use by the authorities of information supplied by individual entities for any purpose other than statistics compilation, thus establishing the independence of the statistics compilation function from other government activity (e.g., taxation authorities); the prohibition should be supported by penalties and a mechanism for their enforcement
- A prohibition on other government agencies influencing the content of statistics releases<sup>5</sup>
- The establishment of an oversight committee of independent experts to help ensure the professionalism and objectivity of the compiling agency

**10.15** With such legal backing, the statistics compiling agency would have the necessary support for the collection of information from enterprises and commercial banks. Nonetheless, the compiling agency should not rely solely on legal backing but rather use the legal backing to help and encourage the private sector to report (see paragraph 12.30).

### Collection Techniques at Different Stages of Liberalization

**10.16** As mentioned above, liberalizing financial transactions is likely to affect the information available from statistical reports.<sup>6</sup> Provided that liberalization proceeds on a step-by-step basis, the agency or agencies responsible for external statistics, including external debt, should develop a strategy to ensure that good-quality statistics continue to be compiled and disseminated. Part of this strategy involves considering whether there is a need to strengthen the statistical infrastructure, as discussed above—the need for legal backing and for improved cooperation and a clear distribution of compilation responsibilities

<sup>5</sup>Data integrity is very important for the statistical function. Where compiling agencies have an operational as well as recording function, consideration might be given to delineating functions so that the statistical function operates at “arm’s length” from other functions.

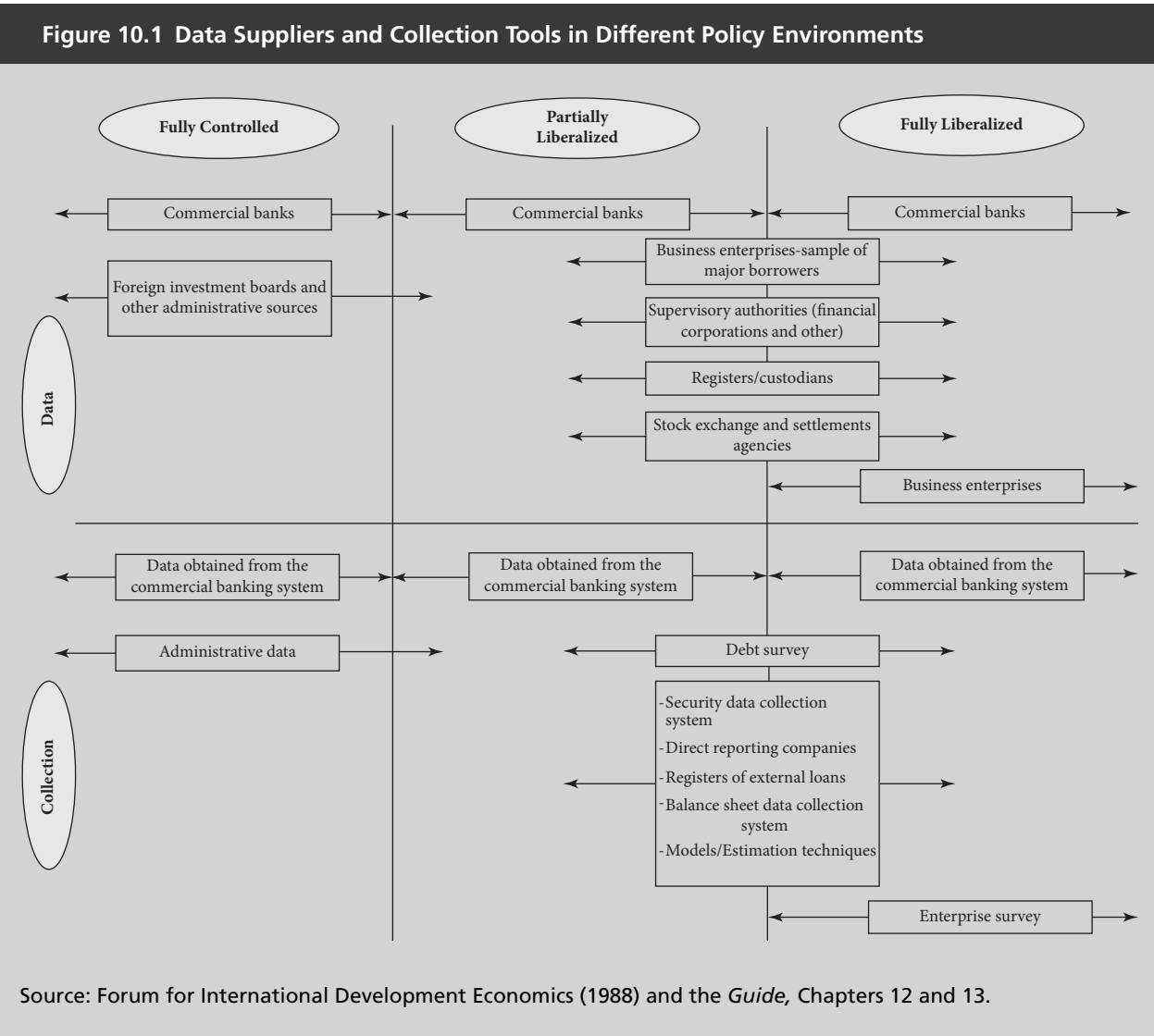
<sup>6</sup>This section draws on Forum for International Development Economics (1998).

among the various interested compiling agencies. But collection techniques also need to be considered. Figure 10.1 provides a stylized view of the techniques that can be used as the process of economic liberalization proceeds.<sup>7</sup>

**10.17** In Figure 10.1, in an environment with strict controls, data are provided primarily from administrative sources, such as foreign investment boards, and from commercial banks, for their own and their domestic clients’ transactions. As financial transactions are increasingly liberalized, the information that enterprises need to report directly increases, in terms of the number of enterprises and the information required. The information provided by the public sector and commercial banks on their own debt remains broadly unchanged throughout.

**10.18** In a partially liberalized environment, when some enterprises begin to get greater freedom to borrow abroad, the comprehensiveness of the traditional administrative and commercial bank sources of information is reduced. Commercial banks may remain a valuable source of information on their clients’ activities, but there could well be a need to supplement this data source by requiring reports from those enterprises given permission to borrow directly abroad, i.e., undertaking external transactions without involving the domestic commercial banks. For instance, those borrowing directly abroad could be asked to report on individual borrowings as they are undertaken (i.e., to provide information on external debt only) and/or be asked to report periodically on a survey form that covers external assets and liabilities and any associated income flows, i.e., a survey that is part of the data collection programs employed to compile external sector statistics. In addition, supervisory authorities, registrars and custodians, and stock exchange and settlement agencies may become supplementary sources of information. Supervised (financial and nonfinancial) enterprises may report useful information to their supervisory authorities, such as balance sheet data. Custodians and registrars may provide relevant information on nonresident holdings of debt securities issued by residents.

<sup>7</sup>While presented as three stages of policy environments, it is more likely that a continuous spectrum of liberalization will be experienced.



**10.19** As liberalization proceeds—and the statistical agency becomes less dependent on administrative and commercial bank sources, and more dependent on obtaining the necessary information from private enterprises—its job becomes more complex. The statistical agency or agencies will need to develop and/or deepen the necessary human skills needed to compile data in a more liberalized environment, including for a core set of staff.<sup>8</sup> These include developing skills in conducting surveys, in developing and maintaining a

<sup>8</sup>One of the potential benefits of compiling external debt statistics in conformity with other macroeconomic data series is that staff mobility can be enhanced. For instance, basic conceptual knowledge and compilation skills developed for a related set of macroeconomic data can also be relevant for external debt statistics, and vice versa.

register of companies, and in quality control as well as enhancing knowledge of the basic conceptual framework. The partial liberalization phase could provide an opportunity to develop these capabilities in an environment where the traditional sources of information are still relevant, albeit to a lesser extent.

**10.20** The idea of a phased approach allows the statistical agency, or agencies, to develop the capabilities required for these changed circumstances over time. Given that there will be difficulties and costs in undertaking the institutional changes required, a phased approach could help minimize these costs for all concerned.

**10.21** Whether a country wants to take a phased approach to the implementation of detailed reporting

of the foreign activities of private enterprises might depend on a range of factors including the resources and legal backing it has for conducting surveys. But by the time an economy fully liberalizes capital movements, it is important that the statistical agency or agencies have in place the capability to monitor the foreign activities of the private sector. Otherwise, economic policymakers and private sector investors might be misled into underestimating the degree to which private enterprises have accumulated external debt, with consequential negative repercussions for the economy at a later stage.

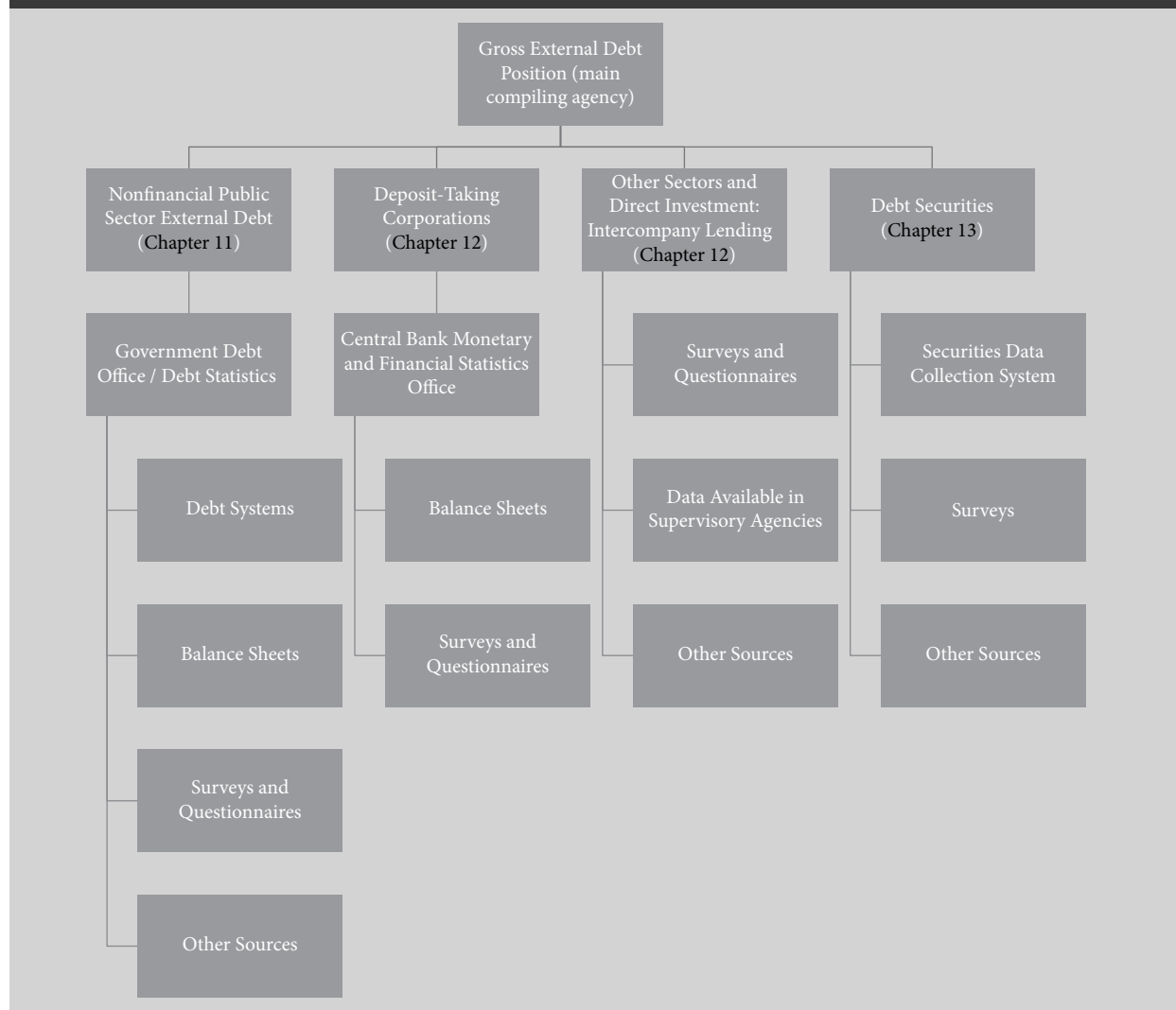
**10.22** Finally, if it is decided that a new system is required both for balance of payments and IIP as well as for external debt, perhaps because circumstances have changed such that there is a significant

weakening of the reliability of traditional sources of information, it is important that the objectives for the new system be established at the start. For instance, the timeliness and frequency of results need to be determined because these could affect both the types of survey and the resources required. Similarly, the importance of the data to policymakers needs to be ascertained because any collection needs to be considered within the context of overall statistical priorities. Inevitably, resources in the compiling agency and among respondents are limited.

### Overview of Data Sources

**10.23** Figure 10.2 further provides an overview of the possible data sources for the compilation of the gross external debt position. These sources can be grouped

**Figure 10.2 Gross External Debt Position: Possible Data Sources**



under four main headings. They are discussed in the subsequent chapters: public sector external debt compilation in Chapter 11, deposit-taking corporations and other sectors in Chapter 12, and debt securities in Chapter 13.

**10.24** Figure 10.2 is not intended to be comprehensive and mainly refers to data sources that generally are available and not necessarily mutually exclusive. The relative importance of different types of external debt—depending on national circumstances—may contribute to the judgment a compiler might have to make in determining the resource allocation between the different data sources.

### Dissemination of External Debt Statistics

**10.25** The compilation of external debt statistics is undertaken for the ultimate purpose of making these data available to policymakers and other users. Data should be publicly disseminated on a frequent and timely basis, preferably according to a well-established, preannounced release schedule. The dissemination of data could be in print and/or electronic form, and may also be included as part of an external debt bulletin. As part of the dissemination process, the concepts, definitions, classifications, and methodology (metadata) used should be documented and disseminated in publication form at regular intervals. The metadata should also identify any significant deviations from internationally accepted standards, biases in the data, and information about response rates to the main surveys employed in collecting external debt statistics.

**10.26** The regular production and dissemination of external debt bulletins<sup>9</sup> can provide the public with a clear, comprehensive, and up-to-date review of the developments in the gross external debt position of an economy. The debt bulletin should be clear and precise in presenting the data. Thus, tables and charts included should state in the titles the coverage and periodicity of the time series disseminated. A table of contents with information included in the bulletin is highly recommended. Data disseminated should be in line with the coverage, and concepts

and definitions set up in the *Guide* and other relevant international statistical standards. Metadata with information about the data sources, compilation methods, and statistical framework (i.e., concepts and definitions) used should be included in the bulletin. In developing a debt bulletin, the use of technical terminology should be balanced allowing compilers and users an adequate use of the information disseminated. An external debt bulletin may include detailed information on the composition of the gross external debt position (e.g., by sector, currency of denomination, maturity, creditor, and interest rate), valuation, debt transactions, and other debt indicators to support the analysis of the financial structure of the economy.

**10.27** It is recommended that the periodicity and timeliness of external debt statistics follow the IMF data dissemination standards (SDDS or GDDS). Box 4.1 in Chapter 4 provides detailed information on the SDDS and GDDS specifications regarding the dissemination of external debt statistics. Both the SDDS and the GDDS recommend that data on external debt be compiled according to the guidelines of the *Guide*. Compilers are also encouraged to report external debt data to the Quarterly External Debt Statistics (QEDS) database that was created in 2004 to improve the transparency, timeliness, and availability of external debt data. See Appendix 3 for more details on the QEDS and other international databases on external debt.

**10.28** Invariably, to meet the needs of users, data will be published that could well be subject to later revision. In such instances, users should be alerted that the initially published data are preliminary and may be subject to revision. If revised data are later published, users should be informed of the revisions, with explanations, i.e., if possible, the practice of revisions should follow a predictable pattern of which users of statistics are informed,<sup>10</sup> preliminary and revised data should be clearly identified, and users should be informed of results and studies of the revisions to the statistics. In addition, if major changes to the

<sup>9</sup>In some economies, these bulletins may cover external and public sector debt statistics.

<sup>10</sup>That means that the revision cycle should be predetermined and reasonably stable from year to year and made known to the public; the reasons underlying the cycle should be explained as well. Revisions outside the regular cycle should be made known and explained to the public.

statistical methodology are to be implemented, it is strongly recommended that users be given advance warning, and sufficient back runs of data provided after the revisions have been published: historical revisions to prior years are highly encouraged when substantial revisions to coverage and/or methodology take place, with a view to ensuring the consistency of the series of external debt.

**10.29** Data revision is a continuous process, e.g., for quarterly statistics, in principle, preliminary data need to be released one quarter after the end of the reference quarter. Although practices may differ across countries, in many cases these data are revised when data for the following quarter become available, e.g., Q1 data are revised when Q2 data are released. When annual results are available from collections, data for all estimated quarters in the year (and perhaps for one or more earlier years) may be

subsequently revised. When data from annual surveys become available, the quarterly data should be revised accordingly: the difference between end-year position reported on the annual survey and the year-end position derived from quarterly estimates may be distributed equally (and cumulated) over the three quarters, unless other information suggests a different pattern (available information may suggest that the adjustments to the three quarters should not be equal, e.g., if exchange rate movements or transactions were particularly significant in a single quarter); then a different pattern of adjustment should be considered.

**10.30** In general, providing the user with information on revisions and revision practice is likely to engender greater confidence in the statistics and may help encourage a “culture of reporting” to the compiling agency(ies).



# 11

## Government and Public Sector External Debt Statistics

### Introduction

**11.1** This chapter examines possible data sources and methods that can be used by the statistics agencies to compile public sector external debt statistics.<sup>1</sup> Similar sources can also be used for the compilation of publicly guaranteed external debt.

**11.2** Ideally, the relevant information needed to compile public sector external debt statistics is built into the government and public corporations' accounting systems, so debt statistics can be easily derived from a financial information management system or a debt recording and reporting system. However, for some countries, this may not be the case or it may only be so for some public sector units. If so, alternative methods should be employed. Statistics can be collected from the debtor, from the creditor, or indirectly through information in the form of surveys, regulatory reports, published financial statements (in particular, balance sheets) of public sector units, and/or from other administrative records. Information may also be available from monetary and financial, international investment position, and other macroeconomic statistics. The more detailed the source data, the more accurate are the public sector external debt statistics being compiled.

**11.3** As indicated in previous chapters of the *Guide*, compilers should collect, in addition to liabilities of public sector units, data on outstanding guarantees (contingent liabilities) by guarantor, public or private, following either the “institutional sector approach” or “public-sector-based approach.”<sup>2</sup> The *Guide* provides

tables that may be used for the dissemination of guaranteed external debt data: Memorandum Table 4.7 for the “institutional-sector approach,” and Tables 5.2 and 5.3 for the “public-sector-based approach.”

### Debt Office

**11.4** A debt office, or an asset/liability management office, would usually be the main source for position (and flow) data on foreign loans and debt securities. Many countries have a debt office—the government debt office—that keeps records on debt securities issued by, and loans of, most components of the public sector. However, although rare, in some countries, state and/or local governments may have their own debt offices when they are large issuers of debt securities, or large borrowers from abroad. Nevertheless, the same principles apply to debt offices at all levels of the public sector.

**11.5** Typically, a government debt office is either within the ministry of finance or constituted as a separate agency within the government sector or the central bank. Whether the government debt office is the compiling agency of public sector external debt statistics or not, it is important that the government debt office coordinate, as appropriate, with any other agencies involved with the compilation of these statistics.

**11.6** A government debt office is responsible for debt management, which may involve seven functions that are discussed in detail in the appendix to this chapter. Proper debt records are fundamental for effective

<sup>1</sup>The compilation of the central bank's external debt statistics is discussed in Chapter 12.

<sup>2</sup>For descriptions of the “institutional-sector approach” and “public-sector-based approach,” see the *Guide*, paragraphs 4.3 and 5.5, respectively. Because the “institutional-sector approach” includes the general government as a sector, data on outstanding guarantees (contingent liabilities) for this sector exclude all contingent liabilities among units of the general government.

Because the “public-sector-based approach” includes the public sector as a whole, data on outstanding guarantees of units within the public sector are excluded, i.e., contingent liabilities among units of the public sector are consolidated. See more about the public sector subsector/units and consolidation of government finance statistics in the *Public Sector Debt Statistics: Guide for Compilers and Users (PSDS Guide)* paragraphs 2.17 and 2.154–2.157, respectively.

debt management, and the availability of accurate and up-to-date statistics determines how effectively the debt office can carry out its other functions whether they are operational or analytical. It is critical to the smooth functioning of a government debt office that the compilation, recording, and dissemination (if the debt office is the main compiling agency) of external debt statistics be undertaken in a timely and comprehensive manner.

## Main Data Sources

**11.7** Information collected at the level of the individual debt instrument provides the compiling agencies with the greatest flexibility in meeting user requirements. Also, instrument-by-instrument detail supports detailed quality checks. However, it may not always be possible or practical to collect information at the level of the individual debt instrument.<sup>3</sup> It may well be necessary to use a combination of data sources, e.g., information could be collected at the individual debt instrument for large public corporations, and by other means (such as periodic surveys) for small public corporations.

**11.8** Table 11.1 summarizes, by debt instrument, the possible data sources for compiling public sector external debt statistics. Four main types of data sources—which are discussed in detail below—may be distinguished:

- Computer-based debt-management system (CBDMS)
- Balance sheets

- Surveys and questionnaires
- Other sources

## Computer-Based Debt-Management System

**11.9** The main characteristics of a CBDMS are presented in Table 11.2. The source data for a CBDMS could be drawn or complemented from one, or more, of the following data systems: accounting systems, financial management systems, and other systems. Typically for public sector debt, a CBDMS is the centerpiece of the data recording system, with the other sources mentioned ahead, supplementing or providing data for the CBDMS.

## Balance Sheets

### General considerations

**11.10** Typically, extrabudgetary units, social security funds, and public corporations produce financial statements, including balance sheets, usually in accordance with an internationally accepted accounting standard. These balance sheets are compiled annually, and often on a quarterly basis as well. Budgetary units of central government, state governments, and local governments are also increasingly implementing accrual accounting systems and compiling financial statements (including balance sheets) following international (or national) accounting standards.

**11.11** A balance sheet includes position information on assets and liabilities and provides detailed information on loans and debt securities as well as SDRs

**Table 11.1 Possible Data Sources for Compiling Public Sector External Debt Statistics**

Debt Instruments	Data Sources	CBDMS	Balance Sheets	Surveys and Questionnaires	Other Sources
Special drawing rights (allocations)			X		X
Currency and deposits			X	X	
Debt securities		X	X	X	
Loans		X	X	X	
Trade credits and advances			X	X	X
Other debt liabilities					
Insurance, pension, and standardized guarantee schemes			X	X	X
Other accounts payable			X	X	

Source: *PSDS Guide, GFSM 2001, GFS: Compilation Guide for Developing Countries, BPM6, and BPM6 Compilation Guide.*

<sup>3</sup>In most countries, the majority of public sector external debt other than that of the central government (e.g., public corporations) tends to be concentrated in a small number of large units. There is also a tendency for borrowing over a certain size to be limited to only a few public sector units.



**Table 11.2 What a Computer-Based Debt-Management System (CBDMS) Should Do**

Task	Requirements
Debt recording [loan-by-loan]	<p>A CBDMS should be able to maintain a comprehensive inventory of loan information:</p> <ul style="list-style-type: none"> <li>• Records of loan agreement details—loan title, borrower, creditor, amount, currency, purpose, sector, conditions attached, creditor bank, other parties, etc.</li> <li>• Records of loan terms—effective date, final maturity date, conditions preceding effectiveness, disbursement pattern, commitment fees, interest rate, other fees, repayment profile, prepayment conditions, other loan development details, etc.</li> <li>• Records of actual disbursements—i.e., records of actual loan drawdowns</li> <li>• Records of actual debt-service payments—commitment charges, interest payments, principal payments, agency/management fees, other loan charges</li> <li>• Records of debt-related data—exchange rate, interest rate, and macroeconomic variables</li> <li>• Support day-to-day debt operation functions, ensuring that payments due are paid in time, monitoring arrears, and following up on delays in loans disbursement that can lead to undue payment of commitment fees</li> </ul>
Debt reporting [loan-by-loan and on aggregate basis]	<p>A CBDMS should be flexible enough to produce a variety of debt reports that meet the requirements of users both within and outside the country:</p> <ul style="list-style-type: none"> <li>• Summary reports showing basic details of individual loans or group of loans based on any possible selection criteria</li> <li>• Summary reports on loan utilization rates—for single loans, groups of loans, or entire loan portfolio</li> <li>• Reports on debt stock based on selection criteria such as currency composition, creditor composition, maturity structure, etc.</li> <li>• Reports on debt-service profile (historical and forecast) based on selection criteria—for example, debt service falling due to specific creditors or group of creditors within a given period, debt arrears, etc.</li> <li>• Reports for direct use in the balance of payments statistics, IIP framework, Government Finance Statistics, International Finance Statistics, Global Development Finance Statistics, etc.</li> </ul>
Debt analysis	<p>A CBDMS should be able to perform basic debt analysis:</p> <ul style="list-style-type: none"> <li>• Portfolio analysis—to carry out sensitivity tests to determine, for example, effect of variation in exchange rates and interest rates on future debt-service profile</li> <li>• Analysis on the impact of new loan offers—test the impact of new loan proposals on the debt service profile</li> <li>• Analysis of the impact of debt rescheduling or refinancing proposals on the debt-service profile</li> <li>• Using macroeconomic data to compute standard debt indicators—in both nominal and present value terms</li> <li>• Compute the grant element of loans as well as the present value of debt</li> <li>• Perform basic economic simulations using macroeconomic data</li> <li>• Allow debt managers to use risk-management techniques</li> </ul>
Linkages with other packages	<p>A CBDMS should be flexible enough to interface with other systems:</p> <ul style="list-style-type: none"> <li>• Export debt data electronically to commonly used applications such as Excel spreadsheets</li> <li>• Provide linkages to other systems for specific analysis/reporting—such as the World Bank DSM Plus and Debtor Reporting System</li> <li>• Import data such as exchange rates and interest rates from external sources</li> <li>• Interface with integrated financial management systems (IFMS). This is a paramount utilization of the CBDMS, playing the role of public credit module, in complement to the budget, treasury, public accountancy, and cash flow for the public sector</li> </ul>

allocations,<sup>4</sup> currency and deposits, trade credit and advances, insurance, pension and standardized guarantee schemes, and other accounts payable. Nevertheless, a balance sheet is usually presented on an aggregated basis, and compilers will need to find detailed information, often captured in the notes to the balance sheets. If the balance sheet and notes to the balance sheet do not provide the required information to compile external debt statistics, additional information—such as the residence of creditors—should be collected from supplementary sources, such as accounting systems and creditors registry that public supervising entities may have.

**11.12** When using balance sheets as sources to compile public sector external debt statistics, compilers should understand the methodology underlying the debt liabilities in the source balance sheet, to ensure that the statistics they compile reflect, as relevant, the proper valuation, classification, and basis of recording. If needed, source data should be adjusted to reflect the proper valuation, classification, and basis of recording.

### ***Public deposit-taking corporations***

**11.13** An important source of information on public sector external debt is the public deposit-taking corporations sector, which is closely regulated in nearly all countries and reports balance sheet data to central banks or regulatory agencies both for supervisory and monetary policy purposes. However, balance sheets typically do not contain sufficient detailed information on the maturity of loans and deposits; and additional information is required to calculate the debt service payment schedules.<sup>5</sup> This is best achieved by obtaining and using information on individual debt instruments.

**11.14** Central government and public corporations sometimes access foreign sources of funding via resident public deposit-taking corporations instead of borrowing directly from foreign lenders themselves. There is potential for double counting if both the government and the public deposit-taking corporation report the borrowing as an external debt liability.

<sup>4</sup>SDRs liabilities will be in the central government or central bank's balance sheet, depending on the arrangements in the country. SDRs are discussed in paragraph 3.45.

<sup>5</sup>Examples of the type of disaggregated information that could be collected from a financial corporation's balance sheet are set out in IMF (2000), *MFSM* (e.g., Box 7.1, p. 76).

If the latter borrows externally, the corporation—not the government—has the external debt liability, while the government has a domestic liability to the deposit-taking corporation.

### **Surveys and Questionnaires**

**11.15** Information collected at the level of the individual debt instrument is preferable but may not always be available. Balance sheet information may not meet all the requirements. If so, compilers will have to use surveys or questionnaires to obtain source data for the compilation of public sector external debt statistics. Questionnaires may be used to collect source data from extrabudgetary government units, state governments, local governments, and some public corporations. The key aspects of organizing a survey are set out in Chapter 12 and also apply to surveys of public sector entities.

**11.16** Questionnaires and surveys should include clear reporting instructions to provide for high-response rates and high-quality responses. In addition, seminars and workshops explaining the reporting requirements for respondents are of value to both respondents and the compiling agency, and are encouraged by the *Guide*.<sup>6</sup>

### **Other Sources**

**11.17** For some debt instruments, information from data sources other than those discussed above may need to be used. This is the case for (1) public sector employees' pension funds managed by a public corporation; (2) unfunded public sector employees pension schemes; and (3) provisions for calls under standardized guarantee schemes, e.g., external debt statistics compilers may need to request actuarial companies to estimate liabilities for unfunded government employers' pension schemes. To ensure consistency, it is important that the same sources and methods be applied over time.

**11.18** In countries with some form of exchange control, the central bank requires approval or registration of external borrowing. In such cases, the central bank can provide information on external borrowing—particularly in the case of public corporations.

<sup>6</sup>For additional information about data collection, compilation, and dissemination of public sector statistics, see Chapter 6 of the *PSDS Guide*.

## Some Data Collection and Compilation Considerations

### How Should Data Be Collected and Compiled?

**11.19** To establish a proper external debt record, detailed information about loans and other types of borrowing (such as currency and deposits, debt securities, trade credit and advances, etc.) and all related transactions need to be compiled. The debt office should capture data on all public and publicly guaranteed external debt. This is why it is very important that the agency collecting information on public and publicly guaranteed external debt be the same as the one in charge of servicing or ordering payments. Government assumption of external debt originally contracted by different public units should be covered in debt records in a timely manner. In order to ensure that data collected by the debt office are reliable and exhaustive, a basic requirement is that all entries in the internal accounting system are interfaced into the government general accounting system and adequate reconciliation is undertaken periodically.

**11.20** For those economies that may not have proper records of external debt data, there may be a need to first compile a thorough inventory of existing external debt data (and metadata) in order to establish the external debt positions, including any arrears that have accumulated on principal and interest payments. Once the external debt position is known, procedures should be put in place to obtain, on a regular basis, information on existing and new borrowing, as well as information on transactions and other economic flows that affect the external debt position. There may be a need to establish formalized institutional arrangements for the comprehensive and timely flow of information to the debt office. Table 11.3 lists information that should ideally be compiled for each debt instrument. This table is explained in more detail below.

**11.21** Data compilation is best undertaken on an instrument-by-instrument basis, tranche by tranche, and in its original currency and stored in CBDMS. For each borrowing instrument, there are basically three types of information that need to be compiled: (1) the core information on details and terms that will produce the amortization and disbursements tables; (2) data on actual disbursements, as well as the changes in the committed undisbursed amount if, say, there

are cancellations and/or increases (e.g., with a project loan); and (3) actual debt-service transactions. There are other types of information required, and these are described in paragraphs 11.29–11.31.

**11.22** If the debt instrument is negotiable, additional information will be required in order to attribute ownership by residency. This information may come from a different agency, which is responsible for capturing information on the nonresident ownership of debt securities. Methods of capturing information on nonresident ownership of debt securities are set out in Chapter 13.

### What Are the Core Details and Terms of the Borrowing?

**11.23** Basic information on each debt instrument should normally be available from the loan or credit agreement or related documentation, a copy of which should be deposited—preferably under legal statute—with the debt office for all public or publicly guaranteed debt instruments. As well as compiling data on the amount committed and the currency, where possible, details are also required on the borrower, the creditor and creditor category (government, bank, multilateral institution, etc.), the disbursement agency, the implementing agencies, and the currencies of disbursement and debt service. In addition, details on the terms of the borrowing should also be compiled, especially any grace period and the maturity date(s), interest rates (variable or fixed) and any fees that are to be paid, and the dates for payments of interest and the type of repayment profile of principal. Data on the purpose or the end use of the amount borrowed are also important for analyzing the sectors that have benefited from the borrowing, while the guarantee status of the debt instrument will help assess the risk exposure of the government through the extension of guarantees to other borrowing entities.

**11.24** Information on the terms allows the debt office to forecast the debt-service requirements for each debt instrument.

### *Disbursements*

**11.25** The debt office will need to compile information on disbursements, including actual and expected disbursements. From such information, to the extent possible, accurate projections of debt service can be made. Clearly, actual disbursements affect the total

Table 11.3 Information To Be Compiled on Each Instrument

Type of Information	Description
<b>I. Details of Borrowing Instrument</b>	
Purpose of borrowing	Descriptive title
Agreement date	Date agreement has been signed
Type of instrument	Type of borrowing instrument
Effective date	Date borrowing becomes effective
Type of borrowing	Whether single currency or multi-currency or multi-tranche
Amount borrowed	Original amount borrowed or revised amount after cancellation or enhancement
Currency of borrowing	Original currency, and currencies of disbursement and repayments
Participants	
• Debtor	Whether government, public enterprises, or private sector
• Implementing agency	Agency in charge of implementing project
• Creditor	Name and type of creditor (multilateral, bilateral, etc.)
• Disbursement agency	Name, if different from lender
• Creditor insurer	Name and country
Guarantee status	Borrowing by public enterprises or the private sector guaranteed by government, and percentage guaranteed
Insured	Whether borrowing is insured by export guarantee agency in creditor country and percentage guaranteed
Economic sector	Economic sector receiving borrowing
Use of funds	Whether to finance a project, etc.
<b>II. Disbursements</b>	
Disbursement period	Period during which disbursement is to take place
Method of disbursement	Such as direct disbursement or reimbursement
Expected disbursement pattern/profile	Forecast of how the borrowing will be disbursed
Actual disbursement	Currencies and amount of each disbursement taking place
<b>III. Borrowing Terms</b>	
	Interest Information on interest charged should include:
	• Interest type: fixed or variable rate
	• For variable rate: specify interest base/reference and margin/spread
	• Interest period: dates of payments
	• Basis for interest calculation (conversion factor: daily/monthly/semiannual/annual, etc.)
	• Months: actual number of days or 30-day month
	• Days in interest year (360/365)
Commitment fee	Rate levied on undisbursed (full or partial) amount
Penalty fees	Charges for late payment of interest and principal
Other fees	Such as agency fee, management fee, front-end fee
Principal	Maturity: repayment period/profile Type of repayment: bullet, equal or annuity-based, etc.
<b>IV. Actual Debt-Service Payments</b>	
	For each payment (of interest, principal, other charges) made:
	• Date, currency, and currency of transaction; amount of transaction in original currency, currency of transaction, domestic currency, and perhaps U.S. dollar and SDR
	• For multicurrency borrowing: equivalent amount paid in borrowing currency
<b>V. Exchange Rate</b>	
	Exchange rates on each transaction date for relevant currency vis-à-vis the local currency
	Exchange rates for end of period (daily, weekly, month, quarter, year)
<b>VI. Interest Rates</b>	
	Prevailing variable interest rates of base/reference rate used by the creditor for each interest period
<b>VII. Debt Restructuring</b>	
	• Changes in terms as a result of debt reorganization, through rescheduling, refinancing (voluntary or involuntary), write-off, etc.
	• Date required:
	–Debt concerned, arrears, consolidation period
	–Debt-relief terms (debt forgiveness, reschedule)
	–Terms for rescheduled debt (applicable interest rate, repayment profile)
	–Transactions on actual debt-service payments or for rescheduled debt
	–Other transactions from buyback or conversion/swap
<b>VIII. Financial Derivatives</b>	
	• Transactions arising from financial derivatives contracts
	• Positions measured both in market value and notional amounts in forwards (including swaps) and options

of the undisbursed amounts and, in many cases, the expected future pattern of disbursement. Data on disbursements can usually be obtained from project-implementing agencies and creditors (on an instrument-by-instrument basis or for groups of instruments).

**11.26** Because different types of borrowings can be disbursed in various ways, the task of compiling disbursement data can be complex. For instance, in the case of project loans, disbursement can take the form of advances to the borrowing entity, direct payment by the lender to suppliers of goods and services, or reimbursements after the borrower has already paid the suppliers. The timing of the disbursement under these methods is different. Under the advances approach, it is the periodic payments by the lender to the borrowing government that constitutes disbursement; under the direct payment approach, it is the moment when the lender pays the supplier (although the debtor may have a trade credit liability to the supplier when goods are supplied and before the lender pays); and under the reimbursement approach, it is when the reimbursements are made to the borrower (e.g., a government). The debt office must keep track of these transactions and reconcile its records at regular intervals with information maintained by the project-implementing agencies.

### ***Debt-service payments***

**11.27** All data on debt-service payments need to be compiled on a regular and timely basis. Information such as principal repayments, interest payments, commitment fees, service fees, and other fees and charges (including penalty fees) will not only allow the debt office to ensure that payments due are made on time, but enable it to track those debt instruments that are in arrears. Debt-service data are primarily obtained from the terms and conditions of the contract but can also be obtained from statements sent by creditors. For government loans, information can also be provided by those responsible for making the payments, such as the accountant general or the foreign payment department in the central bank. Debt service on public corporations' external debts can be obtained directly from the borrowing entity or through a unit in the ministry of finance, which monitors this category of external debt. Data for private external debt that is guaranteed by the government

can be obtained through a reporting mechanism agreed upon when guarantees are originally issued.

**11.28** Where the debt office is at the center of the government's financial administration and public sector control system, the debt office itself orders the payment for budget execution, triggering at the same time the formal accounting procedures within the government for public debt service. This framework, known as an IFMS, is frequently implemented in projects financed by the World Bank, or other regional development banks, through loans for the modernization of the public sector. This interface with the budget execution is not only on the expenditure side, i.e., debt service—but also on the revenue side; when a deposit in the treasury accounts is made from the proceeds of a debt instrument. The debt office should alert the budget office and the treasury of the availability of resources.

### ***Additional data requirements***

#### ***Exchange rates and interest rates***

**11.29** Given that debts can be contracted in various currencies, it is important that the debt office collects and maintains information on the relevant exchange rates for all currencies in which borrowing has taken place, and those related to financial derivative contracts in foreign currency. This information should be compiled on a regular basis, including for dates on which transactions have occurred and for end-periods (month, quarter, year, and, for certain short-term instruments, perhaps weekly). This is necessary because the disbursements and the debt-service operations should be recorded in the original currency, the currency of transaction (if different from the original one), and the domestic currency. For those instruments bearing variable interest rates, all relevant rates should be updated for each interest period, thus enabling the debt office to project the debt-service requirements with respect to these instruments. If data on exchange and variable interest rates are to be compiled on a daily basis, it is highly convenient to have a specialized, online computer service to obtain this information.

#### ***Changes in debt instrument amounts and debt restructuring***

**11.30** Information on any changes to individual debt instruments such as enhancements or cancellation

of the debt liability, or a reorganization of the debt through debt forgiveness, rescheduling, refinancing, conversion, prepayments, or debt assumption should also be compiled.<sup>7</sup> Similarly, information on debt reduction given through discounts on debt buybacks should be maintained. Debt office representation at the loan negotiation processes would help ensure that this kind of information is correctly recorded.

### *Data on financial derivatives transactions*

**11.31** Although financial derivatives are not debt per se, these instruments have implications for debt management. For those countries where borrowers use financial derivatives to manage their risk exposures, data on transactions arising from these contracts should be compiled and recorded, as well as positions on outstanding contracts, in both market value and notional amounts. Because financial derivative contracts can result in additional external liabilities, their market value needs to be monitored on an ongoing basis. Any direct increase in debt-service costs arising from hedging using financial derivatives (e.g., commission expenses) should be registered.

### **How Should Information Be Stored?**

**11.32** A debt office should store information in an efficient and comprehensive CBDMS that can undertake a number of tasks and so support both operational and policy functions (see more information about CBDMS in Table 11.2). A good CBDMS can also be used to store and retrieve information on private sector external debt. Typically, a CBDMS should be able to do:

- Debt recording (loan-by-loan)
- Debt reporting (loan-by-loan and on an aggregate basis)
- Debt analysis
- Linkages with other packages and systems of the public sector unit

### **How Should Data Be Validated?**

**11.33** Data validation is essential in ensuring the compilation of reliable, comprehensive, and timely external debt statistics that, in turn, are essential for the management and formulation of a country's fiscal and

other macroeconomic policies and strategies. For this reason, the *Guide* recommends that procedures be put in place at various stages of the data compilation and recording process to ensure that all data captured are properly validated and reconciled with other data sources. Although data provided to and supplied by the different institutions and departments—both international and domestic—should be checked for mutual consistency, these data may not be identical. But the data validation process should ensure that where differences do exist, the underlying factors for the differences are identified and explained to users of the data.

**11.34** Among the various procedures and actions that can support data validation are:

- Verification of data recorded in the CBDMS with data extracted from debt instrument agreements, statements, and other documentation
- Systems with inbuilt-validation procedures to check for inconsistencies at the time of the recording of the information in debt recording and management systems
- Description of procedures for treating different types of external debt and their components, including sources of data in a Debt Procedures Manual—a “how-to” manual that accumulates knowledge and passes on experiences
- Periodic reconciliation of data obtained from one source with other sources of information—for instance, data on debt-service payments can be checked with records kept by the foreign exchange payment department in the central bank; loan balances could also be verified with creditors and debtors on a regular basis; and cash flows could be reconciled with bank accounts and with accrual records
- An audit mechanism that is consistent with the general rules of public finance control

### **Appendix: Functions of the Government Debt Office**

**11.35** Effective debt management by a government involves seven basic functions (see Table 11.4): policy, regulatory, resourcing, recording, analytical, monitoring, and operating (including active portfolio management). The policy, regulatory, and resourcing functions (known as the executive debt-management

<sup>7</sup>Indeed, a new instrument is created when a change in the terms of a loan agreement results from a renegotiation (see Chapter 8).

Table 11.4 Some Recommended Functions of a Debt Office

Functions	Public Sector Debt		Private Sector Debt (depending on economy)
	Domestic	External	
Policy and regulatory	<ul style="list-style-type: none"> <li>Formulating debt-management objectives and strategy</li> <li>Decisions on volume, type of instruments, timing, frequency, and selling techniques</li> <li>Where feasible, development of a benchmark debt structure</li> <li>Communication linkages within government/cabinet/parliament</li> <li>Fixing borrowing ceilings accordingly to budgetary and fiscal policy goals</li> </ul>	<ul style="list-style-type: none"> <li>Institutional arrangements for borrowing, disbursements and debt service, including laws and regulations as well as policy for public guarantees</li> <li>Establish debt sustainability standards</li> <li>Policy Framework on Contingent Liabilities</li> <li>Determine borrowing needs, desired terms, borrowing resources</li> </ul>	<ul style="list-style-type: none"> <li>Determine the policy relating to private borrowing (external), dependent on nature of exchange regime and capital account liberalization</li> <li>Establish sources and institutional arrangements for monitoring private debt (short- and long-term)</li> <li>Policy Framework for Contingent liabilities</li> </ul>
Recording and operations	<p><i>Primary Market</i></p> <ul style="list-style-type: none"> <li>Organize distribution channels and selling procedures</li> <li>Management of debt operations including auctions, subscriptions, etc.</li> <li>Institutional arrangements for contacts with market</li> </ul> <p><i>Secondary Market</i></p> <ul style="list-style-type: none"> <li>Active management of government outstanding portfolio</li> <li>Development of debt and liquid markets</li> <li>Institutional arrangements for intervention and contacts with market</li> </ul> <p><i>Redemption</i></p> <ul style="list-style-type: none"> <li>For both new and old issues, administration of delivery and redemption of securities</li> </ul> <p><i>Recording arrangements</i></p> <ul style="list-style-type: none"> <li>Recording system for debt operations</li> <li>Management of records of debt holders/stock</li> <li>Servicing of government debt and its linkage to budgetary execution</li> <li>Administration of register of government debt instruments</li> </ul>	<ul style="list-style-type: none"> <li>All needed information flows are in place in order to gather the necessary data to cover all information needs for operations and decision making</li> <li>Ensure appropriate budgetary provisions are made for debt and service contingent liabilities and the planning of reserves for externalization</li> <li>Checking invoices and ensuring debt service paid on due dates</li> <li>Managing disbursements including claims for reimbursements</li> <li>For commercial market borrower, the whole range of activities pertaining to market participation and penetration</li> </ul>	<ul style="list-style-type: none"> <li>Where governments is fully responsible for foreign exchange reserves, perhaps take account of the debt-servicing needs of private sector debt in deciding upon the level of foreign reserves</li> </ul>
Statistical/analytical	<ul style="list-style-type: none"> <li>Maintain timely and comprehensive data on all borrowing instruments</li> <li>Generate periodic reports</li> </ul>	<ul style="list-style-type: none"> <li>Maintain timely and comprehensive data on loan-by-loan basis (forecast and actual) of commitments, disbursements, debt service, arrears (held for a computerized management system)</li> <li>Generate periodic reports</li> </ul>	<ul style="list-style-type: none"> <li>Maintain timely and comprehensive data (including short-term debt) on a loan-by-loan basis, as practicable, from various sectors such as deposit-taking corporations, other financial corporations, etc.</li> <li>Generate periodic reports</li> </ul>
Controlling/monitoring	<ul style="list-style-type: none"> <li>Projecting government borrowing requirements in context of fiscal and monetary targets and sustainable levels of debt</li> <li>Evaluate cost of borrowing (yields) of various instruments</li> <li>Ensure that the yearly ceilings are respected</li> </ul>	<ul style="list-style-type: none"> <li>Monitor debt indicators and other performance criteria to ensure debt sustainability</li> <li>Undertake analysis of debt portfolio in a macroeconomic framework and International Investment Position (IIP) framework</li> <li>Analyze database for debt restructuring including rescheduling</li> <li>Undertake analysis for the purpose of risk management especially exchange risks and other market risks</li> </ul>	<ul style="list-style-type: none"> <li>Monitor debt levels, non-performing loans, and other liabilities bearing systemic risks</li> <li>Monitor relevant debt indicators and other performance criteria to ensure debt sustainability</li> </ul>

Table 11.4 Some Recommended Functions of a Debt Office (*Concluded*)

Functions	Public Sector Debt		Private Sector Debt (depending on economy)
	Domestic	External	
Active portfolio investment	Active monitoring of risks (interest rate, exchange rate, and counterparty risks) Performance measurement using benchmark or other yardsticks	Continuous market analysis Constant innovation	Ensure effective risk management is encouraged Monitor systematic risk through prudent bank supervision Set standards for transparent and reliable corporate disclosure

functions) are undertaken at a very senior level, i.e., Board of Ministers or a subset of it, and as such might be viewed as establishing the “rules of the game” by the highest levels of government. Hence, direction and organization are given to the whole debt-management system. Once this framework has been decided upon, it is the government debt office that undertakes the other operating functions, implementing and executing the set of agreed “rules of the game.”

### Policy, Regulatory, and Resourcing

**11.36** These functions deal with the formulation of debt-management objectives and strategy including the setting up of debt sustainability levels. A strategy may, for instance, impose statutory limits or overall guidelines on how much borrowing can be done by the public sector and/or by the economy as a whole, which in many cases is approved by the parliament. These functions also cover the institutional arrangements that govern the determination, raising, and disbursement of funds, and the related debt service, as well as the application of laws and regulations that govern debt management at the policy and operational levels. The resourcing function ensures that the recording, analytical, controlling, and operating functions pertaining to public debt management are performed by qualified staff and involves recruiting, hiring, motivating, training, and retaining staff. Resourcing should also provide for adequate physical facilities to perform the required tasks.

### Recording, Analytical, Monitoring, and Operating

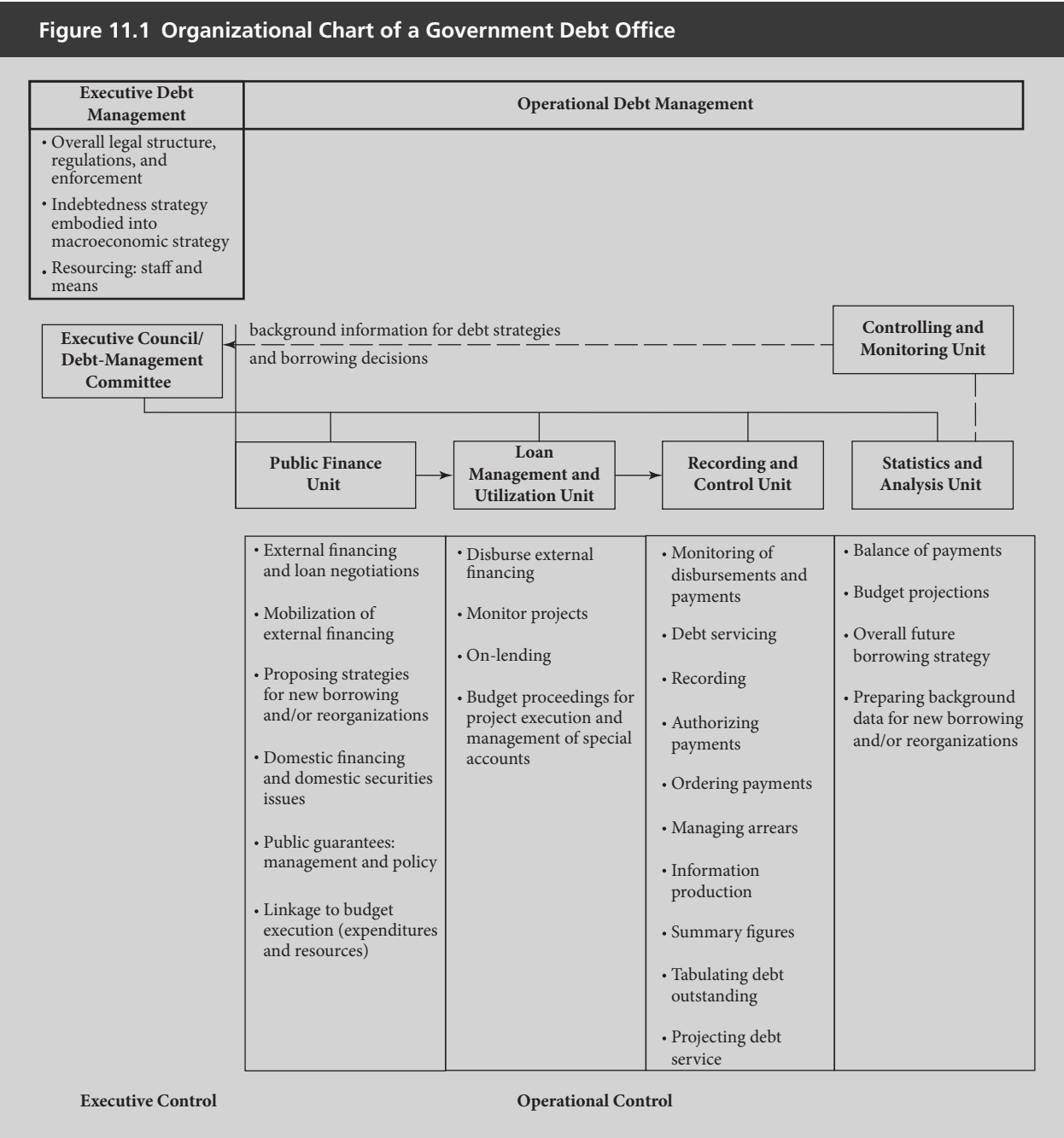
**11.37** The recording function deals with the recording framework for all relevant debt-management information and with those activities related to the raising of loans, the budgetary and reserves provision

of debt-service payments and the servicing of debt. The analytical, or statistical, function utilizes the information provided by the recording function. At the aggregate level, the analytical function involves macroeconomic analysis to explore the various options available, given economic and market conditions, and determining the future structure of the external debt. The operating function involves negotiation, utilization of loan proceeds, and the servicing of external debt, as well as active portfolio management. The latter covers the day-to-day active management of the debt portfolio and takes into account market developments, such as in interest rates and exchange rates, which affect the portfolio in terms of desired performance and risk.

**11.38** The monitoring function covers the entire range of activities involved in the maintenance of external debt statistics and their analysis. This function helps ensure that policy objectives are realized and assists in the determination of debt-management policies. The controlling/monitoring function must ensure, among other things, that the terms of new borrowing fall within the guidelines set by the senior level; that funds are being utilized on time and appropriately; and that repayments are made according to schedule. At the aggregate level, the controlling/coordinating function is essential in ensuring that operational debt-management is in accordance with executive debt-management actions (i.e., the policy and regulatory functions performed at the most senior level).

**11.39** The day-to-day active management of the debt portfolio takes into account market developments, such as in interest rates and exchange rates, which affect the portfolio in terms of desired performance and risk. Formally, active portfolio management per-





tains to the operations function, but given its specificity, it is best to consider this work separately.

**11.40** The location and organizational structure of a government debt office (typically referred to as a debt-management unit) will vary among countries. The differences between developing and developed countries are due to the differences in sources of financing. That is to say that the organizational structure is different if the country is mainly a borrower of Interna-

tional Development Association (IDA) funds or if the country is issuing bonds in the international financial market.

**11.41** For most developing countries, the debt-management functions are not assumed by a single office but dispersed across several institutions. A schematic representation of these functions can be found in Figure 11.1. A common structure has a debt office in the ministry of finance, focusing on public sector domes-

tic and external debt, with the central bank overseeing private debt, and often taking on the operational functions related to government debt as its financial agent. Ministries of planning and finance and the central bank each make economic forecasts that provide the framework for debt management. A high-level coordinating committee steered by the ministry of finance (or the prime minister's office or a ministry of economic coordination) takes charge of debt strategy and policy, which should be embodied in the overall macroeco-

nomie targets. In some developed countries, however, an independent government debt office conducts debt operations based on objectives set by the government as part of asset-liability management operations. Ireland, New Zealand, Sweden, and the United Kingdom have set up such structures that delineate separate objectives for debt management and monetary management. No matter what the structure, each country should have a transparent framework for the efficient conduct of all debt office functions.



# 12

## Deposit-Taking Corporations and Other Sectors' External Debt Statistics

### Introduction

**12.1** In circumstances where controls on foreign borrowing are still in place, it is possible for the statistical agency to compile information on private sector borrowing from information provided by borrowers to the central bank or other official agency for regulatory purposes, such as when they seek approval for foreign borrowing. Also, commercial banks might well be required to report on foreign transactions of their private sector clients. However, as liberalization of financial transactions proceeds, and such information becomes less readily available, there is a need to develop other methods of collecting data on private sector debt. This chapter considers the collection of these data from deposit-taking corporations and other sectors when financial transactions are liberalized.<sup>1</sup> The measurement of external debt in the form of debt securities is covered in the next chapter.

**12.2** From the standpoint of compiling external debt data, information collected at the level of the individual debt instrument provides the statistical agency with the greatest flexibility in meeting user requirements. Provided that sufficient detail on the characteristics of the instrument is supplied, potentially varied combinations of characteristics of external debt could be produced as users request (the method by which

the compiling agency stores the information supplied could limit the possibilities). Also, instrument-by-instrument detail supports detailed quality checks. However, some compilers may find that it is only realistic to ask respondents to supply aggregate data. If so, the design of the survey form/enterprise survey is particularly important because it needs to endeavor to meet all foreseeable data needs—it is unlikely that the form can be changed very frequently, not least because respondents will develop systems to compile the required information—and incorporate quality-control features (e.g., cross-checks on the form itself or with related data collections). If the survey form is too complex, there could be a negative impact on quality as respondents may have difficulty supplying the required information.

**12.3** It is recognized that for compilers, compiling comprehensive data for the private sector presents a greater degree of difficulty than for the public sector. Problems can arise from the limitations inherent in the available information sources. For instance, data on arrears may not be readily available from balance sheet reports, nor data for a debt-service schedule. Also, it may be difficult to monitor certain sectors of the economy, such as the household sector. In all such instances, the importance and relevance of the data need to be weighed against the likely costs of collection, and, where appropriate, alternative sources and methods used to produce data of an acceptable degree of accuracy and reliability, e.g., data might be sourced from creditor sources or available data used in models to estimate items such as trade credit and advances data, interest cost accrued, and/or positions data from transactions data (see the appendix of this chapter).

**12.4** Table 12.1 provides an overview of the possible data sources for the compilation of the gross external debt position of central bank, deposit-taking corporations, except the central bank, other sectors, and direct

<sup>1</sup>For practical convenience, deposit-taking corporations, except the central bank, are also referred to as banks throughout this chapter. The deposit-taking corporations, except the central bank sector encompasses institutions such as savings banks (including trustee savings banks and savings and loan 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 (see paragraph 3.6). The *other sectors* category comprises other financial corporations (i.e., other than deposit-taking corporations), nonfinancial corporations, and households and nonprofit institutions serving households (NPISHs) subsectors (see paragraphs 3.8–3.11).

Table 12.1 Gross External Debt Position: Possible Data Sources for Main Components According to the *Guide*<sup>1</sup>

	MFS	BS	SCS	REL	DRC	ES	SA	OEDS	CDIS
<b>Central Bank</b>									
Special drawing rights (allocations)	X	X						X	
Currency and deposits	X	X							
Debt securities	X	X	X						
Loans	X	X							
Trade credit and advances	X	X							
Other debt liabilities	X	X							
<b>Deposit-Taking Corporations, except the Central Bank</b>									
Currency and deposits	X	X							
Debt securities	X	X	X	X					
Loans	X	X		X		X		X	
Trade credit and advances	X	X				X			
Other debt liabilities	X	X				X			
<b>Other Sectors</b>									
<b>Other financial corporations</b>									
Currency and deposits	X	X					X		
Debt securities	X	X	X	X	X	X	X		
Loans	X	X		X	X	X	X		
Trade credit and advances	X	X		X	X	X	X		
Other debt liabilities	X	X		X	X	X	X		
<b>Nonfinancial corporations</b>									
Currency and deposits									
Debt securities			X	X	X	X			
Loans				X	X	X		X	
Trade credit and advances				X	X	X			
Other debt liabilities				X	X	X			
<b>Households and nonprofit institutions serving households (NPISHs)</b>									
Currency and deposits									
Debt securities									
Loans				X	X	X			
Trade credit and advances				X	X	X			
Other debt liabilities				X	X	X			
<b>Direct Investment: Intercompany Lending</b>									
Debt liabilities of direct investment enterprises to direct investors				X	X	X			X
Debt liabilities of direct investors to direct investment enterprises				X	X	X			X
Debt liabilities between fellow enterprises				X	X	X			X

<sup>1</sup>These data sources exclude those for general government.  
MFS: Monetary and Financial Statistics  
BS: Balance Sheets  
SCS: Securities Data Collection System  
REL: Register of External Loans

DRC: Direct Reporting Companies  
ES: Enterprise Surveys  
SA: Supervisory Authorities  
OEDS: Other External Data Sources  
CDIS: Coordinated Direct Investment Survey

investment: intercompany lending. The possible data sources for compiling these statistics, which are covered throughout the chapter, include monetary and financial statistics (MFS); balance sheets (BS); security data collection system (SCS)<sup>2</sup>; registers of external loans (REL); direct reporting companies (DRC); Enterprise surveys (ES); supervisory authorities (SA);

Other external data sources (OEDS) (e.g., BIS International Banking Statistics, and other international financial organizations datasets); and Coordinated Direct Investment Survey (CDIS).

## Deposit-Taking Corporations Reporting of Debt

**12.5** An important source of information on external debt is the banking sector. Banks are closely regulated in nearly all countries—and so are usually identifiable

<sup>2</sup>As mentioned above, the measurement of external debt in the form of debt securities is covered in Chapter 13. The compilation of general government and public sector external debt statistics is covered in Chapter 11.

to the statistical agency—and have to report balance sheet data to central banks or regulatory agencies both for supervisory and monetary policy purposes. These reports can be a major source of information on the outstanding external debt of banks. External debt mainly includes deposits of nonresident banks with domestic banks, deposits of other nonresidents with domestic banks, and other external liabilities, such as loans and debt securities owned by nonresidents and issued by domestic banks. Domestic banks include resident branches of foreign-owned banks.

**12.6** It is essential that the reporting requirements agreed between the central bank and commercial banks take into account the external debt data needs. When changes in bank reporting are being considered, a task group could be formed that includes relevant statistical experts on external debt and other external statistics. In particular, attention must be paid to how external liabilities (and assets) are defined, and the external debt—and balance of payments—concept of residence (and not nationality or currency) is used to determine what is an external liability or asset.

**12.7** Balance sheet data of the deposit-taking corporations, including the central bank, used to compile monetary and financial statistics are generally available (monetary and financial statistics are often compiled on a monthly basis). Monthly data are available for most countries in the IMF publication *International Financial Statistics (IFS)*.

### Central Bank

**12.8** For the central bank, the external debt components<sup>3</sup> can either be sourced from a CBDMS—a centerpiece for the compilation of public sector debt (see paragraph 11.9)—or directly from balance sheet data. The external debt components can also be compiled and/or reconciled with information collected for monetary and financial statistics according to the *MFSM* and the IMF Statistics Department's *Standardized Report Form (SRF) 1SR for Central Bank*. Summary lines for external liabilities from the *SRF 1SR* form are shown in Table 12.2.

<sup>3</sup>With the probable exception of external debt in the form of debt securities as data on nonresident ownership of debt securities are generally sourced from a securities data collection system (see Chapter 13).

**Table 12.2 Re-arranged Information on External Liabilities in MFS: Central Bank<sup>1</sup>**

Liabilities
Nonresidents
Currency in circulation <sup>2</sup>
Deposits
Debt Securities
Loans
Other accounts payable
Special drawing rights (allocations)

<sup>1</sup>Based on *MFSM*: Table 1 Sectoral Balance Sheet for Central Bank.

<sup>2</sup>For liabilities (currency in circulation), usually nonresidents' holdings are not separately identified in the central bank's balance sheet.

**Table 12.3 Re-arranged Information on External Liabilities in MFS: Other Depository Corporations<sup>1</sup>**

Liabilities
Nonresidents
Deposits
Debt Securities
Loans
Insurance technical reserves
Other accounts payable

<sup>1</sup>Based on *MFSM*: Table 2 Sectoral Balance Sheet.

### Deposit-Taking Corporations, Except the Central Bank

**12.9** External debt data for deposit-taking corporations, except the central bank, can generally be sourced or reconciled with monetary and financial statistics data presented in the *SRF 2SR for Other Depository Corporations (SRF 2SR)*.<sup>4</sup> Summary lines from the *SRF 2SR* form are presented in Table 12.3. External debt components that could use monetary and financial statistics as a data source are identified in Table 12.1 with the acronym MFS.

**12.10** However, balance sheets typically do not contain sufficient detailed information on the maturity of loans and deposits; and additional information is required to calculate the debt-service payment

<sup>4</sup>The coverage of other depository corporations in monetary and financial statistics may not be the same as deposit-taking corporations in the *Guide* (see Chapter 3, paragraph 3.6, footnote 8).

schedule for the banking sector.<sup>5</sup> This is best achieved by obtaining and using information on individual external debt instruments. When these data are not available to the compiling agency, and depending on the type of debt liabilities, the compiler can estimate projected interest costs using position data and appropriate representative interest rates, but some indication of a payment schedule is required for projecting principal payments.

### Offshore Banks<sup>6</sup>

**12.11** Data on the external debt of “offshore banks” should be collected and included in the gross external debt position. Some compilers argue that banks that are treated as “offshore” under exchange control and other regulations should be excluded from the coverage of external debt statistics because the banks borrow from and lend to nonresidents. In other words, debt of such “offshore banks” does not relate to developments in the domestic economy and should be excluded. However, even if netting is legally binding in the jurisdiction of one country, legal actions by third parties may prevent the local banking institution from enforcing its right of offset. Thus, if the loans of offshore banks become unrecoverable, these banks still need to find the resources to meet their debt obligations. Nonetheless, as noted in Chapter 2, in some economies separate identification of the gross external debt (and external assets) of resident “offshore banks” and other “offshore entities” is necessary because of the potential size of their liabilities relative to the rest of the economy.

### Other Issues

**12.12** In addition to their on-balance-sheet liabilities, the compiler could consider collecting data on outstanding guarantees given by banks. Banks do guarantee debts of private nonfinancial sector borrowers,

and while not external debt of the banks, but rather the debt of other sectors, there is analytical interest in data on guarantees. Although data on bank guarantees most likely will cover only part of the private sector’s external debt, these data may be helpful in cross-checking data provided by other sectors.<sup>7</sup>

**12.13** Central government and public enterprises sometimes borrow from resident banks instead of directly from foreign lenders. The loans may be denominated in foreign currency, and the ultimate borrower, not the commercial bank, may assume the exchange risk. There is potential for double counting if the government reports the foreign currency loan as an external liability along with the bank. If the bank borrows externally, it is the bank not the government that has the external debt.

**12.14** Also, other private sector entities may borrow foreign currency from resident banks, particularly if the nonbank private sector is not allowed to borrow directly abroad (so that the authorities have close control over capital flows). In these cases, the compiler has two sources of information: the private nonbank entity (perhaps from exchange control forms) and the reports of the bank. The preferred source is the bank because the bank has the external debt, and bank records are normally more comprehensive.

## Other Sectors

### Other Financial Corporations

**12.15** Some countries may compile monetary and financial statistics using the IMF Statistics Department’s *SRF 4SR for Other Financial Corporations (SRF 4SR)*.<sup>8</sup> If this is the case, external debt compilers could use this data source. Also, in some countries certain financial intermediaries, such as investment funds, insurance companies, and pension funds, report their balance sheets to supervisory authorities

<sup>5</sup>Examples of the type of disaggregated information that could be collected from a balance sheet are set out in the *MFSM IMF (2000)*, (e.g., see Box 7.1 of the *MFSM*).

<sup>6</sup>In external sector statistics, deposit-taking corporations that engage exclusively (or almost exclusively) with nonresidents, often called offshore banks or offshore banking units, are included in deposit-taking corporations, except the central bank, but they may be excluded from the money-issuing sector (depository corporations) because their liabilities are not included in broad money (see paragraph 3.6, and *BPM6*, paragraph 4.72).

<sup>7</sup>A memorandum table for the presentation of position data on a range of explicit contingent liabilities by sector of the guarantor is provided in Table 4.7. Table 4.7 covers the value of outstanding guarantees given by banks of residents’ external debt liabilities and also cross-border guarantees given by banks (debt of nonresidents to other nonresidents that is contractually guaranteed by resident banks and debt of a legally dependent nonresident branch of a resident bank that is owed to a nonresident).

<sup>8</sup>The coverage of Other Financial Corporations in monetary and financial statistics may not be the same as other financial corporations in external debt statistics (see paragraph 3.6, footnote 8).

(SA). If this is the case, those reports could be accessible to statistical authorities as a data source. In many countries the report forms can be adapted to fit both uses (supervision and macroeconomic statistics).

**12.16** In the compilation of the *SRF 4SR*, insurance technical reserves receive separate treatment and appear as liabilities in the accounts of insurance corporations and pension funds.<sup>9</sup> In many countries such reserves constitute a significant contribution to the total liabilities of the financial corporations' sector. Technical reserves have three components. First, the liabilities account for obligations for prepaid insurance premiums received from all resident and nonresident policyholders. Included are prepayments for both life insurance and nonlife insurance policies as well as premium prepayments for reinsurance. The second component of insurance technical reserves comprises changes in reserves for claims outstanding, which insurance enterprises hold in order to cover the amounts for (valid) claims that are not yet settled or claims that may be disputed. The third component covers the obligation from entitlements of households in life insurance corporations and pension funds reserves.<sup>10</sup>

### Enterprise Surveys

**12.17** When no comprehensive exchange controls exist, data on loans and other external debt of other sectors are best obtained through a periodic survey of those enterprises (including other financial corporations, if not captured through the *SRF*) that are involved in external transactions.<sup>11</sup> Gross external debt position components that could be sourced through enterprise surveys as a data source are identified in Table 12.1 with the acronym ES. The accumulation of transactions data from the balance of payments, together with valuation adjustments, may be used to estimate position data between position surveys. The appendix to this chapter provides the methodology for such calculations.

<sup>9</sup>These debt liabilities are included in insurance, pension, and standardized guarantee schemes and classified as other debt liabilities in the gross external debt position (see paragraph 3.40).

<sup>10</sup>The *BPM6 Compilation Guide*, Appendix 2, provides detailed guidance on the compilation of external positions of insurance companies and pension funds.

<sup>11</sup>The *BPM6 Compilation Guide* provides practical advice on how to conduct a survey (Chapter 2), specific surveys of business (Chapter 3), and model survey forms (Appendix 8) for the compilation of balance of payments and IIP data.

**12.18** To ensure good coverage of cross-border activity, it is necessary to develop and maintain a register of nonbank enterprises that have or could have significant cross-border assets and liabilities. Without a good register, serious discrepancies from reality could arise. Enterprises might be identified from customs forms—it seems likely that such entities will be involved in trade credit transactions—and/or from balance of payments reports, such as through a system that relies on bank reporting of individual transactions, and/or by the regulatory authorities, such as information held by foreign investment or monitoring boards.

**12.19** In developing a register of enterprises to approach, it is vitally important that the work be coordinated with the agency that has the responsibility for the national accounts, as well as the balance of payments and IIP compiling agency. Not only will external sector and national accounts compilers be interested in information on external liabilities, the national accounts compiling agency may already have developed a centralized national register of reporting entities and be collecting some of the information required. Alternatively, registers may have been developed in different agencies for particular sectors, e.g., manufacturing enterprises, banks, etc., and a register for external debt purposes may be built up by conducting an “exploratory survey” of all these enterprises, in order to identify those that have external positions.

**12.20** Existing registers of enterprises maintained by the statistical agency or other government agencies for other purposes might serve to provide useful information on those enterprises with international transactions or positions. Business registers available in statistics offices—used for surveys of the economy—are often focused more on production activity than international financing. For instance, those parts of businesses involved in financing that may have very few employees but through which all the international finance accessed by the group is channeled might not be covered. Thus, the external debt compiler should be careful to ensure that enterprise groups with international financial activities are covered in the register the compiler uses.

**12.21** Sources of information on enterprises for developing a separate register of enterprise groups with international involvement include:

- Existing registers of businesses maintained by the statistical agency or other government agencies
- Existing business data collections already run by the statistical agency or other government data collection agencies
- Government administrative sources (these might include taxation records and customs files)
- Information held by foreign investment approval agencies or marketing boards
- Information held by regulatory authorities, such as those responsible for supervision of financial institutions
- Statutory company reports and company registration details
- Records held in foreign exchange control or international transactions reporting systems
- Media reports
- Publicly available databases and trade associations

**12.22** Also the compiler should undertake a regular review of the corporate structure of the top few hundred businesses in the economy, as well as the general press and corporate registration sources listed above to validate and update the registry of enterprises.

**12.23** As enterprises are recognized from the various sources above as potentially engaged in cross-border finance, they may be included in an “exploratory survey,” which identifies if they have external positions. The “exploratory survey” may also collect some broad investment benchmark information for use in designing the ongoing investment survey.

**12.24** In determining the reporting population, various approaches are possible:

- *Census*—Including in the survey all members of the population
- *Partial coverage collection*—Including in the survey all enterprises above a certain threshold measured in terms of their dimensions (e.g., nominal capital) or other variable (e.g., significant cross-border activity), with the results “grossed” up for the whole population (if possible)
- *Random sample*—Including in the survey enterprises that are preferably selected according to

rigorous sampling procedures, with the results “grossed” up for the whole population

- *Stratified random sample*—A procedure that groups population components according to the size of selected activity so that enterprises within different strata have different probabilities of selection, with the results “grossed” up for the whole population; usually, this is a combination of the partial coverage and random sample options but is more sophisticated and might produce a high level of coverage while remaining relatively cost-effective

**12.25** Conducting a survey requires prior knowledge of the approximate size of the universe. The size of the universe involves two major dimensions: the number of entities in the universe, and the individual size (or weight) of each enterprise’s transactions/positions. As external debt data are focused on the value of outstanding positions, in any survey, it is important that those entities with the largest size be covered. Nonetheless, at a minimum, a sample survey of other entities should be conducted. Undertaking a sample survey without a good understanding of the relative size and importance of the enterprises being surveyed may produce data that cannot be reliably grossed up to a universe total. So experience should be gained in conducting surveys before introducing sophisticated methods of compiling data by conducting a benchmark survey. A periodic census is important as it provides the benchmark for estimating the universe in subsequent surveys when samples may be used. It is not necessary or practical to conduct a census every year, but maintaining an up-to-date database of entities involved in external debt transactions is essential to keeping the estimates as accurate as possible.

**12.26** It is usually preferable to approach enterprises that engage in a number of activities at the group level because they may have a central organization that handles the external financing transactions of the group. Also, approaching the enterprise at this level reduces the workload for the compiler. However, if external financing transactions are handled by several centers in a group, and/or the group covers more than one type of institutional sector (e.g., a bank and a nonbank enterprise), arrangements should be made to collect data from each center, in consultation with the enterprise.



**12.27** A survey of nonbank enterprises should cover loans from nonresident banks, securities issued abroad (both long- and short-term), trade credit and advances, and other external liabilities. If the information on debt instruments is provided on an instrument-by-instrument basis, details collected could include name of lender, country and type of lender, currency, amount outstanding, start date of contract, due date of contract, scheduled payments of principal, interest payments, put options, and relationship between borrower and lender. Similar information could be required for securities, although the identity of the lender may be unknown to the borrower. Although this information is detailed, it should be readily available to the entity for its own accounting purposes. Also, if possible, it is preferable to collect liability and asset data together on the same survey form, not least because the balance-sheet approach introduces a consistency in its own right, while the development of external debt within an IIP statement, among other things, would focus attention on external assets as well as liabilities. One of the advantages of collecting data from individual nonbank enterprises on international investment on the same form is that the possibility of double counting is eliminated. Because the boundaries between debt and equity, and direct, portfolio, and other investment are subject to different interpretations, and also subject to error and mismeasurement, a valuable consistency check on the data is provided by requiring that the disaggregated data sum to a total, i.e., the report form can be made internally consistent with clear distinctions between the types of debt instruments (and equity). Collecting different types of debt data separately, sometimes even by different agencies, inevitably creates the potential for under- and/or double counting as boundaries between the types of debt instruments (and with equity) can be subject to different interpretations.

**12.28** When developing survey forms, writing very clear reporting instructions is an essential but not easy task—different respondents must be clear about what types of transactions they should report. In this context, it is important to engage the larger enterprises being surveyed. The discussions should make these entities aware of the purpose of the survey and help the statistical agency design the survey that is most efficient in obtaining the desired information. In approaching the enterprises to be surveyed, the

compiler should be aware of not only the concepts that are to be measured but also the nature of the business activities that are being surveyed. The format and wording used in the collection forms, together with the wording in the detailed explanatory notes that are supplied to all respondents, should be closely aligned to the wording in the *Guide* and take account of such things as the terminology used in the business activity, the nature of the operations, record keeping, and accounting practices of nonbank enterprises being surveyed. This is important in order to be able to communicate with respondents and to gain their respect and cooperation. The overwhelming evidence from compilers is that report forms and instructions should be kept as simple as possible. Practical experience invariably shows that where compilers complicate the form and the instructions, perhaps to collect that extra bit of detail, the compiler is disappointed with the information received. Reporting instructions must be clear on concepts, on what is to be reported, and on who can be contacted at the statistical agency, together with telephone and fax numbers and e-mail addresses, in the event of the respondent having a question about the reporting requirements. Explanatory notes should also provide examples of what should be included (and excluded) for each type of debt instrument.

**12.29** The compiler is advised to undertake form testing, i.e., finding out from a sample of respondents whether the instructions are clear and workable before they become operational. Conducting a small-scale trial survey with a sample of respondents before the full survey is publicly launched may provide many benefits, resources permitting. It may highlight where respondents have problems interpreting the questionnaire, and it may also serve to test the compiler's processing system. Highlighting and addressing problems at this stage will reduce problems at the later, and more crucial, stage when data are compiled to be disseminated. Also, seminars and workshops explaining the reporting requirements for respondents are of value to both respondents and the compiling agency, and are encouraged by the *Guide*. On an ongoing basis, the maintenance of an electronic register that keeps track of respondents who have called and when, who was the contact person, their phone number, etc., is information that helps ensure a well-run statistical operation. Through such a register, corporate memory at the statistical agency can be developed.

**12.30** Even so, private nonbank entities may be more reluctant than banks and the government to report to the compiling agency. How can they be “encouraged”? There are at least three important steps that can be taken.

- As mentioned above, there should be legal backing for the surveys, so that as a last resort the compiler has some means of redress if the respondent proves unwilling to report. However, this legal backing must make clear that individual reporters’ data are kept confidential and used for statistical purposes only, and this statement must be honored in letter and spirit by the compiling agency, not the least to encourage reporting.<sup>12</sup> Nonbank respondents may well be reluctant to supply data if they believe the individual data will be shared among other agencies.<sup>13</sup>
- Other elements of government that have a policy interest in external assets and liabilities should be made aware of the reporting needs and encouraged to promote the need for good reporting whenever possible when dealing with private enterprises. Better data help promote better-informed policy-making. In other words, the authorities should build the idea of good reporting into their policy objectives in this field. Often, those with policy responsibilities have access to senior officials in private entities and so can deliver the message of good reporting at a more senior level than might be available to the statistical agency.
- The compiling agency along with other agencies responsible for statistics should encourage a “culture of reporting.” This is not easily achieved in a short time period and should not just cover external debt data, or the private nonbank sector. Steps to encourage a culture of reporting include meeting potential respondents and discussing issues of concern; developing report forms that as

easily as possible fit in with management reporting systems and are not overly complex; and disseminating and promoting the final output in a transparent manner. If data are captured and compiled in an efficient manner and the output is seen to be important, private sector respondents are more likely to report.

**12.31** Even if data are supplied, how can they be confirmed to be reliable? First, if data are supplied in a balance-sheet form and/or in an internally consistent form, this adds a degree of consistency in its own right. Also, if a publicly quoted company supplies data, published accounts from the company are likely to be available against which data can be checked.<sup>14</sup> Second, wherever possible data should be cross-checked with other sources. For instance, transactions data can be compared with changes in position data if different sources are used. Net borrowing data from income and expenditure accounts, or profit and loss accounts of companies, can be compared with the buildup of net financial assets and liabilities because the two are interrelated. Income data could be compared with position data to see whether the implied rates of return on liabilities and assets are realistic. Data on nonbank liabilities to foreign banks could be cross-checked with the International Banking Statistics from the BIS,<sup>15</sup> although conceptual differences between BIS and national data need to be taken into account.<sup>16</sup> Data on intercompany lending could be compared with mirror data available from the CDIS (see paragraphs 12.45–12.46). Some national authorities may make periodic requests to creditors to verify the status of loans that they have extended to organizations in the country, but nonresident creditors may be unwilling to provide information to foreign government agencies when private debtors are involved.

<sup>12</sup>See Appendix 6 Data Quality Assessment Framework (DQAF), 0.1.3 Individual reporters’ data are kept confidential and used for statistical purposes only.

<sup>13</sup>However, sharing of aggregated data that does not reveal information on individual institutions is not a barrier to respondents supplying their data. Cooperation of data collection between different agencies in an economy can even encourage the supply of data as it ultimately reduces the burden imposed on respondents. Legal backing may be needed to allow the necessary exchange of data. See Appendix 6, 0.1.2. Data sharing and coordination among data-producing agencies are adequate.

<sup>14</sup>Because accounting standards do differ in some respects from statistical standards, this approach may provide a broad rather than close check.

<sup>15</sup>Compilers may use the BIS locational data on loans from nonresident banks to resident nonbanks—nonbanks include other sectors as well as the general government sector—to supplement other external debt data sources (see [www.bis.org/statistics/](http://www.bis.org/statistics/)). At the time of writing the *Guide* it is expected that more granular counterparty-sector breakdown data will be collected by the BIS in the future, with a September 2014 target date for dissemination.

<sup>16</sup>See the BIS report *Comparison of Creditor and Debtor Data on Short-Term External Debt* (2002).

## Other Approaches

### *Direct reporting companies*

**12.32** A variation of the enterprise surveys mentioned above is the establishment of so-called direct reporting companies (DRCs). DRCs are intended to constitute a representative sample of companies involved in cross-border activity and to report on a regular and frequent basis to the compiling agency on transactions and positions with nonresidents. This approach, derived from an exchange-control-type administrative system, could be appropriately developed in a partially liberalized environment. The components of the gross external debt position that could use DRCs as a data source are identified in Table 12.1 with the acronym DRC. In some countries, DRCs are divided into “general” and “partial” direct reporting companies.

- *General direct reporting companies* (GDRCs) are companies or groups of companies, the volume of whose cross-border transactions exceeds a certain threshold in a given period. For GDRCs, with the exceptions of certain portfolio investment transactions (see below), all cross-border transactions are covered in the reports to the compiling agency, including flows via foreign accounts and netting. There may be no threshold for the items to be reported. The reports may give details of the currency, amount, economic nature, and geographical breakdown of the transactions. The reports of GDRCs may not include flows/positions concerning portfolio investment, cash management, and investment income when these transactions are conducted through resident commercial banks. Instead, these types of transactions/positions are reported by the domestic commercial banks involved in the particular transactions. However, if these transactions are carried out or held directly via foreign accounts, they remain under the responsibility of the GDRC in question to report, because the GDRC is the only domestic entity aware of these transactions/positions.
- *Partial direct reporting companies* (PDRCs) are companies that hold accounts abroad or participate in an international netting arrangement through which payments are made or received. These companies are subject to direct reporting requirements when the monthly total of incoming and outgoing payments through the accounts

exceeds the agreed threshold. The reports of PDRCs are similar to those of the GDRCs, but they cover only flows/positions via their foreign accounts and changes of position within these accounts. Other transactions/positions between PDRCs and nonresidents are reported by the resident banking sector.

### *Registers of external loans*

**12.33** Some external debt compilers use so-called registers of external loans to obtain data on loans received by the nonbank sector. These data, usually collected for exchange control purposes, allow monitoring of both loans from nonresidents and nonmarketable securities issued to nonresidents. If the exchange controls are abolished, the administrative accounting documents created for that purpose might be transformed into reporting documents for statistical purposes. The figures obtained from this source usually cover both loans between related (parent companies and affiliates) and nonrelated companies, and financing obtained through international bonds and notes, commercial paper, and other issuance programs. The components of the gross external debt position that could use registers of external loans as a data source are identified in Table 12.1 with the acronym REL.

### **Monitoring Short-Term Debt and Trade Finance**

**12.34** Monitoring short-term debt, i.e., loans with an original maturity of one year or less—is of great importance because high levels of short-term debt can make an economy particularly vulnerable to shifts in market conditions<sup>17</sup> and, in the case of trade credit and advances, can have an important impact on real economy activity.<sup>18</sup> However, monitoring such liabilities is a complex process, not the least because there are many small transactions and many participants. In particular, if foreign trade is large relative to total production, there are likely to be many enterprises that receive foreign short-term credits.

<sup>17</sup> Similar vulnerabilities exist if there is a concentration of maturing long-term debt.

<sup>18</sup> As was seen in some Asian economies in 1997–1998, a sudden restriction on trade credit finance can depress imports, affecting the production process and the level of exports when these activities have a high import propensity.

**12.35** Short-term loans and trade finance could be covered by the kind of enterprise surveys, and other approaches, discussed above. While collecting data on a loan-by-loan basis has some advantages, information on private sector short-term debt is likely, for practical reasons, to be compiled only in aggregate. Because of the sheer number of transactions involved and their short maturity, information on short-term debt may not necessarily be easy to compile on a transaction-by-transaction basis for all categories of short-term debt.

**12.36** Also, policymakers may require more up-to-date, detailed information so that the short-term financing position of the economy can be closely monitored. For banks, this might include daily or weekly reports covering interbank lines—the amount, the confirming bank, etc.—because these lines are the core of external funding and sensitive to changes in perceived credit worthiness. Also, key borrowers might be asked to prepare monthly position reports on trade finance covering amounts, currency, counterpart country, and sector.

**12.37** An alternative approach for those countries with balance of payments compilation systems that rely on banks' reporting of individual transactions is to estimate the stock of trade credit debt by accumulating the transactions to the existing position data, taking account of exchange rate fluctuations. However, the main drawback of this approach is that banks may not identify trade credit accurately, or its coverage may not be comprehensive. For instance, new extensions of trade credit for importers might be better identified by banks than repayments of that credit, leaving trade credit stocks artificially high.<sup>19</sup> Also, the recording of cross-border merchandise trade financed through direct credit between importers and their suppliers might be missed because it involves no payment transactions. Although comparing the level of imports recorded by customs with the import payment figures recorded through bank reports might get around this latter problem, there would be a need to ensure that the customs and the banks are taking a consistent approach to classifying and recording imports.

<sup>19</sup>To counter this problem, some countries have developed their systems such that repayment of trade credit is assumed after a certain period of time (e.g., three months). Any such approach should be supported by periodic direct surveys of trade credit positions.

**12.38** In the gross external debt position, trade financed or intermediated—such as through the discounting of bills—by a bank is not classified as trade credit and advances, but rather as a loan or short-term security. However, Chapter 7 provides a table for the presentation of all trade-related credit because of its importance for the real economy. See also Box 6.1 on trade-related credit statistics.

## Financial Derivatives

**12.39** In memorandum Table 4.4, positions in financial derivatives should be recorded on a gross basis and valued at market prices. It is recognized that it may be challenging to obtain comprehensive data on derivatives; at the time of the preparation of the *Guide*, approximately 60 economies reported financial derivatives position data to the *Balance of Payments Statistics Yearbook (BOPSY)*—the reported detail of the data varies considerably; this is over the 2010–2011 period for both transactions and positions data. In some countries the statistical recording of positions in financial derivatives may be hampered by the existing accounting rules for banks and enterprises that do not require financial derivatives positions to be recorded on-balance-sheet and valued at market prices.

**12.40** In some countries where information on positions is available, it is based on regular reports from the largest players, particularly the banking sector. Indeed, available information indicates that derivatives markets are highly concentrated, and so a survey of the major banks and investment houses, which includes information on the counterparties to their derivatives positions, along with the major enterprises that borrow abroad, might cover a considerable amount of resident activity in financial derivative instruments. Given the complexities involved, when developing a financial derivatives survey, it is strongly recommended that it be coordinated with those responsible for other macroeconomic data series that also require information on financial derivatives. Also, it is important that data on market value of positions are collected, since the market value determines the asset or liability position of the financial derivatives contract. Chapter 7 includes tables that present the nominal or notional positions of foreign currency derivatives and, if significant, interest rate derivatives. These data could also be collected.

**12.41** By way of example, in a survey of financial derivatives positions the types of analytical detail that compilers might consider collecting include:

- *Product category*—Forwards (including futures and swaps) and options
- *Risk category*—Exchange rate, interest rate, and other risk (perhaps, if significant, disaggregated into commodity, credit, and “other”)
- *Counterparty information*—General government, monetary authorities, banks, other financial institutions, other residents, and nonresidents

**12.42** While the *Guide* does not explicitly recommend the collection of data on the notional or nominal value for all risk types of financial derivatives, such information can be of analytical value. For instance, the nominal or notional amount provides some indication of the size of the risk transfers underlying financial derivatives instruments, while, as a quality check, the ratio of market to nominal value that is reported could be compared with the “normal” ratio derived from the BIS’s semiannual statistics on the open positions in the global Over-the-counter (OTC) derivatives market.<sup>20</sup>

**12.43** The BIS semiannual derivatives data were introduced in June 1998.<sup>21</sup> They cover the notional amounts and gross market values outstanding of the worldwide consolidated OTC derivatives exposure of major banks and dealers in—at the time of the preparation of the *Guide*—the G-10 countries, Switzerland, Australia, and Spain,<sup>22</sup> with five main categories of market risk reported: foreign exchange, interest rate, equity, commodities, and credit default swaps. Because they are not residence-based, the direct usefulness of the BIS data in the compilation of residence-based statistics is limited. Nonetheless, the BIS data do provide a good indication of the relative size and importance of different types of derivatives instruments and, as mentioned above, of the relationship between market and notional amounts.

<sup>20</sup>E.g., according to data published semiannually by the Bank for International Settlements (BIS), market values of foreign currency options are typically around 2–4 percent of the notional amount.

<sup>21</sup>See [www.bis.org/statistics/derstats.htm](http://www.bis.org/statistics/derstats.htm).

<sup>22</sup>Australia and Spain contributed for the first time to the December 2011 statistics.

## Direct Investment

**12.44** The external debt statement includes information on liabilities of resident direct investment enterprises to foreign direct investors and to foreign fellow enterprises, and of resident direct investors to their foreign direct investment enterprises. Measuring direct investment activity is an integral element of balance of payments and IIP statistics. Many economies take a particularly close interest in direct investment activities because of the benefits this activity is perceived to bring to the economy. Thus, it is recommended that in compiling external debt, use be made of the information on direct investment in the balance of payments and IIP.<sup>23</sup> Care must be taken to avoid double counting of securities, or other debt, in both direct investment and their instrument category. Direct investment takes precedence; a bond issued by a resident direct investment enterprise and, e.g., owned by its foreign direct investor, is classified under direct investment rather than under debt securities (i.e., equivalent to portfolio investment in the balance of payments).<sup>24</sup>

**12.45** The CDIS is a worldwide statistical data collection effort led by the IMF designed to improve the availability and quality of data on direct investment, both overall and by immediate counterpart economy. The CDIS is conducted annually starting with data for end-2009. The concepts, coverage, valuation, and classification of data collected in the CDIS are consistent with *BPM6* and the fourth edition of the *OECD Benchmark Definition of Foreign Direct Investment*. The CDIS database presents detailed data on “inward” direct investment positions (i.e., direct investment into the reporting economy) cross-classified by economy of immediate investor, and data on “outward” direct investment positions (i.e., direct investment abroad by the reporting economy) cross-classified by economy of immediate investment. All participants in the CDIS provide data on their inward direct investment, and most participants also provide data on their outward direct investment. The CDIS database contains breakdowns of direct investment position data, including, in most instances, separate data on equity and debt positions, as well as “mirror”

<sup>23</sup>See up-to-date metadata tables of CDIS participants at <http://cdis.imf.org/CountryMT.aspx>.

<sup>24</sup>An exception is intercompany debt liabilities between selected affiliated financial intermediaries (see paragraph 3.20).

data for all economies (i.e., data on direct investment positions obtained from counterpart economies' data).<sup>25</sup>

**12.46** A *CDIS Guide*<sup>26</sup> was prepared to assist countries in achieving harmonized results in the data collected on their direct investment questionnaires by providing guidance on identifying reporting units, specifying the information to be collected in the questionnaires, and highlighting tasks in conducting a direct investment survey. Debt liabilities between affiliates are collected within the CDIS, and these data could be used for the compilation of external debt statistics. Although the CDIS is only an annual exercise at the time of writing, CDIS data may be collected and compiled by an agency that is not the compiler of the external debt statistics. Therefore, compilers should be aware of this data source and ensure that intercompany lending data included in the gross external debt position are consistent or reconcilable with CDIS reported data. In addition, CDIS mirror data may be compared to an economy's own estimates vis-à-vis the counterpart. The components of the gross external debt position that could use the CDIS as a data source are identified in Table 12.1 by the acronym CDIS.

### Household Sector

**12.47** Obtaining data on the external debt of the household sector is difficult. In many economies, the household sector will focus its borrowing on resident financial institutions, not least because of familiarity. However, with modern forms of communication and the ability to advertise products across borders, borrowing from abroad might become more prevalent. One method of collecting information might be to include foreign borrowing questions in a household survey of expenditures, income, financial assets, and liabilities.

**12.48** For countries that rely on a bank reporting system, specific procedures are sometimes set up to capture data on cross-border assets and liabilities held by residents with nonresident financial institutions, since these positions are not covered by the resident banks' reporting. Under these procedures, all households are obliged to report such positions to the central bank on a regular basis (monthly, quarterly, or annually). Also,

transactions settled through these accounts abroad are to be reported by households, with the frequency and detail of individual reporting dependent on the scale of the activity undertaken.

### Appendix: Estimating Position Data with Transactions Information

**12.49** Changes in positions between end-periods are accounted for by up to four factors: transactions; changes in the price of debt instruments; changes in exchange rates; and other adjustments, such as reclassifications. For all instruments, there can be transactions and other adjustments, but not all instruments are affected by changes in prices or exchange rates. This appendix considers the estimation of position data using transactions data, starting with instruments that are relatively straightforward, and moving on to those that raise more complex issues. Because estimating positions for instruments whose prices change raises the most complex problems, a distinction is made between those instruments that are non-negotiable and debt securities.

#### Nonnegotiable Debt Instruments

**12.50** For nonnegotiable instruments, a distinction needs to be made between those whose value is linked to the unit of account and those whose value is not.

#### *Debt instruments with value linked to the unit of account*

**12.51** For a debt instrument issued in the unit of account, the estimation of position data with transactions data, in principle, is simply a case of adding transactions in the period to the previous position, and taking account of any other adjustments. However, even for such instruments, mismeasurement of position data is possible if the coverage of transactions data is not complete—for instance, due to incomplete population coverage—or if there is misreporting of transactions, including an inability of respondents to report transactions when they occur. Indeed, the compilation of position data through the accumulation of transactions data could lead to a significant mismeasurement over time, in such circumstances. Thus, even for nonnegotiable instruments whose value is linked to the unit of account, there is a need to undertake position surveys from time to time, both to help ensure the quality of position data and also as a check on the reported transactions data.

<sup>25</sup> See <http://cdis.imf.org/>.

<sup>26</sup> See [www.imf.org/external/np/sta/cdis/index.htm](http://www.imf.org/external/np/sta/cdis/index.htm).

### ***Debt instruments with value linked to a foreign currency***

**12.52** For instruments whose value is linked to foreign currencies, not only is there a need to take account of the same factors as mentioned above, but also of the currency composition of transactions and positions.

**12.53** It is recommended that if positions are to be calculated for instruments linked to a foreign currency, data best be compiled on a currency-by-currency basis. In other words, in the original currency, transactions in the period are added to positions at the end of the previous period, and after taking account of any other adjustments in the period, the end-period position is converted into the unit of account using the end-period exchange rate.<sup>27</sup> The positions in all foreign currencies, plus that in the domestic currency, are aggregated into a total position.

**12.54** Essential to such calculations is the availability, at some point in the past, of data on the currency composition of position data. For instance, if the currency composition of position data is available on an annual frequency at end-year, then in the absence of information on the currency composition of transactions data, quarterly position data could be estimated on the assumption that the currency composition of transactions is the same as in the observed end-year position data. Before making such an assumption, it would be necessary to check the observed changes in currency composition over a number of years—the less variable over time the proportions for each currency, the more robust the assumption might be. Once further end-year data are available, revisions to back data to reflect the new information are almost certain to be required.

**12.55** In the absence of data on the currency composition of position data for the whole economy, one sector (e.g., banks) might provide such information. A comparison between the currency composition of bank liabilities and those for other sectors could be made for periods when both are available. Provided that there is some similarity, the data from banks

could be drawn upon to estimate the currency proportions for the rest of the economy, until new data for all sectors become available.

**12.56** An alternative approach is to ignore the currency composition and, in effect, assume that all foreign currency liabilities are in the same currency. This “currency” could be the trade-weighted exchange rate or the known dominant currency in the country’s financial flows, such as the U.S. dollar. Under this approach, positions could be estimated by revaluing the previous end-period position, the transactions during the period, and any other adjustment<sup>28</sup>:

$$K_t = K_{t-1} \left( \frac{X_t}{X_{t-1}} \right) + F_t \left( \frac{X_t}{X_{avt}} \right) + A_t \left( \frac{X_t}{X_a} \right), \quad (12.1)$$

where

$K_t$  = estimated end-period position

$K_{t-1}$  = previous end-period position

$F_t$  = transactions in the period in the unit of account

$X_t$  = end-period exchange rate

$X_{t-1}$  = end-previous period exchange rate

$X_{avt}$  = average period exchange rate

$A_t$  = adjustment in the period

$X_a$  = exchange rate at the time the adjustment occurred

In this calculation, the exchange rate should be entered in terms of the number of units of the unit of account received for one unit of the foreign currency. The example below illustrates the principles involved.

**12.57** Assume that country A’s gross external debt position was 1,000 in domestic currency terms at  $t-1$ , all of which was owed in U.S. dollars, and that there are transactions of 150 in domestic currency terms during the period. There were no other adjustments. The exchange rate was 10 of the domestic currency to 1 U.S. dollar at  $t-1$ , and 14 to 1 U.S. dollar at  $t$ , with an average rate during the period of 12 to 1 U.S. dollar:

$$\left( 1,000 \times \frac{14}{10} = 1,400 \right) + \left( 150 \times \frac{14}{12} = 175 \right) = 1,575$$

(estimated end-period total). A step-by-step detailed calculation is provided in Example 1.

<sup>27</sup>For nonnegotiable instruments, the amount of the change between end-period positions in domestic currency terms attributable to exchange rate variation is equal to the difference between the opening and closing positions, less transactions over the period in domestic terms less any other adjustments in domestic currency terms. For the calculation to be accurate, the transactions and other adjustments need to be translated into domestic currency at the exchange rate at the time they occurred.

<sup>28</sup>The adjustment could increase or decrease positions.

**Example 1 Estimating year-end position data using transactions reported in domestic currency and exchange rate changes**

	end period (t-1)	(t)	end period (t)
<b>Data Source: denominated in foreign currency (\$) and reported in domestic currency (dc)</b>			
(a) Opening position in dc	1,000		
(b) Transactions in dc		150	
<b>Revaluation of transactions for effect of changes in exchange rates</b>			
(c) Exchange rate at end period (t-1) (units of dc to \$)	10		
(d) Average exchange rate		12	
(e) Transactions in \$ = (b)/(d)		12.5	
(f) Exchange rate at end period (t)			14
(g) Value of transactions in terms of end period exchange rate = (e)*(f)			175
<b>Revaluation of opening positions for effect of changes in exchange rates</b>			
(h) Opening position in \$ = (a)/(c)	100		
(i) Exchange rate at end period (t)			14
(j) Opening position revalued using end period (t) exchange rates = (h) × (i)			1,400
(k) End period estimated position in dc = (g) + (j)			1,575

**12.58** Whichever approach is used to estimate end-period positions, in the absence of full currency information, there will be estimation weaknesses. Where end-period currency compositions are assumed for subsequent periods, clearly the actual currency composition of transactions could be different, and this is also true when using one sector's data. Not making any assumption about currency composition is essentially akin to assuming that all other currencies move in an identical way in relation to the unit of account. In both cases, the more volatile the exchange rate, the greater the likelihood of mismeasurement. Even more so than for instruments linked to the domestic currency, frequent observations of position data for instruments whose value is linked to a foreign currency are recommended, otherwise significant mismeasurement could arise over time.

### Debt Securities

**12.59** Calculating positions with transactions data is particularly difficult for debt securities, whose prices change from period to period. In addition to taking account of other adjustments, and, if need be, movements in exchange rates, as above, there is a need to take account of movements in market prices. One particular difficulty is that there are many debt securities all with their own price. Also, unlike nonnegotiable instruments, the debtor is unlikely to know the extent to which debt securities are owned by nonresidents if nonresidents purchase instruments in domestic markets, or the debtor borrows in foreign markets. So, as noted in Chapter 13, the compiler cannot rely on the debtor for detailed information on debt securities owned by nonresidents.

**12.60** To make exact calculations, knowledge is required on the whole sequence of intraperiod prices, exchange rates, and transactions: such information may not be readily available to individual respondents, let alone national compilers. So, some simplifying assumptions or models are therefore needed to produce estimates.

**12.61** The data model most widely employed in the field of external statistics is that recommended in various methodological publications prepared by the IMF, such as the *Quarterly International Investment Position Statistics, Data Sources and Compilation Techniques* (2011). For this model, in addition to information on exchange rates, some estimate of market prices of the instruments is needed. As with exchange rates, the more detailed information available to the compiler, the better. For market prices, the simplest approach might be to base estimates on a representative government bond price(s) for domestic instruments, if available, and/or benchmark prices in other markets where domestic residents have issued instruments.

**12.62** With the required information, the data model can be used for a variety of purposes: calculating transactions on the basis of position data; calculating positions with transactions data; or "validating" both sets of data. The first two variants are particularly useful when only one of these variables is measured directly; the third when both variables are measured, using either the same source or different sources or samples (in which case it is necessary to check on whether reported data on positions and transactions are mutually consistent). The model was originally employed to derive transactions data from positions data reported or available at market value:



$$F_t = K_t \left( \frac{X_{tavg} P_{tavg}}{X_t P_t} \right) - K_{t-1} \left( \frac{X_{tavg} P_{tavg}}{X_{t-1} P_{t-1}} \right), \quad (12.2)$$

where

$F_t$  = estimate of transactions

$P_t$  = end-period prices

$P_{tavg}$  = average period prices

**12.63** However, it can also be used to derive positions data with transactions data. Indeed, equation (12.3) is similar to equation (12.1), once the adjustment factor is introduced, except that equation (12.3) also includes price effects, based on period averages. If the value of the instrument is linked to the unit of account, then the exchange rate factors are redundant.

$$K_t = K_{t-1} \left( \frac{X_t P_t}{X_{t-1} P_{t-1}} \right) + F_t \left( \frac{X_t P_t}{X_{tavg} P_{tavg}} \right) + A_t \left( \frac{X_t P_t}{X_a P_a} \right), \quad (12.3)$$

where

$P_a$  = price at which adjustment occurred

**12.64** The example below illustrates the principles involved. Again assume that country A's gross external debt position was 1,000 in domestic currency terms at  $t-1$ , all of which was owed in U.S. dollars, and there are transactions of 150 in domestic currency terms during the period. There were no other adjustments. The exchange rate was 10 of the domestic currency to 1 U.S. dollar at  $t-1$ , and 14 to 1 U.S. dollar at  $t$ , with an average rate during the period of 12 to 1 U.S. dollar. The securities owed to nonresidents were valued at 1.1 at  $t-1$ , at 1.045 at  $t$ , and at 1.066 during the period:

$$\left[ 1,000 \times \left( \frac{14}{10} \times \frac{1.045}{1.1} \right) = 1,330 \right] + \left[ 150 \times \left( \frac{14}{12} \times \frac{1.045}{1.066} \right) = 171.6 \right] = 1,501.6$$

(estimated end-period total). A step-by-step detailed calculation is provided in Example 2.

**12.65** The accuracy of the model depends on the volatility of market prices and transactions in the period covered; in particular, the accuracy of estimates is inversely related to the combined amount of

**Example 2 Debt securities—Estimating year-end position data using transactions reported in domestic currency, prices, and exchange rate changes**

	end period (t-1)	(t)	end period (t)
<b>Data Source: denominated in foreign currency (\$) and reported in domestic currency (dc)</b>			
(a) Opening position in dc	1,000		
(b) Transactions in dc		150	
<b>Revaluation of transactions for effect of changes in prices and exchange rates</b>			
(c) Exchange rate at end period (t-1) (units of dc to \$)	10		
(d) Average exchange rate		12	
(e) Transactions in \$ = (b)/(d)		12.5	
(f) Average bond price during (t)		1.066	
(g) Bond price at end period (t)			1.045
(h) Estimated value of transactions in \$ at end period (t) bond price = (e) × (g)/(f)			12.3
(i) Exchange rate at end period (t)			14
(j) Estimated value of transactions in dc at end period (t) exchange rate = (h) × (i) = (b) × (i)/(d) × (g)/(f)			171.6
<b>Revaluation of opening positions for effect of changes in prices and exchange rates</b>			
(k) Opening position in \$ = (a)/(c)	100		
(l) Bond price at end-period (t-1)	1.1		
(m) Opening position in \$ revalued using end period (t) bond prices = (k) × (g)/(l)			95
(n) Opening position revalued using end period (t) exchange rates = (m) × (i) = (a) × (i)/(c) × (g)/(l)			1,330
(o) End period (t) estimated position in dc = (j) + (n)			1,501.6

intra-period dispersion in prices and transactions. Estimated values would approach the “true” values when transactions are spread more uniformly and/or prices (including those of currencies) are less dispersed around their mean. Such conditions are more likely to prevail when the reference period chosen for compiling statistics is short (a month, or a quarter, rather than a year).

**12.66** Also, accuracy improves when flows are small compared with the initial stock, in which case intra-period valuation effects would be of secondary importance. As a consequence, lower-frequency statistics compiled using the model could still be reasonably accurate when transactions are very small, even in periods of highly dispersed prices and exchange rates.

**12.67** In addition, research at the IMF (Committeri, 2000) has shown that the availability of more detailed financial information, allowing disaggregated estimates based on homogeneous groupings of instruments and currencies, results in estimates that are closer to the actual values of the relevant variables, irrespective of the intra-period dispersion of prices and exchange rates. Creating homogeneous groupings might be achieved by collecting data on an instrument-by-instrument basis or on an aggregate basis, where information is collected by currency, maturity, and type of instrument (such as whether the instrument has a fixed or variable rate of interest).

**12.68** Clearly, the more periods over which estimates are carried forward, the greater the possibility that the estimates will diverge from “reality.” So, frequent observations of position data for instruments whose price can change are recommended.

**12.69** The data model set out in equation (12.3) also offers manageable formulas for estimating the reconciliation adjustment (equation [12.4]) and its price and exchange rate components<sup>29</sup>:

<sup>29</sup> Adding equations (12.4a) and (12.4b) would not necessarily give equation (12.4), even if there were no “other adjustments.” The difference represents the compound effect in equation (12.4) of changes in  $p$  and  $x$ , which cannot be further divided into “price” and “exchange rate” elements. The difference will be zero only when either  $x$  or  $p$  is constant. See Committeri (2000), pp. 6 and 8. Assuming no “other adjustments,” one approach could be to estimate the exchange rate component first, and calculate the price component by residual, i.e., subtract equation (12.4b) from equation (12.4).

$$ADJ_t = K_{t-1} \left( \frac{X_t}{X_{t-1}} \frac{P_t}{P_{t-1}} - 1 \right) + F_t \left( \frac{X_t}{X_{avg}} \frac{P_t}{P_{avg}} - 1 \right) + A_t \left( \frac{X_t}{X_a} \frac{P_t}{P_a} - 1 \right) \quad (12.4)$$

$$ADJ_t^{price} = K_{t-1} \left( \frac{P_t}{P_{t-1}} - 1 \right) + F_t \left( \frac{P_t}{P_{avg}} - 1 \right) + A_t \left( \frac{P_t}{P_a} - 1 \right) \quad (12.4a)$$

$$ADJ_t^{xrate} = K_{t-1} \left( \frac{X_t}{X_{t-1}} - 1 \right) + F_t \left( \frac{X_t}{X_{avg}} - 1 \right) + A_t \left( \frac{X_t}{X_a} - 1 \right), \quad (12.4b)$$

where

$ADJ_t$  = total reconciliation adjustment between positions and transactions

$ADJ_t^{price}$  = the price component of the total reconciliation adjustment

$ADJ_t^{xrate}$  = the exchange rate component of the total reconciliation adjustment

**12.70** Example 3 provides a practical way of estimating the price and exchange rate components of the adjustment.

**Step 1:** The effect of revaluation due to the market price change is derived by subtracting changes due to transactions from the total change in position. Because exchange rate changes are always zero in the currency of denomination, all revaluation when expressed in the currency of denomination is due to market price changes.

**Step 2:** The beginning and end-period positions, and changes due to transactions, and revaluation due to market price changes (as derived in Step 1) are converted to the currency of external debt compilation (dc in this example) using the appropriate exchange rates. Positions are converted by the exchange rate

**Example 3 Estimating price and exchange rate components of the adjustment—the price component is estimated first, and then the exchange rate component is calculated by residual (see also *BPM6*, Box 9.1)**

	end period (t-1)	(t)	end period (t)
<b>Data Source: denominated in foreign currency (\$) and reported in domestic currency (dc)</b>			
(a) Opening position in dc	1,000		
(b) Transactions in dc		150	
<b>Price component of the total reconciliation adjustment</b>			
(c) Exchange rate at end period (t-1) (units of dc to \$)	10		
(d) Average exchange rate		12	
(e) Transactions in \$ = (b)/(d)		12.5	
(f) Average bond price during (t)		1.066	
(g) Bond price at end period (t)			1.045
(h) Opening position in \$ = (a)/(c)	100		
(i) Bond price at end period (t-1)	1.1		
(j) Estimated value of position in \$ at end period (t) bond price = [(h) × (g)/(i)] + [(e) × (g)/(f)]			107.3
(k) Revaluation of position in \$ for effect of changes in prices = (j) – (h) – (e)			-5.2
(l) Price component of the total reconciliation adjustment—revaluation of position in dc for effect of changes in prices = (k) × (d)			-63
<b>Exchange rate component of the total reconciliation adjustment</b>			
(m) Exchange rate at end period (t)			14
(n) End period (t) estimated position in dc = (j) × (m)			1,501.6
(o) Total reconciliation adjustment between positions = (n) – (a)			501.6
(p) Exchange rate component of the total reconciliation adjustment— revaluation of position in dc for effect of changes in exchange rates = (o) – (b) – (l)			414.5

at the relevant date, and, in the example, transactions and price changes are converted at the average exchange rate (ideally, they would be converted at the exchange rate at the time of each event or flow).

Step 3: The effect of revaluation due to exchange rate changes is derived by subtracting changes due to transactions and revaluation due to market price changes from the total change in positions.<sup>30</sup> Note that for instruments that are valued at nominal prices,

there can be exchange rate effects, but no debt security price changes.

### Revision Policy

**12.71** A clear revision policy is needed for dissemination of high-frequency data that rely to a large extent on estimates. Revisions should follow a regular and transparent schedule, and users should be informed of this practice (see Chapter 10).

<sup>30</sup>However, it is possible that there are “other changes in volume.” If so, these should also be subtracted from the total changes in positions before deriving exchange rate changes as a residual.





# 13

## Debt Securities

### Introduction

**13.1** External debt in the form of debt securities are liabilities within direct and portfolio investment of the balance of payments and the International investment position (IIP). In recent decades, the relaxation of restrictions on the foreign investment activities of financial corporations and other institutional investors, combined with continued financial innovation, has resulted in a surge of cross-border investment in debt securities (and equities). This has increased the interest of policymakers in data on this activity.

**13.2** However, ensuring comprehensive coverage of debt securities is among the most difficult in the field of balance of payments, IIP, and external debt statistics. In particular, the resident issuer is, in many cases, not in a position to identify the owner of their debt securities, and so may be unaware of whether the creditor is a resident or nonresident. Thus, almost inevitably, to compile position data, other than by accumulating flows on a previous position, the compiler needs to obtain information on the stock of debt securities of residents, and the owners of those securities, from a variety of sources. While it is relatively straightforward, but not a simple task, to obtain data on non-traded debt liabilities, for the following reasons, it is more difficult to identify the owner of a debt security.

- Liberalization has facilitated the development of new channels through which investment can flow. In other words, compilers can no longer rely solely on traditional domestic data sources, such as banks, other financial corporations, or security dealers, because investors increasingly use foreign intermediaries, and security issuers may access foreign markets directly.
- Unlike banks, which have a tradition of reporting to the central banks and/or other regulatory agencies, as noted in the previous chapter, non-bank corporations may be reluctant to report to

the authorities on their ownership of debt securities, because, amongst others, of concern that data sent to the statistical agency may be passed on to other agencies. This, once again, highlights the need for the promotion of statistical integrity within the country.<sup>1</sup> Noncompliance by respondents leads to gaps in coverage at a time when activity is rising.

- The participation of various financial intermediaries in international transactions and the practice of registering of investment under nominee companies and in trusts can obscure the owner of the security (the entity to which the security is registered may not necessarily be the security owner; the latter being the relevant party for identifying residency of the creditor).
- International markets in certain instruments have grown quickly in the past decade, causing difficulty in determining the “true” owner of the security. An example is the use of securities in reverse security transactions.
- Rarely, if at all, is it possible for a government to have legal powers to require a nonresident investor to report on their ownership of securities issued by domestic residents.

**13.3** Ways in which these difficulties might be overcome are examined in this chapter.<sup>2</sup>

<sup>1</sup>Integrity of disseminated data is one of the four dimensions of the International Monetary Fund (IMF)’s Special Data Dissemination Standard (SDDS) and General Data Dissemination System (GDDS). Among the types of actions that the SDDS and GDDS outline to promote integrity is the dissemination of the terms and conditions under which official statistics are produced, including those relating to the confidentiality of individually identifiable information.

<sup>2</sup>Although a practical guide for the measurement of assets, a helpful source of information on compiling position data for debt securities is the IMF *Coordinated Portfolio Investment Survey Guide*, second edition (IMF, 2002), which is available on the IMF Website [www.imf.org/external/np/sta/pi/cpisgd.htm](http://www.imf.org/external/np/sta/pi/cpisgd.htm).

## General Observations

**13.4** In looking at ways to capture activity in securities for external debt purposes, countries should take into account any existing system they already have in place for the collection of data on portfolio investment and, more generally, for balance of payments and IIP data, and also arguably, national accounts data. Respondents will know the existing system, and a considerable amount of human capital will have been invested in it at the compiling agency. Those concerned with external debt statistics should draw on this knowledge and expertise, not least because a detailed system of collecting data on inward and outward security investment can be resource intensive.

**13.5** Also, there is a close linkage between cross-border securities activity and other data series such as direct investment.<sup>3</sup> More important, inward and outward portfolio investments are directly affected by both domestic and cross-border activity. Whereas direct investment generally involves the establishment of a longer-term relationship between parent companies and their foreign affiliates, securities investment involves securities—both domestic and foreign—that potentially can be traded between residents and nonresidents. Depending on regulations and institutional arrangements, ownership of domestic and foreign securities can change quickly. Indeed, as exchange controls are lifted, inward and outward capital flows can arise from security transactions of both residents and nonresidents. So, while the focus in the *Guide* is on foreign investment in debt securities issued by residents, when considering how to measure this activity, due regard should be given to the measurement of residents' investment in debt securities—issued by both residents and nonresidents.

**13.6** The close relationship between data on debt securities in external debt, the balance of payments, IIP, and the national accounts means that it is important for agencies to cooperate. Otherwise potentially useful information may not be utilized, while at worst, respondents could end up reporting essentially the same information to two different statistical agencies. Cooperation need not only involve statistical agencies. In other government agencies, there will be potential

users of the data collected. For instance, information on nonresident ownership of government debt securities is likely to be of interest to finance ministries in helping to formulate government debt policy. Policy ministries can help the compiler in devising report forms, encouraging responses, and evaluating the (aggregate) data.

**13.7** Finally, any development of the data system to capture investment in domestic debt securities by nonresidents will inevitably lead to questions about the computer system on which data are to be stored and manipulated. Computer systems are obviously tools that help facilitate a more efficient statistical operation, but before a computer system is installed, it is necessary to consider the form of the data capture and manipulation; the data output required both in final form and from interrogation of the system; as well as any need to be compatible with data stored in other systems.

## Key Considerations

**13.8** An important starting point in deciding how to measure positions (and flows) in debt securities is ascertaining how and through which channels debt security investment flows into and out of the country. This involves talking to market participants and generally gaining an understanding of the domestic debt security markets. The issues to explore are:

- How do nonresidents invest in domestic debt securities?
- Through which institutions do they invest?
- Where do nonresidents arrange for the custody of their domestic debt securities? How are records held?
- Where are trades settled?
- Are security codes used in monitoring debt security positions?
- Do residents issue debt securities directly abroad? Do residents invest in these debt securities?

**13.9** Key characteristics of debt securities are identified in Box 13.1.

**13.10** The importance of preliminary research cannot be overstated because, once completed, the compiler can decide at which point or points in the “chain” of activity it is most appropriate to collect information.

<sup>3</sup>Direct investment intercompany lending may include debt securities (see paragraphs 3.16 and 3.17).

### Box 13.1 Main Features of Debt Securities

Debt securities should display all, or most, of the following quantitative characteristics:

- An issue date, on which the debt security is issued
- An issue price, at which investors buy the debt securities when first issued
- A redemption (or maturity) date, on which the final contractually scheduled repayment of the principal is due<sup>1</sup>
- A redemption price or face value,<sup>2</sup> which is the amount to be paid by the issuer to the holder at maturity
- An original maturity, which is the period from the issue date until the final contractually scheduled payment
- A remaining (or residual) maturity, which is the period from the reference date until the final contractually scheduled payment
- The coupon rate that the issuer pays to the holders, which may be fixed throughout the life of the debt security or vary with inflation, interest rates, or asset prices<sup>3</sup>
- The coupon dates, on which the issuer pays the coupon to the securities' holders
- The issue price, redemption price, and coupon rate may be denominated (or settled) in either domestic currency or foreign currencies

Qualitative characteristics of debt securities include:

- The documents specifying the rights of debt securities issuers, in the form of indentures or covenants. The terms of contracts may be changed only with great difficulty, with amendments to the governing document generally requiring approval by a majority vote of the debt securities' holders
- The default risk attached to debt securities, which is the creditworthiness of individual debt securities issues often assessed by credit rating agencies<sup>4</sup>

<sup>1</sup>The maturity date may coincide with the conversion of a debt security into an equity security, either that of the issuer or a corporation other than the issuer. The redemption (or maturity) date may change due to early redemption or prolongation of the security.

<sup>2</sup>The face value of a debt security is defined as the amount of principal to be repaid (2008 SNA 3.154 (d)).

<sup>3</sup>Some debt securities have no coupon payments during their life, with the full return being paid at maturity (zero-coupon bonds).

<sup>4</sup>For further details, see Section 6 in the *Handbook on Securities Statistics, Part 1: Debt Securities Issues*.

There is no one obvious answer for all compilers. For legal, institutional, and historical reasons, different countries have different market structures and practices, and so what suits one country may not suit another. Nonetheless, the pros and cons of collecting information from different types of market participants (e.g., security issuer, registrar, and custodian) can be indicated, and these are set out in Table 13.1. The relevance of the various advantages and disadvantages will depend on individual economy circumstances. For different instruments and markets, different collection methods may be appropriate.

**13.11** Before discussing the advantages and disadvantages of approaching different types of respondents, the relationship between the collection of transactions and position data needs to be considered. There are various ways transactions and position data can interact:

- Transactions data can be compiled separately from position data, and cross-checks introduced to validate both sets of data.<sup>4</sup>
- Transactions data can be added to a previous position and, with appropriate revaluations and any other adjustments, a new estimated position calculated (although an independent benchmark position survey at periodic intervals is essential to check and improve the quality of the estimated position data)—see the appendix to Chapter 12 on estimating position data with transactions information.
- Position and transactions data can be collected in an integrated way, by requesting respondents

<sup>4</sup>See Appendix: Estimating Position Data with Transactions Information in Chapter 12 for more information in this regard. See also the *BPM6 Compilation Guide* for an explanation of how to reconcile position and transactions data, and to estimate income from position data.

Potential Respondent	Advantages	Disadvantages
<b>Issuer of Security</b>	Will know about securities issued.	Unlikely to know beneficial owner of the security either at issue or during secondary market trading.
<b>Financial Intermediary</b>		
<i>Banks</i> (receipts/payments)	Transactions in domestic currency require settlement through resident banks. Transactions recorded could be cumulated on a previous position and, with appropriate valuation adjustments, provide new position data.	Nature of transaction may be difficult to establish. May have a problem in identifying direct investment transactions. While a method for compiling position data in the short term, a more direct measure of the stock position might be required in the medium term, depending on the complexity of the reporting system. Also, only covers investment in securities issued in the domestic market.
<i>Issuing Agency</i> (Security House/ Bank)	Will know about securities issued.	May not know beneficial owners at issue and, unless a dealer, will not know about secondary trading.
<i>Dealer</i> (Security House/Bank)	Will have information on sales and purchases of securities. As with banks, transactions data could be used to compile position data.	May not cover all nonresident purchases of resident securities. May have a problem with nominees and identifying direct investment transactions.
<i>Fund Manager</i>	Will have information on beneficial owners.	Unlikely to cover all nonresident purchases and holdings of resident securities.
<b>Organized Exchange</b>	Will have a record of transactions on the exchange and perhaps positions. Data on positions might also be available via member firms.	May not cover all nonresident purchases and holdings of resident securities. May have a problem with nominee accounts.
<b>Settlement Agency</b>	Will have a record of transactions.	May not cover all nonresident purchases and holdings of resident securities. May have a problem with nominee accounts and identifying direct investment transactions/positions. Records may not be kept in a form appropriate for external debt/balance of payments purposes.
<b>Registrar</b>	Will know who owns which securities.	Use of bearer securities undermines the use of a securities register. May have a problem with nominee accounts. May not cover transactions particularly well.
<b>Custodian</b>	Information on ownership available. Fewer in number than investors. Should know information on the outstanding value of holdings.	Coverage of nonresident purchases and holdings of resident securities is uncertain. May have a problem in identifying nonresidents, although tax status may help, and direct investment transactions. May not know exact details of transactions/may have difficulty extracting data in line with balance of payments methodology. Double counting a potential problem if subcustodians used.

to reconcile transactions, other flows, and positions. The compilation can be carried out on an aggregated basis (with possible breakdowns by counterpart country, counterpart sector, and currency of denomination) or on a security-by-security basis,<sup>5</sup> supported by a database with information on individual securities issued by

domestic residents (Box 13.2). Individual transactions data could also be used to update the individual holdings of securities (although even then periodic verification of the derived position data is recommended using alternative or additional inquiries).

**13.12** Whichever method is used, decisions on whom to approach and what to request in terms of position data are at least influenced by the approach taken to collecting transactions data. So, in the discussion below, both transactions and positions data are discussed.

<sup>5</sup>For additional information about security-by-security databases, see the *Handbook on Securities Statistics Part 1 (2009): Debt Securities Issues*, Annex 4, and the *Handbook on Securities Statistics Part 2 (2010): Debt Securities Holdings*, Annex 2.



### Box 13.2 Security-by-Security Databases

In measuring positions in debt securities, information may be collected from respondents at the level of the individual instrument (security-by-security). Such an approach potentially provides great flexibility in meeting requirements for external debt statistics. However, to utilize fully the potential of such information, the compiler is advised to develop or acquire a database that contains detailed information on individual securities—price, country of issuer, industrial sector of issuer, income, etc.—and that uniquely identifies securities through a security identification code, e.g., the International Security Identification Number (ISIN).<sup>1</sup> Through such a database, individual securities that are reported with an identification code can be located in the database, and the associated information can be drawn upon to compile information not only on outstanding positions but, depending on the scope of the associated information contained, statistics on the debt-service payments schedule, the currency composition of external debt, etc. Also, such an approach can enhance data quality by allowing the compiler to check the accuracy of submitted data and to resolve conflicting reports. A prominent example of a security-by-security database is the Centralized Securities Database (CSDB) set up by the European System of Central Banks.

#### Sources of Information

Information on individual securities can be obtained from commercial sources, international organizations, and security numbering agencies. By far, the most comprehensive and complete databases are those available from commercial sources, usually at a commercial price. The best of these commercial sources supply high-quality, timely, comprehensive data to the international financial community to support investment activity. Nevertheless, they may not be the most reliable source for statistical attributes, and, so statisticians will need to review closely the reporting of these attributes if relying on commercial sources. The Bank for International

<sup>1</sup> More detailed information on securities database is available in the IMF (2002), *Coordinated Portfolio Investment Survey Guide*, second edition, available at [www.imf.org/npl/sta/pi/cpisgd.htm](http://www.imf.org/npl/sta/pi/cpisgd.htm).

Settlements (BIS) maintains a database of international debt securities that is available to member central banks and perhaps other governmental organizations.<sup>2</sup> The Association of National Numbering Agencies has a database of individual securities that is commercially available. By linking the databases of national numbering agencies (NNAs)—the entities that assign the ISIN in their own jurisdiction—this database provides key descriptive information on individual securities. Coverage of individual securities differs in completeness among NNAs, and information on market prices is not included. To understand more about the information available on this database, it is recommended that the compiler approach the NNA that allocates ISIN codes to securities issued within the domestic economy.

#### Role of the Security Identification Code

As noted above, in a compilation approach that uses a database of individual securities, the security identification code is of central importance—the respondent needs to provide a code so that the database can identify the security. However, different respondents could submit different security identifiers for the same security because any widely traded security could be allocated a domestic as well as an international security identifier. For instance, in the United States, a domestic security code (known as CUSIP) will be allocated to a domestic security. As a result, private investors have adopted a variety of different security identification systems as their primary identifier. National compilers should discuss the use of security identifiers with potential survey respondents. If national compilers can rely on survey respondents to use primarily one coding system—for instance, the ISIN—this enhances the efficiency of the compilation procedure. If not, then the agency is advised to acquire a database(s) that contains all the various identifier codes that a given security has been assigned by the different coding systems. These cross-reference databases may well be available from the same commercial firms mentioned above.

<sup>2</sup> BIS data are available at [www.bis.org/statistics/index.htm](http://www.bis.org/statistics/index.htm).

## Nonresident Investment in Domestically Issued Debt Securities: Potential Respondents

**13.13** An obvious approach for compilers is to collect information on nonresident investment in debt securities issued domestically by residents from domestic financial intermediaries. This approach assumes that nonresidents will involve these intermediaries when undertaking transactions in the domestic market. For instance, for transactions and positions in government debt securities, the government might consider making such a reporting

requirement a condition of any licensing approval that the domestic financial entity may need in order to have settlement accounts in domestic government debt securities.

## Deposit-Taking Corporations

**13.14** Typically, banks are approached for data on external transactions and positions because of their role in the payments system; if domestic currency is used to settle transactions, a resident bank is likely to be involved. However, money flows through banks for a variety of reasons, and banks may have difficulty

in establishing the specific nature of a transaction as a debt securities transaction. Also, it is important that transactions involving nonresidents are captured not only when money comes into the country but also whenever nonresidents transact in domestic currency, such as when a nonresident draws down a domestic bank account to purchase a resident debt security. This is the key issue: can banks identify and report in a comprehensive manner investment by nonresidents in domestic debt securities? The possible use of data from banks in their role as custodians is examined later in the chapter.

### Issuing Agency

**13.15** Some countries collect information on domestically issued debt securities from issuing agencies. These agencies act on behalf of the issuer of securities in distributing the securities and in realizing the proceeds. They can typically provide information on key features of the issuance such as debt security issuer, issue price, currency, and maturity. Nevertheless, the beneficial owner at issue and information on secondary trading may not be available.

### Investment Dealers

**13.16** Another method used is to gather data on debt securities from investment dealers, including banks that conduct portfolio investment business on behalf of nonresidents. In other words, those who arrange and execute the deals. Dealers usually keep records of client transactions and may be better able to identify portfolio investment transactions than banks through their payments system activity. Invariably, the number of domestic investment dealers is likely to be fewer than the number of investors, and, legal circumstances permitting, should be approachable. This method of approach depends, of course, on nonresidents using domestic intermediaries (which may not be the case). Also, these institutions will need to be able to identify residents and nonresidents and keep records in a manner that allows their use in external debt, as well as balance of payments and IIP compilation.

**13.17** Countries may adopt a system of capturing foreign investment in debt securities using dealer reports. The dealers report individual transactions involving nonresidents and include the value of the deal and the unique code for the debt security (devel-

oped for settlement purposes).<sup>6</sup> Information kept on a database of individual debt securities is used to confirm the residence of the issuer of the debt security and provide additional information, e.g., Canada has successfully adopted such a detailed and complex statistical system using dealer reports, which also generates income data on an accrual basis.

### Resident Fund and Investment Managers

**13.18** Some countries carry out special surveys that are addressed to resident fund/investment managers, and request information on own account and client account investments in resident and nonresident debt securities by resident and nonresident investors, thus providing the necessary data on residents' debt liabilities to nonresidents. Data on the country and institutional sectoral distribution of ownership may also be requested. The information can provide good coverage of the household sector's portfolio assets, provided that they use resident fund managers. However, such a survey will not provide comprehensive coverage of nonresident ownership of resident securities unless nonresidents use domestic fund managers extensively.

### Stock Exchange and Settlement Agencies

**13.19** Another method is to capture nonresident investment in domestic securities at the point of the trade or settlement—for instance, using information on transactions from the stock market. At the least, the stock exchange usually has to keep a record of individual transactions, and at best may act in a settlement capacity and see the cash change hands. It may be possible for this information to be supplied to the compiling agency. Sometimes there may be a separate but similar market mechanism for bond trades. Through these markets, nonresident investment transactions and holdings may be obtained. For instance, the exchange might have or can obtain the authority to request that information be reported to it on who owns what securities. This might be undertaken not only for statistical but also for regulatory and policy purposes.

**13.20** However, there may be reluctance for the stock exchange or settlement agency to release the infor-

<sup>6</sup>While NNAs frequently issue their own code for securities issued in their jurisdiction, they also allocate a unique ISIN code for each security. More information on ISIN codes is available in IMF (2002), Appendix 7, pp. 151–153.

mation required by the compiling agency, and the prevalence of nominee accounts may lead to misidentification of the true investor (a common problem when “intermediaries” report). Other issues that could arise are whether the records kept can be readily utilized for external debt and balance of payments and IIP statistics purposes, and the comprehensiveness of the coverage of nonresident investment in resident securities.

**13.21** Close links with the stock exchange may be important for the compiler in other regards. The stock exchange will be a source of information on market developments; it may well be the agency that needs to be kept informed by quoted corporations of new securities issues—helpful for information on security issues in foreign markets by residents (and domestic security issues by nonresidents); it may be the agency allocating code numbers to individual securities issued in the domestic market; and individual investors may need to inform the stock exchange of large equity holdings, thus helping the compiler to identify direct investment positions and transactions.

### Registrars

**13.22** Another avenue is to approach registrars who store information on the owners of debt securities (e.g., to make coupon payments).<sup>7</sup> For instance, details of ownership of debt securities issued by the government in domestic markets are frequently held on a computerized book-entry register, with change of ownership being evidenced by an entry on this computerized register, rather than the transfer of a physical certificate. These registers are often maintained at a country’s Central Securities Depository (CSD). Typically, these registers contain useful information such as, for each debt security, the outstanding balance for each investor, and the amount of accrued interest. Also, debt securities can be valued both at market as well as nominal value and can be classified by original as well as remaining maturity. However, problems arise in identifying ownership, given the frequent use of nominee accounts, not least for administrative efficiency.

<sup>7</sup>For identifying nonresident holders of debt securities, compilers may find useful information from the residency of holders receiving coupon payments.

### Custodians

**13.23** Yet another method of measuring nonresident investment in debt securities issued by domestic residents is to collect data from custodians. Many countries use custodian surveys of one type or another, and an approach should be explored for compiling at least some element of the data on nonresident ownership of securities. Domestic securities owned by nonresidents may be deposited with local custodians for “safekeeping,” and these institutions, primarily deposit-taking corporations, could be approached through a survey to report transactions and ownership of domestic securities by nonresidents. Such a survey can provide good coverage of resident securities denominated in the domestic currency and traded in national organized markets.

**13.24** However, resident securities denominated in foreign currency, issued and usually traded in foreign organized markets (e.g., international bonds), are unlikely to be captured by such a survey. Also, there are other possible drawbacks that the compiler needs to consider.

**13.25** The custodian may have difficulty in distinguishing residents from nonresidents, although a possible different tax treatment from that applied to residents may be one way in which this distinction can be made.

**13.26** A local custodian may be acting on the instructions of a “global” custodian, located in another economy, and so may not know the name of the beneficial owner of the debt security—the debt security might be registered in the name of a foreign global custodian. Resident custodians are likely to record debt security holdings in the name of the global custodians as nonresident holdings, but resident investors could subsequently purchase the debt securities but leave them entrusted with the global custodian, causing a mismeasurement of nonresident ownership. Periodic surveys to confirm the beneficial owner of securities may be warranted.

**13.27** Another potential problem, and one that arises with all transactions and positions reported through financial intermediaries, is the difficulty in distinguishing debt securities related to direct investment activity from other cross-border security activity, leading to the possibility of double

counting of investment activity if direct investment data are separately collected, which is usually the case.

**13.28** Debt securities data from custodians can be reported on an individual or aggregate basis. As mentioned above, data reported on an individual basis is best supported by a database that records individual securities issued by domestic residents. The quality of the data compiled using such a database can be better assured and the possibilities of data analysis can be expanded. Also, it can reduce the burden on the respondent and confirm the data reported. Nevertheless, there can be considerable resource cost for the compiling agency.

**13.29** Alternatively, aggregate data can be requested from custodians. As always, checks are required, for instance, with aggregate data a custodian might report the number of debt securities owned rather than their value. It should also be recognized when requesting aggregate information that custodians may not hold their records of nonresident ownership of domestic securities in a way that is conducive to external debt reporting. Therefore, preliminary discussions are essential to ascertain which data might be readily available.

### Issues of Debt Securities by Residents in Foreign Markets

**13.30** Measuring foreign investment in debt securities issued abroad by residents can be difficult. Foreign intermediaries will not report to the domestic compiling agency. Swapping data with foreign compilers is one option, but this approach is difficult to implement because the compiler would need to know all the compilers to approach, and the nonresident compiler would need to have the requisite data. A more promising approach is to obtain information on gross issues and redemptions of international issues either from issuers themselves or from other sources, including the domestic stock exchange or other official bodies that should be informed of any new issues by quoted companies. International sources of information, such as the BIS international securities database,<sup>8</sup> could also prove useful.

<sup>8</sup>Other additional sources regarding debt securities databases are presented in the *Handbook on Securities Statistics Part 1 (2009): Debt Securities Issues* and *Part 2 (2010): Debt Securities Holdings*.

**13.31** If a database of individual debt securities is maintained—or aggregate information on foreign debt security issuance is reported by resident issuers—so that net new issues in foreign markets—gross issues and gross redemptions—are recorded, and the outstanding amounts of the debt securities issued by residents in foreign markets can be calculated, a reasonable assumption could be that these securities are purchased by nonresidents, excluding those known to be purchased by residents. In other words, external debt in the form of nonresident investment in debt securities issued in foreign markets by residents, including government, could be calculated by, all other things being equal, netting out domestic ownership of resident debt securities issued in foreign markets from the total outstanding. Information on resident holdings of these debt liabilities could come from domestic respondents, either the investors themselves or financial institutions involved in this activity. Besides being a method of calculating an element of external debt, the resultant information on resident and nonresident ownership of debt securities issued in foreign markets is of interest in its own right, as explained in Chapter 7.

**13.32** This approach is a perfectly acceptable compilation technique and would require the compiler to liaise with the agency that compiled data on domestic investment in domestic securities for the financial accounts. Indeed, some countries employ this technique to measure inward investment into all debt securities issued by residents (issued both in domestic and international markets).

### Information on Securities Involved in Reverse Security Transactions

**13.33** If the collateralized loan approach<sup>9</sup> is employed to record *reverse security transactions* (such as repurchase agreements, repos), memorandum Table 4.6 is provided for the presentation of data on debt securities issued by residents that residents acquire from or provide to nonresidents under these arrangements. It is expected that the majority of such transactions will occur in the domestic market, most likely in the government debt securities market. Most commonly,

<sup>9</sup>For the collateralized loan approach and *reverse security transaction* definitions, see paragraphs 3.37 and 3.38 in this *Guide*.

repos are transacted by financial institutions with other financial institutions, including central banks. Requiring domestic financial institutions to report domestic and nonresident debt securities sold to and purchased from nonresidents under reverse transactions, perhaps in their balance-sheet returns to central banks and/or statistical agencies, is likely to cover the bulk of the business. Other entities such as nonfinancial enterprises and governments may be involved in *reverse security transactions*, perhaps even in domestically issued securities in foreign markets. So the compiler is advised to investigate the significance of information from these institutional sectors as well.

**13.34** However, in compiling data on debt securities issued by residents and traded under *reverse security transactions* by residents with nonresidents, care needs to be taken to avoid double counting. Experience indicates that where debt security registers are used to identify nonresident ownership and/or where custodians report, it is not always possible to identify debt securities subject to repos. So, if a custodian provides information on nonresident ownership of resident debt securities, it may be inclusive of debt securities purchased and sold under *reverse security transactions*, i.e., the information might already include resident securities acquired by nonresidents from residents under *reverse security transactions*, contrary to the collateralized loan approach. It is very important for the compiler to understand how securities involved in *reverse security transactions* are recorded in the position information provided.

### Possible Mismeasurement

**13.35** Clearly, the more transactions in domestic securities are concentrated in the domestic economy, the greater is the likelihood that domestic financial intermediaries can provide adequate coverage and, thus, a lower likelihood that there will be undercounting. The difficulty is then in ensuring that resident and nonresident owners are correctly identified and the concepts outlined in the *Guide* are adhered to.

**13.36** On the other hand, overcounting is more likely where a number of methods are used to collect data. While more than one method may be needed to ensure comprehensive coverage—for instance, the measurement of foreign investment in government debt securities may differ from that for private

debt securities—the compiler should be aware of the increased possibility for the double counting of activity when more than one method is used.

**13.37** To reduce the possibility of mismeasurement, particular care needs to be taken in deciding on the respondent population; as noted in the previous chapter, a register of reporters, kept current, is essential and could be drawn from a centralized national register of reporting entities maintained for national accounts reporting purposes.

### Periodic Position Surveys

**13.38** As mentioned above, in the short term some economies might compile position data by accumulating transactions on a previous position. However, it is important to conduct periodic benchmark position surveys, perhaps at least once a year, as changes in the positions of listed securities can be significant due to fluctuations in market prices. The sources of position data could be different from those for transactions data. For instance, data on transactions might be compiled from information supplied by dealers or organized exchanges, whereas custodian information might be used for the position data. The results of the position survey can then be checked against the cumulative transactions data; in other words, reconciliation can be undertaken. This reconciliation is particularly important when financial intermediaries are reporting transactions because it can reveal inconsistencies and errors in reporting that might not otherwise be spotted. In some ways, independent verification of the data is helpful for the robustness of the compilation system. Alternatively, the same institutions could be approached for both transactions and position data so that any discrepancies can be rectified and improvements made for future years.

### Counterpart Information

**13.39** Because of the need to improve the coverage of portfolio investment assets globally, and also because of the difficulty of identifying nonresident ownership of resident securities, the IMF, in cooperation with other international organizations, has promoted the development of a Coordinated Portfolio Investment Survey (CPIS).<sup>10</sup> The CPIS collects comprehensive

<sup>10</sup>For CPIS data and metadata, see <http://cpis.imf.org/>.

information on year-end holdings of portfolio investment securities by individual economy, both equity and debt securities, valued at market prices, and cross-classified by economy of issuer of the security. The CPIS was conducted for the first time with a reference date of end-December 1997, and the results published in 1999. The CPIS has been conducted annually since 2001.<sup>11</sup>

**13.40** In 2009, the “Group of Twenty (G-20) Finance Ministers and Central Bank Governors Working Group on Reinforcing International Co-operation and Promoting Integrity in Financial Markets” called on the IMF and the Financial Stability Board (FSB) to explore information gaps and provide appropriate proposals for strengthening data collection. In response to the request, the IMF and the FSB Secre-

tariat staff presented a report<sup>12</sup> outlining 20 recommendations for closing data and information gaps. Two of these recommendations refer to the CPIS (Recommendations 10 and 11).<sup>13</sup>

**13.41** In consultation with the IMF Committee on Balance of Payments Statistics and numerous data users, several enhancements to the CPIS have been implemented. Such enhancements include increased frequency (semiannual CPIS data collection starting with June 2013 reference date), timeliness (a dissemination lag of less than nine months), and scope (collection on a voluntary basis of data on the institutional sector of the foreign debtor and on short or negative positions). Also, the IMF Executive Board agreed to include the CPIS data in the SDDS Plus<sup>14</sup> beginning in 2015.

<sup>11</sup>The coverage of the CPIS is augmented with information from two other surveys, namely, the Securities Held as Foreign Exchange Reserves (SEFER) and the Securities Held by International Organizations.

<sup>12</sup>*The Financial Crisis and Information Gaps*, IMF staff and Financial Stability Board (FSB) Secretariat, November 2009.

<sup>13</sup>Recommendation 10 states that “All G-20 economies are encouraged to participate in the IMF’s CPIS and in the BIS’s International Banking Statistics (IBS). The IMF and the BIS are encouraged to continue their work to improve the coverage of significant financial centers in the CPIS and IBS, respectively.” Recommendation 11 states that “The IMF, in consultation with the IMF’s BOPCOM, to strive to enhance the frequency and timeliness of the CPIS data, and consider other possible enhancements, such as the institutional sector of the foreign debtor.”

<sup>14</sup>See also Box 4.1.



# 14

## External Debt Sustainability Analysis<sup>1</sup>

### Introduction

**14.1** The creation of debt is a natural consequence of economic activity. At any time, some economic entities have income in excess of their current consumption and investment requirements, while other entities are deficient in this regard. Through the creation of debt, both sets of entities are better able to realize their intertemporal consumption and output preferences, thus encouraging economic growth.

**14.2** The creation of debt is premised on the assumption that the debtor will meet the requirements of the debt contract. But if the income of the debtor is insufficient or there is a lack of sufficient assets to call upon in the event of income proving insufficient, debt problems ensue. In such circumstances, or in the expectation of such circumstances, the benefits arising from international financial flows—for both creditors and debtors—may not be fully realized. Hence, the need at the country level for good risk-management procedures and the maintenance of external debt at sustainable levels.

**14.3** The objective of external debt sustainability analysis (DSA) is to evaluate a country's capacity to finance its policy objectives and service the ensuing debt. DSAs are an integral part to the Fund's assessments of member countries' policies, both in the context of program monitoring and country surveillance. To this end, the Fund has developed two frameworks

for conducting public and external DSA, one focusing on low-income countries (LICs), the other focusing on market access countries (MACs) including both advanced and emerging market economies.

**14.4** This chapter discusses the main concepts associated with external debt sustainability, including solvency and liquidity aspects, the basic steps involved in the preparation of external DSAs, and provides a brief overview of the frameworks used at the Fund to carry out DSAs.

### Basic Concepts

**14.5** Chapter 2 of the *Guide* discusses the definition of external debt as well as the accounting principles for the measurement of external debt. Accordingly, for the purpose of external DSAs, external debt refers to debt liabilities owed by residents of an economy (both the public and the private sector) to nonresidents. Foreign financial resources can be important to growing economies as they supplement domestic savings to finance investment. However, access to foreign finance could also lead to accumulation of unsustainable external debt, which is costly to a country and can disrupt the smooth functioning of international capital markets. External DSA aims to help policymakers to identify imbalances as they are building up.

**14.6** A key component of external DSAs is to estimate the path of a country's external debt stock (position) over time. To compute the evolution of the debt, the starting values for the initial stock of public and private external debt, its maturity profile, and schedule of debt service payments are needed. A projection of future external borrowing and interest rates must be made. The projected path of the debt level is then compared with other indicators of a country's capacity to repay external debt over the medium to long term.

<sup>1</sup>This chapter draws substantially on the following papers: *Stress Testing in the Debt Sustainability Framework (DSF) for Low-Income Countries*, François Painchaud and Tihomir (Tish) Stučka, World Bank 2011; *Modernizing the Framework for Fiscal Policy and Public Debt Sustainability Analysis*, IMF 2011; *Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries* (forthcoming), IMF 2013; *Staff Guidance Note on Debt Sustainability Analysis for Market Access Countries*, IMF 2008.

**14.7** DSAs are usually done on a gross debt basis.<sup>2</sup> However, in countries with significant liquid assets (such as countries with substantial extra-budgetary funds), a DSA on a gross basis may overstate a country's debt distress. In these cases, the public debt component of external debt could take these assets into account.

### Solvency

**14.8** From a national perspective, solvency can be defined as the country's ability to discharge its external obligations on a continuing basis. It is relatively easy, but not very helpful, to define a country's theoretical ability to pay. In theory, assuming debt can be rolled over (renewed) at maturity, countries are solvent if the present value of net interest payments does not exceed the present value of other current account inflows (primarily export receipts) net of imports.<sup>3</sup> In practice, countries stop servicing their debt long before this constraint is reached, at the point where servicing the debt is perceived to be too costly in terms of the country's economic and social objectives. Thus, the relevant constraint is generally the willingness to pay, rather than the theoretical ability to pay. To establish that a country is solvent and willing to pay is not easy.

### Liquidity

**14.9** Liquidity problems, i.e., when a shortage of liquidity affects the ability of an economy to discharge its immediate external obligations, generally, though not necessarily, give rise to concerns about insolvency. Liquidity problems can be triggered, e.g., by a sharp drop in export earnings, or an increase in interest rates (foreign and/or domestic),<sup>4</sup> or a rise in the prices for imports, or a tightening in global liquidity conditions. The currency and interest rate composition of debt, the maturity structure of debt, and the

availability of assets to pay debts are all important determinants of the vulnerability of an economy to external liquidity crises; these are all considered in the next chapter.

### How Is Debt Sustainability Assessed?

**14.10** Debt sustainability is assessed on the basis of indicators of the debt stock or debt service relative to various measures of repayment capacity (typically GDP, exports, or government revenues). The basic equation is:

$$\text{Debt indicator} = \frac{\text{Indebtedness}}{\text{Repayment capacity}}$$

**14.11** The various data series that can be used to populate the basic equation to calculate the various debt indicators are described below. Each of the indicators provides a different perspective on debt sustainability, suggesting that they should be used in combination.

### Measures of Indebtedness (the Numerator)

**14.12** Different measures of indebtedness are used to identify solvency and liquidity risks. Delineating liquidity and solvency risks can be a challenge, especially as liquidity problems can turn into solvency problems if not adequately addressed.

**14.13** Indicators based on debt stocks (e.g., gross external debt position) are used to identify possible solvency problems. Debt stock indicators reflect the capacity of a country to generate resources to repay debt. In the case of LICs, the long maturity and grace periods of concessional debt make debt stock measure based on the present value (PV) of debt more appropriate as it captures the favorable terms of concessional loans by discounting the stream of future debt-service payments (see Appendix 3, Present Value). For MACs, the analysis is done on the basis of nominal values.

**14.14** Indicators based on debt service (interest payments and amortization) are typically used to assess liquidity problems. They represent the share of a country's resources used to repay its debt (and therefore resources not used for other purposes). Debt-service ratios provide the best indication of the claim on resources and the associated risk of payment difficulties and distress. In the same vein, low and stable

<sup>2</sup>Timely and consistent data on net investment positions data are not always available. Moreover, even if individual entities in the economy have external assets, they may not correspond to the entities that have external liabilities. Furthermore, the liquidity aspect of sustainability, the risk of not being able to roll over existing debts, is likely to be related to gross financing needs.

<sup>3</sup>In considering imports, it is worth noting that these are endogenous and subject to potentially severe compression (reduction).

<sup>4</sup>Such as when domestic rates rise because of an economy's perceived deterioration in creditworthiness.



debt-service ratios are the clearest indication that debt is likely to be sustainable.<sup>5</sup>

### Measures of Capacity to Repay (the Denominator)

**14.15** Measures of capacity to repay include, among others, GDP, exports, and government revenues. Nominal GDP captures the amount of overall resources of the economy, while exports provide information on the capacity of an economy to generate foreign exchange. Finally, government revenues measure the government's ability to generate fiscal resources. In some specific cases, remittances<sup>6</sup> may be added to GDP and exports to assess external debt sustainability.

**14.16** The choice of the most relevant indicator of capacity to repay depends on the constraints that are more binding in an individual country. In general, it is useful to monitor external debt and debt service measures in relation to GDP, exports, and fiscal revenue.

### Debt Burden Indicators

#### Stock-Based Indicators

**14.17** The debt stock is measured by the nominal value of the debt or its present value. The most commonly used indicators are:

- *Debt-to-exports ratio*—Defined as the ratio of total outstanding debt at the end of the year to the economy's exports of goods and services for that year. An increasing debt-to-exports ratio over time, for a given interest rate, implies that total debt is growing faster than the economy's basic source of external income, indicating that the country may have problems meeting its debt obligations in the future.
- *Debt-to-GDP ratio*—Defined as the ratio of the total outstanding external debt at the end of the year to annual GDP for that year. By using GDP

as a denominator, the ratio may provide some indication of the potential to service external debt by switching resources from production of domestic goods to the production of exports. Indeed, a country might have a large debt-to-exports ratio but a low debt-to-GDP ratio if exportables comprise a very small proportion of GDP. This ratio, however, is vulnerable to the presence of over- or undervaluations of the real exchange rate, which could significantly distort the GDP denominator. Also, as with the debt-to-exports ratio, it is important to take account of the country's stage of development and the mix of concessional and nonconcessional debt (i.e., to consider the relevance of nominal or PV indicators).

- *Debt-to-fiscal revenue ratio*—Defined as the ratio of the total outstanding external debt at the end of the year to annual fiscal revenue. This ratio can be used as a measure of sustainability in those countries with a relatively open economy facing a heavy fiscal burden of external debt. In such circumstances, the government's ability to mobilize domestic revenue is relevant and will not be measured by the debt-to-exports or debt-to-GDP ratios.

#### Flow-Based Indicators

**14.18** Debt service provides information on the resources that a country has to allocate to servicing its debts and the burden it may impose through crowding out other uses of financial resources. Comparing debt service to a country's repayment capacity yields the best indicator for analyzing whether a country is likely to face debt-servicing difficulties in the current period. Two main indicators are typically looked at:

- *Debt service-to-exports ratio*—Defined as the ratio of external debt-service payments (principal and interest) to exports of goods and services for any one year.<sup>7</sup> It indicates how much of a country's export revenue will be used up in servicing

<sup>5</sup>In the case of LICs, debt service indicators may be less informative than for other economies because the repayment of concessional loans is usually back loaded. While long projection periods can mitigate this problem, the reliability of a projection tends to diminish with its length.

<sup>6</sup>Workers' remittances are current transfers made by employees to residents of another economy; in *BPM6* they are included as a supplementary item of personal transfers (*BPM6*, paragraphs 12.21–12.24).

<sup>7</sup>This ratio, in addition to the total debt-to-exports and the total debt-to-GNP (national output) ratios, is provided for individual countries in the World Bank's annual *International Debt Statistics* publication.

its debt and thus, how vulnerable the payment of debt-service obligations falling due in any one year is to an unexpected fall in export proceeds.<sup>8</sup>

- *Debt service-to-(government) revenues ratio*—Measures the burden of the external debt service in relation to the government’s revenues. It highlights the extent to which debt service hampers debtor countries in the use of their financial resources.

**14.19** These debt burden indicators focus on the typical measures of repayment capacity (GDP, exports, and revenues). However, remittances can also affect the assessment of debt sustainability by improving a country’s capacity to repay its external debt. In countries where remittances are large and represent a reliable source of foreign exchange, the inclusion of remittance in GDP and exports becomes even more relevant.

**14.20** While the indicators mentioned above are commonly used in assessing external debt sustainability, there are other indicators that help gauge debt vulnerabilities associated with the composition of debt, developments in the current account, market perceptions, international liquidity develop-

ments, as well as the country’s own record of servicing its debt. Some of these indicators are mentioned in Table 14.2.<sup>9</sup>

## Basic Steps for Undertaking an External DSA

**14.21** External debt sustainability is assessed by undertaking a forward-looking analysis of the evolution of debt burden indicators under baseline and stress test scenarios. In practice, this requires projecting the flows of income and expenditures, including those for servicing debt as well as exchange rate changes (given the currency denomination of the debt). Projections of the debt dynamics thus depend, in turn, on macroeconomic and financial market

**Table 14.1 Common Debt Burden Indicators in Assessing External Debt Sustainability**

Stock (nominal or PV)	Flow
Debt-to-GDP	Debt service-to-exports
Debt-to-exports	Debt service-to-revenues
Debt-to-revenues	

**Table 14.2 Other Indicators for Vulnerability Analysis for the External Sector<sup>1</sup>**

Purpose	Indicators
External solvency indicators	Gross financing need
External liquidity indicators	Reserves in months of imports of goods and services
Indicators of stock imbalances (solvency risks)	Noninterest external current account deficit that stabilizes external debt-to-GDP
Indicators of flow imbalances (rollover risks)	- Gross official reserves-to-short-term external debt (at remaining maturity) <sup>2</sup>
	- Extended reserve cover <sup>3</sup>
	- Foreign currency deposits to foreign assets of the banking system

<sup>1</sup> For additional information on external and public indicators, see IMF 2008, *Staff Guidance Note on Debt Sustainability Analysis for Market Access Countries*.

<sup>2</sup> Defined as the ratio of the stock of international reserves available to the monetary authorities (reserve assets) to the short-term debt stock on a remaining maturity basis. This ratio indicates the extent to which the economy has the ability to meet all its scheduled amortizations to nonresidents for the coming year using its own international reserves. It provides a measure of how quickly a country would be forced to adjust if it were cut off from external borrowing, e.g., because of adverse developments in international capital markets. It could be a particularly useful indicator of reserve adequacy, especially for countries with significant, but not fully certain, access to international capital markets.

<sup>3</sup> Reserve assets in percent of the current account deficit adjusted for net FDI inflows plus short-term debt on a remaining maturity basis (i.e., long-term external debt [original maturity] due in one year or less plus the stock of short-term external debt [original maturity]) at the end of the last period including foreign currency deposits in the banking system.

<sup>8</sup> For further guidance on including remittances in the DSA for LICs, see the *Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for LIC* (IMF, 2013).

<sup>9</sup> International financial crises have also underscored the importance of disseminating comprehensive information on countries’ international reserves and foreign currency liquidity on a timely basis (see paragraph 15.28 for more information on the Reserves Data Template).

developments, which are intrinsically uncertain and highly variable. While debt assessments can be presented in many ways, a typical DSA consists of three basic elements:

- *Baseline scenario*—This step implies the assessment of debt dynamics under the most likely path of key macroeconomic variables (e.g., GDP growth, net exports, foreign direct investment, and interest rates among others).
- *Stress/sensitivity tests*—The purpose of stress tests is to test the robustness of the baseline by assessing the evolution of debt burden indicators under different scenarios. Stress testing therefore scrutinizes the resilience of the baseline to shocks and reveals the country’s vulnerabilities. Taking into account country-specific characteristics in the design of stress tests is important to accurately capture the risks that a country is exposed to. The impact of stress testing is channeled in two ways: by changing the evolution of the measures of indebtedness and by changing the capacity to repay compared to the baseline scenario.
- *Interpretation of results*—This step involves a discussion of the main risks resulting from the assessment of debt dynamics under the baselines and stress tests. This includes a discussion of policy implications resulting from the projected debt dynamics and the adjustments needed to ensure sustainable debt dynamics, where relevant. This step should bear in mind country-specific circumstances and include an assessment of whether and how other factors (e.g., the evolution of domestic debt, contingent liabilities, or the financial sector) affect a country’s capacity to service future debt payments. The assessment of factors such as the currency and maturity structure of the outstanding debt position (see paragraph 15.16) may be necessary in order to cover the risks and vulnerabilities arising from external debt.

### What Are the Main Drivers of Debt Dynamics?

**14.22** As mentioned in the sections above, the evolution of external debt is embedded in the context of the overall macroeconomic framework. This involves the projection of key macroeconomic variables and deriving the implicit evolution of external debt.

**14.23** The basic equation for the evolution of external debt takes into account a country’s sources of foreign exchange/inflows (exports of goods and services, net transfers, and net income<sup>10</sup>) and expenditures/outflows (imports of goods and services). The evolution of the external debt position also takes into account non-debt-creating sources of financing from the balance of payments (in particular the non-debt sources related to direct investment). Other factors (residual) contributing to the evolution of the external debt position include debt relief (exceptional financing), drawdown of foreign exchange reserves, and errors and omissions.<sup>11</sup>

**14.24** The evolution of the external debt position is determined by the following components: noninterest current account deficit, net foreign direct investment, endogenous debt dynamics, and a residual. The combined effect of the first three effects is labeled “identified net debt-creating flows” (Figure 14.1). The residual captures all factors that determine the projections of external debt but cannot be explained by the “identified net debt-creating flows.” The decomposition helps to identify whether the change in the debt burden indicators is largely driven by adjustment of the current account or is rather the result of the behaviors of interest rates, growth rates, and/or price and exchange rate movements.

**14.25** The current account dynamics are important because, if deficits persist, the country’s external position may eventually become unsustainable (as reflected by a rising ratio of external debt to GDP). In other words, financing of continually large current account deficits through external debt will lead to an increasing debt burden, perhaps undermining solvency and leading to external vulnerability from a liquidity perspective, owing to the need to repay large amounts of debt.

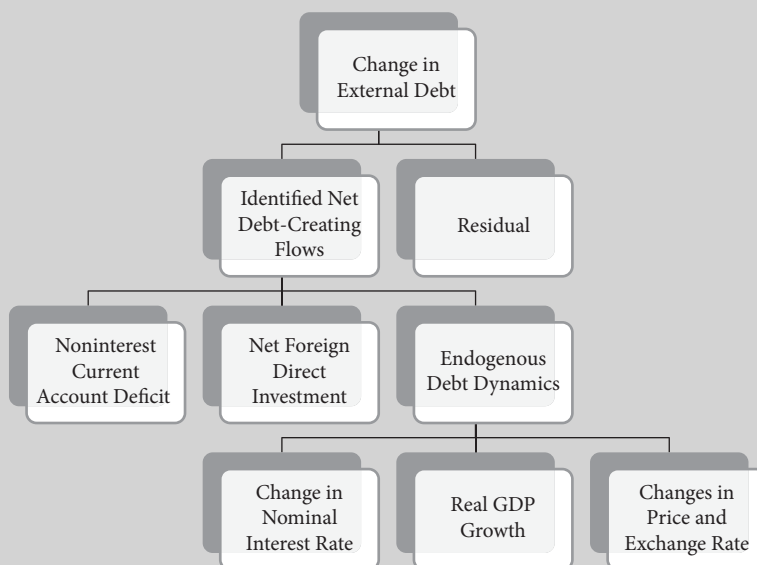
### Assessing Debt Sustainability in the Context of Fund Program Monitoring and Country Surveillance

**14.26** The IMF has developed a framework for conducting public and external DSAs as a tool to bet-

<sup>10</sup>Net income and net transfers are referred to as the balance on primary and secondary income, respectively, in *BPM6*.

<sup>11</sup>For a detailed explanation of the equation of external debt dynamics, see Painchaud and Tihomir (2011), *Stress Testing in the Debt Sustainability Framework (DSF) for Low-Income Countries*.

Figure 14.1 Evolution of External Debt



ter detect, prevent, and resolve potential crises. The framework also helps assess the evolution of debt under alternative policy paths.

**14.27** As mentioned in previous sections, DSA results should be assessed against relevant country-specific circumstances, including the particular features of a given country's debt as well as its policy track record and its policy space. With this in mind, two types of frameworks have been designed: those for MACs and those tailored for LICs.

### DSA Framework for Market Access Countries

**14.28** The IMF Board endorsed a standard framework for external and public debt sustainability for MACs in June 2002, with the goal of improving the consistency and discipline of DSAs.

**14.29** The framework consists of a medium term (five years) baseline scenario, usually the set of macroeconomic projections that form the basis for understandings on a Fund-supported program or the articulation of the authorities' intended policies as discussed with the staff in a surveillance context. Together with a detailed presentation of the baseline scenarios, the framework also facilitates assessments of sensitivity of debt dynamics to a number of assumptions, essentially providing a tool to stress test the baseline.

**14.30** In August 2011, the IMF Board approved a modernized framework for public DSA, which moved toward a risk-based approach, while maintaining some elements of standardization to ensure evenhandedness and cross-country comparability.<sup>12</sup> The external DSA part of the framework has not been changed.

### DSA Framework for Low-Income Countries<sup>13</sup>

**14.31** The World Bank and IMF jointly introduced a DSA framework for LICs in 2005. The conceptual framework underpinning the LIC DSA is essentially the same as that for the MAC DSA. However, its implementation involves different data and operational issues and reflects the prevalence of concessional financing from official creditors. For instance, it uses a 20-year projection horizon as opposed to the five-year period applicable in DSAs for MACs, reflecting the longer maturity of LICs debt. Also, debt indicators for LICs are expressed in present value terms because their debt is predominantly conces-

<sup>12</sup>For more detailed information, see *Modernizing the Framework for Fiscal Policy and Public Debt Sustainability*, IMF, 2011.

<sup>13</sup>More information can be found at the IMF Website: [www.imf.org/external/np/exr/facts/jdsf.htm](http://www.imf.org/external/np/exr/facts/jdsf.htm).

sional. Furthermore, LICs face a number of unique challenges, such as overcoming large infrastructure gaps, which raises questions on how best to capture the impact of public investment on growth and debt sustainability.

**14.32** LIC DSAs are prepared jointly with the World Bank, and the framework is extended to include an explicit rating of the risk of external debt distress. LIC DSAs are published annually on the external Websites of the IMF and the World Bank.

**14.33** The LIC DSA framework has been adopted as a tool to help policymakers strike a balance between achieving development objectives and maintaining debt sustainability. It guides the design of policies that help prevent the emergence, or reemergence, of debt distress in LICs. It is built on three pillars:

- A standardized forward-looking analysis of public sector and external debt and its vulnerability to shocks (baseline scenario, alternative scenarios, and standardized stress test scenarios are computed)
- A debt sustainability assessment, including an explicit rating of the risk of external debt distress
- Recommendations for a borrowing strategy that limits the risk of debt distress

**14.34** There are important conceptual and methodological differences between the HIPC Initiative

debt relief assessment (HIPC DRA) and the LIC DSA. While both are driven by the objective of preventing excessive indebtedness, the HIPC DRA is a tool to calculate debt relief under the HIPC Initiative. The HIPC Initiative thresholds for the PV of debt-to-exports and the PV of debt-to-revenue ratios are uniform across countries; their denominators (exports and revenues) are derived on the basis of three-year backward-looking averages to limit the impact of transitory factors; and predetermined currency specific discount rates are used to calculate PVs within currencies, to avoid reliance on exchange rate projections. This analysis is described in more detail in Appendix 5. The LIC DSA is forward-looking, uses single-year denominators, incorporates exchange rate projections and a uniform discount rate, and applies policy-dependent indicative thresholds. The HIPC Initiative and Multilateral Debt Relief Initiative (MDRI, see Appendix 5) debt relief should be accounted for in the baseline or alternative scenario, depending on HIPC status. For instance, for post completion point countries, the LIC DSA should incorporate HIPC Initiative and MDRI relief in the baseline scenario; while for countries in the interim period, the baseline scenario should assume HIPC interim relief, and in an alternative scenario, irrevocable HIPC and MDRI relief should be assumed beyond the expected completion point date.





# 15

## External Debt Analysis: Further Considerations

### Introduction

**15.1** The type of debt burden indicators discussed in the previous chapter focus primarily on overall external debt and external debt service and the potential to meet debt obligations falling due on an economy-wide basis. However, in assessing the vulnerability of the economy to solvency and liquidity risk arising from the external debt position, a more detailed examination of the composition of the external debt position and related activity may be required.

**15.2** As financial markets in many economies have become increasingly integrated with global markets, foreign borrowing has helped finance higher levels of investment than would have been possible with savings by residents alone. But the opening of financial markets has revealed that private financial flows are sensitive to market conditions, perceived policy weaknesses, and negative shocks. Flows of private finance have been volatile, with some economies experiencing financial crises. The financial structure of economies—the composition and size of the liabilities and assets on the economy’s financial balance sheet—has been an important source of vulnerability to crises. Financial weaknesses, such as a high level of short-term debt, can be a trigger for domestic and external investors to reassess their willingness to provide finance to an economy.

**15.3** To support the analysis of the financial structure of economies, the balance sheet approach (BSA) provides a systematic analytical framework for exploring how balance sheet weaknesses contribute to macro financial vulnerabilities, including the origin and propagation of modern-day financial crises.<sup>1</sup> This

approach is built on the use of harmonized classifications and definitions in different types of economic statistics so that data can be aggregated and compared.

**15.4** In this chapter, the relevance of additional data on the composition of external debt, external income, external assets, financial derivatives, contingent liabilities, and on the economy’s creditors is explored, drawing particularly on data series described in Part I of the *Guide*. The discussion in this chapter, however, is not intended to be exhaustive. Data series described and presented in Part I of the *Guide*—notably sector, currency, and maturity breakdown of external debt data—facilitate the examination of potential vulnerabilities of balance sheets of key sectors of an economy.

### Balance Sheet Mismatches

**15.5** To support the analysis of potential risks and vulnerabilities, the framework for assessing balance sheet risks focuses on different types of balance sheet mismatches, all of which help to determine an economy’s ability to service debt in the face of shocks:

- *Maturity mismatches*—Where a gap between liabilities due in the short term and liquid assets leaves an institutional sector unable to honor its contractual commitments if creditors decline to roll over debt. They also expose the sector to the risk that interest rates will rise
- *Currency mismatches*—Where, if unhedged, a change in the exchange rate leads to a holding loss
- *Financial structure problems*—Where a heavy reliance on debt rather than equity financing leaves a firm or bank less able to weather revenue shocks
- *Solvency problems*—Where assets, including the present value of future revenue streams, are

<sup>1</sup>See M. Allen, C. Rosenberg, C. Keller, B. Setser, and N. Roubini, *A Balance Sheet Approach to Financial Crisis*, IMF Working Paper (WP/02/210); J. Mathisen and A. Pellechio, *Using the Balance Sheet Approach in Surveillance: Framework, Data Sources, and Data Availability*, IMF Working Paper (WP/06/100); and *BPM6*, Chapter 14.

insufficient to cover liabilities, including contingent liabilities

- *Dependency problems*—Where financial assets and liabilities by partner economy can help identify overreliance on another economy, and hence potential vulnerability and contagion concerns.

## Composition of External Debt

**15.6** The relevance for debt analysis of the different data series presented in the *Guide* is set out below. The level and the servicing profile of the debt are relevant when assessing vulnerabilities; a fuller discussion of the risks linked to debt structure characteristics—including borrowing sector, maturity, currency composition, and the creditor base—is warranted. In particular, this section focuses on the following issues:

- Who is borrowing?
- What is the composition of debt by functional category?
- What type of instrument is being used to borrow?
- What is the maturity of debt?
- What is the currency composition of the debt?
- Is there industrial concentration of debt?
- What is the profile of debt servicing?
- What is the value of residents' guarantees of external debt?

**15.7** Traditionally in debt analysis, the focus has been on official sector borrowing, not least in the form of loans from banks or official sources. However, the 1990s saw a tremendous expansion in capital market borrowing by the private sector. Since then, global shocks have underscored the increased interconnectiveness in a more globally integrated financial system as well as the interlinkages between the public and private sectors. This has had significant implications for debt analysis, including the need to gather and analyze external debt data by the borrowing sector.

**15.8** Financial difficulties of the government itself carry high risk of generating a broader crisis. If there is a risk that the public sector will cease to discharge its external obligations, this is likely in itself to lead to a sharp curtailment of financial inflows to the economy as a whole, in part because it also casts severe doubt on the government's commitment to an

economic environment that allows private sector debt repayment. Thus, information on public sector total, and short-term, external debt is important. Especially in the absence of capital controls or captive markets, information on short-term domestic debt of the government is important, since capital flight and pressure on international reserves can result from a perceived weak financial position of the public sector. In addition, the government's debt is often a key financial asset held by the domestic banking system; this interlinkage increases the risk that a government financing crisis will snowball into a banking crisis. On the other hand, there are cases in which the resolution of a private sector crisis may warrant intervention by the government in order to avoid spillovers to the broader economy. This is particularly true if the crisis either originates in the financial sector or has a clear risk of spilling over into the financial sector.

**15.9** Also, beyond its own borrowing policies, the government has a special role to play in ensuring that it creates or maintains conditions for sound risk management in other sectors; for instance, avoiding policies that create a bias toward short-term foreign currency borrowing.

**15.10** Most of the financial sector, notably deposit-taking corporations (banks), is by nature highly leveraged, i.e., most assets are financed by debt liabilities. Banks may take on liabilities to nonresidents by taking deposits and short-term interbank loans. These positions can build up quickly and, depending also on the nature of the deposits and depositors, be run down quickly. How well banks intermediate these funds has implications for the ability to withstand large-scale withdrawals. More generally, information on the composition of assets and liabilities is important for banks—notably information on the maturity structure and maturity mismatch (including in foreign currency)—because it provides insight about their vulnerability to such withdrawals and their sensitivity to changing exchange and interest rates.<sup>2</sup>

<sup>2</sup>Banks are subject to moral hazard risk through explicit or implicit deposit insurance and limited liability. The potential moral hazard risk arising from deposit insurance schemes is that by “protecting” from loss an element of their deposit base, banks might be provided with an incentive to hold portfolios incorporating more risk, but potentially higher returns, than they otherwise would. Monitoring the risks taken by banks is a central element of banking supervision, a subject beyond the scope of the *Guide*.



**15.11** This type of information is also important for other financial corporations, i.e., financial corporations other than deposit-taking corporations, also referred as to nonbank financial corporations. New banking standards may encourage certain activities to move to financial units that are part of the other financial corporations subsector, and that may be posing systemic risks within the so-called shadow banking sector, where those standards do not apply or are weakly enforced. Collectively, credit intermediation involving entities or activities undertaken by nonbanks that are outside the regulated sector (whether by maturity or liquidity transformation or leverage) has become known as the shadow banking system.<sup>3</sup> With a wider universe of tradable claims, banks become more connected with other banks and with other financial corporations; increased interconnectedness may also lead to higher systemic risk. The breakdown in credit markets in 2008 revealed how financial intermediation by nonbanks can contribute to systemic risks: the interconnection of banks and nonbanks led to contagion across both sets of entities. Enhanced monitoring of systemic risks posed by other financial corporations has been a work in progress, including improving data collection on the cross-border activities of these institutions, particularly for economies with a relatively large role for other financial corporations in the intermediation process.

**15.12** Balance sheet information of nonfinancial corporations is needed to identify potential financial weaknesses in private firms and how they might be transmitted to the rest of the economy in a crisis.<sup>4</sup> Large-scale defaults by nonfinancial corporations that borrow from abroad, depending on their importance to the economy, could result in financially expensive government intervention, an impact on the credit risk of the financial sector, and an undermining of asset prices in the economy. In any case, the debt-service needs of corporations will affect the economy's liquidity situation. As with deposit-taking corporations, the regulatory regime and incentive structure within which the corporate sector operates is important. For

instance, overborrowing in foreign currency, particularly short-term, in relation to foreign currency assets or hedges (be they natural hedges in the form of foreign currency cash flow or through derivatives products such as forwards), exposes the corporate sector to cash-flow (liquidity) problems in case of large exchange rate movements. Overborrowing in foreign currency in relation to foreign currency assets could potentially expose corporations to solvency problems in the event of a depreciation of the domestic exchange rate. Ensuing corporate failures, in the event of sharp exchange rate depreciation, can reduce external financing flows and depress domestic activity, especially if contract enforcement is poor or the procedures are overwhelmed.

**15.13** Contingent liabilities have gained prominence in the analysis of public finance and the assessment of the financial position of the public sector because they may result in substantial fiscal costs. The provision of guarantees can influence economic behavior. Invariably, the government provides implicit and explicit guarantees, such as deposit insurance, and sometimes also guarantees on private sector external borrowing (classified as publicly guaranteed private sector debt in the *Guide*). Also, domestic corporations may use offshore enterprises to borrow, and provide guarantees to them, or have debt payments guaranteed by domestic banks. Similarly foreign corporations may guarantee part of domestic debt. Countries could potentially have debt liabilities to nonresidents in excess of those recorded as external debt on a residence basis if their residents provide guarantees to nonresidents that might be called. Also, branches of domestic institutions located abroad could create a drain on the domestic economy if they ran into difficulties and their own head offices needed to provide funds. Indeed, the latter circumstances arose for some economies during the global crisis of 2008–2009. Where possible, direct and explicit guarantees should be monitored because they affect risk assessment; the magnitude of these “off-balance-sheet” obligations in financial crises reinforced the need to monitor them. Enhancing the analysis of tail risks—i.e., low-probability events with potentially severe consequences—could complement the focus on more likely risks. The *Guide* encourages the measurement and monitoring of contingent liabilities, especially of guarantees—the value of guarantees of residents' external debt

<sup>3</sup>Shadow banking is a broad term covering a variety of markets, instruments (including repos), and institutions that replicate core features of commercial banks.

<sup>4</sup>Information on bankruptcy resolution regimes is likely to be relevant on how corporate distress might transmit across the economy.

liabilities, by sector of the guarantor, and cross-border guarantees—and outlines some measurement techniques (see Chapter 9 and Table 4.7).

**15.14** The functional classification of financial instruments is a balance of payments concept, grouping instruments into four categories: direct investment, portfolio investment, financial derivatives and ESOs, and other investment.<sup>5</sup> The implications for vulnerability differ among different functional categories and instruments. In the case of direct investment and portfolio investment equity, the return to the creditor depends on the performance of the issuer. In contrast, in the case of debt liabilities, the payment stream due to the creditor is not dependent on the economic circumstances of the debtor, so the economy of the debtor has a greater risk exposure, in that payments are required to be made even if the debtor faces difficult circumstances. Direct investment takes place between an investor in one country and its affiliate in another country and is generally based on a long-term relationship. Recent crises have tended to support the view that this category of investment is less likely to be affected in a crisis than other functional types.<sup>6</sup> Portfolio investment, by definition, includes tradable debt instruments; other investment, by definition, includes all debt instruments other than those recorded in one of the other functional categories. The relevance of financial derivatives instruments for external debt analysis is discussed in paragraphs 15.35–15.41.

**15.15** The type of instrument that a debtor will issue depends on what creditors are willing to purchase as well as the debtor's preferences. Borrowing in the form of loans concentrates debt issuance in the hands of banks, whereas securities are more likely to be owned by a wider range of investors. Trade credit and advances are typically of a short-term maturity. Although equity issues are not regarded as debt instruments, dividends,

once the shares go ex-dividend, are recorded as debt liabilities and included in debt servicing until they are settled,<sup>7</sup> and so it remains necessary to monitor activity in these instruments. At the least, sudden sales of equity by nonresidents or residents can have important ramifications for an economy and its ability to raise and service debt.<sup>8</sup>

**15.16** The currency and maturity structure of the outstanding debt stock is almost as important as the total size of the debt stock. The maturity composition of debt is important because it can have a profound impact on liquidity. Concentration of high levels of short-term external debt is seen to make an economy particularly vulnerable to unexpected downturns in financial fortune.<sup>9</sup> For instance, an economy with high levels of short-term external debt may be vulnerable to a sudden change in investor sentiment. Interbank lines are particularly sensitive to changes in risk perception, and early warning signals of changes in investor sentiment toward the economy might be detected through the monitoring of the refinancing (“rollover”) rate.<sup>10</sup>

**15.17** Debt analysis needs to make a distinction between short-term debt on an original maturity basis, i.e., debt issued with a maturity of one year or less, and on a remaining-maturity basis, i.e., debt obligations that fall due in one year or less. Data on an original maturity basis provide information on the typical terms of debt and the debt structure, and monitoring changes in these terms provides useful information on the preferences of creditors and the sectoral distribution of debtors. Data on a remaining (residual) maturity basis provide the analyst and policymaker with information on the repayment obligations (i.e., the liquidity structure). Particularly important is information on payments coming due in the near term; information on external debt on a short-term remaining maturity basis helps in the

<sup>5</sup>Reserve assets is a further functional category in the balance of payments, but it is not relevant to the following discussion because it consists entirely of assets.

<sup>6</sup>However, direct investment enterprises may place additional pressure on the exchange rate in a crisis situation through the hedging of domestic currency assets. Affiliates of foreign-owned deposit-takers may need to remit funds to their parents or other foreign affiliates in certain circumstances, while foreign investors can repatriate rather than reinvest profits, thereby effectively increasing the domestically (debt) funded part of their investments.

<sup>7</sup>The ex-dividend date is the date the dividends are excluded from the market price of shares (see paragraph 2.27).

<sup>8</sup>In analyzing the securities transactions, both debt and equity, changes in prices (rather than in quantities) may equilibrate the market.

<sup>9</sup>The compilation of average maturity data might disguise important differences in the sectoral composition of debt and in the dispersion of maturities. However, data on average maturity by sector and by debt instrument might alert policymakers and market participants to maturity structures that are potentially problematic.

<sup>10</sup>This type of monitoring is discussed in more detail in Box 7.1.

assessment of liquidity risk by indicating that part of the gross external debt position that is expected to fall due in the coming year. For the policymaker, to ensure sufficient liquidity, such as indicated by an appropriate ratio of international reserves to short-term debt, requires avoiding a bunching of debt payments.

**15.18** The method of valuing financial assets and liabilities might depend on the focus of the analysis. The *Guide* recommends that debt instruments are valued at the reference date at nominal value, and for debt securities, at market value as well. The debtor will be interested in the nominal value of its debt because at any moment in time it is the amount that the debtor owes to the creditor at that moment, e.g., applying nominal values might help identify maximum exposure which can be used to assess liquidity risk. Also, the debtor is well advised to monitor the market value of its debt. The market value and the spreads over interest rates on “risk-free” instruments provide an indication to the borrower of the market view on its ability to meet debt obligations as well as current market sentiment toward it.<sup>11</sup> This is important information because it might influence future borrowing plans: whether it is advantageous to borrow again while terms seem good, or whether there are early warning signs of possible increased costs of borrowing, or even refinancing difficulties. However, for those countries with debt that has a very low valuation or is traded in markets with low liquidity (or both), a sudden swing in sentiment might cause a very sharp change in the market value of external debt, which might also be reversed suddenly. Because it would be unaffected by such swings, information on the nominal value of external debt would be of particular analytical value in such circumstances.

**15.19** The currency composition of external debt is also important. Experience suggests that information on the currency composition of the gross external debt position is necessary for monitoring an economy’s potential vulnerability to exchange rate risks. There is a significant difference between having external debt denominated in domestic currency

and having external debt denominated in foreign currency.<sup>12</sup> In the event of a sudden depreciation of the domestic currency, foreign currency external debt (including foreign-currency-linked debt) has potentially important wealth and cash-flow effects for the economy. For instance, when public debt is denominated in foreign currency, a devaluation of the domestic currency could aggravate the financial position of the public sector, so creating an incentive for the government to avoid a necessary exchange rate adjustment. Information on the currency composition of debt at the sectoral level, including resident and nonresident claims in foreign currency, is particularly important because the wealth effects also depend on foreign currency relations between residents. Private actors should hedge against currency risk; but there are risks when the government or deposit-takers are the primary source of the private sector’s hedge: if there is a significant underlying mismatch and it is passed to the government or deposit-takers, sudden changes in currency rates could expose vulnerabilities.

**15.20** But any analysis of the foreign currency composition of external debt needs to take account of the size and composition of foreign currency assets, and income, together with foreign-currency-linked financial derivatives positions. The latter instruments can be used to change the exposure from foreign to domestic currency or to a different foreign currency.

**15.21** The interest rate composition of external debt, both short- and long-term, may also have significant implications. For instance, economies with high amounts of variable-rate debt are vulnerable to a sharp increase in interest rates. Sharp increases in short-term interest rates, such as those experienced in the early 1980s, can have profound implications for the real cost of debt, especially if a significant share of debt pays interest that is linked to a floating rate such as LIBOR. As with the foreign currency position, it is necessary to take account of financial derivatives positions, since these may significantly change the effective interest composition of debt. For instance, interest-rate-based financial derivatives can be used

<sup>11</sup>Increasingly, information from credit derivatives, such as default swaps and spread options, also provides market information on an entity’s credit standing.

<sup>12</sup>The currency of denomination is the currency in which cash flows are determined. For settlements purposes, a different currency may be used—which means that a currency conversion is involved when settlement occurs.

to swap variable-rate obligations into fixed-rate liabilities, and vice versa. For instance, if all external debt were variable-rate linked but debtors had entered into derivatives contracts with nonresidents to swap all their interest payments into fixed-rate-related payments, then the apparent exposure of the economy to variable-rate interest rates would be actually converted into a fixed-rate exposure. The relevance of financial derivatives in analyzing external debt is considered in more detail in paragraphs 15.35–15.41.

**15.22** The industrial concentration of debt should also be monitored. If debt is concentrated in a particular industry or industries, economic shocks such as a downturn in worldwide demand for certain products could increase the risk of a disruption in debt-service payments by that economy.<sup>13</sup>

**15.23** To monitor debt service, the amounts to be paid are important, rather than the market value of the debt. Debt servicing involves both the ongoing meeting of obligations—i.e., payments of interest and principal—and the final payment of principal at maturity. However, it is most unlikely that the debt-service schedule will be known with certainty at any given time. Estimates of the amounts to be paid can vary over time because of variable interest and foreign currency rates, and the repayment dates for debt containing embedded put (right to sell) or call (right to buy) options that can be triggered under certain conditions can add further uncertainty. So, in presenting data on the debt-service payment schedule, it is important that the assumptions used to estimate future payments on external debt liabilities be presented in a transparent manner along with the data.

**15.24** Detailed information on arrears is useful for various kinds of policy analyses and solvency assessments and should be made available where significant. One indication of an economy that is beginning to have difficulty servicing its external debt is when the level of arrears is on a rising trend both in relation to the external debt position and to the amount of debt service falling due. In such circumstances, detailed

<sup>13</sup>While the *Guide* does not explicitly include guidance for the measurement of the industrial composition of external debt, these data can be compiled using the concepts set out in the *Guide* together with the International Standard Industrial Classification of All Economic Activities (2008 SNA, paragraphs 2.39 and 14.32, and pp. 545 and 614).

data by institutional sector and by type of instrument might help to identify the sources of the difficulty.

## The Role of Income

**15.25** In analyzing debt, the future trend of income is clearly relevant because it affects the ability of the debtor to service debt. Debt burden indicators focus on the typical measures of repayment capacity. Traditionally, the focus has been on earnings from exports of goods and services.<sup>14</sup> To what extent is debt, or are debt-service payments, “covered” by earnings from the export of goods and services? Diversification of products and markets is positive because it limits exposure to shocks, in turn limiting the possibility that the private sector as a whole will get into difficulties, and that the public sector will lose revenues, thus affecting the willingness to pay. The currency composition of export earnings may also be of relevance.<sup>15</sup>

**15.26** While the willingness to pay is an important factor in determining whether debt-service payments are made, the use of external borrowing will affect the future income from which those payments are made.<sup>16</sup> If debt is used to fund unproductive activity, future income is more likely to fall short of that required to service the debt. The question to address is not so much the specific use of the borrowed capital but rather the efficiency of total investment in the economy, considered in the context of indicators for the economy as a whole, such as the growth rates of output and exports, and total factor productivity—all data series potentially derivable from national

<sup>14</sup>For some economies, remittances—which constitute a source of income and foreign exchange for a country along with its exports of goods and services—can also affect the probability of debt distress by enhancing a country’s capacity to repay its external debt. The inclusion of remittances in the denominator lowers the debt burden indicators, particularly for countries receiving large remittances.

<sup>15</sup>For remittances, the geographical distribution of counterparts may also be of relevance, as GDP growth perspectives in both the sending and receiving economies may affect remittance flows.

<sup>16</sup>Dragoslav Avramovic and others (1964, p. 67) noted that while the debt-service ratio “does serve as a convenient yardstick for passing short-term creditworthiness judgments, i.e., judgments of the risk that default may be provoked by liquidity crises,” in fact, “the only important factor, from the long-run point of view, is the rate of growth of production.” Indeed, “it is only in the interest of the borrowers as well as of the lenders that output and savings be maximized, since they are the only real source from which debt service is paid.”

accounts data. From another perspective, if an economy is unwilling to service its debts, and defaults, production losses might ensue as the economy ceases to be integrated with international capital markets.

## The Role of Assets

**15.27** As indicated above, the external debt position needs to be considered in the context of the financial structure of economies—the composition and size of the liabilities and assets on the economy’s financial balance sheet. As an economy increasingly integrates with the rest of the world, so analysis of the external liability position, and gross external debt position in particular, needs to take into account positions in external assets. External assets may help meet debt-servicing requirements—assets generate income and can be sold to meet liquidity demands. On the other hand, there is difficulty in ascertaining the extent to which assets might be usable to meet outstanding debt liabilities. In the IIP, the difference between external assets and external liabilities is the net asset (or liability) position of an economy.

**15.28** For all economies, international reserve assets are, by definition, those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing).<sup>17</sup> Because of this role, in March 1999, the IMF’s Executive Board, drawing on the work of the IMF and the Committee on Global Financial Systems of the G-10 central banks, strengthened the Special Data Dissemination Standard requirements for the dissemination of data on international reserves and foreign currency liquidity. A data template on international reserves and foreign currency liquidity was introduced that provides a considerably greater degree of transparency in international reserves data than was hitherto available.<sup>18</sup>

<sup>17</sup> See *BPM6*, paragraph 6.64.

<sup>18</sup> The Reserves Data Template aims to provide a comprehensive account of countries’ official foreign currency assets and drains on such resources arising from various foreign currency liabilities and commitments of the authorities. See *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (IMF, 2012).

**15.29** As private entities in an economy become increasingly active in international markets, they are likely to acquire external assets as well as liabilities. The diverse nature of private sector external assets suggests that they are of a different nature than reserve assets. For instance, private sector external assets may not be distributed among sectors and individual enterprises in such a way that they can be used to absorb private sector liquidity needs. But the presence of such assets needs to be taken into account in individual country analysis of the external debt position. One approach is to present the net external debt position for each institutional sector, thus comparing the institutional attribution and concentration of external assets in the form of debt instruments with external debt (see Chapter 7).

**15.30** But in comparing assets with debt, it is necessary to also consider the liquidity and quality of assets, their riskiness, and the functional and instrument composition of assets.

**15.31** Most important, assets should be capable of generating income or be liquid so that they could be sold if need be, or both. The functional composition of assets provides important information in this regard. For instance, direct investment assets may generate income but are often less liquid, especially if they take the form of fully owned nontraded investments in companies or subsidiaries. Typically, direct investment assets are either illiquid in the short term (such as plant and equipment) or, if they are potentially marketable, the direct investor needs to take into account the implications on direct investment enterprises of withdrawing assets. The latter will be a countervailing factor to any selling pressures. Nonetheless, some direct investment assets may be closer to portfolio investments and relatively tradable—such as nonmajority shares in companies in countries with deep equity markets.

**15.32** Portfolio investment is by definition tradable. Investments—such as loans and trade credit and advances—while generating income can be less liquid than portfolio investment, but the maturity of these investments may be important because the value of short-term assets can be realized early. Increasingly, loans can be packaged into a single debt instrument and traded. Trade credit and advances may be difficult to withdraw without harming export

earnings, a very important source of income during situations of external stress.

**15.33** In assessing assets in the context of debt analysis, the quality of assets is a key factor. In principle, the quality of the assets is reflected in the price of the assets. Some knowledge of the issuer and the country of residence may provide a further idea of the quality of the asset and its availability in times of a crisis; availability is often correlated with location or type of country. Knowledge of the geographic spread of assets can help one to understand the vulnerability of the domestic economy to financial difficulties in other economies.

**15.34** The currency composition of assets, together with that of debt instruments, provides an idea of the impact on the economy of changes in the various exchange rates; notably, it provides information on the wealth effect of cross exchange rate movements (such as changes in the dollar-yen exchange rate for euro-area countries). *BPM6* provides, as part of the standard presentation of the IIP, a table for presenting the currency composition of outstanding debt claims and liabilities using the currency of denomination.<sup>19</sup> The BIS International Banking Statistics, and the IMF's Coordinated Portfolio Investment Survey (see Chapter 13) and Coordinated Direct Investment Survey (see Chapter 12), at the least, encourage the collection of data on the country of residence of the nonresident debtor, and the first two also encourage the collection of data on the currency composition of assets.

### Relevance of Financial Derivatives and Repurchase Agreements (Repos)

**15.35** The growth in financial derivatives markets has implications for debt management and analysis. They are used for a number of purposes including risk management, hedging, arbitrage between markets, and speculation.

**15.36** From the viewpoint of managing the risks arising from debt instruments, derivatives can be both cheaper and more efficient than other tools. This is because they can be used to directly trade away the specific risk to be managed. For instance, a foreign

currency borrowing can be hedged through a foreign-currency-linked derivative and so eliminate part or all of the foreign currency risk. Through the use of financial derivatives, the economy could become more, or less, exposed to exchange rate risk than is evidenced in the gross foreign currency external debt data; in this context, the notional value data—by providing a broad indication of the potential transfer of price risk underlying the financial derivatives contract—are analytically useful. Thus, aggregate information on the notional position in foreign currency derivatives is important in determining the wealth and cash-flow effects of changing exchange rates. Similarly, the cash-flow uncertainties involved in borrowing in variable interest rates can be reduced by swapping into “fixed-rate” payments with an interest rate swap.<sup>20</sup> In both instances the derivatives contract will involve the borrower in additional counterparty credit risk, but it facilitates good risk-management practices.

**15.37** Derivatives are also used as speculative and arbitrage instruments.<sup>21</sup> They are a tool for undertaking leveraged transactions, in that for relatively little capital advanced up front, significant exposures to risk can be achieved, and differences in the implicit price of risk across instruments issued by the same issuer, or very similar issuers, can be arbitrated.<sup>22</sup> However, if used inappropriately, financial derivatives can cause significant losses and so enhance the vulnerability of an economy. Derivatives can also be used to circumvent regulations, and so place unexpected pressure on markets. For instance, a ban on holding securities can be circumvented by foreign institutions through a total-return swap.<sup>23</sup>

<sup>19</sup>See *BPM6*, Appendix 9, Table A9-I.

<sup>20</sup>The risk might not be completely eliminated if at the reset of the floating rate the credit risk premium of the borrower changes. The interest rate swap will eliminate the risk of changes in the market rate of interest.

<sup>21</sup>Speculation and arbitrage activity can help add liquidity to markets and facilitate hedging. Also, when used for arbitrage purposes, derivatives may reduce any inefficient pricing differentials between markets and/or instruments.

<sup>22</sup>Leverage, as a financial term, describes having the full benefits arising from holding a position in a financial asset without having had to fund the purchase with own funds. Financial derivatives are instruments that can be used by international investors to leverage investments, as are repos.

<sup>23</sup>A total-return swap is a credit derivative that swaps the total return on a financial instrument for a guaranteed interest rate, such as an interbank rate, plus a margin.

**15.38** Derivatives positions can become very valuable or costly depending on the underlying price movements. The value of the positions is measured by the market value of the positions. For all the above reasons, there is interest in market values, gross assets and liabilities, and notional (or nominal) values of financial derivatives positions.<sup>24</sup>

**15.39** Risk-enhancing or -mitigating features that are similar to financial derivatives may also be embedded in other instruments such as bonds and notes. Structured bonds are an example of such enhanced instruments. These instruments could, e.g., be issued in dollars, with the repayment value dependent on a multiple of the Mexican peso–U.S. dollar exchange rate. Borrowers may also include a put—right to sell—option in the bond contract that might lower the coupon rate but increase the likelihood of an early redemption of the bond, not least when the borrower runs into problems. Also, e.g., credit-linked bonds may be issued that include a credit derivative, which links payments of interest and principal to the credit standing of another borrower. The inclusion of these derivatives can improve the terms that the borrower would otherwise have received, but at the cost of taking on additional risk. Uncertainty over the repayment terms or the repayment schedule is a consequence, so there is analytical interest in information on these structured bond issues.

**15.40** Repos also facilitate improved risk management and arbitrage. A repo allows an investor to purchase a financial instrument, and then largely finance this purchase by on-selling the security under a repo agreement. By selling the security under a repo, the investor retains exposure to the price movements of the security, while requiring only modest cash outlays. In this example, the investor is taking a “long” or positive position. On the other hand, through a security loan, a speculator or arbitrageur can take a “short” or negative position in an instrument by selling a security they do not own and then meeting their settlement needs by borrowing the security (security loan) from another investor.

**15.41** While in normal times all these activities add liquidity to markets and allow the efficient taking of positions, when sentiment changes, volatility may increase as leveraged positions may need to be unwound, such as to meet margin requirements. Position data on securities issued by residents and involved in repurchase and security lending transactions between residents and nonresidents help in understanding and anticipating market pressures. These data can also help in understanding the debt-service schedule data, e.g., if a nonresident sold a security under a repo transaction to a resident who then sold it outright to another nonresident, the debt-service schedule would record two sets of payments to nonresidents by the issuer for the same security, although there would be only one payment to a nonresident for that security. In volatile times, when large positions develop in one direction, this might result in apparent very significant debt-service payments on securities; the position data on resident securities involved in cross-border reverse transactions could indicate that reverse transactions are a factor.

### Information on the Creditor

**15.42** In any debt analysis an understanding of the creditor is relevant because different creditors have different motivations and may respond to changing circumstances differently.

**15.43** The sector and country of lender are important factors in debt analysis because different types of creditors may respond to changing circumstances differently, and this can have implications for the economic situation of an economy. Debt analysis has traditionally focused on sectors—in particular, on the split between the official creditors, banking, and other, mostly private, sectors. The importance of this sectoral breakdown lies in the different degrees of difficulty for reaching an orderly workout in the event of payment difficulties. Traditionally, creditor sector information has been most readily available for nonnegotiable instruments and has been essential when undertaking debt-reorganization discussions. For instance, negotiations of debt relief will differ, depending on the status of the creditor. The official sector and the banks constitute a relatively small and self-contained group of creditors that can meet and negotiate with the debtor through such forums as the Paris Club (official sector) and London Club (banks).

<sup>24</sup>While the *Guide* explicitly presents data only on the notional (or nominal) value for foreign-currency- and interest-rate-linked financial derivatives, information on the notional value of financial derivatives, for all types of risk category, by type and in aggregate, can be of analytical value.

By contrast, other private creditors are typically more numerous and diverse, although they might organize their negotiations through specialized groups, such as trade associations.

**15.44** Also, the public sector may be a guarantor of debts owed to the foreign private sector. Often this is the case with export credit, under which the credit agency pays the foreign private sector participant in the event of nonpayment by the debtor, and so takes on the role of creditor. These arrangements are intended to stimulate trade activity, and premiums are paid by the private sector. In case of

default, the ultimate creditor is the public sector, if the credit agency is indeed in the public sector. The country of creditor is important for debt analysis because overconcentration of the geographic spread of creditors has the potential for contagion in adverse financial conditions. For instance, if one or two countries are main creditors, then a problem in their own economies or with their own external debt position could cause them to withdraw finance from the debtor country. Indeed, concentration by country and sector, such as banks, could make an economy highly dependent on conditions in that sector and economy.





# Appendix 1. Specific Financial Instruments and Transactions: Classification

The purpose of this appendix is to provide detailed information on specific instruments and transactions and to set out their classification treatment in the gross external debt position. There are two sections. The first provides a description of specific financial instruments and how they should be classified in the gross external debt position; the second sets out the classification treatment of some specific transactions that, experience suggests, require particular clarification.

## Part 1. Financial Instruments: Description and Classification in the Gross External Debt Position<sup>1</sup>

### A

#### American Depositary Receipt (ADR)

An ADR is a negotiable certificate that represents ownership of the securities of a non-U.S. resident company. Although the securities underlying ADRs can be debt or money market instruments, the large majority are equities. An ADR allows a non-U.S. resident company to introduce its equity into the market in a form more readily acceptable to investors, such as in U.S. dollars, without needing to disclose all the information normally required by the U.S. Securities and Exchange Commission. A U.S. depository bank will purchase the underlying foreign security and then issue receipts in dollars for those securities to the U.S. investor. The receipts are registered. The investor can exchange the ADRs for the underlying security at any time. See also *Bearer Depository Receipts* and *Depository Receipts*.

#### Classification

These instruments are classified by the nature of the underlying instrument backing the ADR. This is because the “issuing” intermediary does not take the underlying security onto its balance sheet but simply acts as a facilitator. So, the debtor is the issuer of the underlying security, i.e., an ADR is regarded as a non-U.S. resident issue. If owned by nonresidents, these instruments are to be included in the gross external debt position if the underlying security is a debt security. The security is classified as *short-term/long-term, debt securities (portfolio investment, debt securities in the IIP)* or, depending on the relationship between debtor and creditor, as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). If the underlying item is an equity investment, it should be classified in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under the appropriate institutional sector. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* (Table 4.5).

#### Arrears

Amounts that are past due-for-payment and unpaid. These include amounts of scheduled debt-service payments that have fallen due but have not been paid to the creditor(s).

In the context of the Paris Club, arrears are the unpaid amounts that fall due before the consolidation period. See *Paris Club, Creditor, and Consolidation Period* in Appendix 3.

Arrears also include amounts related to other non-debt-instruments and transactions such as, a financial

<sup>1</sup>This appendix has drawn significantly upon the Bank of England (1998), *Financial Terminology Database*, and *BPM6*, Chapter 5.

derivatives contract that comes to maturity and a required payment is not made, or when goods are supplied and not paid for on the contract payment date, or a payment for goods is made but the goods are not delivered on time.

### **Classification**

Arrears of principal and/or interest are reported in the original debt instrument. If owned by nonresidents, the debt instruments are to be included in the gross external debt position.

Arrears related to other nondebt-instruments and late payments of nondebt transactions are debt liabilities that should be recorded under the appropriate instrument, i.e., either *trade credit and advances* or *other debt liabilities* in the gross external debt position (*other investment*, either *trade credit and advances* or *other accounts receivable/payable-other* in the IIP).

### **Asset-Backed Securities**

Asset-backed securities are bonds whose income payments and principal repayments are dependent on a pool of assets. Securities may be backed by various assets, e.g., mortgages, credit card loans, and automobile loans, in effect, converting illiquid assets into negotiable securities. The security issuers have a requirement to make payments, while the holders do not have a residual claim on the underlying assets. An asset-backed security enables the original lending institution to devolve credit risks to investors. There are several key features of asset-backed securities: the original lender will usually sell the assets to a trust or other form of intermediary (special purpose vehicle) and so, in the case of a bank, this frees “capital” that regulatory guidelines require a bank to hold against the assets. The intermediary will finance the purchase of the assets by issuing securities. Because income and the repayment of principal are dependent on the underlying assets, if the underlying assets are prepaid so is the security. Issuers often provide different tranches of the security so that if there are prepayments, the first tier will be repaid first, the second tier next, etc. The pricing of the various tranches will reflect the probability of early repayment. Asset-backed securities have also been developed that securitize future income streams—such as the earnings of musicians.

### **Classification**

Asset-backed securities owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). These securities present a special problem regardless of the amount outstanding because there can be partial repayments of principal at any time. Therefore, simply revaluing the original face value to end-period market prices will cause overvaluation of the position data if there has been a partial repayment.

## **B**

### **Balances on Nostro and Vostro Accounts**

A vostro (your) account is another bank’s account with a reporting bank, while a nostro (our) account is a reporting bank’s account with another bank.

### **Classification**

Liability positions in nostro and vostro accounts are to be included in the gross external debt position. They are classified as deposit-taking corporations, except the central bank, *short-term, currency and deposits*, or *loans* (*other investment* in the IIP) depending on the nature of the account.

### **Bankers’ Acceptances**

A negotiable order to pay a specified amount of money on a future date, drawn on and guaranteed by a financial corporation. These drafts are usually drawn for international trade finance purposes as an order to pay an exporter a stated sum on a specific future date for goods received. The act of a financial corporation stamping the word “accepted” on the draft creates a banker’s acceptance. The acceptance represents an unconditional claim on the part of the owner and an unconditional liability on the part of the accepting financial corporation; the financial corporation’s counterpart asset is a claim on its customer. Bankers’ acceptances are treated as financial assets from the time of acceptance, even though funds may

not be exchanged until a later stage. By writing the word “accepted” on the face of the draft the bank carries primary obligation, guaranteeing payment to the owner of the acceptance. Bankers’ acceptances can be discounted in the secondary market, the discount reflecting the time to maturity and credit quality of the guaranteeing bank. Since the banker’s acceptance carries a financial corporation’s obligation to pay (in effect “two-name paper”) and is negotiable, it becomes an attractive asset. Bankers’ acceptances are always sold at a discount and usually have maturities of up to 270 days.

### **Classification**

Bankers’ acceptances are short-term debt securities that are claims on the accepting financial corporation, with the financial corporation owning a claim on the issuer of the bill.

If owned by nonresidents, bankers’ acceptances should be included in the gross external debt position. They should be classified as *short-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of over one year, in which instance they are to be classified as *long-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment; Intercompany lending* (see the description of *direct investment* in Chapter 3).

### **Bearer Depository Receipt (BDR)**

A form of depository receipt issued in bearer rather than registered form. See *Depository Receipts*.

### **Classification**

A BDR is classified according to the nature of the underlying instrument backing it. This is because the “issuing” intermediary does not take the underlying security onto its balance sheet but simply acts as a facilitator. So, the debtor is the issuer of the underlying security. If owned by nonresidents, these instruments are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *direct investment;*

*intercompany lending* (see the description of *direct investment* in Chapter 3).

### **Bonds with an Embedded Call Option**

A bond that gives the issuer a right to buy back the bonds on or by a particular date. The value of this right is usually reflected in the interest rate on the bond.

### **Classification**

Bonds with embedded call options owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment; Intercompany lending* (see the description of *direct investment* in Chapter 3).

### **Bonds with an Embedded Put Option**

A bond whereby the creditor has the right to sell back the bonds to the issuer on or by a particular date, or under certain circumstance, such as a credit downrating of the issuer. This right is usually reflected in the interest rate on the bond.

### **Classification**

Bonds with embedded put options owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment; Intercompany lending* (see the description of *direct investment* in Chapter 3). The option is regarded as an integral part of the bond and is not separately valued and classified.

### **Brady Bonds**

Brady bonds, named after U.S. Treasury Secretary Nicholas Brady, arose from the Brady Plan. This plan was a voluntary market-based approach, developed in the late 1980s, to reduce debt and debt service owed to commercial banks by a number of emerging

market countries. Brady bonds were issued by the debtor country in exchange for commercial bank loans (and in some cases unpaid interest). In essence they provided a mechanism by which debtor countries could repackage existing debt. They are dollar denominated, “issued” in the international markets. The principal amount is usually (but not always) collateralized by specially issued U.S. Treasury 30-year zero-coupon bonds purchased by the debtor country using a combination of IMF, World Bank, and the country’s own foreign currency reserves. Interest payments on Brady bonds, in some cases, are guaranteed by securities of at least double-A-rated credit quality held with the New York Federal Reserve Bank. Brady bonds are more negotiable than the original bank loans but come in different forms. The main types are as follows:

- *Par bonds*—Bonds issued to the same value as the original loan, but the coupon on the bonds is below market rate. Principal and interest payments are usually guaranteed
- *Discount bonds*—Bonds issued at a discount to the original value of the loan, but the coupon is at market rate. Principal and interest payments are usually guaranteed
- *Debt-conversion bonds*—Bonds issued to the same value as the original loan but on condition that “new” money is provided in the form of new-money bonds
- *Front-loaded interest reduction bonds*—Bonds issued with low-rate fixed coupons that step up after the first few years

There are also other, less common types.

### **Classification**

Brady bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP). When a Brady bond is issued, the original loan is assumed to have been redeemed unless the terms of the issue of the Brady bond state otherwise. Any debt reduction in nominal value terms should be recorded—see Chapter 8. The initial purchase of the principal collateral (U.S. Treasury bonds) is a separate transaction and is classified as debt of the United States.

## **C**

### **Callable Bonds**

A callable bond is a bond in which the bondholder has sold the issuer an option (more specifically, a call option) that allows the issuer to repurchase the bond from the time the bond is first callable until the maturity date.

### **Classification**

Callable bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### **Catastrophe Bonds**

Catastrophe bonds (also known as cat bonds) are bonds whose principal and interest is forgiven in the event of a catastrophe. These bonds are typically issued by insurers as an alternative to selling traditional catastrophe reinsurance. If no catastrophe occurred, the insurance company pays a coupon (usually at a high rate given the risk inherent in the bond) to the investors. If a catastrophe occurs, the forgiveness of the bond supports the insurance company as it makes payments to its claim-holders.

### **Classification**

Cat bonds owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). If a catastrophe occurs, that is the event specified in the debt contract, forgiveness of principal and interest is recorded as debt forgiveness (see paragraph 8.11, footnote 6).

### Certificate of Deposit (CD)

A certificate issued by a deposit-taking corporation acknowledging a deposit in that corporation for a specified period of time at a specified rate of interest; CDs are essentially a form of negotiable time deposit (evidenced by the certificate). Nevertheless, a small minority of CDs are known to be nonnegotiable—not negotiable. CDs are widely issued in the domestic and international markets, and are typically bearer instruments, issued at face value with original maturities of one to six months, although there have been maturities of up to seven years. Typically, interest costs are payable at maturity for issues of one year or less, and semiannually on longer issues. The rate of interest on a given CD depends on several factors: current market conditions, the denomination of the certificate, and the market standing of the bank offering it. Typically, CDs are highly liquid instruments, which allow banks access to a cheaper source of funds than borrowing on the interbank market.

#### Classification

CDs owned by nonresidents are to be included in the gross external debt position. Those with an original maturity of one year or less should be classified as *short-term, debt securities (portfolio investment, debt securities* in the IIP), while those with an original maturity of over one year should be classified as *long-term, debt securities*. However, nonnegotiable CDs that are owned by nonresidents are to be classified as *short-term, currency and deposits (other investment, currency and deposits* in the IIP). Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Collateralized Debt Obligations (CDOs)

CDOs are bonds whose income payments and principal repayments are dependent on a pool of instruments. Typically, a CDO is backed by a diversified pool of loan and bond instruments either purchased in the secondary market or from the balance sheet of a commercial bank. The diversified nature of the instruments differentiates a CDO from an asset-backed security, which is backed by a homogeneous pool of instruments, such as mortgages and credit card loans. Issuers are often provided with different tranches of the security, so that if there are prepayments the first

tier will be repaid first, the second tier next, etc. This allows investors to take different levels of credit risk. The pricing of each tranche reflects the probability of repayment.

#### Classification

CDOs owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). These securities present a special problem regardless of the amount outstanding because there can be partial repayments of principal at any time. Therefore, simply revaluing the original face value to end-period market prices will cause overvaluation of the position data if there has been a partial repayment.

### Commercial Paper (CP)

Commercial paper (CP) is an unsecured promise to pay a certain amount on a stated maturity date, issued in bearer form. CP enables corporations to raise short-term funds directly from end investors through their own in-house CP sales team or via arranged placing through bank dealers. Short-term in nature, with maturities ranging from overnight to one year, CP is usually sold at a discount. A coupon is paid in a few markets. Typically, issue size ranges from \$100,000 up to about \$1 billion. In bypassing financial intermediaries in the short-term money markets, CP can offer a cheaper form of financing to corporations. But because of its unsecured nature, the credit quality of the issuer is important for the investor. Companies with a poor credit rating can obtain a higher rating for the issue by approaching their bank or insurance company for a third-party guarantee, or perhaps issue CP under a MOF (Multiple Option Facility), which provides a backup line of credit should the issue be unsuccessful.

#### Classification

Commercial paper owned by nonresidents is to be included in the gross external debt position. Such paper should be classified as *short-term, debt securities (portfolio investment, debt securities* in the IIP).

Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). When CP is issued at a discount, this discount represents interest income.

### Commitment-Linked Repayment Loans

These loans have a schedule of principal repayments including a grace period based on the committed amount. The schedule of payment, which is usually shown in the loan agreement, is based on the assumption that the loan will be fully withdrawn. In cases of cancellation or enhancement of the committed amount, the schedule of repayments in the loan agreement is maintained but the repayment amounts are adjusted in line with the ratio between the new committed amount and the original committed amount. The actual principal repayments depend on the amount disbursed. Commitment-linked repayment loans will usually have one of the following principal repayment schedules: (1) annuity-type repayment; (2) bullet repayment; (3) straight-line repayment; and (4) custom-tailored repayment.

#### Classification

Commitment-linked repayment loans extended by nonresidents to residents are to be included in the gross external debt position as *loans (other investment in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these loans could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Commodity-Linked Bonds

A bond whose redemption value is linked to the price of a commodity. Typically, issuers whose income stream is closely tied to commodity earnings issue these bonds.

#### Classification

Bonds with payoffs linked to movements in commodity prices and owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending

on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Commodity-Linked Derivatives

Derivatives whose value derives from the price of a commodity. These include:

- *Commodity future*—traded on an organized exchange, in which counterparties commit to buy or sell a specified amount of a commodity at an agreed contract price on a specified date
- *Commodity option*—gives the purchaser the right but not the obligation to purchase (call) or sell (put) a specified amount of a commodity at an agreed contract price on or before a specified date
- *Commodity swap*—a swap of two payment streams, where one represents a currently prevailing spot price and the other an agreed contract price for a specified quantity and quality of a specified commodity

Net cash settlements are usually made.

#### Classification

Commodity-linked derivatives in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### Convertible Bonds

A convertible bond is a fixed-rate bond that may, at the option of the investor, be converted into the equity of the borrower or its parent. The price at which the bond is convertible into equity is set at the time of issue and typically will be at a premium to the market value of the equity at the time of issue. The conversion option on the bond may be exercised at one specified future date or within a range of dates—"the window period." The conversion right cannot be separated from the debt. The instrument allows the investor to participate in the appreciation of the underlying asset of the company while limiting risk. A convertible bond will generally pay a coupon rate higher than the dividend rate of the underlying equity at the time of issue but lower than the rate of a comparable bond without a conversion option. For the investor, the value of the

convertible bond lies in the excess return of the bond yield over the dividend yield of the underlying shares.

### **Classification**

Convertible bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). As bonds are converted into equity, so the debt is extinguished. The equity issued is recorded in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5), under the appropriate institutional sector. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* in the memorandum table (Table 4.5).

### **Covered Bonds**

Covered bonds are dual-recourse bonds with a claim on the issuer and, if the issuer defaults, a cover pool of high-quality collateral (which the issuer is required to maintain). Covered bonds are issued under specific legislation (or contracts which emulate this). The recourse to the pool of collateral and consequent reduction in credit risk transfer distinguishes covered bonds from asset-backed securities.

### **Classification**

Covered bonds owned by nonresidents are to be included in the gross external debt position of the economy of residence of the issuer of the covered bond. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). In case of default, a change of debtor and/or type of instrument may occur when the recourse to the pool of collateral is activated.

### **Credit Derivatives**

Derivatives that provide a market in credit risk. Investors will use credit derivatives to gain or reduce exposure to credit risk. With a credit derivative the investor is taking a view on the creditworthiness of the issuer(s) of the underlying instrument(s) without necessarily risking principal (although credit derivatives may be embedded in a security). Credit derivatives take the form of both forward-type (total return swaps) and option-type contracts (credit default swaps). For instance, a creditor may lend to a debtor but wants to protect against the risk of default by that debtor. The creditor “buys” protection in the form of a credit default swap—the risk premium inherent in the interest rate is swapped by the creditor for a cash payment in event of default, i.e., in the event of default, the seller of a credit default swap is liable for “loss given default” (the magnitude of likely loss on the exposure if the borrower defaults). Also, these instruments are used to circumvent local investment rules, e.g., if a foreign investor cannot invest in equity securities and so enters into a total return swap where the foreign investor pays a reference rate, say LIBOR, against the total return—dividends and capital gain/loss—on an equity security. The other most common structure is a spread option whose payoff structure depends on the interest rate spread between emerging country debt and, say, U.S. Treasury bonds.

### **Classification**

Credit derivatives in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### **Credit Default Swap**

A credit derivative option-type contract. A credit default swap (CDS) is a financial derivative whose primary purpose is to trade credit default risk. Under a CDS, premiums are paid in return for a cash payment in the event of a default by the debtor of the underlying instrument. See also *Credit Derivatives*.

### **Classification**

Credit default swaps in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### Credit-Linked Note

A so-called structured security that combines a credit derivative and a regular bond. Credit-linked notes (CLN) are debt securities that are backed by reference assets, such as loans and bonds, with an embedded CDS allowing credit risk to be transferred from the issuer to investors. Investors sell credit protection for the pool of assets to the protection buyer (or issuer) by buying the CLN. Repayment of principal and interest on the notes is conditional on the performance of the pool of assets. If no default occurs during the life of the note, the full redemption value of the note is paid to investors at maturity. If a default occurs, then investors receive the redemption value of the note minus the value of the default losses.

#### Classification

Credit-linked notes owned by nonresidents are to be included in the gross external debt position of the issuer of the credit-linked note. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP). Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). The credit derivative is regarded as an integral part of the bond and is not separately valued and classified.

### Currency

Currency consists of notes and coins that are of fixed nominal values and are issued and authorized by central banks or governments; notes and coins are in circulation and commonly used to make payments.

#### Classification

Domestic currency owned by nonresidents is included within the gross external debt position as *central bank* (or perhaps *deposit-taking corporations, except the central bank, or other institutional units*), *short-term, currency and deposits (other investment* in the IIP).

### Currency-Linked Bonds

A bond in which the coupon and/or redemption value are linked to the movement in an exchange rate. Examples of these types of bonds were the *tesobonos* issued by Mexican banks in 1994. These bonds, issued and payable in pesos, had a redemption value

linked to the movement in the U.S. dollar/Mexican peso exchange rate. When the Mexican peso depreciated, the redemption value increased. More recent examples include currency-linked bonds issued by Brazilian federal government in late 1990s and until mid-2000s—see BIS Quarterly Review, June 2007—Jamaica, Philippines, Thailand, Malaysia, Indonesia, India, and the World Bank—for instance, a samurai bond with a foreign exchange linked variable coupon.

#### Classification

Bonds with payoffs linked to movements in exchange rates and owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Currency Pool Loans

Currency pool loans, provided by the World Bank and regional development banks, are multicurrency obligations committed in U.S. dollar-equivalent terms whose currency composition is the same (pooled) for all borrowers.

#### Classification

Currency pool loans of the borrowing economy are to be included in the gross external debt position. They should be classified as *loans (other investment* in the IIP).

## D

### Debt Securities

Debt securities are negotiable instruments serving as evidence of a debt. They include bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, and similar instruments normally traded in the financial markets. Bills are defined as securities that give the holders the unconditional rights to receive stated fixed sums on a specified date. Bills are generally issued at discounts to face value that depend on the rate of interest and the time to maturity and are usually traded



in organized markets. Examples of short-term, debt securities are treasury bills, negotiable certificates of deposit, bankers' acceptances, promissory notes, and commercial paper. Debt securities give the holders the unconditional right to fixed or contractually determined variable payments (i.e., earning of interest is not dependent on earnings of the debtors). Depository receipts, whose underlying securities are debt securities, are debt securities.

#### **Classification**

Debt securities owned by nonresidents are to be included in the gross external debt position. Debt securities should be classified as *long-term, debt securities*, if issued with an original maturity of over one year, or as *short-term, debt securities*, if issued with an original maturity of one year or less (*portfolio investment, debt securities* in the IIP). Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Deep-Discount Bond**

A bond that has small interest payments and is issued at a considerable discount to its par value. See also *Zero-Coupon Bonds*.

#### **Classification**

Deep-discount bonds owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Deferred-Coupon Bonds**

Deferred-coupon bonds are long-term securities that let the issuer avoid using cash to make interest payments for a specified number of years. There are three types of deferred-coupon structures: (1) deferred-interest bonds, (2) step-up bonds, and (3) pay-in-kind bonds. Deferred-interest bonds are those deferred-coupon structures that sell at a deep-discount and do not pay interest for the initial period. Step-up bonds

do pay coupon interest, but the coupon rate is low for the initial period and then increases or "steps-up" to a higher coupon rate. Payment in-kind bonds give the issuer an option to give the bondholder a similar bond, i.e., a bond with the same coupon rate and a par value equal to the amount of the coupon payment that would have been paid.

#### **Classification**

Deferred-coupon bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Deferred Drawdown Options (World Bank)**

The Development Policy Loan Deferred Drawdown Option (DPL DDO) provides the borrower with the flexibility to rapidly fund its financing requirements following a shortfall in resources due to adverse economic events such as downturns in economic growth or unfavorable changes in commodity prices or terms of trade. The Catastrophe Risk DDO (Cat DDO) enables the borrower to access an immediate source of funding to respond rapidly in the aftermath of a natural disaster.

#### **Classification**

When funds are actually borrowed/lent, these loans extended by nonresidents to residents are to be included in the gross external debt position as *loans* (*other investment* in the IIP).

#### **Depository Receipts**

A depository receipt allows a nonresident entity to introduce its equity or debt into another market in a form more readily acceptable to the investors in that market. A depository bank will purchase the underlying foreign security and then issue receipts in a currency more acceptable to the investor. The investor can exchange the depository receipts for the underlying security at any time. See also *American Depository Receipts* and *Bearer Depository Receipts*.

### **Classification**

A depository receipt is classified according to the nature of the underlying instrument backing it. This is because the “issuing” intermediary does not take the underlying security onto its balance sheet but simply acts as a facilitator. So, the debtor is the issuer of the underlying security. If owned by nonresidents, these instruments, if a debt security is the underlying instrument, are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). If the underlying item is an equity investment, it should be classified in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under the appropriate institutional sector. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* in the memorandum table.

### **Deposits**

Deposits include all claims that are on the central bank, deposit-taking corporations, except the central bank, and, in some cases, other institutional units, and are represented by evidence of deposit. Deposits are claims that are either transferable or are “other deposits.” Transferable deposits consist of all deposits that are exchangeable on demand at par without restriction, or penalty, and directly usable for making payments by check, giro order, direct debit/credit, or other payment facility. “Other deposits” comprise all claims, other than transferable deposits, represented by evidence of deposit, e.g., savings and fixed-term deposits; sight deposits that permit immediate cash withdrawals but not direct third-party transfers; and shares that are legally (or practically) redeemable on demand or on short notice in savings and loan associations, credit unions, building societies, etc. Liabilities under securities repurchase agreements that are included in national measures of broad money are also other deposits (while liabilities under other

repurchase agreements are included in loans; see *BPM6*, paragraph 5.43).

### **Classification**

Deposits are liabilities of central banks, deposit-taking corporations, except the central bank, and, in some cases, other institutional units, and if owned by a nonresident are to be included in the gross external debt position. They should be classified as *short-term, currency and deposits (other investment, currency and deposits in the IIP)*, under the corresponding institutional sector, unless detailed information is available to make the short-term/long-term attribution.

In some cases, the instrument classification of interbank positions may be unclear, e.g., because the parties are uncertain or one party considers it as a loan and the other a deposit. Therefore, as a convention to ensure symmetry, all interbank positions other than debt securities and accounts receivable/payable are classified in the gross external debt position as *short-term, deposits (other investment, currency and deposits in the IIP)*, unless detailed information is available to make the short-term/long-term attribution.

### **Deposits in Mutual Associations**

Deposits in the form of shares or similar evidence of deposit issued by mutual associations such as savings and loans, building societies, credit unions, and the like are classified as deposits. See *Deposits*.

### **Classification**

Deposits in mutual associations owned by nonresidents are to be included in the gross external debt position. They should be classified as deposit-taking corporations, except the central bank, *short-term, currency and deposits (other investment in the IIP)*.

### **Disbursement-Linked Repayment Loans**

The disbursement linked repayment loans are loans that have a repayment schedule that is linked to each disbursement and will include a grace period for the repayment of principal. The grace period, which is fixed in the loan agreement, will apply from the beginning of each actual disbursement grouping. Usually disbursement-linked repayment loans are multi-tranche loans with each tranche having a different maturity period.

**Classification**

Loans extended by nonresidents to residents are to be included in the gross external debt position as *loans* (*other investment* in the IIP). Alternatively, depending on the relationship between debtor and creditor, these loans could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Dual-Currency Bonds**

Dual-currency bonds are a group of debt securities where the interest and/or principal payments differ from the currency in which the bond is issued. The issue of currency-linked bonds followed the development of the currency swap market that broadened the range of currencies in which international bonds were issued.

**Classification**

Dual-currency bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**E****Embedded Derivatives**

An embedded derivative arises when a derivative feature is inserted in a standard financial instrument and is inseparable from the instrument. If a primary instrument, such as a security or loan, contains an embedded derivative, the instrument is valued and classified according to its primary characteristics—even though the value of that security or loan may well differ from the values of comparable securities and loans because of the embedded derivative. Examples are bonds that are convertible into shares, and securities with options for repayment of principal in currencies that differ from those in which the securities were issued.

**Classification**

Debt instruments with embedded derivatives owned by nonresidents are to be included in the gross

external debt position, and they should be classified as *debt securities* or *loans* according to their primary characteristics (*portfolio investment, debt securities, or other investment, loans* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Employee Stock Options (ESOs)**

Employee stock options (ESOs) are options to buy the equity of a company, offered to employees of the company as a form of remuneration. In a few cases, the company that issues the option is a resident of a different economy from the employee. ESOs have similar pricing behavior to financial derivatives, but they have a different nature and purpose (i.e., to motivate employees to contribute to increasing the value of the company, rather than to trade risk). If a stock option granted to employees can be traded on financial markets without restriction, it is classified as a financial derivative. *BPM6* includes financial derivative instruments and ESOs in the same functional category.

**Classification**

ESOs in which the counter-party is a nonresident are not debt instruments, and are included in Table 4.4 (memorandum table on financial derivatives and employee stock options positions with nonresidents by sector).

**Equity**

Equity consists of all instruments and records acknowledging, after the claims of all creditors have been met, claims to the residual values of a corporation or quasi-corporation. Equity may be split into listed shares, unlisted shares, and other equity. Both listed and unlisted shares are equity securities. Other equity is equity that is not in the form of securities. It includes equity in quasi-corporations for branches and notional units for ownership of land (in most cases), and the ownership of many international organizations. Equity is not a debt instrument, as it gives a residual claim on the assets of the entity.

**Classification**

Equity securities are included in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under the appropriate institutional sector, as well as other equity that is not direct invest-

ment. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* in the memorandum table.

### Equity-Linked Bond

An equity-linked bond comprises features of both debt and equity. Equity-linked bonds are debt instruments that contain an option to purchase (either by conversion of existing debt or by exercising the right to purchase) an equity stake in the issuer, its parent, or another company at a fixed price. These instruments are usually issued when stock market prices are rising because companies can raise funds at lower than market interest rates while investors receive interest payments, and potentially lock into capital gains.

#### Classification

Equity-linked bonds, if owned by nonresidents, are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). If the bonds are converted into equity, the debt is extinguished. The equity issued is recorded in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under the appropriate institutional sector. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* in the memorandum table. See also *Equity Warrant Bond* and *Warrants*.

### Equity-Linked Derivatives

Derivatives whose value derives from equity prices. These include:

*Equity future*—traded on an organized exchange, in which counterparties commit to buy or sell a specified amount of an individual equity or a basket of equities or an equity index at an agreed contract price on a specified date

*Equity option*—gives the purchaser the right but not the obligation to purchase (call) or sell (put) a

specified amount of an individual equity or a basket of equities or an equity index at an agreed contract price on or before a specified date

*Equity swap*—in which one party exchanges a rate of return linked to an equity investment for the rate of return on another equity investment

Net cash settlements are usually made.

#### Classification

Equity-linked derivatives in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### Equity Warrant Bond (Debt-with-Equity Warrants)

Equity warrant bonds are debt securities that incorporate warrants, which give the holder the option to purchase equity in the issuer, its parent company, or another company during a predetermined period or on one particular date at a fixed contract price. The warrants are detachable and may be traded separately from the debt security. The exercise of the equity warrant will normally increase the total capital funds of the issuer because the debt is not replaced by equity but remains outstanding until the date of its redemption. The issue of equity warrant bonds reduces the funding costs for borrowers because the investor will generally accept a lower yield in anticipation of the future profit to be gained from exercising the warrant.

#### Classification

Because the warrant is detachable and may be traded separately from the debt security, the two instruments should be separately recorded. Bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). Warrants owned by nonresidents are to be included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

## Exchange Traded Funds

An exchange-traded fund (ETF) is a fund—similar to a mutual fund—with a fixed share capital, where investors entering or leaving the fund must buy or sell existing shares. An ETF tracks indices, such as for stocks, commodities, or bonds and is traded over the course of the trading day on an exchange.

### Classification

Exchange traded funds shares owned by nonresidents are equity investments to be included in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5).

## F

### Financial Lease

A financial lease is a contract under which a lessor as legal owner of an asset conveys substantially all the risks and rewards of ownership of the asset to the lessee. While there is not a legal change of ownership of the good under the financial lease, the risks and rewards are, de facto, transferred from the legal owner of the good, the lessor, to the user of the good, the lessee. For this reason, under statistical convention, the total value of the good is imputed to have changed economic ownership. Therefore, the debt liability at inception of the lease is defined as the value of the good and is financed by a loan of the same value, a liability of the lessee (see paragraph 3.39).

### Classification

Debt liabilities arising from financial leases between residents and nonresidents are to be included in the gross external debt position as loans (*other investment* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Fixed-Rate Bond

A bond whose coupon payments are set for the life of the bond or for a certain number of years. See also *Variable-Rate Bond*.

### Classification

Fixed-rate bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which

instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Foreign Bonds

A foreign bond is a security issued by a nonresident borrower in a domestic capital market, other than its own, usually denominated in the currency of that market. Issues are placed publicly or privately. These bonds generally adopt the characteristics of the domestic market of the country in which they are issued, such as in terms of registration—bearer or registered form—settlement, and coupon payment arrangements. Common foreign bonds are Yankee bonds (U.S. market), Samurai bonds (Japan), and Bulldog bonds (U.K.).

### Classification

If the owner of the foreign bond is a nonresident, and this is most likely given that the bonds are issued in foreign markets, the bonds are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Foreign-Currency-Linked Derivatives

Derivatives whose value is linked to foreign currency exchange rates. The most common foreign-currency-linked derivatives are:

- Forward-type foreign exchange rate contracts, under which currencies are sold or purchased for an agreed exchange rate on a specified day
- Foreign exchange swaps, whereby there is an initial exchange of foreign currencies and a simultaneous forward purchase/sale of the same currencies
- Cross-currency interest rate swaps, whereby—following an initial exchange of a specified amount of foreign currencies—cash flows related to interest and principal payments are exchanged according to a predetermined schedule

- Options that give the purchaser the right but not the obligation to purchase or sell a specified amount of a foreign currency at an agreed contract price on or before a specified date

### **Classification**

Foreign-currency-linked derivatives in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### **Forward-Type Derivatives**

A contract in which two counterparties commit to exchange an underlying item—real or financial—in a specified quantity, on a specified date, at an agreed contract price or, in the specific example of a swaps contract, agree to exchange cash flows, determined by reference to the price(s) of, say, currencies or interest rates according to predetermined rules. In essence, two counterparties are trading risk exposures of equal market value.

### **Classification**

Forward-type derivatives in which the counterparty is a nonresident are included in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### **Futures**

Futures are forward-type contracts traded on organized exchanges. The exchange facilitates trading by determining the standardized terms and conditions of the contract, acting as the counterparty to all trades, and requiring margin to be deposited and paid to mitigate against risk. See also *Forward-Type Derivatives*.

### **Classification**

Futures in which the counterparty is a nonresident are included in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

## **G**

### **Gold Accounts: Allocated and Unallocated**

Allocated gold accounts provide ownership of a specific piece of gold. The ownership of the gold remains with the entity placing it for safe custody. Allocated gold accounts have no counterpart liability. When held as reserve assets, allocated gold accounts are classified as monetary gold. When not held as reserve

assets, allocated gold accounts are treated as representing ownership of a good. In contrast, unallocated gold accounts represent a claim against the account operator to deliver gold. For these accounts, the account provider holds title to a reserve base of physical (allocated) gold and issues claims to account holders denominated in gold. Unallocated gold account liabilities are debt liabilities of the account operator.

### **Classification**

All unallocated gold accounts liabilities are treated as deposits. If owned by nonresidents, unallocated gold accounts are to be included in the gross external debt position, and they should be classified as *short-term, currency and deposits (other investment, currency and deposits* in the IIP).

### **Gold Loans**

Gold loans consist of the delivery of gold for a given time period. They may be associated with physical gold or (less frequently) unallocated gold accounts. As with securities lending, legal ownership of the gold is transferred (the temporary borrower may on-sell the gold to a third party), but the risks and benefits of changes in the gold price remain with the lender, that is the gold is assumed not to have changed ownership and remains on the balance sheet of the gold provider. No cash is provided as collateral in gold loan transactions.

### **Classification**

No debt position is created for gold loans, as no cash is provided.

### **Gold Swaps**

A gold swap involves an exchange of gold for foreign exchange deposits with an agreement that the transaction be reversed at an agreed future date at an agreed gold price. The gold taker (cash provider) will not usually record the gold on its balance sheet, while the gold provider (cash taker) will not usually remove the gold from its balance sheet. In this manner, the transaction is analogous to a repurchase agreement and should be recorded as a collateralized loan or deposit. See Appendix 2; see also *Repurchase Agreements* in Part 2 of this appendix.

### **Classification**

For the cash taker, a gold swap is classified as a loan or a deposit; so borrowing under a gold swap from a nonresident is included within the gross external debt position. A gold swap is generally a loan, but it is clas-

sified as a deposit if it involves liabilities of a deposit-taking corporation that are included in national measures of broad money. The debt should be classified as *loans* or as *currency and deposits (other investment)* in the IIP).

## I

### Index-Linked Securities

Index-linked securities are debt instruments with coupon and/or principal payments linked to commodity prices, interest rates, stock exchange, or other price indices. The benefits to the issuer of indexing include a reduction in interest costs if the deal is targeted at a particular group of investors' requirements, and/or an ability to hedge an exposed position in a particular market. The benefit to investors is in the ability to gain exposure to a wide range of markets (e.g., foreign exchange or property markets) without the same degree of risk that may be involved in investing in the markets directly. Issues linked to a consumer price index also provide investors with protection against inflation.

#### Classification

Index-linked securities owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities)* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). When interest payments are index linked, the payments are treated as interest. If the value of the principal is index linked, the issue price should be recorded as principal, and any subsequent change in value due to indexation changes the value of the principal amount (see also *BPM6*, paragraphs 11.6–11.65).

### Insurance, Pension, and Standardized Guarantee Schemes

Insurance, pension, and standardized guarantee schemes is a type of debt instrument that comprises (1) nonlife insurance technical reserves; (2) life insurance and annuity entitlements; (3) pension entitlements, claims of pension funds on pension managers, and entitlements to nonpension funds; and (4) provi-

sions for calls under standardized guarantees (these items are separately described in this Appendix).

#### Classification

Insurance, pension, and standardized guarantee schemes that are liabilities to nonresidents policyholders or beneficiaries are to be included in the gross external debt position as *other debt liabilities (other investment, insurance, pension, and standardized guarantee schemes)* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Interest-Rate-Linked Derivatives

Derivatives whose value is linked to interest rates. The most common are:

- Interest rate swaps, which involve an exchange of cash flows related to interest payments, or receipts, on a notional amount of principal in one currency over a period of time
- Forward rate agreements, in which a cash settlement is made by one party to another calculated by the difference between a market interest rate of a specified maturity in one currency on a specific date and an agreed interest rate, times a notional amount of principal that is never exchanged (if the market rate is above the agreed rate, one party will agree to make a cash settlement to the other, and vice versa)
- Interest rate options that give the purchaser the right to buy or sell a specified notional value at a specified interest rate—the price traded is 100 less the agreed interest rate in percentage terms, with settlement based on the difference between the market rate and the specified rate times the notional value.

#### Classification

Interest-rate-linked derivatives in which the counterparty is a nonresident are included indistinguishably in the memorandum table, *financial derivatives and employee stock options positions with nonresidents by sector* (Table 4.4).

### Investment Fund Shares or Units

Investment funds are collective investment undertakings through which investors pool funds for investment in financial or nonfinancial assets or both. These

are sometimes known as mutual funds. These funds issue shares (if a corporate structure is used) or units (if a trust structure is used). The shares in the fund purchased by individual investors represent an ownership interest in the pool of underlying assets—i.e., the investors have an equity stake. Because professional fund managers make the selection of assets, investment funds provide individual investors with an opportunity to invest in a diversified and professionally managed portfolio of securities without the need of detailed knowledge of the individual companies issuing the stocks and bonds. Investment funds include money market funds (MMF) and non-MMF investment funds. MMFs are investment funds that invest only or primarily in short-term debt securities such as treasury bills, certificates of deposit, and commercial paper. Non-MMF investment funds mainly invest in a range of assets, long-term in nature, also including commodity-linked investments, real estate, shares in other investment funds, and structured assets.

#### **Classification**

Investment fund shares or units owned by nonresidents are equity investments to be included in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5).

## **L**

### **Land and Other Natural Resources Ownership**

By convention, land and other natural resources such as subsoil assets, noncultivated biological resources, and water can only be owned by residents. Therefore, if a nonresident purchases these assets, then a notional resident entity is created on which the nonresident has a financial claim (unless the land or other natural resources are a territorial enclave of the nonresident—see *BPM6* paragraph 4.5(e)). Also, if a nonresident leases these assets for long periods, then it is usually the case that a branch should be recognized (see *BPM6* paragraph 4.35).

#### **Classification**

The financial claim the nonresident has on the notional resident entity is assumed to be a direct investment equity investment, so the equity investment is classified in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under *direct investment: equity and investment fund shares*.

### **Letters of Credit**

Letters of credit provide a guarantee that funds will be made available only when certain documents specified by contract are presented, but no financial liability exists until funds are actually advanced.

#### **Classification**

Because letters of credit are not debt instruments, they are not included within the gross external debt position.

### **LIBOR-Based Loans (LBL)**

These are loans commonly offered by multilateral institutions to both sovereign and nonsovereign borrowers. The terms of borrowing are based on a LIBOR rate, an effective contractual spread and, where applicable, a maturity premium fixed over the life of the loan. The loans are extended in the various currencies offered by the multilateral institution. These loans normally provide a high degree of flexibility for borrowers like: (1) choice of interest rate basis; (2) embedded options (i.e., currency and interest rate swaps); and (3) choice of currency.

#### **Classification**

LIBOR-based loan extended by nonresidents to residents are to be included in the gross external debt position as *loans (other investment in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### **Life Insurance and Annuity Entitlements**

This instrument consists of reserves of life insurance companies and annuity providers for prepaid premiums and accrued liabilities to life insurance policyholders and beneficiaries of annuities. Life insurance and annuity entitlements are used to provide benefits to policyholders upon the expiry of the policy, or to compensate beneficiaries upon the death of policyholders, and thus are kept separate from shareholders' funds. These entitlements are regarded as liabilities of the insurance companies and assets of the policyholders and beneficiaries. See also *Insurance, Pension, and Standardized Guarantee Schemes*.

#### **Classification**

Life insurance and annuity entitlements that are liabilities to nonresident policyholders or beneficiaries



are to be included in the gross external debt position as *other debt liabilities* (*other investment, insurance, pension, and standardized guarantee schemes* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

## Loans

Loans comprise those financial assets created through the direct lending of funds by a creditor to a debtor through an arrangement in which the lender either receives no security evidencing the transaction or receives a nonnegotiable document or instrument. Included are loans to finance trade, other loans and advances (including mortgages), use of IMF credit, and loans from the IMF. In addition, finance leases and repurchase agreements are covered under loans. The supply and receipt of funds under a securities repurchase agreement is generally treated as a loan, unless the securities repurchase agreement involves liabilities of a deposit-taking corporation that are included in national measures of broad money when it is classified as a deposit. An overdraft arising from the overdraft facility of a transferable deposit account is classified as a loan. However, undrawn lines of credit are not recognized as a liability. Loans may be payable in the domestic or foreign currency(s).

### Classification

Loans extended by nonresidents to residents are to be included in the gross external debt position as *loans* (*other investment* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

## M

### Margins

Margins are payments of cash or deposits of collateral that cover actual or potential obligations incurred in financial derivative and some other contracts. The mandatory provision of margin is standard in financial derivative markets and reflects market concerns over counterparty risks. Repayable margins consist of cash or other collateral deposited to protect the counterparty against default risk. Ownership of the mar-

gin remains with the unit that deposited it. Repayable margins in cash are a debt liability of the taker of the margin. Non-repayable margin payments reduce the liability created through a financial derivative. The entity that pays nonrepayable margin no longer retains the ownership of the margin nor has the right to the risks and rewards of ownership.

### Classification

The classification of margins depends on whether they are repayable or nonrepayable. Repayable margins in cash in which the counterparty is a nonresident are to be included in the gross external debt position. They should be classified as *short-term, currency and deposits* (particularly, if the debtor's liabilities are included in broad money) or in *short-term, other debt liabilities* (*other accounts receivable/payable-other* in the IIP). Nevertheless, when a repayable margin deposit is made in a noncash asset (such as securities), no position is recorded because no change in economic ownership has occurred.

### Medium-Term Notes (MTNs)

These are debt instruments of usually one- to five-year maturity issued in bearer form under a program agreement through one or more dealers. Once a program is set up, issues can be made quickly to take advantage of market conditions, with issues structured more closely to investors' needs than in the public bond markets. Typically, the MTN market is not as liquid as the international bond market, so issuers may have to pay a higher interest rate.

### Classification

Medium-term notes owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Military Debt

Loans and other credits extended for military purposes.

**Classification**

Military debt owed to nonresidents is to be included in the gross external debt position, allocated by the nature of the debt instrument.

**Mortgage-Backed Securities**

A mortgage-backed security is a form of asset-backed security. See *Asset-Backed Securities*. These securities are also referred to as collateralized mortgage obligations. The various tranches of these instruments—first tranche repaid first, the second tranche next, etc.—attract investors with differing sensitivities to prepayment risk.

**Classification**

Mortgage-backed securities owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)*.

**Multi-Currency Loans—Pooled and Nonpooled**

A multi-currency loan—pooled—is a loan facility than can be disbursed in more than one currency and repaid in any other applicable currency. A multi-currency loan—nonpooled—is a loan facility than can be disbursed in more than one currency and repaid in the currencies that were disbursed. The currencies in which the loan can be disbursed or repaid should be those currencies that are applicable to the creditor.

**Classification**

Multi-currency loans—pooled and nonpooled—extended by nonresidents to residents are to be included in the gross external debt position as *loans (other investment in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Mutual Fund Shares**

See *Investment Fund Shares or Units*.

**N****Nondeliverable Forward Contracts (NDFs)**

A nondeliverable forward contract is a foreign currency financial derivative instrument. An NDF differs from a normal foreign currency forward con-

tract in that there is no physical settlement of two currencies at maturity. Rather, based on the movement of two currencies, a net cash settlement will be made by one party to the other. NDFs are commonly used to hedge local currency risks in emerging markets where local currencies are not freely convertible, where capital markets are small and undeveloped, and where there are restrictions on capital movements. Under these conditions, an NDF market might develop in an offshore financial center, with contracts settled in major foreign currencies, such as the U.S. dollar.

**Classification**

NDF contracts in which the counterparty is a nonresident are included indistinguishably in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

**Nonlife Insurance Technical Reserves**

Non-life insurance technical reserves consist of reserves for unearned insurance premiums, which are prepayment of premiums, and reserves against outstanding insurance claims, which are amounts identified by insurance corporations to cover what they expect to pay out arising from events that have occurred but for which the claims are not yet settled. Both nonlife direct insurance and reinsurance are included in this item. These reserves represent liabilities of the insurer and a corresponding asset of the policyholders. See also *Insurance, Pension, and Standardized Guarantee Schemes*.

**Classification**

Non-life insurance technical reserves that are liabilities to nonresidents policyholders are to be included in the gross external debt position as *other debt liabilities (other investment, insurance, pension, and standardized guarantee schemes in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Nonnegotiable Debt**

Debt instruments that are not usually negotiable in organized and other financial markets.

**Classification**

Nonnegotiable debt owned by nonresidents is to be included in the gross external debt position. The

financial instrument classification will depend on the nature of the instrument.

### Nonparticipating Preferred Shares

These are a type of preferred shares in which the payment of a “dividend” (usually at a fixed rate) is calculated according to a predetermined formula and not determined by the earnings of the issuer. In other words, the investor does not participate in the distribution of profits to equity investors (if any), nor share in any surplus on dissolution of the issuer. See also *Preferred Shares* and *Participating Preferred Shares*.

#### Classification

Non-participating preferred shares are debt instruments, and so if owned by a nonresident are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Note Issuance Facilities (NIFs)/Revolving Underwriting Facilities (RUFs)

A note issued under an NIF/RUF is a short-term instrument issued under a legally binding medium-term facility—a form of revolving credit. A bank, or banks, underwrite, for a fee, the issuance of this three- or six-month paper and may be called upon to purchase any unsold paper at each rollover date, or to provide standby credit facilities. The basic difference between an NIF and an RUF is in the underwriting guarantee: under an RUF the underwriting banks agree to provide loans should the issue fail, but under an NIF they could either lend or purchase the outstanding notes. First developed in the early 1980s, the market for NIFs grew substantially for a short period in the mid-1980s. It was a potentially profitable market for international banks at a time when the syndicated credits market was depressed, following the debt crisis of the early 1980s. By the early 1990s, euro commercial paper (ECP), and euro medium-term notes (EMTNs) had become more popular forms of finance.

#### Classification

Notes issued under an NIF/RUF that are owned by a nonresident are to be included in the gross external debt position. They should be classified as *short-term, debt securities (portfolio investment, debt securities in the IIP)*. This is because the contractual maturity is less than one year’s maturity. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### O

#### Operational Leases

Operational leases are arrangements in which machinery or equipment is rented out for specified periods of time that are shorter than the total expected service lives of the machinery or equipment. Typically under an operational lease, the lessor normally maintains the stock of equipment in good working order, and the equipment can be hired on demand or at short notice; the equipment may be rented out for varying periods of time; and the lessor is frequently responsible for the maintenance and repair of the equipment as part of the service which he provides to the lessee. Under an operational lease, ownership of the equipment does not change hands; rather, the lessor is regarded as providing a service to the lessee, on a continuous basis.

#### Classification

Operational leases are not financial instruments, but rather the provision of a service, the cost of which accrues continuously. Any payments under an operational lease are either classified as prepayments for services—creating a trade credit and advances claim on the lessor—or postpayments for services rendered—extinguishing a trade credit and advances liability to the lessor.

#### Options

An option is a contract that gives the purchaser the right but not the obligation to buy (call) or sell (put) a specified underlying item—real or financial—at an agreed contract (strike) price on or before a specified date from the writer of the option.

#### Classification

Options owned by nonresidents are to be included in Table 4.4 (memorandum table on *financial derivatives*

and employee stock options positions with nonresidents by sector).

### Original Issue Discount Bond

An original issue discount (OID) bond is issued at a price below par. A zero-coupon bond is an example of an OID bond. See also *Deep Discount Bond* and *Zero-Coupon Bonds*.

#### Classification

OID bonds owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as short-term, debt securities. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Other Accounts Receivable/Payable-Other

*Other accounts receivable/payable-other* include arrears arising from nondebt instruments and transactions (see Chapter 3, paragraph 3.43), and liabilities such as in respect of taxes, dividends, purchases and sales of securities, security lending fees, wages and salaries and social contributions that have accrued but are not yet paid.

#### Classification

Other accounts payable-other owed to nonresidents are to be included in the gross external debt position. They should be classified as *other debt liabilities (other investment, other accounts receivable/payable-other in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

## P

### Participating Preferred Shares

Also known as a participating preference share. These are a type of preferred share where the investor has some entitlement to a share in the profits or a share of any surplus on dissolution of the issuer (in addition to the fixed dividend payment received). See also *Preferred Shares* and *Nonparticipating Preferred Shares*.

### Classification

Because of the claim on the residual value of the issuer, participating preference shares are classified as equity instruments, and so are included in the memorandum table, *equity liability position with nonresidents by sector* (Table 4.5) under the appropriate institutional sector. If the nonresident is in a direct investment relationship with the issuer, then the equity is classified as *direct investment: equity and investment fund shares* in the memorandum table.

### Pension Entitlements

Pension entitlements show the extent of financial claims both existing and future pensioners hold against either their employer or a fund designated by the employer to pay pensions earned as part of a compensation agreement between the employer and employee. The economy of residence of pension schemes may differ from that of some of their beneficiaries, in particular, for border workers, guest workers who return home, people who retire to a different economy, staff of international organizations, and employees of transnational enterprise groups that have a single pension fund for the whole group. In addition to liabilities of pension funds, liabilities of unfunded pension schemes are included in this category. These entitlements represent liabilities of the pension fund and a corresponding asset of the beneficiaries. See also *Insurance, Pension, and Standardized Guarantee Schemes*.

#### Classification

Pension entitlements that are liabilities to nonresidents policyholders or beneficiaries, are to be included in the gross external debt position as *other debt liabilities (other investment, insurance, pension, and standardized guarantee schemes in the IIP)*.

### Permanent Interest-Bearing Shares (PIBS)

These are deferred shares issued by mutual societies, which rank beneath ordinary shares (which are more akin to deposits than equity in mutual societies) and all other liabilities (including subordinated debt) in the event of dissolution of the society. They provide “permanent” capital. In the United Kingdom these instruments are non-profit-participating by regulatory requirement; rather, predetermined (but not necessarily fixed) interest costs are payable, with the amounts to be paid not linked to the issuer’s profits; interest costs are not to be paid if this would result in

the society breaching capital adequacy guidelines and are noncumulative; but more PIBS can be issued in lieu of a cash dividend.

#### **Classification**

PIBS are debt instruments because they are a form of nonparticipating preferred share (defined as such because the holders of the instruments do not participate in the profits of the society). PIBS owned by non-residents are to be included within the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Perpetual Bonds**

Perpetual bonds are debt instruments with no maturity date although interest is paid.

#### **Classification**

Perpetual bonds should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Perpetual Floating-Rate Notes**

A debt security whose coupon is refixed periodically on a refix date by reference to an independent interest rate index such as three-month LIBOR. Generally, these instruments are issued by financial institutions, particularly banks, and are perpetual so as to replicate equity and qualify as tier-one capital under the Basel capital adequacy requirements (subject to the security meeting a range of additional regulatory requirements, such as giving the issuer flexibility to cancel coupon payments).

#### **Classification**

Despite the perpetual nature of these instruments, they are debt securities because the instruments give the holder a contractually determined money income. Perpetual floating-rate notes owned by nonresidents are to be included within the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)*.

Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

#### **Precious Metals (Other than Gold) Accounts: Allocated and Unallocated**

Allocated precious metals accounts provide ownership of a specific piece of precious metals. The ownership of the precious metal remains with the entity placing it for safe custody. Allocated precious metals accounts have no counterpart liability. Allocated precious metals (other than gold) accounts are treated as representing ownership of a good, they are not financial assets. In contrast, unallocated precious metals accounts represent a claim against the account operator to deliver precious metals. For these accounts, the account provider holds title to a reserve base of physical (allocated) precious metals and issues claims to account holders denominated in precious metals. Unallocated precious metals account liabilities are debt liabilities of the account operator (see also *Gold Accounts: Allocated and Unallocated*).

#### **Classification**

All unallocated precious metals accounts liabilities are treated as deposits. If owned by nonresidents, unallocated precious metals accounts are to be included in the gross external debt position, and they should be classified as short-term, currency and deposits (other investment, currency and deposits in the IIP).

#### **Preferred Shares**

Also known as a preference share. Preferred shares are a class of equity capital that rank ahead of common equity in respect of dividends and distribution of assets upon dissolution of the incorporated enterprise. Investors have little control over the decisions of the company: voting rights are normally restricted to situations where the rights attached to preferred shares are being considered for amendment. Preferred shares are registered securities. Preferred share issues typically pay a fixed-rate dividend payment that is calculated according to a predetermined formula, but some preferred shares participate in the profits of the issuer.

#### **Classification**

Preferred shares are classified as equity securities if the shares are participating and debt securities if the shares are nonparticipating. See *Nonparticipating*

and *Participating Preferred Shares* for specific classification requirements.

### Project Preparation Facility

A loan facility that is provided to support project preparation. The outcome of the preparation will determine whether the facility will be treated as standalone loan, or will form part of the facility to be extended to the borrower for the purposes of implementing the project.

#### Classification

Loans extended by nonresidents to residents to support project preparation are to be included in the gross external debt position as *loans (other investment in the IIP)*. Alternatively, depending on the relationship between debtor and creditor, these loans could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Promissory Note

An unconditional promise to pay a certain sum on demand on a specified due date. Promissory notes are widely used in international trade as a secure means of payment. They are drawn up (issued) by an importer in favor of the exporter. When the latter endorses the note, provided the importer is creditworthy, a promissory note is traded.

#### Classification

Promissory notes are debt securities that are claims on the issuer. If owned by nonresidents, promissory notes should be included in the gross external debt position. They should be classified as *short-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity over one year, in which instance they are to be classified as *long-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Provisions for Calls Under Standardized Guarantees

Standardized guarantees are defined as those that are not provided by means of a financial derivative (such as credit default swaps), but for which the probability of default can be well established. These guarantees cover similar types of credit risk for a large number of cases. Examples include guarantees issued by governments on export credit or student loans. Generally it is not pos-

sible to estimate precisely the risk of any one loan being in default, but it is possible to make a reliable estimate of how many out of a large number of such outstanding loans will default. These provisions represent liabilities of the issuer of standardized guarantees, and a corresponding asset of the beneficiaries. See also *Insurance, Pension, and Standardized Guarantee Schemes*.

#### Classification

Provisions for calls under standardized guarantees that are liabilities to nonresidents policyholders or beneficiaries are to be included in the gross external debt position as *other debt liabilities (other investment, insurance, pension, and standardized guarantee schemes in the IIP)*.

### Putable Bonds

A putable bond is a bond in which the bondholder has the right to sell the bond to the issuer at a designated price and time before the expiration date of the security.

#### Classification

Putable bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities in the IIP)* unless they have an original maturity of one year or less, in which instance they are to be classified as *short term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

## R

### Recognition Bonds

Recognition bonds are bonds issued by a government in some economies to recognize accrued social security contributions made by public workers joining a new scheme.

#### Classification

Recognition bonds owned by nonresidents are to be included in the gross external debt position. Debt securities should be classified as *long-term, debt securities*, if issued with an original maturity of over one year, or as *short-term, debt securities*, if issued with an original maturity of one year or less (*portfolio investment, debt securities in the IIP*).

## Reverse Security Transactions

See Appendix 2.

## S

### Single Currency Loans

Loans which allow the borrower to make drawings and repayments in the same currency only.

#### **Classification**

Single currency loans extended by nonresidents to residents are to be included in the gross external debt position as *loans (other investment* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

### Special Drawing Rights

Special drawing rights (SDRs) are international reserve assets created by the IMF and allocated to members to supplement existing official reserves. SDRs are held only by the depositories of IMF members, a limited number of international financial institutions that are authorized holders, and the IMF itself, through the General Resources Account. SDR holdings (assets) represent unconditional rights to obtain foreign exchange or other reserve assets from other IMF members. SDRs allocated by the Fund to a member that is a participant in the SDR Department are a long-term liability of the member because upon termination of participation in, or liquidation of, the SDR Department, the member will be required to repay these allocations, and also because interest accrues. The holdings and allocations should be shown gross, rather than netted.

#### **Classification**

SDR allocations are to be included in the gross external debt position, classified as *long-term, special drawing rights (allocations) (other investment, special drawing rights* in the IIP).

### Stripped Securities

Stripped securities are securities that have been transformed from a principal amount with periodic interest coupons into a series of zero-coupon bonds, with the range of maturities matching the coupon payment dates and the redemption date of the principal amount. Strips can be created in two ways. Either the owner of

the original security can ask the settlement or clearing house in which the security is registered to “create” strips from the original security, in which case the strips replace the original security and remain the direct obligation of the issuer of the security; or the owner (a third party) of the original security can issue strips in its own name, “backed” by the original security, in which case the strips represent new liabilities and are not the direct obligation of the issuer of the original security. Usually, short-term strips are bought by money managers as government bill or note substitutes; intermediate maturity strips will be purchased by investors who believe that the yield curve might become more positive. Whereas demand is strongest for the longer maturities because these instruments have longer duration than the original bonds and are leveraged investments, a relatively small up-front payment gives the investor exposure to a larger nominal amount.

#### **Classification**

Stripped securities owned by a nonresident are to be included in the gross external debt position. Depending on their maturity, a stripped security is to be classified as either *short-term, debt securities* (original maturity of one year or less) or *long-term, debt securities* (original maturity of over one year) (*portfolio investment, debt securities* in the IIP). Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). The residence of the issuer depends on who has issued the strips. If the owner of the original security issues the stripped bonds, then the residence of the issuer is that of the entity issuing the strips; the underlying securities remain extant. If the strips remain the direct obligation of the original issuer, then the issuer is the original issuer, and the strips “replace” the original securities that have been stripped.

### Structured Bonds

Structured bonds have characteristics that are designed to attract a certain type of investor and/or take advantage of particular market circumstances. However, structuring securities to appeal to a particular type of investor risks the possibility of a loss of liquidity if the market moves in such a way as to make the structured features of the issue no longer attractive. Typically, the structured features are achieved through the use of derivatives—for instance, a credit-

linked note is a bond with an embedded credit derivative, and therefore inseparable from the debt security.

### **Classification**

Structured bonds are debt instruments, and if owned by a nonresident are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). Any embedded derivative is regarded as an integral part of the bond and not separately valued and identified.

### **Structured Floating-Rate Notes**

The structured floating-rate note is a variation of a standard variable-rate bond (i.e., a long-dated debt security whose coupon payment is reset periodically by reference to an independent interest rate index such as six-month LIBOR). The structured issue includes a derivative that allows the coupon calculation to be tailored to meet investors' interest rate expectations. For instance, there may be an interest rate collar or band—the interest rate cannot increase above an upper specified rate or fall below a lower specified rate. The issue of structured floating-rate notes has grown as borrowers have used financial derivatives to tailor financing products to investor demands while meeting their own funding needs.

### **Classification**

Structured floating-rate notes are debt instruments, and if owned by a nonresident are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). Any embedded derivative is regarded as an integral part of the note and not separately valued and identified.

### **Sukuk**

Sukuk are Islamic instruments that are issued by Islamic financial institutions. A distinguishing feature of Sukuk is that they are structured to be consistent with Islamic law, which does not allow the charging of interest. The holders are entitled to a share (rent) from the return on the underlying assets. Sukuk can be classified by type of underlying contract, such as Murābahah, Ijārah, Salam, Istisnā, Mushārakah, Mudārabah, and Wakalah.

### **Classification**

For the purpose of compiling external debt statistics, Sukuk should be classified as debt instruments, unless the owner of the security has a claim on the residual value of the issuing entity, and if owned by a nonresident are to be included in the gross external debt position. They should be classified as *long-term, debt securities (portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. For further details on the classification of Sukuk by type of underlying contract, see Annex 2 in the *Handbook on Securities Statistics, Part 1: Debt Securities Issues*.

### **Swaps**

A forward-type financial derivative contract in which two counterparties agree to exchange cash flows determined with reference to prices of, say, currencies or interest rates, according to predetermined rules. At inception, this instrument typically has zero market value, but as market prices change the swap acquires value.

### **Classification**

Swaps in which the counterparty is a nonresident are included in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### **Syndicated Loans**

A syndicated loan is a loan offered by two or more lending institutions on similar terms and conditions using common documentation and administered by a common agent. Also referred as a "Consortium Loan."

### **Classification**

Syndicated loans extended by nonresidents to residents are to be included in the gross external debt position as *loans (other investment* in the IIP). Alter-



natively, depending on the relationship between debtor and creditor, the debt could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

## T

### Total Return Swap

A credit derivative that swaps the total return on a financial instrument, cash flows and capital gains and losses, for a guaranteed interest rate, such as an inter-bank rate, plus a margin.

#### Classification

Total return swaps in which the counterparty is a nonresident are included in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with nonresidents by sector*).

### Trade Credit and Advances

Trade credit and advances consist of (1) credit extended directly by the suppliers of goods and services to their customers and (2) advances for work that is in progress (or is yet to be undertaken) and prepayment by customers for goods and services not yet provided (the debt is extinguished when the supplier provides the goods and/or services).

#### Classification

Trade credit and advances owed to nonresidents is to be included in the gross external debt position. Such credit should be classified as *trade credit and advances (other investment)* in the IIP). Alternatively, depending on the relationship between debtor and creditor, the credit could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). For the treatment of progress payments for high-value capital goods (see Part 2 of this appendix). The 2008 SNA and BPM6 regard *trade credit and advances* as a form of other accounts receivable/payable (2008 SNA, paragraph 11.126 and BPM6, paragraph 5.69).

### Treasury Bills

A common form of sovereign short-term debt; many governments of the world issue treasury bills. Typically issued through the central bank with maturities ranging from four weeks to two years, they are typically issued at a discount to face value and are redeemed at par.

#### Classification

Treasury bills are debt instruments, and so if owned by a nonresident are to be included in the gross external debt position. These bills should be classified as *short-term, debt securities (portfolio investment, debt securities)* in the IIP) unless they have an original maturity of more than one year, in which instance they are to be classified as *long term, debt securities*.

## U

### Use of IMF Credit and Loans

These comprise members' drawings on the IMF other than those drawn against the country's reserve tranche position. Low-income countries may borrow on concessional terms through the Extended Credit Facility (ECF), the Standby Credit Facility (SCF), and the Rapid Credit Facility (RCF). Non-concessional loans are provided mainly through Stand-By Arrangements (SBA), the Flexible Credit Line (FCL), the Precautionary and Liquidity Line (PLL), and the Extended Fund Facility (EFF). The IMF also provides emergency assistance via the Rapid Financing Instrument (RFI) to all its members facing urgent balance of payments needs. Detailed information on the use of IMF Credit and Loans is available at [www.imf.org/external/np/exr/facts/howlend.htm](http://www.imf.org/external/np/exr/facts/howlend.htm).

#### Classification

Use of IMF credit and loans is to be included in the gross external debt position and classified as *central bank, long term, loans (other investment, central bank, loans)* in the IIP), and/or *general government, long term, loans, (other investment, loans, general government)* in the IIP). Because of the particular accounting procedures of the IMF, the use of IMF credit might be considered to have some of the characteristics of a swap of currencies. However, since the IMF has lent in SDR terms, with payments in SDR terms, at an interest rate that is SDR-related, the recommended classification reflects the economic nature of the transaction—a loan.

## V

### Variable-Rate Bond

A bond whose interest payments are linked to a reference index (e.g., LIBOR), or the price of a specific commodity, or the price of a specific financial instrument that normally changes over time in a continuous manner in response to market pressures.

**Classification**

Variable-rate bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Variable-Rate Notes (VRNs)**

These securities adopted the standard characteristics of a variable-rate bond. However, whereas a standard characteristic of a variable-rate bond is that it carries a fixed spread over a referral index, the spread over LIBOR on a VRN varies over time depending on the change in the perceived credit risk of the issuer. The spread is reset at each rollover date—normally every three months—by means of negotiation between the issuer and arranging house. VRNs are usually issued with no maturity date (perpetual VRNs) but fixed five-year and longer-dated issues are in existence. VRNs generally have a put option for the existing holders of notes to sell the issue back to the lead manager of the issuing syndicate, at par, at any interest payment date.

**Classification**

VRNs owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3). The put option, embedded in the instrument, is not valued and classified separately.

**W****Warrants**

Warrants are a form of financial derivative giving the owner the right but not the obligation to purchase or sell from the issuer of the warrant a fixed

amount of an underlying asset, such as equities and bonds, at an agreed contract price for a specified period of time or on a specified date. Although similar to traded options, a distinguishing factor is that the exercise of the warrants can create new securities, thus diluting the capital of existing bond or shareholders, whereas traded options typically grant rights over assets that are already available. Warrants can be issued in their own right or with equity or bonds to make the underlying issue more attractive. They can be quoted and traded separately in the secondary market.

**Classification**

Warrants owned by nonresidents are to be included in Table 4.4 (memorandum table on *financial derivatives and employee stock options positions with non-residents by sector*).

**Z****Zero-Coupon Bonds**

A single-payment security that does not involve interest payments during the life of the bond. The bond is sold at a discount from par value, and the full return is paid at maturity. The difference between the discounted issue price and the face or redemption value reflects the market rate of interest at the time of issue and time to maturity. The longer the maturity of the bond and the higher the interest rate, the greater the discount against the face or redemption value. Zero-coupon and deep-discount bonds have four particular characteristics for investors:

- There may be some tax advantage in receiving a capital gain rather than an income payment
- There is no or little (deep-discount bond) reinvestment risk (the possibility that when coupon payments fall due, and need to be reinvested, interest rates will be lower)
- The bond has a longer “duration” than a bond of comparable maturity that pays fixed- or variable-rate interest, so making the zero-coupon bond’s price more sensitive to interest rate changes
- A zero-coupon bond is a leveraged investment in that a relatively small initial outlay gives exposure to a larger nominal amount

See also *Deep-Discount Bond*.

**Classification**

Zero-coupon bonds owned by nonresidents are to be included in the gross external debt position. They should be classified as *long-term, debt securities* (*portfolio investment, debt securities* in the IIP) unless they have an original maturity of one year or less, in which instance they are to be classified as *short-term, debt securities*. Alternatively, depending on the relationship between debtor and creditor, these securities could be classified as *Direct investment: Intercompany lending* (see the description of *direct investment* in Chapter 3).

**Part 2. Description and Classification of Specific Transactions**

This section discusses the classification treatment within the gross external debt position of specific transactions.

**B****Borrowing for Fiscal Purposes**

Borrowing for fiscal purposes refers to when a special purpose entity (SPE) or other entity owned or controlled by the general government is resident in another territory and borrows for fiscal purposes. Fiscal purposes can be distinguished because, unlike commercial purposes, they are always oriented to serving the fiscal objectives of the government, e.g., a government may use an SPE or other entity to issue securities to fund its expenditures. Special rules are introduced in *BPM6* in relation to this type of borrowing. At the time of borrowing by the SPE, a government's external debt liability to the SPE is imputed equal to the amount of the SPE borrowing (the corresponding entry is an increase in the government's equity in the SPE), which is only extinguished when the SPE repays its debt. These entries are made symmetrically for both the government and the borrowing entity. The imputations do not affect the transactions or positions between the borrowing entity and its creditors, which are recorded as they occur with no imputations. The imputed government's external debt liability is to be included in the gross external debt position, and classified as general government debt under the appropriate debt instrument.

**C****Collateralization of External Debt**

To provide additional assurance to the creditor, the debtor may set aside either financial assets or

future streams of income as collateral for the debt incurred. In other words, payments on the debt might be "backed" by future export earnings, such as receipts from petroleum sales, or the creditor may have a claim on certain financial assets held with third parties if the debtor defaults. Alternatively, the debtor might invest funds in a zero-coupon instrument that at maturity will equal the value of the principal debt incurred, which is then due for repayment. In all cases, external debt should be recorded gross, i.e., separately from the collateral. For instance, where the debtor has invested funds in a zero-coupon bond, both the external debt and the zero-coupon bond are recorded on a gross basis, the zero-coupon bond being an asset of the debtor. Also, when debt is contractually to be serviced by an income source of the debtor (e.g., future export earnings), the debtor continues to record the receipt of income and the payment of principal and/or interest even if the income is passed directly from "source" (e.g., the purchaser of the exports) to the account of the creditor, without directly involving the debtor. There may well be analytical interest in information on the value of external debt that has been collateralized, and in the type of financial asset or income stream used to back the external debt.

**Consignment Trade**

No debt is created for goods on consignment, i.e., goods intended for sale but not actually sold at the time of crossing a frontier, because ownership of the goods has not changed hands.

**D****Defeasance**

Defeasance is a technique by which a debtor unit 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. The *Guide* does not recognize defeasance as affecting the outstanding debt of the debtor as long as there has been no change in the legal obligations of the debtor. In other words, provided the payment obligations remain *de jure* with the original debtor, ownership of the liabilities remains unchanged, and should be reported as external debt of the original debtor. Defeasance may be carried out (1) by placing the paired assets and liabilities in a sep-

arate account within the institutional unit concerned or (2) by transferring them to another institutional unit. In the second case, debt defeasance leads to a change in the outstanding debt of the original debtor. If the two units are resident in the same economy, the sector classification of the debtor may change; if the second unit is resident of another economy a change in the gross external debt position of the economy of the original debtor will be recorded.

### Deposits Jointly Held by Residents and Nonresidents

Some financial instruments have owners who are residents of different economies. The allocation of joint bank accounts, or other cases in which an account holder authorizes relatives to withdraw funds from the account, may be unclear. By convention, deposits of emigrant workers in their home economies that are freely usable by family members resident in the home economies are treated as being held by residents of the home economy; therefore, they are not external debt liabilities of the home economy. Similarly, deposits of emigrant workers in the host economy that are freely usable by family members are treated as being held by a resident of the host economy; therefore, they are not external debt liabilities of the host economy (see *BPM6*, paragraph 4.145). Compilers may adopt another treatment if better information is available.

### Direct Investment: Intercompany Lending

Intercompany lending is used to describe direct investment debt positions between affiliated enterprises. It is not limited to loans. Intercompany lending is identified separately from other debt in the gross external debt position, and is classified under *Direct investment: Intercompany lending*. Although debt and other claims that do not involve voting power are not relevant to defining a direct investment relationship, they are included in direct investment transactions and positions if a direct investment relationship exists between the parties. Debt instruments—other than SDRs, interbank positions, and pension and related entitlements potentially—can be included in direct investment. Insurance technical reserves are included in direct investment when the parties are in a direct investment relationship. Debt between

selected affiliated financial corporations is not classified as direct investment because it is not considered to be so strongly connected to the direct investment relationship. The financial corporations covered by this exception are: (1) deposit-taking corporations (both central banks and deposit-taking corporations, except the central bank); (2) investment funds; and (3) other financial intermediaries, except insurance corporations and pension funds (see *BPM6*, paragraph 6.28).

## F

### Fees on Security Lending and Gold Loans

Securities (equity or debt) and monetary gold are financial instruments, and thus, the fees for securities lending without cash collateral and gold loans are payments for putting a financial instrument at the disposal of another institutional unit. Accordingly, fees on securities lending and gold loans accrued to the security/gold owner are treated as interest (see *BPM6*, paragraph 11.68). The ability of the “borrower” to on-sell the securities (or gold) reflects that legal ownership is transferred to the borrower, while the economic risks and benefits of ownership remain with the lender (original owner). In return, the “lender” receives a fee from the “borrower” for the use of the security. In general, interest accrued and not yet payable, should be recorded with the financial liability on which it has accrued. However, for securities lending and gold loans fees, which are treated as interest by convention, the corresponding entries are classified in the gross external debt position as *other debt liabilities (other investment, other accounts receivable/payable-other* in the IIP) rather than with the instrument to which they relate.

### Financial Intermediation Service Charges Indirectly Measured (FISIM)

In line with *2008 SNA*, the concept of FISIM is introduced in *BPM6*. Actual interest can be seen as including both an income element and a charge for a service. FISIM is the financial service compensated for by the margin between interest rate payable and the reference rate on loans and deposits involving financial corporations, even when lending their own funds (see *BPM6*, paragraphs 10.126–127). Therefore, actual interest payable by borrowers is partitioned

between a pure interest charge at the reference rate and the implicit service charge made by financial corporations. By convention, FISIM applies only to loans and deposits provided by, or deposited with, financial corporations. *BPM6* recommends that accrued interest not yet paid should be included in the outstanding amount of the financial asset or liability, rather than being classified separately (such as in other accounts receivable/payable-other), and that accrued interest not yet paid also includes FISIM accrued and not yet paid (see *BPM6*, paragraph 7.41). Thus, the generation of FISIM does not affect the gross external debt position. Interest due and not paid (arrears) recorded in the appropriate instrument also includes FISIM due and not paid. Interest payments recorded in the debt-service payment schedule include any FISIM element (see Chapter 6, footnote 19).

### Financial Leases: Treatment of Residual Values

As explained in Chapter 3, under a financial lease, ownership of the underlying item is considered to have changed hands because the risks and rewards of ownership have, de facto, been transferred from the legal owner to the user; this de facto change of ownership is financed by a financial claim, which is the asset of the lessor and a liability of the lessee. However, even though the rentals may enable the lessor over the period of the contract to recover most of the costs of goods and the carrying charges, there may be a residual amount. The lessee may have an option to pay the residual value to gain legal ownership of the underlying item. How should the residual amount be recorded?

The residual amount is part of the debt obligation that arises when the goods are assumed to have changed ownership. In other words, under statistical convention, the debt at the inception of the lease is defined as the full value of the good, inclusive of the residual amount. This debt obligation is recorded as a *loan*. The loan liability arising from the residual value is extinguished either when the goods are returned or when a payment is made and legal ownership changes hands. (see *BPM6*, Appendix 6b, Box A6b. I for a numerical example of financial lease).

This issue also raises the question of whether there is a point at which the residual value is such a large

percentage of the total value of the goods that the lease should be regarded as operational and not financial. There is no firm percentage; rather, these arrangements are determined more by their nature. When a lease is a financial arrangement, it is usually evident from the roles and obligations of the transactors, e.g., the lessee is responsible for repairs and maintenance, and the lessor is a financial institution, etc. (see also *BPM6*, paragraph 5.57).

Fundamental to the assumption of a change of ownership is the idea that, de facto, the lessee assumes the risks and rewards of ownership from the legal owner. But if there is option rather than agreement to purchase the residual value, or if it is agreed that the lessee will pay a market price for the residual amount, the greater the percentage size of the residual amount at inception, the more diminished the extent to which the de facto risks and rewards of ownership can be said to have changed hands.

## G

### Guaranteed External Debt

The provision by one institutional unit of a guarantee to make future debt-service payments to a non-resident creditor if certain conditions are met, such as a default by the debtor, does not negate the claim the creditor has on the debtor. Thus, the debtor on whom the nonresident creditor has a claim, and not the guarantor, should record an external debt liability, unless and until the guarantor assumes the external debt. Chapter 8 provides guidance on the classification of debt assumption.

## I

### Islamic Banking<sup>2</sup>

Activities of Islamic financial institutions differ from those of standard commercial depository corporations in that predetermined interest on financial transactions is prohibited. As is evident from the definition of external debt in Chapter 2, the nonpayment of interest on liabilities does not in itself preclude instruments from being classified as external debt.

<sup>2</sup>Islamic banking is described in detail in Appendix 2 of the IMF's MFSM (IMF, 2000), and in Annex 2 of the *Handbook of Security Statistics, Part I: Debt Securities Issues* (BIS, ECB, and IMF, 2009).

The classification of Islamic banking instruments as external debt, or not, can be determined by the following general guidance.

*Islamic instruments—deposits* include conventional and transferable deposits, such as Amanah and Qardhasan deposits—as well as various investment participation certificates that are not investments in the permanent capital of a financial institution and do not have the characteristics of negotiable securities.

*Islamic instruments—debt securities* consist of various investment participation certificates that have the characteristics of negotiable securities and are not an investment in the permanent capital of the issuer. Included in this category are the most negotiable investment certificates recorded as liabilities of a financial corporation.

*Islamic instruments—loans* cover arrangements in which a financial institution makes prepayments for clients, finances ventures or trade, or supplies working capital to clients. The arrangements may include short-term or other partnerships in which a financial institution is not making permanent, equity-type investments.

## L

### Lending to the Fund

The IMF maintains two standing multilateral borrowing arrangements—the expanded New Arrangements to Borrow (NAB) and the General Arrangements to Borrow (GAB). If the IMF considers that its forward commitment capacity might fall short of its member countries' needs, e.g., in the event of a major financial crisis, it can activate these arrangements.

The GAB is a long-standing credit arrangement under which 11 advanced economies stand ready to loan domestic currency to the IMF for the purpose of forestalling or addressing situations that could impair the international monetary system. The NAB is a set of credit arrangements with selected member countries, who stand ready to lend to the IMF. A contingent claim results from participation in the NAB or GAB, equal to the undrawn amount of credit. As noted, the IMF may require a member who participates in the NAB or in the GAB to lend to the IMF at short notice. When funds are actually lent, the member obtains a claim on the IMF that qualifies as a reserve asset, and should be included in the reserve position in the

Fund. For more information on NAB and GAB see [www.imf.org/external/np/exr/facts/gabnab.htm](http://www.imf.org/external/np/exr/facts/gabnab.htm) and the update of the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template*, Appendix 8 (IMF, 2013).

In response to the financial crisis and following a call by the International Monetary and Financial Committee (IMFC) in April 2009, the IMF took a number of actions aimed at substantially increasing its lending resources. Additional arrangements under the umbrella of the General Resources Account include Bilateral Loan Agreements (BLA)—an agreement under which an IMF member commits to lending funds, usually in its domestic currency, up to an agreed limit, to the IMF, upon demand by the IMF—and Note Purchase Agreements (NPA)—an agreement under which an IMF member commits to purchasing an IMF promissory note from the IMF on demand, up to an agreed limit. Regarding Notes, two classes of notes were designed under the NPAs, Series A and Series B Notes.

## M

### Merchanting of Goods

Merchanting is defined as the purchase of goods by a resident of the compiling economy from a nonresident combined with the subsequent resale of the goods to another nonresident without the goods being present in the compiling economy (see *BPM6*, paragraph 10.41). For goods under merchanting, the acquisition of goods and the sales of goods are recorded at the time the change in economic ownership of goods occurs. External debt liabilities with nonresidents may arise from the external financing of goods under merchanting, in which case they should be included in the gross external debt position under the appropriate debt instrument.

### Monetary Gold

Monetary gold is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title and is held as reserve assets. Monetary gold includes gold bullion and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. Gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts. See *Gold Accounts: Allocated and Unallocated*, in this appendix, Part 1.

Gold bullion included in monetary gold is a financial asset for which there is no corresponding liability, so no liability is included in external debt. Unallocated gold accounts do have a counterpart deposit liability (see paragraph 3.30). Unallocated gold account liabilities to nonresident monetary authorities are included in external debt.

### **Multiterritory Enterprises**

A multiterritory enterprise has substantial activity in more than one economy and it is run as an indivisible operation with no separate accounts or decisions, so that no separate branches can be identified. Such enterprises may have operations including shipping lines, airlines, hydroelectric schemes on border rivers, pipelines, bridges, tunnels, and undersea cables. For multiterritory enterprises, it is necessary to prorate the total operations of the enterprise, as well as the enterprise's gross external debt position, into the individual economies. The factor used for prorating should be based on available information that reflects the contributions to actual operations, e.g., equity shares, equal splits, or splits based on operational factors such as tonnage or wages (see *BPM6*, paragraph 4.43) could be considered. Compilers in each of the territories involved are encouraged to cooperate in order to develop consistent data, avoid gaps, and minimize respondent and compilation burden, as well as assist counterparties to report bilateral data on a consistent basis.

## **N**

### **Nonresident Deposits**

Because of exchange control or other restrictions, nonresident deposits in domestic banks may not be transferable out of the economy. Such restrictions may be introduced after the deposits have been made or may have been established when the accounts were opened. All such nonresident deposit claims on resident banks should be classified as external debt. Nonetheless, if the amounts are significant and are of analytical interest in their own right, it is recommended that additional information be provided.

## **O**

### **On-Lending of Borrowed Funds**

An institutional unit within an economy might borrow funds from a nonresident(s) and then on-lend

the funds to a second institutional unit within the economy. In such instances, the first institutional unit, i.e., the institutional unit that borrowed from the nonresident(s), should record an external debt liability, with any subsequent on-lending classified as a domestic claim/liability. As set out in Chapter 2, the decisive consideration is whether the creditor has a claim on the debtor, and in this example the nonresident creditor has a claim on the first institutional unit.

If an institutional unit within an economy borrowed from a nonresident(s) and on-lent the funds to a nonresident, the unit should record both external debt and an external claim. The nonresident borrower would also record an external debt liability in that economy's measure of external debt.

### **Overnight Deposits**

Overnight deposits (or sweep accounts) involve funds that are moved back and forth overnight. In some cases, these overnight accounts are a liability to a nonresident. The funds are returned at the beginning of the next working day and may then be moved back at the close of business. Positions should be measured at the end of the day after the funds are moved from the first to the second economy and not after they are returned to the first economy the next working day. The calculation of external liability positions can differ substantially depending on whether they are measured before, or after, funds are moved. By measuring positions after the funds have been moved, consistency is ensured between the measure of interest flows and of positions. In addition, major data users are interested in the size and location of these stocks for risk assessment and other purposes.

## **P**

### **Part-Payments for Capital Goods**

*See Progress Payments for High-Value Capital Goods.*

### **Penalties Arising from Commercial Contracts**

Under the terms of a commercial contract, one party (resident) may be required to compensate another party (nonresident) (i.e., pay a penalty) in the event of the first party failing to meet its obligations, or some of its obligations, under the contract. Once the penalty is owed and until it is paid to the nonresident,

it is external debt, and recorded under other debt liabilities. The debt should be recorded from the time when the resident becomes liable under the contract for the penalty.

### Prepayments of Goods and Services

When an importer makes a prepayment to an exporter for goods and services, the exporter has a liability to the importer that remains outstanding until ownership of the goods changes hands or the service is provided. Similarly, when an importer makes a postpayment some time after he acquires goods or services, the importer has a liability to the exporter that remains outstanding until the postpayment is made. These liabilities should be recorded as debt liabilities because future payments are required; in the case of the prepayment, the principal amount outstanding is repaid in goods or in a service provided, whereas in the case of the postpayment, it is likely that a financial payment will be made, although in the instance of barter, goods or services may be provided to extinguish the debt. Unless the prepayment is for more than one year hence, these debt liabilities should be recorded as *short term, trade credit and advances*.

### Processing of Goods

Manufacturing services on physical inputs owned by others—known as goods for processing—covers processing, assembly, labeling, packing, etc., undertaken by enterprises that do not own the goods concerned but are paid a fee by the owner. In these cases, the ownership of the goods does not change, so no general merchandise transaction is recorded between the processor and the owner. Therefore, there are no corresponding imputed liabilities related to these transactions to be recorded because there is no imputation of a change of ownership of the goods. In other words, external debt liabilities recorded under trade credit and advances (or under *Direct investment: Intercompany lending*, if applicable) are not required for goods for processing.

### Progress Payments for High-Value Capital Goods

The production of high-value capital goods such as ships, heavy machinery, and other structures may take several months or years to complete. In *BPM6*, when a contract of sale is agreed in advance for the

construction of such products, a progressive change of ownership may occur for the work-in-progress. When the contract calls for stage payments (progress payments, also known as part-payments), the transaction values may often be approximated by the value of the stage payments made each period, although a difference in timing between the change of ownership and progress payment may give rise to trade credit and advances. Therefore, progress payments are not to be recorded as trade credit and advances debt of the exporter, unless there is a difference in timing between the change of ownership and progress payments.

### Project Loans: Disbursements

Disbursements of project loans can take the following form:

- Advances to the borrowing entity—disbursements are to be recorded when the lender advances funds to the borrower
- Direct payment by the lender to suppliers of goods and services—disbursements are to be recorded when the lender pays the supplier
- On a reimbursement basis after the borrower has already paid the suppliers—disbursements are to be recorded when the lender makes reimbursements to the borrower

### Public-Private Partnerships (PPPs)

Public-private partnerships (PPPs) typically involve the government and a private corporation agreeing to a long-term contract under which the private corporation constructs and operates fixed-assets of a kind that are usually the responsibility of the general government sector, or public corporations. These commonly include, e.g., roads, bridges, water supply and sewerage treatment works, hospitals, prison facilities, electricity generation and distribution facilities, and pipelines. In many such instances, such transactions are likely to be classified as resident to resident, particularly if the private corporation creates a separate unit to construct and/or operate the asset (although in such instances that unit may incur external debt liabilities to its nonresident parent, which need to be recorded).

If the private sector corporation is a nonresident, the classification of the transactions as external debt



depends on who is the economic owner of the fixed asset during the contract period and the nature of the contract. PPPs projects are often complex and the specific contract needs to be taken into account. Detailed advice on different arrangements, with numerical examples, is provided in the *PSDS Guide* (paragraphs 4.123–4.126). For the purposes of this *Guide* some general principles for recording external debt are provided:

- Where an asset is constructed by, and the economic ownership remains with, a nonresident private corporation until transferred to government on completion of the contract, any prepayments for the asset by the government are claims on a nonresident enterprise, i.e., external debt of the private nonresident corporation. If the government only pays the private nonresident corporation and obtains economic ownership on completion, and needs to borrow abroad to finance this purchase, then the government will incur external debt when it borrows.
- Where there are lease arrangements between the government and a nonresident private corporation, these are classified in the normal way as operating or financial leases, and hence external debt or not, depending on whether the government or private corporation gains most of the risks and benefits of ownership as a result of the contracts entered into. For instance, if the private corporation continues to legally own the asset but the government makes payments both to cover the costs of operating the asset and to meet the financing costs, then a financial lease, and hence external debt, arises for the government and should be recorded as such.
- If the government is assessed as the economic owner of the asset during the contract period but does not make any explicit payments to the private nonresident corporation, a financial lease is imputed, hence external debt for the government (see also *PSDS Guide*, paragraph 4.125).

As with all financial leases, at the time of effective change of ownership, the market value of the good is recorded and represents the external debt of the government. The payments to be made need to be separated into operating and financing costs. If a market value is available, the total amount paid in financing

costs over the life of the lease in relation to that price will determine the implicit rate of interest on the loan. Otherwise, the financing costs discounted by a representative interest rate of the government—the present value of the finance payments—could represent the market value of the asset in the absence of other information, and generate data on the future interest and principal payments—examples 1 and 2 in the appendix of Chapter 2, provide calculations that illustrate the principles involved.

## R

### Reinsurance

Positions arising from reinsurance are treated in the same way as those arising from insurance.

For reinsurance relating to life insurance, any technical reserves held by insurance companies that are assets of nonresident policyholders are external debt of the insurance company. As with claims of households in life insurance companies, any such external debt should be included under *other debt liabilities* in the gross external debt position.

For nonlife insurance, prepayment of premiums by nonresidents, and reserves held against claims of nonresidents that have arisen, are also external debt. In both instances, any such external debt is included under *other debt liabilities* (see also *Insurance, Pension, and Standardized Guarantee Schemes* in Part I of this Appendix above).

### Repurchase Agreements: Delay in Returning the Security

If the security taker fails to return the security to the security provider, then the recording treatment depends on whether the failure is simply a delay or whether there is a default. If the failure is due to a delay (e.g., the result of another party in the chain of repo securities being unable to access the specific security at that particular date), it has no impact on the gross external debt position, although in line with common market practice the security provider may retain the funds without paying any interest. If there is a default, usually under the terms of the reverse agreement the security provider's loan liability to the security taker is extinguished—the security taker no longer has a claim on the security provider. If the security provider defaults on returning the cash, then the security pro-

vider's security holdings fall, and those of the security taker increase, and the loan is extinguished. In either event, because the security provided is likely to be of greater value than the cash provided, residual claims may still continue to exist.

### Reserve Position in the IMF

Reserve position in the IMF is a component of *reserve assets* and is the sum of (1) the “reserve tranche,” i.e., the foreign currency (including SDRs) amounts that a member country may draw from the IMF at short notice; and (2) any indebtedness of the IMF (under a loan agreement) in the General Resources Account that is readily available to the member country, including the reporting country's lending to the IMF under the General Arrangements to Borrow (GAB) and the New Arrangements to Borrow (NAB). (See *BPM6*, paragraphs 6.85 and 7.77–7.78 for more information).

## S

### Sovereign Wealth Funds

Some governments create special purpose government funds, usually called sovereign wealth funds (SWFs). Created and owned by the general government for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies which include investing in foreign financial assets. The funds are commonly established out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports (see *BPM6*, paragraphs 6.93–6.98 for more information on SWFs).

The classification of an SWF controlled by government in the general government or financial corporations sectors is determined according to the criteria set out in *BPM6*, paragraph 4.92, i.e., government-controlled enterprises that (1) produce market output

(i.e., charge prices that are economically significant), and (2) have complete sets of accounts, are excluded from general government and are included as public enterprises in the financial corporations sector—in the case of SWFs. If the fund is an entity incorporated abroad or is a quasi-corporation located abroad, it is classified as a separate institutional unit in the financial corporations sector resident in its economy of incorporation.

## T

### The Value of Debt After Consolidation Is Greater Than the Value of the Consolidated Debts Combined

If the terms of a loan are changed, a new contract is created. Thus, if two or more old debts are consolidated into one debt, the new debt replaces the two or more old debts and is classified by type of instrument (loan, security, etc.). If the total value of the new debt is greater than the old debts combined, e.g., because of extra charges arising from rescheduling, the gross external debt position increases.

### Trading of Non-negotiable Instruments that are Recorded at Nominal Values in Positions

Nominal valuation is used for positions in nonnegotiable instruments—such as loans, deposits, and trade credit and advances (see paragraph 2.38). However, nonnegotiable debt instruments may be sold—without becoming negotiable instruments—by the creditor to a third party, with the sale value often being less than the nominal value, because, for instance, the market price takes account of the possibility of default. Where there is a difference between the sale value and the nominal value of the instrument, the debt instrument continues to be recorded at the nominal value in external debt statistics. For the new creditor, the difference in value is recorded as a revaluation in the flow data (see *BPM6*, paragraph 9.33).



## Appendix 2. Reverse Security Transactions

### Introduction

1. A reverse securities transaction is defined in the *Guide* to include all arrangements whereby one party legally acquires securities and agrees, under a legal agreement at inception, to return the same or equivalent securities on or by an agreed date to the same party from whom the securities were acquired initially.<sup>1</sup> These arrangements are known as repurchase agreements (repos), securities lending, and sell-/buybacks.<sup>2</sup> Where cash is involved, the economic nature of the agreement is similar to that of a collateralized loan in that the purchaser of the security is providing funds collateralized by the securities to the seller for the period of the agreement and is receiving a return from these funds through the agreed fixed price at which the securities are resold when the agreement is reversed.

2. As outlined in Chapter 3, securities that are provided under a reverse securities transaction are reported as remaining on the balance sheet of the security provider. The supply and receipt of funds under a security repurchase agreement is treated as a loan or deposit. It is a loan, unless classified as a deposit in national measures of broad money. If a securities repurchase agreement does not involve the supply of cash (i.e., there is an exchange of one security for another, or

one party supplies a security without collateral), there is no loan or deposit. If the security taker sells outright these securities so acquired, the security taker reports a negative (or “short”) position in the security.

3. This appendix provides background information on reverse security transactions and four examples of how these positions should be recorded in the gross external debt position.

### What Are These Instruments?

#### Repurchase Agreements (Repos)

4. Under a repo, securities are provided for cash with a commitment by the seller (security provider) to repurchase the same or similar securities for cash at a fixed price on a specified future date. The security taker views the transaction as a *reverse repo*. The security taker earns interest on the cash advanced through the difference between the selling and buying rates for the securities; interest is related to the current interbank rate and not that of the security being “repoed”.<sup>3</sup> Full, unfettered ownership passes to the security taker, who can on-sell the security, but the market risk—the benefits (and risks) of ownership (such as the right to holding gains—and losses)—remains with the security provider, who also receives the property/investment income attached to the security, albeit from the security taker rather than the security issuer, i.e., the commitment to reverse the change in legal ownership in the future at a fixed price means that the original owner retains the risks and rewards of changes in the price of the asset. Originally, it was intended that the security taker’s right to on-sell would be invoked only

<sup>1</sup> The commitment to repurchase may be either on a specified future date (often one or a few days hence, but also further in the future) or an “open” maturity.

<sup>2</sup> Repos, securities lending with cash collateral, and sale-/buybacks are different terms for arrangements with the same economic effect as a securities repurchase agreement—all involve the provision of securities as collateral for a loan or deposit. A repo is used as a term from the perspective of the security provider, while a reverse repo is used from the perspective of the security taker. Sell-/buybacks are the same as repos in economic effect, but are less sophisticated operationally. If the seller acquires an option rather than an obligation to buy back the security, the arrangement is sometimes called a *spurious repurchase agreement*. Such a transaction is not considered to be a reverse security transaction in the *Guide*.

<sup>3</sup> In the event that a coupon payment is made during the life of the repo, this is taken into account when determining the funds to be repaid. However, market participants endeavor to avoid such a situation if possible.

in the event of a default by the security provider, but as the market has developed, the right to on-sell at the security taker's option has become commonplace.

5. Repos are actively used in international financial markets. They often have a very short overnight maturity, but are also for longer maturities (sometimes up to several weeks), or have an “open” maturity (i.e., the parties agree daily to renew or terminate the agreement). Several different types of institutions are involved. Most commonly, financial institutions transact with other financial institutions, both domestic and nonresident, and central banks with domestic financial institutions and other central banks. However, nonfinancial enterprises and governments may also use repos.

6. Repos are undertaken for a variety of reasons:

- To finance security purchases, i.e., the security provider acquires a security outright and then sells it under a repo to help finance the position
- To increase liquidity by raising funds while retaining exposure to market price movements in the security, i.e., the security provider may want a longer-term position in the security but may also require cash in the short term
- To acquire securities in order to cover a negative (or “short”) position, i.e., the security taker takes a negative position in the security, thus benefiting from market price declines
- To take leverage positions in securities through a program of buying securities, repoing them out, purchasing more securities with the cash acquired and so on, with only the requirement for margins limiting this activity, i.e., the security provider creates a large positive exposure to movements in the price of the securities without having to fully fund this exposure with own funds
- Central banks use repos as an operational tool to ease or drain liquidity in the domestic financial markets—in many countries, the repo rate (the rate paid by the borrower in a repo transaction) is the benchmark rate for central bank market lending

7. Chains of repos and reverse repos are common practice in financial markets as highly creditworthy market players raise funds at lower rates than they

are able to on-lend. In this manner, the repo market is part of broader financial intermediation activity.<sup>4</sup> The development of repo markets can increase the liquidity of a money market while, at the same time, deepening the market for the underlying securities used (frequently government securities, but not necessarily), leading to finer borrowing rates both for money market participants and governments.

8. Usually, the security provider in a repo is the initiator of the transaction, which tends to place the security taker in a slightly stronger negotiating position. These are called “cash-driven” repos. In these circumstances, the security provider is not required to provide a specific security—a list of acceptable securities is generally available. Frequently, substitution of the security is permitted during the life of the repo, i.e., the security provider may wish to access the security repoed and so usually is permitted to do so by substituting it for another of equal quality (generally, one on the list of acceptable securities). The right to substitute securities will usually affect the rate of interest charged on the repo.

9. In certain circumstances, one party may have need for a specific type of security. These transactions are known as “securities-driven” repos. They result when a particular security goes “special”, i.e., is in very high demand and there is insufficient supply to meet commitments. In these circumstances, cash is provided as collateral (noncash collateral is discussed under *Securities Lending*, below) and the security provider is in a stronger bargaining position. In essence, when a security-driven transaction takes place, the security provider is prepared to accept cash in return for the security “lent,” provided that the provider can be compensated for the risk of lending by obtaining a sufficient spread between the interest to be paid on the cash received and what can be earned in the money market. In extreme cases, when the security may be unavailable from any other source, the interest rate on the cash received may fall to zero.

<sup>4</sup>Repo market players may have matched or unmatched books: in a matched book, maturities of all repos out are the same as those for repos in; in an unmatched book, the maturities differ, in which case the market player is speculating on movements in the yield curve.

10. Whether a transaction is cash-driven or securities-driven will affect which party pays *margin*. Margin payments provide one party with collateral of greater market value than the instrument being provided—the term “haircut” is sometimes used to describe this difference. Margin payments may be made at the outset—known as *initial margins*—and during the life of a repo—known as *variation margin*.<sup>5</sup> As the market value of the collateral falls, so variation margin is paid, restoring the margin to its original market value. If the transaction is cash-driven, the security provider will provide the margin; if the transaction is securities-driven, the security taker will provide the margin. Margin may be cash or securities.

11. Market and credit risk affect the amount of margin provided. The market risk is that of the underlying security—the more variable the market price of the security, the greater the margin; the credit risk is that of the two counterparties to the repo to each other—the greater the perceived credit risk of the margin provider, the higher the margin. In both instances, the higher margin protects the margin taker against the higher probability of adverse developments. Because each party at the inception of a repo is equally exposed to risk, in many developed financial markets, initial margin may not be required if the credit standing is approximately equal (monetary authorities usually ask for initial margin and rarely, if ever, pay initial margin), but variation margin is usually provided when the market price of the security falls. On the other hand, when the value of the security rises, the security taker may or may not return part of the security’s value as a “reverse variation margin,” depending on the market’s practices in any given country. In less developed capital markets, and depending on the depth and price volatility of the market of the security underlying the repo, initial margins of substantially more (possibly up to 25 percent) than the value of the cash provided may be required.

12. The legal and market arrangements for repos, including the payments of margin (whether initial or variation), the ability to substitute securities, and the retention of market risk by the security provider, support the view that repos are classified as loans, with the

security remaining on the balance sheet of the security provider, i.e., there is considered to be no change of economic ownership of the security. This is certainly the way repos are viewed by market participants. On the other hand, given the change of legal ownership of the security, some argue that a security transaction should be recorded—the security provider no longer has a legal claim on the security issuer. In Chapter 4 a memorandum table to the gross external debt position is provided that can be used to present data on resident-issued debt securities that residents (1) provided to and (2) acquired from nonresidents under outstanding reverse transactions, including repo agreements. This table helps in tracking the change of legal ownership of these debt securities between residents and nonresidents and, more generally, the positions acquired under reverse transactions.

### Securities Lending

13. Under a *securities lending agreement*, securities are provided under a legal agreement that requires the security taker to return the same or similar securities on or by an agreed date to the same party from whom the securities were acquired initially. No cash is provided by the security taker to the security provider in return for the acquisition of the securities, although a fee may be paid by the security taker and collateral provided (as in the form of other securities). If cash collateral is provided, the transaction has the same economic impact as a repo.

14. As with repos, full, unfettered legal ownership passes to the security taker, who can on-sell the security, but the market risk—the benefits (and risks) of ownership (such as the right to holding gains—and losses)—remains with the original owner of the security, who also receives the property/investment income attached to the security, albeit from the security taker rather than the security issuer. Therefore, there is no transaction in securities and—if no cash is involved—there is no loan. Because securities lending is a securities-driven activity, so the security taker initiates the transaction, which means that the bargaining advantage lies with the “lender” of the security. The level of the fee charged depends on the availability of the security. The payment may be made at inception or at the close out of the contract. In most cases, the original security owner considers the arrangements to

<sup>5</sup> Sale-/buybacks do not have margin payments.

be temporary and does not remove the securities or include the collateral on its balance sheet, since the owner retains the rights to any dividends or interest while the securities are on loan, albeit from the security taker rather than the security issuer.<sup>6</sup>

15. Security loans are actively used in financial markets. In many cases, the transfer of securities between holders is conducted by security depositories. The security owner will provide the depository with the general right to on-lend the securities subject to certain legal safeguards. As a consequence, frequently the owner of the security will be unaware that the security it owns has been sold under a securities loan agreement.

16. The primary purposes of securities lending are:

- For the security taker, the security is acquired in order to meet a commitment to sell the security, i.e., to cover a negative (or “short”) position. The security taker can take leverage positions by selling securities it does not own and then covering the position with securities acquired under securities loans.
- For the security provider, the fee paid by the security taker generates income—the owner has a long-term position in the security, but through a securities loan earns additional income.
- The depository can earn extra fee income, which might be partially passed on to the security owner through lower custodial fees. The depository is more likely to be able to manage the collateral provided by the security taker than the security owner, who, in return for allowing securities to be lent, may pay lower custodial fees and not have the responsibility of managing the collateral provided.

17. Like repos, chains of securities lending can be established whereby brokers successively on-lend securities to brokers, dealers, or other parties. The lending chains are reversed when the securities are returned. Securities lending involves securities that may be issued by residents or nonresidents, by governments

or by corporations, and can be either equities or debt instruments. Securities lending increases liquidity in the securities market as well as the timeliness of some trade settlements—especially for securities that trade infrequently or in small volume.

18. The securities taker will usually provide collateral in the form of other securities of equal or greater value to the securities “lent,” providing initial margin, although in some instances no collateral is provided. If cash collateral is provided, the transaction has the same economic impact as a repo (discussed above). If the market value of securities placed as collateral falls relative to the value of the securities “loaned,” the securities taker is usually required to place variation margin, to restore the relative position. If the value of the securities placed as collateral increases, the securities provider may or may not be required to return part of the collateral, depending on country practice.

19. Because of the requirement for the securities to be returned, the payments of margin, the retention by the original security owner of the market risks of the securities, and the right to receive income payments on the security, securities lent under security loans remain on the balance sheet of the original owner. If a security taker sells the security acquired under a security loan, a negative (or “short”) position is recorded in the security, reflecting the obligation to return the security to the security provider. As noted above, Chapter 4 provides a memorandum table to the gross external debt position that can be used to present data on resident-issued debt securities that residents (1) provided to and (2) acquired from nonresidents under outstanding reverse transactions, including security lending agreements.

## Recording Examples

20. To help compilers, some examples are set out in Table A2.1 of how different types of reverse security transactions should be recorded in the gross external debt position and in the memorandum table, when debt securities are involved.<sup>7</sup> These examples show the change in the position when resident-issued debt

<sup>6</sup>In instances where equities are loaned, the period of the loan usually avoids coinciding with a shareholders’ meeting, or any other instance where voting rights are required to be exercised (such as for a takeover bid). However, it is not always possible to know when these situations will arise, and the arrangements usually permit the return of the equities to the original owner in such circumstances.

<sup>7</sup>When equity securities are involved in reverse security transactions, external debt is affected only if the equity securities are used as collateral to raise cash from a nonresident. In this instance, a loan is recorded.

Table A2.1 External Debt: Recording of Reverse Security Transactions

Transaction	Change in the Gross External Debt Position		Memorandum: Debt Securities Acquired Under Reverse Security Transactions: Change in the Position	
	Debt securities (+ = increase)	Loans (+ = increase)	Acquired by nonresidents from residents (+ = increase)	Acquired by residents from nonresidents (- = increase)
<b>Example 1: Repurchase agreement (repo)</b>				
(a) Resident of A sells the security under a repo to a nonresident.	—	+95	+ 100	—
(b) Following 1(a), the nonresident sells the security under a repo to another resident of A.	—	+95	+100	-100
(c) Following 1(a), the nonresident sells the security under a repo to another nonresident.	—	+95	+100	—
(d) Following 1(a), the nonresident sells the security outright to a resident of A.	-100	+95	+100	—
(e) Following 1(a), the nonresident sells the security outright to another nonresident.	—	+95	+100	—
<b>Example 2: Repurchase agreement (repo)</b>				
(a) Resident of A buys the security under a repo from a nonresident.	—	—	—	-100
(b) Following 2(a), the resident sells the security under a repo to another resident of A.	—	—	—	-100
(c) Following 2(a), the resident sells the security under a repo to a nonresident.	—	+95	+100	-100
(d) Following 2(a), the resident sells the security outright to another resident.	—	—	—	-100
(e) Following 2(a), the resident sells the security outright to a nonresident.	+100	—	—	-100
<b>Example 3: Security loan</b>				
(a) Resident of A “sells” the security under a security loan to a nonresident.	—	—	+100	—
(b) Following 3(a), the nonresident “sells” the security under a security loan to another resident of A.	—	—	+100	-100
(c) Following 3(a), the nonresident “sells” the security under a security loan to another nonresident.	—	—	+100	—
(d) Following 3(a), the nonresident sells the security outright to a resident of A.	-100	—	+100	—
(e) Following 3(a), the nonresident sells the security outright to another nonresident.	—	—	+100	—
<b>Example 4: Security loan</b>				
(a) Resident of A “buys” the security under a securities loan from a nonresident.	—	—	—	-100
(b) Following 4(a), the resident “sells” the security under a security loan to another resident of A.	—	—	—	-100
(c) Following 4(a), the resident “sells” the security under a security loan to a nonresident.	—	—	+100	-100
(d) Following 4(a), the resident sells the security outright to another resident of A.	—	—	—	-100
(e) Following 4(a), the resident sells the security outright to another nonresident.	+100	—	—	-100

securities are acquired by a nonresident from a resident, or vice versa, under a reverse security transaction. In all these examples, it is assumed that debt securities involved in the transactions are valued at 100, and any cash provided is valued at 95. Each example involves a transaction in a debt security issued by a resident of A. Each example specifies an initial transaction, followed by different subsequent transactions. For each subsequent transaction, the recorded entries include both the initial

transaction and the subsequent transaction. So, the entries, e.g., 1(b) include both the sale of the debt security under a repo by a resident of A to a nonresident (1(a)), and the subsequent sale under a repo by the nonresident to another resident of A (1(b)); the entries, e.g., 1(c) include both the sale of the debt security under a repo by a resident of A to a nonresident (1(a)), and the subsequent sale under a repo by the nonresident to another nonresident (1(c)).





## Appendix 3. Glossary of External Debt Terms

### A

#### Acceleration Clause

Concessional loans from multilateral institutions include an acceleration clause that is triggered when a country becomes creditworthy for International Bank for Reconstruction and Development (IBRD) borrowing and its per capita gross national income (GNI) reaches or exceeds the operational cutoff for the International Development Association (IDA) eligibility for three consecutive years. The acceleration clause will double the size of each repayment, effectively reducing the remaining maturity in half.

#### Accrual of Interest Costs

Continuous recording of interest costs, so matching the cost of capital with the provision of capital.

#### Affiliates

Enterprises related through direct investment relationships. Consist of the *direct investors (s)*, both immediate and indirect; the *direct investment enterprises*, whether subsidiaries (including branches and other quasicorporations), associates, and subsidiaries of associates, both immediate and indirect; and *fellow enterprises*, i.e., those enterprises that are under the control or influence of the same immediate or indirect investor, but neither fellow enterprises controls or influences the other fellow enterprises. Affiliates are also known as “affiliated enterprises” because they are almost always enterprises.

#### Agreed Minute

*Paris Club* document detailing the terms for a *debt rescheduling* between *creditors* and the *debtor*. It specifies the coverage of *debt-service* payments (types of debt treated), the *cutoff date*, the *consolidation period*, the proportion of payments to be rescheduled, the provisions regarding the down payment (if

any), and the repayment schedules for rescheduled and deferred debt. Creditor governments commit to incorporate these terms in the bilateral agreements negotiated with the debtor government that implements the *Agreed Minute*. Paris Club creditors will agree to reschedule only with countries that have an IMF upper credit *tranche* arrangement (*Stand-By Arrangement* or *Extended Fund Facility* (EFF)), a *Poverty Reduction and Growth Facility* (PRGF) arrangement, or a *Rights Accumulation Program*.

#### Amortized Value

Amortized value of a loan reflects the decline in the value of the liability through regular payments over a specified period of time. At the time of each scheduled payment, amortized value is the same as *nominal value*, but it may differ from the nominal value in other dates because nominal value includes accrued interest costs that have not been paid.

#### Amortization Schedule

The schedule for the repayment of *principal* and payment of *interest* on an ongoing basis. For loans, the amortization schedule is normally included in an annex to the contract or can be estimated from the contract.

#### Annuity-Type Repayment

A repayment schedule where the sum of interest payment and repayment amounts (annuity) is constant throughout the amortization schedule at fixed intervals. Over time, the interest amount falls, while the repayment amount increases, but the installment remains the same.

#### Arbitrage

Buying (or borrowing) in one market and selling (or lending) in the same or another market to profit from market inefficiencies or price differences.

### Arrangement on Guidelines for Officially Supported Export Credits

The Arrangement is a gentleman's agreement governing the provision of officially supported *export credits* with a credit period of two years or more. It is negotiated by an international body called the Participants to the *Arrangement on Guidelines for Officially Supported Export Credits*, which meets in Paris under the auspices, and with the administrative support, of the Secretariat of the OECD. The Participants are Australia, Canada, the European Union (including all the Member States), Japan, Korea, New Zealand, Norway, Switzerland, and the United States.

### Average Maturity

Average maturity is defined as the weighted average time to maturity of all principal payments. The maturity of each principal payment is weighted by the value in the unit of account of that payment relative to all principal payments, and aggregated. This indicator shows how long it takes on average to rollover the debt portfolio. A shortening suggests that the portfolio is being rolled over more frequently and therefore is more exposed to refinancing risks. Like SDR allocations, the exclusion of perpetual bonds from the calculation of average maturity should be considered.

### Average Time to Refixing

The average time to refixing is a measure of weighted average time until the interest rate on the whole debt portfolio is refixed. The larger the percentage of variable debt within total debt, the shorter the average time to refixing. For zero-coupon bonds and bonds with fixed coupons, the period until refixing corresponds to the residual life of the bond.

## B

### Balance of Payments

A statistical statement that systematically summarizes, for a specific period of time, transactions between residents and nonresidents. It consists of the goods and services accounts, the primary and secondary income accounts; the capital account; and the financial account.

### Bank for International Settlements (BIS)

Established in 1930 by intergovernmental convention, the BIS promotes discussion and facilitates cooperation

among central banks. In this capacity, the BIS carries out four main activities: (1) it organizes meetings for central banks and supervisory agencies; (2) it supports economic, monetary, financial, and legal research and it is a hub for sharing statistical information amongst central banks, and publishing statistics on global banking, securities, foreign exchange and derivatives markets; (3) it organizes seminars and workshops; and (4) it offers a wide range of financial services to assist central banks and other official monetary institutions in the management of their foreign reserves.

### Berne Union

The International Union of Credit and Investment Insurers (Berne Union). This Union is an informal association of *export credit insurance agencies and/or investment insurance companies and agencies*, founded in 1934. The two main objectives of the Berne Union are the promotion of the international acceptance of sound principles in export credit insurance and investment insurance, and the exchange of information relating thereto. The almost 50 members meet several times per year at general or specialist meetings to exchange information and discuss matters of common interest. They also consult with each other on a continuing basis, and cooperate closely. All members participate as insurers and not as representatives of their governments.

### Bilateral Deadline

In the context of Paris Club *reschedulings*, the date by which all bilateral agreements must be concluded. It is set in the *Agreed Minute* and is typically about six months later, but can be extended upon request.

### Bilateral Debt

Loans extended by a bilateral *creditor*.

### Bilateral Rescheduling Agreements

*Rescheduling agreements* reached bilaterally between the *debtor* and *creditor* economies. These are legally the equivalent of new loan agreements. After a Paris Club *rescheduling*, such agreements are required to put into effect the *debt restructuring* set forth in the multinational *Agreed Minute*.

### Bullet Repayment

The repayment of principal in a single payment at the maturity of the debt.

### Buyer's Credit

A financial arrangement in which a bank or financial institution, or an *export credit agency* in the exporting economy, extends a loan directly to a foreign buyer or to a bank in the importing economy to pay for the purchase of goods and services from the exporting economy. Also known as financial credit. This term does not refer to credit extended directly from the buyer to the seller (e.g., through trade credit and advances payment for goods and services).

## C

### Capital Account

In the balance of payments, the capital account shows (1) *capital transfers* receivable and payable between residents and nonresidents and (2) the acquisition and disposal of nonproduced, nonfinancial assets between residents and nonresidents.

### Capital Transfers

Consists of transfers in which the ownership of an asset (other than cash and inventories) changes from one party to another; or which obliges one or both parties to acquire or dispose of an asset (other than cash or inventories); or where a liability is forgiven, by the *creditor*.

### Capitalized Interest

Capitalized interest is the conversion of accrued *interest* costs or future interest payments, by a contractual arrangement with the creditor, into a new *debt instrument* or *principal of the current debt instrument*. The most common form of capitalization is the reinvestment of interest costs into the principal amount, either because of an explicit agreement regarding the specific debt instrument or as part of a *rescheduling agreement*. Frequently as part of a rescheduling agreement, some percentage of interest due during the *consolidation period* (see below) is converted, through an agreement made with the *creditor*, into principal.

### Claim Payments

Payments made to exporters or banks after the *claims-waiting period* by an *export credit agency* on insured or guaranteed loans when the original borrower or borrowing-economy guarantor fails to pay. Claim payments are recorded by the agencies as unrecovered

claims until they are recovered from the *debtor* or the debtor's guarantor.

### Claims-Waiting Period

The period that exporters or banks must wait after the due-date of payment before the *export credit agency* will pay on the corresponding claim.

### Cofinancing

The joint or parallel financing of programs or projects through loans or grants to developing economies provided by commercial banks, *export credit agencies*, other official institutions in association with other agencies or banks, or the World Bank and other multilateral financial institutions (see also *Multilateral Creditors*).

### Commercial Credit

In the context of the Paris Club, loans originally extended on terms that do not qualify as *official development assistance* (ODA) credits. These are typically *export credits* on market terms but also include other non-ODA loans by governments.

### Commercial Interest Reference Rates (CIRRs)

A set of currency-specific interest rates for OECD countries. CIRRs have been established on the basis of secondary market yields on government bonds. These data are published monthly on the Internet at [www.oecd.org/tad/xcred/cirrs.pdf](http://www.oecd.org/tad/xcred/cirrs.pdf). CIRRs are adjusted monthly and are intended to reflect commercial rates.

### Commercial Risk

In the context of *export credits*, the risk of nonpayment by a nonsovereign or private sector buyer or borrower in his or her domestic currency arising from default, insolvency, and/or a failure to take up goods that have been shipped according to the supply contract (contrasted with *transfer risk* arising from an inability to convert domestic currency into the currency in which the *debt service* is payable, or with broader *political risk*).

### Commitment

Generally, a firm obligation to lend, guarantee, or insure resources of a specific amount under specific financial terms and conditions. However, in the

OECD's *Arrangement on Guidelines for Officially Supported Export Credits*, commitment simply refers to any statement, in whatever form, whereby the willingness or intention to provide official support is communicated to the recipient economy, the buyer, the borrower, the exporter, or the financial institution.

### Commitment Charge (or Fee)

This is the charge made for holding available the *undisbursed* balance of a loan commitment. Typically, it is a fixed-rate charge (e.g., 1.5 percent a year) calculated on the basis of the undisbursed balance.

### Commitment, Date of

The date on which the *commitment* is made.

### Comparable Treatment

An understanding in a *debt-restructuring* agreement with the Paris Club *creditors* that the *debtor* will secure at least equivalent *debt relief* from other creditors.

### Complete Market

A financial market place is said to be complete when a market exists with an equilibrium price for every asset in every possible state of the world.

### Completion Point

In the context of the *HIPC Initiative* (see below), when the IMF and World Bank Executive Boards decide that an economy has met the conditions for assistance under the Initiative. The timing of the completion point depends on the satisfactory implementation of key structural policy reforms agreed at the *decision point*, the maintenance of macroeconomic stability, and the adoption and implementation of a poverty reduction strategy developed through a broad-based participatory process (see also *Decision Point*).

### Concessional Loans

These are loans that are extended on terms substantially more generous than market loans. The concessionality is achieved either through interest rates below those available on the market or by *grace periods*, or a combination of these. Concessional loans typically have long grace periods.

### Concessional Restructuring

*Debt restructuring* with a reduction in *present value* of the *debt service*. In the context of the Paris Club,

concessional restructuring terms have been granted to *low-income countries* since October 1988 with a reduction in the present value of *eligible debt* of up to one-third (Toronto terms); since December 1991, with a present value reduction of up to one-half (London terms or “enhanced concessions” or “enhanced Toronto” terms); and, since January 1995, with a present value reduction of up to two-thirds (Naples terms). In the context of the *HIPC Initiative*, *creditors* agreed in November 1996 to increase the present value reduction to up to 80 percent (Lyon terms) and then in June 1999 to 90 percent (Cologne terms). Such restructuring can be in the form of *flow restructuring* or *stock-of-debt operations*. While the terms (*grace period and maturity*) are standard, creditors can choose from a menu of options to implement the *debt relief*.

### Concessionality Level

A *net present value* calculation, measured at the time the loan is extended, that compares the outstanding *nominal value* of a debt and the future *debt-service* payments discounted at an *interest* rate applicable to the currency of the transaction, expressed as a percentage of the nominal value of the debt. The concessionality level of *bilateral debt* (or tied aid) is calculated in a similar manner, but instead of using the nominal value of the debt, the *face value* of the loan is used, i.e., including both the *disbursed* and *undisbursed* amounts, and the difference is called the *grant element* (see also *Grant Element* and *Net Present Value*).

### Consolidated Amount or Consolidated Debt

The *debt-service payments* and arrears, or debt stock, restructured under a Paris Club *rescheduling agreement*.

### Consolidated Banking Statistics (BIS)

The BIS consolidated banking statistics report banks' on-balance sheet financial claims on the rest of the world on an immediate borrower basis, and, after risk transfers, on an ultimate risk basis. They thereby provide a measure of the risk exposures of lenders' national banking systems. The quarterly data cover contractual lending by the head office and all its branches and subsidiaries on a worldwide consolidated basis, i.e., net of inter-office accounts.

In addition to on-balance sheet financial claims, derivative contracts, guarantees and credit commitments are also reported.

### Consolidated Reporting

Reporting covering the claims and liabilities of all offices worldwide of the same entity, but excluding positions between offices of the same entity. Offices include head offices, branch offices, and subsidiaries. A consolidated balance sheet refers to a balance sheet grouping of assets and liabilities of a parent company and all its offices, after elimination of all unrealized profits on intragroup trading and of all intragroup balances.

### Consolidation Period

In Paris Club restructuring agreements, the period in which *debt service* to be restructured (the “current maturities consolidated”) have fallen or will fall due. The beginning of the consolidation period may precede, coincide with, or come after the date of the *Agreed Minute*. The standard consolidation period is one year, but sometimes debt payments over a two- or three-year period have been consolidated, corresponding with a multiyear arrangement with the IMF.

### Contingent Asset/Liability (Contingencies)

Contingent assets and liabilities are contractual financial arrangements between institutional units that do not give rise to unconditional requirements either to make payments or to provide other objects of value. They are not recognized as financial assets or liabilities prior to the condition(s) being fulfilled. Lines of credit, letters of credit, and loan commitments assure that funds will be made available, but no financial asset (i.e., loan) is created until funds are actually advanced.

### Corporations

Corporations in the legal sense are separate legal entities, so qualify as institutional units, except resident artificial subsidiaries (see *BPM6*, paragraph 4.18). In addition to corporations in the legal sense, some arrangements that are not legal entities in their own right may be recognized as being institutional units, including cooperatives, limited liabilities partnerships that are not incorporated, notional residents units, and other quasi-corporations. For example, branches in separate economies from their head offices and partnerships are not separate legal entities, but may be

treated as corporations because they behave in similar ways (see *BPM6*, paragraph 4.15).

### Coupon

A coupon payment of a bond is a periodic interest payment that the bondholder receives during the time between when the bond is issued and when it matures.

### Cover

Provision of *export credit* guarantee or insurance against risks of payment delays or nonpayments relating to export transactions. Cover is usually, though not always, provided for both *commercial risk* and *political risk*. In most cases, cover is not provided for the full value of future *debt-service* payments; the percentage of cover is typically between 90 percent and 95 percent (see also *Quantitative Limits*).

### Coverage of Rescheduling Agreements

The *debt service* or arrears rescheduled. Comprehensive coverage implies the inclusion of most or all *eligible debt service* and arrears.

### Credit

An amount for which there is a specific obligation of repayment. Credits include loans, trade credits, bonds, bills, etc., and other agreements that give rise to specific obligations to repay over a period of time usually, but not always, with *interest*. Credit is extended to finance consumption and investment expenditures, and financial transactions.

### Credit Guarantee

Commitment by an *export credit agency* to reimburse a lender if the borrower fails to repay a loan. The lender pays a guarantee fee.

### Credit Insurance

The main business of most *export credit agencies* is insurance of finance provided by exporters or banks (although some major agencies lend on their own account). Insurance policies provide for the export credit agency to reimburse the lender for losses up to a certain percentage of the *credit* covered and under certain conditions. Lenders or exporters pay a premium to the export credit agency. Insurance policies typically protect the lender against political or *transfer risks* in the borrowing economy that prevent the remittance of *debt-service* payments.

### **Creditor**

An entity with a *financial claim* on another entity.

### **Creditor Economy**

The economy in which the creditor resides. In Paris Club terminology, it is an official bilateral creditor.

### **Creditor Reporting System**

A statistical reporting system maintained by the OECD on aid activities. It contains detailed quantitative and descriptive data on individual aid projects and programs. CRS data are used to analyze the sectoral and geographical breakdown of aid for selected years and donors, to examine aid that promotes specific policy objectives (gender quality, environmental sustainability, and aid for trade), and to monitor donors' compliance with various international recommendations in the field of development cooperation and the debt of developing economies. Major creditor economies, primarily the 23 member economies—of the DAC, together with the European Commission, other donors, and international organizations supply information (see [www.oecd.org/dac/stats/data](http://www.oecd.org/dac/stats/data)).

### **Cross-Border Positions**

Asset and liability positions of residents of an economy vis-à-vis residents of all other economies.

### **Currency of Denomination**

The currency of denomination is determined by the currency in which the value of flows and positions is fixed as specified in the contract between parties. Accordingly, all cash flows are determined using the currency of denomination and, if necessary, converted into the domestic currency or another unit of account for the purpose of settlement or compilation accounts. The currency of denomination is important for distinguishing transaction values and holding gains and losses.

### **Currency of Reporting**

The unit of account in which amounts are reported either to the compiling agency and/or to an international agency compiling debt statistics. See Chapter 2 for details on unit of account.

### **Currency of Settlement**

The currency of settlement is determined by the currency in which the values of the flows and posi-

tions are settled. It is important for international liquidity and measurement of potential foreign exchange drains. The currency of settlement may be different from the currency of denomination. Using a currency of settlement that is different from the currency of denomination simply means that a currency conversion is involved each time a settlement occurs.

### **Currency of Transaction**

The medium of exchange in which an individual transaction occurs. It may be currency, goods, or services. The medium of exchange of one transaction (e.g., disbursement) does not necessarily determine the medium of exchange of another (e.g., repayment).

### **Current Account**

The current account of the balance of payments covers all transactions of goods, services, primary income, and secondary income between residents and non-residents. The current account balance shows the difference between the sum of exports and income receivable and the sum of imports and income payable (exports and imports refer to both goods and services, while income refers to both primary and secondary income). The value of the current account balance equals the saving-investment gap for the economy.

### **Current Maturities**

In the context of restructuring agreements, *principal* and *interest* payments falling due in the *consolidation period*.

### **Current Transfers**

Current transfers are all transfers, i.e., the transfer of a real resource or a financial item without a quid pro quo—that are not transfers of capital. Current transfers directly affect the level of disposable income and should influence the consumption of goods and services. Current transfers are classified in the secondary income account of the balance of payments.

### **Custom-Tailored Repayment**

A repayment schedule with uneven intervals and uneven repayment installments. The repayment schedule is usually defined for purposes of satisfying cash flow requirements.

### Cutoff Date

The date (established at the time of a country's first Paris Club *debt reorganization/restructuring*) before which loans must have been contracted in order for their *debt service* to be eligible for restructuring (pre-cutoff-date debt). New loans extended after the cutoff date are protected from future restructuring (*subordination strategy*). In exceptional cases, arrears on post-cutoff-date debt can be deferred over short periods of time in restructuring agreements.

## D

### De Minimis Creditors (or Clause)

Minor creditors that are exempted from *debt restructuring* to simplify implementation of the Paris Club restructuring agreements. Their claims are payable in full as they fall due. An exposure limit defining a minor creditor is specified in each *Agreed Minute*.

### Debt- and Debt-Service-Reduction (DDSR) Operations

*Debt-restructuring* agreements are typically undertaken for bank loan debt obligations and involve the buyback and exchange of *eligible debt* either for financial instruments that are valued at a substantial discount (simple cash buyback) or for new bonds featuring a *present value* reduction. In some instances, the principal portion of new financial instruments is fully collateralized with zero-coupon bonds issued by the treasury of an advanced economy, while interest obligations are also partially secured. DDSR operations are characterized by a “menu approach,” allowing individual creditors to select from among several DDSR options. Under the Brady Plan of March 1989, some of these arrangements have been supported by loans from official creditors.

### Debt Assumption

Debt assumption is a trilateral agreement between a creditor, a former debtor, and a new debtor under which the new debtor assumes the former debtor's outstanding liability to the creditor and is liable for repayment of the debt. The activation of a guarantee is an example of debt assumption.

### Debt Buyback

The repurchase by a debtor of its own debt, usually at a substantial discount. The debtor's obligations are

reduced while the *creditor* receives a once-and-for-all payment. Although in apparent contravention of standard commercial bank loan agreements, some debtors have bought back their own debt on the secondary market.

### Debt Conversion

The exchange of debt for a nondebt liability, such as equity, or for counterpart funds can be used to finance a particular project or policy.

### Debt Default

Failure to meet a debt obligation payment, either *principal* or *interest*. A payment that is overdue or in arrears is technically “in default,” since by virtue of nonpayment the borrower has failed to abide by the terms and conditions of the debt obligation. In practice, the point at which a debt obligation is considered “in default” will vary.

### Debt-for-Charity Swap

The purchase by a nonprofit organization such as a nongovernmental organization (NGO) of the *external debt* of an economy at a discount in the secondary market, which the NGO then exchanges for local currency to be used for philanthropic purposes.

### Debt-for-Commodity Swap

The repayment in kind by a debtor economy of all or part of its *external debt*. Typically, the lender takes a specific, earmarked percentage of the receipts from the exports of a particular commodity or group of commodities to service the debt.

### Debt-for-Development Swap

Financing part of a development project through the exchange of a foreign-currency-denominated debt for local currency, typically at a substantial discount. The process normally involves a foreign nongovernmental organization (NGO) that purchases the debt from the original creditor at a substantial discount using its own foreign currency resources, and then resells it to the debtor economy government for the local currency equivalent (resulting in a further discount). The NGO in turn spends the money on a development project, previously agreed upon with the debtor economy government.

### Debt-for-Equity Swap

A transaction in which debt of an economy is exchanged, usually at a discount, for equity in an enterprise in the same economy. Although variable in form, such arrangements usually result in the extinction of a fixed-rate liability (e.g., a debt security or loan) denominated in foreign currency and the creation of an equity liability (denominated in domestic currency) to a nonresident. There may be clauses in the agreement to prevent the repatriation of capital before some specified future date.

### Debt-for-Nature Swap

Similar to a *debt-for-development swap*, except that the funds are used for projects that improve the environment.

### Debt Forgiveness

The voluntary cancellation of all or part of a debt within a contractual arrangement between a *creditor* in one economy and a debtor in another economy.

### Debt Instrument(s)

Existing debt instruments typically arise out of contractual relationships under which an institutional unit (the *debtor*) has an unconditional liability to another institutional unit (the *creditor*) to repay principal with or without interest, or to pay interest without principal. These instruments include SDRs, currency and deposits, debt securities, loans, trade credit and advances, insurance, pension, and standardized guarantee schemes and other accounts payable/receivable-other. Debt instruments may also be created by the force of law—in particular, obligations to pay taxes or to make other compulsory payments—or through rights and obligations that results in a debtor accepting an obligation to make future payment(s) to a *creditor*.

### Debt Prepayment

Debt prepayments consist of a repurchase, or early payment, of debt at conditions that are agreed between the debtor and the creditor, i.e., debt is extinguished in return for a cash payment agreed between the debtor and the creditor. When a discount is involved relative to the nominal value of the debt, debt prepayments are referred to as buybacks.

### Debt-Reduction Option

Option under concessional Paris Club *debt restructurings* where *creditors* effect the required debt reduction in *present value* terms through a reduction of the *principal* of the *consolidated amount*. A commercial *interest* rate and standard repayment terms apply to the remaining amounts. (See *Concessional Restructuring*.)

### Debt Refinancing

Debt refinancing refers to the conversion of the original debt including arrears, into a new *debt instrument*. In other words, overdue payments or future *debt-service* obligations are “paid off” using a new debt obligation. In the *Guide*, as in *BPM6*, a change in the terms of a debt instrument is to be reported as the creation of a new debt instrument, with the original debt extinguished.

### Debt Relief

Any form of *debt reorganization* that relieves the overall burden of debt. Debt relief results where there is a reduction in the *present value* of these *debt-service* obligations and/or a deferral of the payments due, thus providing smaller near-term debt-service obligations. This can be measured, in most cases, by an increase in the duration of these obligations, i.e., payments become weighted more toward the latter part of the *debt instrument's* life. However, if debt reorganization results in changes in present value and duration that are countervailing in their impact on the debt burden, then there is no debt relief, unless the net impact is significant—such as could occur if there was a deep reduction in present value (together with small decrease in duration) or a sharp increase in duration (together with a small increase in present value).

### Debt Reorganization/Restructuring

Debt reorganization (also referred to as debt restructuring) is defined as arrangements involving both the creditor and the debtor (and sometimes third parties) that alter the terms established for servicing an existing debt. Types of debt reorganization include debt rescheduling, refinancing, forgiveness, conversion, prepayments, and assumption.

### Debt Rescheduling

Debt rescheduling refers to the formal deferment of *debt-service* payments and the application of new and extended maturities to the deferred amount. Resched-



uling debt is one means of providing a debtor with *debt relief* through a delay and, in the case of concessional rescheduling, a reduction in debt-service obligations.

### Debt Service

Refers to payments in respect of both *principal* and *interest*. Actual debt service is the set of payments actually made to satisfy a debt obligation, including principal, interest, and any late payment fees. Scheduled debt service is the set of payments, including principal and interest, which is required to be made through the life of the debt.

### Debt-Service (-to-Exports) Ratio

The ratio of debt service (*interest* and *principal* payments due) during a year, expressed as a percentage of exports (typically of goods and services) for that year. Forward-looking debt-service ratios require some forecast of export earnings. This ratio is considered to be a key indicator of an economy's debt burden.

### Debt-Service-Reduction Option

Option under concessional Paris Club *debt reschedulings* where *creditors* effect the required debt reduction in *present value* terms through a reduction in the applicable interest rate. (See *Concessional Restructuring*.)

### Debt-Sustainability Analysis (DSA)

A study of an economy's medium- to long-term debt situation. The IMF's advice on macroeconomic policies—both in the context of IMF-supported programs and surveillance—is anchored in the analysis of a country's capacity to finance its policy objectives and service the ensuing debt without unduly large adjustments, which could otherwise compromise its stability. To this end, the IMF has developed a formal framework for conducting public and external debt sustainability analyses (DSAs) as tools to better detect, prevent, and resolve potential crises. This framework became operational in 2002 (see [www.imf.org/external/pubs/ft/dsa/index.htm](http://www.imf.org/external/pubs/ft/dsa/index.htm))

### Debt-Sustainability Framework (DSF)

As part of the Millennium Development Goals (MDGs), the IMF and the World Bank have developed a framework to help guide countries and donors in mobilizing the financing of low-income countries' development needs, while reducing the chances of an excessive build-up of debt in the future. The DSF was

introduced in April 2005, and is periodically reviewed, to address this challenge. Under the DSF, debt sustainability analyses (DSAs) are conducted regularly.

### Debt Swaps

Debt swaps are exchanges of debt, such as loans or debt securities, for a new debt contract (i.e., debt-to-debt swaps), or exchanges of *debt-for-equity*, debt-for-exports, or debt-for-domestic currency, such as to be used for projects in the debtor economy (also known as *debt conversion*).

### Debt Workout

The process of working out a satisfactory method whereby the debtor economy can repay external debt, including restructuring, adjustment, and the provision of new money.

### Debt Write-Offs

Debt write-offs are unilateral actions through which a creditor can reduce the value of its debt claims on the debtor in its own books. Write-offs may arise, for instance, when the creditor regards a claim as unrecoverable, perhaps because of bankruptcy of the debtor, and so no longer carries it on its books. The corresponding liability should also be removed from the balance sheet of the debtor.

### Debtor and Creditor Approach for Defining and Measuring Interest for Debt Securities

Under the debtor approach, when debt securities are issued at a fixed rate, the rate of interest (original yield-to-maturity) payable, and accruing, is fixed at the time the debt security is issued. Under the creditor approach, when debt securities are issued at a fixed rate, the prevailing market rate during the period is used to determine the interest (current yield-to-maturity) paid on a debt security (see *BPM6*, paragraph 11.52). The external debt position is the same regardless of the method employed to accrue interest.

### Debtor Economy

The economy in which the debtor resides.

### Debtor Reporting System (DRS)

The World Bank collects through the Debtor Reporting System (DRS) data on external indebtedness from

debtor countries that have received either a World Bank loan or an International Development Association (IDA) credit. These data form the core of the detailed country-level debt stock and flow data that are published annually in the *Global Development Finance (GDF) publication*.

### Decision Point

In the context of the *HIPC Initiative*, the point at which an economy's eligibility for assistance is determined by the IMF and World Bank Executive Boards on the basis of a *debt-sustainability analysis* and three years of sound performance under IMF- and World Bank-supported adjustment programs. The international community enters into a commitment at the *decision point* to deliver assistance at the *completion point*, provided that the *debtor* adheres to its policy commitments. The debt-sustainability analysis is essentially a medium-term *balance of payments* projection that assesses the debt burden of the economy and its capacity to service those obligations. If external debt ratios for that economy fall within or above applicable targets, it will be considered for special assistance: the target is 150 percent for the ratio of the *present value* of debt to exports, with exceptions to this target in the special case of very open economies with a high debt burden in relation to fiscal revenues (see also *Completion Point*).

At the decision point, the Executive Boards of the IMF and World Bank will formally decide on an economy's eligibility, and the international community will commit to provide sufficient assistance by the completion point for the economy to achieve debt sustainability calculated at the decision point. The delivery of assistance committed by the IMF and Bank will depend on satisfactory assurances of action by other creditors.

### Deferred Payments

In the context of Paris Club debt reschedulings, obligations that are not consolidated but postponed non-concessionally, usually for a short time, as specified in the *Agreed Minute*.

### Delivery-Versus-Payment (DVP)

Delivery-versus-payment (DVP) refers to the simultaneous exchange of the value of assets and money. This approach is widely used for settlement of securities.

### Development Assistance Committee (DAC) of the OECD

Since the early 1960s the OECD's DAC has grouped the world's main donors, defining and monitoring global standards in key areas of development and is a unique forum for sharing views and exchanging lessons. Through wide-ranging partnerships for development, the DAC tracks development finance, helping to make sure the finance is invested effectively and promotes good policy. Over the years, the DAC has worked to provide innovative and integrated approaches to a range of development challenges—from climate change to conflict and gender equality—and played a role in forging major international development commitments, including the Millennium Development Goals and the Paris Declaration on Aid Effectiveness. The DAC periodically reviews both the amount and the nature of its members' contributions to aid programs, both bilateral and multilateral. The DAC does not disburse assistance funds directly, but is concerned instead with promoting increased assistance efforts by its members. The members of the DAC are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, the United States, and the European Union (see [www.oecd.org/dac](http://www.oecd.org/dac)).

### Direct Investment Enterprise

An entity subject to control or a significant degree of influence by a *direct investor*. 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 *BPM6*, paragraphs 6.11 and 6.12).

### Direct Investor

An entity or group of related entities that is able to exercise control or significant degree of influence over another entity that is resident of a different 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 *BPM6*, paragraphs 6.11 and 6.12).

### Disbursed Loans

The amount that has been disbursed from a loan but has not yet been repaid or forgiven.

### Disbursements

The transactions of providing financial resources. The two counterparties must record the transaction simultaneously. In practice, disbursements are recorded at one of several stages: provision of goods and services (where trade credit is involved); placing of funds at the disposal of the recipient in an earmarked fund or account; withdrawal of funds by the recipient from an earmarked fund or account; or payment by the lender of invoices on behalf of the borrower. The term “utilized” may apply when the credit extended is in a form other than currency. Disbursements should be recorded gross—the actual amount disbursed.

### Domestic Currency

Domestic currency is that which is legal tender in the economy and issued by the monetary authority for that economy, i.e., either that of an individual economy or, in a currency union, that of the common currency area to which the economy belongs. All other currencies are foreign currencies.

### Duration

Duration is the weighted average term to maturity of a *debt instrument*. The time period until the receipt/payment of each cash flow, such as six months, is weighted by the *present value* of that cash flow, as a proportion of the present value of total cash flows over the life of the instrument. Present value can be calculated using the yield-to-maturity or another *interest* rate. The more the cash flows are concentrated toward the early part of a debt instrument’s life, the shorter the duration relative to the time to maturity.

## E

### Eligible Debt or Debt Service

In the context of the Paris Club, debt that can be rescheduled—namely, debt that is contracted before the *cutoff date*, with maturities of one year or longer.

### Enhanced Concessions (or Enhanced Toronto Terms)

See *Concessional Restructuring*.

### ESAF-HIPC Trust

A trust established by the IMF in February 1997 to provide assistance to the countries deemed eligible for assistance under the HIPC Initiative by the Boards of the IMF and the World Bank. Through this trust, the IMF will provide grants (or, in exceptional circumstances, highly concessional loans) that will be used to retire an economy’s obligations falling due to the IMF after the completion point.

### Escrow Accounts

In the context of *external debt* payments, accounts typically held in banks outside of the *debtor economy* through which a portion of the export proceeds of a *debtor* is channeled. Typically involve balances of one-year maturity to cover future *debt-service* payments. *Creditors* who are the beneficiaries of such accounts thus obtain extra security for their loans and effective priority in *debt service*.

### Exceptional Financing

As an alternative to—or in conjunction with—the use of reserve assets, IMF credit and loans, and liabilities constituting foreign authorities’ reserves, to deal with payments imbalance, exceptional financing denotes any other arrangements made by the authorities of an economy to finance *balance of payments* needs. The identification of exceptional financing transactions is linked to an analytical concept rather than being based on precise criteria. Among the transactions regarded as exceptional financing transactions are *debt forgiveness*, *debt-for-equity swaps*, and other types of transactions relating to *debt reorganizations*. Under certain circumstances, some borrowings by the government or other sectors might meet the criterion.

### Export Credit

A loan extended to finance a specific purchase of goods or services from within the *creditor economy*. Export credits extended by the supplier of goods—such as when the importer of goods and services is allowed to defer payment—are known as *supplier’s credits*; export credits extended by a financial institution, or an *export credit agency* in the exporting economy are known as *buyer’s credits* (see also *Officially Supported Export Credits*).

### Export Credit Agency

An agency in a *creditor economy* that provides insurance, guarantees, or loans for the export of goods and services.

### Extended Credit Facility (ECF)

The IMF's Extended Credit Facility (ECF) is a lending window under the PRGT that provides medium-term support to low income countries with protracted balance of payments problems. Financing under the ECF currently carries a zero interest rate, with a grace period of 5½ years, and a final maturity of 10 years (see [www.imf.org/external/np/exr/facts/poor.htm](http://www.imf.org/external/np/exr/facts/poor.htm)).

### Extended Fund Facility (EFF)

This IMF lending facility was established in 1974 to assist countries addressing longer-term *balance of payments* problems reflecting extensive distortions that require fundamental economic reforms. Arrangements under the EFF are thus longer than Stand-By Arrangements—usually 3 years. Repayment is due within four-and-one-half to ten years from the date of disbursement (see *Stand-By Arrangement*).

### External Debt (Gross External Debt)

Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of *interest* and/or *principal* by the *debtor* at some point(s) in the future and that are owed to nonresidents by residents of an economy.

## F

### Face Value

Face value is the undiscounted amount of principal to be paid to the holder at maturity (e.g., the redemption amount of a bond). Sometimes called initial contractual value, for loans, the face value is the original amount of the loan as stated in the loan contract. If the loan is not fully disbursed, then the face value will include future disbursements, just as the face value of a zero-coupon bond includes *interest* that has not yet accrued. It is also known as “par value” or simply “par.”

### Fair Value

Fair value of a debt instrument is a market-equivalent value. It is defined as the amount for which an asset could be exchanged, or a liability settled between knowable, willing parties in an arm's-length transac-

tion. Therefore, it represents an estimate of what could be obtained if the creditor had sold the financial claim.

### Fellow Enterprises

See *Affiliates*.

### Financial Account

The financial account of the *balance of payments* records transactions that involve foreign financial assets and liabilities and take place between residents and nonresidents (see more detail in *BPM6*, Chapter 8). The primary basis for classification of the financial account is functional: direct, portfolio, and other investment, financial derivatives and employee stock options, and reserve assets.

### Financial Assets

Financial assets are stores of value, over which ownership rights are enforced and from which their owners may derive economic benefits—such as property income and/or holding gains and losses—by holding them over a period of time. Financial assets consist of claims in respect of equity and investment fund shares, debt instruments, financial derivatives and ESOs and the gold bullion component of monetary gold.

### Financial Claim

A financial claim (1) entitles a *creditor* to receive a payment, or payments, from a *debtor* in circumstances specified in a contract between them; or (2) specifies between the two parties certain rights or obligations, the nature of which requires them to be treated as financial. A financial claim has a counterpart liability.

### Financial Derivatives

Financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right. The value of a financial derivative derives from the price of an underlying item, such as an asset or index. Unlike *debt instruments*, no principal amount is advanced to be repaid, and no investment income accrues. Financial derivatives are used for a number of purposes including risk management, hedging, *arbitrage* between markets, and speculation. Transactions in financial derivatives should be treated as separate transactions rather than integral parts of the value of underlying transactions to which they may be linked.

### Financial Intermediaries

Financial intermediaries are institutional units that incur liabilities on their own account for the purpose of acquiring financial assets by engaging in financial transactions on the market. They consist of deposit-taking corporations, investment funds, other financial intermediaries, insurance corporations, and pension funds. The role of financial intermediaries is to channel funds from lenders to borrowers by intermediating between them. The most prevalent way in which financial intermediaries obtain funds is through acceptance of deposits from the public (see *SNA 2008*, paragraph 4.101 and *BPM6*, paragraph 4.64(a)).

### Flag-of-Convenience Countries

Countries with favorable tax rules and other regulations attracting corporations whose main business (originally, primarily shipping—but increasingly, production or services) is outside the economy.

### Flexible Credit Line (FCL)

The FCL is an IMF credit facility designed to meet the increased demand for crisis-prevention and crisis-mitigation lending from countries with robust policy frameworks and very strong track records in economic performance. FCL arrangements are requested by member countries and are approved by the IMF Executive Board, for countries meeting pre-set qualification criteria. The length of the FCL is one to two years (with an interim review of continued qualification after one year) and the repayment period the same as for the SBA. Access is determined on a case-by-case basis, is not subject to the normal access limits, and is available in a single up-front disbursement rather than phased. Disbursements under the FCL are not conditioned on implementation of specific policy understandings as is the case under the SBA. There is flexibility to either draw on the credit line at the time it is approved or treat it as precautionary. In case a member draws, the repayment terms are the same as that under the SBA.

### Flow Rescheduling

In the context of the Paris Club, the rescheduling of specified *debt service* falling due during the *consolidation period* and, in some cases, of specified arrears outstanding at the beginning of the consolidation period (see *Stock-of-Debt Operation*).

### Foreign Currency

In this *Guide*, a foreign currency is a currency other than the domestic currency.

### Forfeiting

A mechanism, most commonly used in medium- and long-term credit, involving the purchase of promissory notes or bills of exchange by the forfaiter, at a discount. Banks or other financial services entities often own forfait companies.

### Fund Credit

See Use of IMF Credit and Loans in Appendix 1.

## G

### *Geographical Distribution of the Financial Flows to Developing Countries (Annual)*

An annual publication of the OECD that provides comprehensive data on the volume, origin and types of aid and other resource flows to around 150 developing countries. The data show each country's intake of official development assistance and well as other official and private funds from members of the OECD's DAC, multilateral agencies and other key donors. Key development indicators are provided for reference.

### Goodwill Clause

Clause used in Paris Club agreements under which *creditors* agree in principle, but without commitment, to consider favorably subsequent *debt-relief* agreements for a *debtor economy* that remains in compliance with the restructuring agreement as well as with its IMF arrangement, and has sought comparable debt relief from other creditors. The clause can be intended for a future flow restructuring or a *stock-of-debt operation*.

### Government Debt Management Performance Assessment (DeMPA)

The DeMPA is designed to help countries improve central government debt management capacity through a comprehensive evaluation of the strengths and weakness of current debt management performance, identifying areas where institutions, legislation, practices, and capacity deficits contribute to less-than fully effective management of government debt and related economic policies. The DeMPA evaluates strengths and weaknesses in public debt management, through a comprehensive set of 15 performance indicators covering six core areas

of public debt management: (1) governance and strategy development; (2) coordination with macroeconomic policies; (3) borrowing and related financing activities; (4) cash flow forecasting and cash balance management; (5) operational risk management; and (6) debt records and reporting. Its scope is central government public debt management and closely related functions such as issuance of loan guarantees, on-lending and cash flow forecasting and cash balance management. The World Bank was the lead agency in the process of developing the DeMPA tool. For more information see <http://go.worldbank.org/BDYOEXLFL0>.

### Grace Period and Maturity

The grace period for *principal* is the period from the date of signature of the loan or the issue of the financial instrument to the first repayment of principal. The repayment period is the period from the first to last repayment of principal. Maturity is the sum of both periods: grace plus repayment periods.

### Graduated Payments (or “Blended Payments”)

In the context of Paris Club reschedulings, the term refers to a repayment schedule where *principal* repayments gradually increase over the repayment period, reflecting an expected improvement in the repayment capacity of a *debtor economy*. *Creditors* have made increasing use of the graduated payments, replacing flat payment schedules where equal amounts of principal repayments were made over the repayment period: from the creditor perspective, graduated payments provide for principal repayments starting earlier, and, from the *debtor* perspective, they avoid a large jump in *debt service*.

### Grant Element

Measure of the concessionality of a loan, calculated as the difference between the *face value* of the loan and the sum of the discounted future *debt-service* payments to be made by the borrower expressed as a percentage of the face value of the loan. A 10 percent rate of discount is used by the DAC and the World Bank to measure the grant element of official loans (see also *Development Assistance Committee, Concessionality Level*, and *Official Development Assistance*).

### Grant-Like Flows

Loans for which the original agreement stipulates that payments to service the debt are to be placed into an

account in the borrowing economy and used in the borrowing economy to the benefit of that economy. These transactions are treated as “grants (transfers)” in the OECD-DAC statistics because their repayment does not require a flow of foreign currency across the exchanges. They are nevertheless counted as *external debt* because the *creditor* is nonresident. (The classification of these transactions as transfers is not consistent with *BPM6* recommendations. In *BPM6*, transfers are regarded as transactions where a real resource or financial item is provided but no quid pro quo is received. In the above transaction, in return for a reduction in outstanding debt, domestic currency is provided.)

### Gross Domestic Product (GDP)

Essentially, the sum of the gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output. For further details, see *2008 SNA*, paragraphs 2.138–2.140.

### Gross National Income (GNI)

GDP plus net primary income from abroad. For further details, see *2008 SNA*, paragraphs 2.143–2.145.

## H

### Heavily Indebted Poor Countries (HIPC)

Group of developing countries (economies) classified as being heavily indebted poor countries. These are those countries that are eligible for highly concessional assistance from the *International Development Association* (IDA), and from the IMF’s *Poverty Reduction and Growth Facility* (PRGF, previously the Enhanced Structural Adjustment Facility, ESAF), and that face an unsustainable debt situation even after the full application of traditional *debt-relief* mechanisms.

### Helsinki Package

Agreement that came into force in 1992. This agreement prohibits (with some exceptions) the provision of *tied aid loans* to *high-income countries* (based on World Bank per capita income), and for commercially viable projects (see also *Arrangement on Guidelines for Officially Supported Export Credits*).

### High-Income Countries

The World Bank classifies as high-income those countries with GNI per capita income of \$12,476 or more

in 2011. Income classifications are set each year on July 1, and are fixed during the period ending on June 30 of the following year (see <http://data.worldbank.org/about/country-classifications>).

### **HIPC Initiative**

Framework for action to resolve the external debt problems of *heavily indebted poor countries* (HIPC) that was developed jointly by the IMF and the World Bank and was adopted in September 1996. The Initiative envisaged comprehensive action by the international financial community, including multilateral financial institutions, to reduce to sustainable levels the *external debt* burden on HIPC, provided they build a track record of strong policy performance.

Following a comprehensive review of the HIPC Initiative, a number of modifications to the Initiative were approved in September 1999 to provide faster, deeper, and broader *debt relief* and strengthen the links between debt relief, poverty reduction, and social policies.

In 2005, to help accelerate progress toward the UN Millennium Development Goals, the HIPC initiative was supplemented by the Multilateral Debt Relief Initiative (MDRI).

### **HIPC Trust Fund**

The Trust Fund administered by the International Development Association (IDA) to provide grants to eligible *heavily indebted poor countries* (HIPC) for relief on debt owed to participating multi-laterals. The Trust Fund will either prepay, or purchase, a portion of the debt owed to a multilateral creditor and cancel such debt, or pay *debt service*, as it comes due. The HIPC Trust Fund receives contributions from participating multilateral creditors and from bilateral donors. Contributions can be earmarked for debt owed by a particular debtor or to a particular multilateral creditor. Donors can also provide contributions to an unallocated pool and participate in decisions regarding the use of these unallocated funds. The Trust Fund allows multilateral creditors to participate in the Trust Fund in ways consistent with their financial policies and aims to address the resource constraints for certain multilateral creditors (see also *ESAF-HIPC Trust*).

### **Home Economy**

For corporations, including quasi-corporations, the economy of residence of the head office of the institutional unit.

### **Host Economy**

The economy in which the institutional unit is located.

### **Houston Terms**

See *Lower-Middle-Income-Country Terms*.

## **I**

### **IMF Adjustment Program**

An adjustment program in a member country of the IMF. An IMF-supported program is a detailed economic program that is based on an analysis of the economic problems of the member country. It specifies the policies being implemented or that will be implemented by the country in the monetary, fiscal, external, and structural areas, as necessary, in order to achieve economic stabilization and set the basis for self-sustained economic growth. It usually, though not necessarily, refers to a program that is supported by the use of IMF resources.

### **IMF Arrangement**

Agreement between the IMF and a member country on the basis of which the IMF provides financial assistance to a member country seeking to redress its *balance of payments* problems and to help cushion the impact of adjustment. See Appendix 1, Use of IMF Credit and Loans.

### **Institutional Sector**

The grouping of institutional units with common economic objectives and functions (see also *Sector Classification*).

### **Institutional Unit**

In the *2008 SNA*, institutional units are the entities that undertake the activities of production, consumption, and the accumulation of assets and liabilities. In other words, economic activity involves transactions among institutional units be they households or corporations. An institutional unit is defined in the *2008 SNA* as “an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities” (*2008 SNA*, paragraph 4.2).

### **Insured (Guaranteed) Export Credit**

An *export credit* that carries a guarantee, issued by an *export credit agency*, protecting the *creditor*

against *political, commercial, or transfer risks* in the *debtor economy* that may prevent the remittance of *debt-service* payments (see also *Export Credit Agency*).

### Interbank Positions

Asset and liability positions that deposit-taking corporations have with other deposit-taking corporations. As a convention to ensure symmetry, all interbank positions, other than securities and accounts receivable/payable, are classified under deposits.

### Interest

For the use of *principal*, interest can, and usually does, accrue on the principal amount, resulting in an interest cost for the *debtor*. When this cost is paid periodically, as commonly occurs, it is known in this *Guide* as an interest payment. Interest can be calculated either on a fixed-interest-rate or on a variable-interest-rate basis. In this *Guide*, in contrast to a fixed interest rate, which remains unchanged over a period of years, a variable interest rate is linked to a reference index (e.g., the *London interbank offered rate*, LIBOR), or the price of a specific commodity, or the price of a specific financial instrument that normally changes over time in a continuous manner in response to market pressures (see also *Principal*).

### International Bank for Reconstruction and Development (IBRD)

The International Bank for Reconstruction and Development (IBRD) was set up as an intergovernmental financial institution in 1946 as a result of the Bretton Woods Accord. It is the original agency of the *World Bank Group* and is commonly referred to as the World Bank (see also *World Bank Group*).

### International Banking Business (BIS Data)

In the consolidated BIS statistics, international claims are defined as banks' cross-border claims (A) plus local claims of foreign affiliates in foreign currencies (B). Foreign claims are defined as the sum of cross-border claims plus foreign offices' local claims in all currencies. Therefore, on an immediate borrower basis, foreign claims can be calculated as the sum of international claims (A+B) and local claims in local currency (C).

### International Development Association (IDA)

IDA, established in 1960, is the concessional lending arm of the *World Bank Group*. IDA provides low-income developing countries (economies) with long-term loans on highly concessional terms: typically a ten-year grace period, a 40-year repayment period, and only a small servicing charge.

### International Interbank Market

An international money market in which banks lend to each other—either cross-border or locally in foreign currency—large amounts of funds, usually at short term (between overnight and six months).

### International Investment Position (IIP)

The IIP is a statistical statement that shows at a point in time the value and composition of (1) financial assets of residents of an economy that are claims on nonresidents and gold bullion held as reserve assets, and (2) liabilities of residents of an economy to nonresidents. The difference between an economy's external financial assets and liabilities is the economy's net IIP, which may be positive or negative.

### International Monetary Fund (IMF)

Following the Bretton Woods Accords and established in 1945, the IMF is a cooperative intergovernmental monetary and financial institution with 187 member countries. Its main purpose is to promote international monetary cooperation so to facilitate the growth of international trade and economic activity more generally. The IMF provides financial resources to enable its members to correct payments imbalances without resorting to trade and payments restrictions.

### International Security Identification Number (ISIN)

The ISIN is a unique international security code issued by National Numbering Agencies (NNAs) to securities issued in their jurisdiction. The Association of National Numbering Agencies (ANNA) is the authority responsible for coordinating all aspects of the implementation of the ISIN numbering system. More information on the ISIN code system is available in Appendix VII of the IMF's *Coordinated Portfolio Investment Survey Guide*, 2nd ed. (IMF, 2002).



**Issue Price**

It is the price at which the investors buy the debt securities when first issued.

**J****Joint External Debt Hub (JEDH)**

The Joint External Debt Hub (JEDH)—jointly developed by the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD) and the World Bank—brings together external debt data and selected foreign assets from international creditor/market and national debtor sources. The JEDH table distinguishes loans and debt securities (total and due within one year) as well as certain other debt instruments. Some selected information on foreign assets is also included. For more information see [www.jedh.org/](http://www.jedh.org/).

**Joint Venture**

An enterprise in which two or more parties hold major interests. See also *BPM6*, paragraphs 4.45–4.46.

**L****Late Interest Charges**

The additional *interest* that may be levied on obligations overdue beyond a specified time; in some Paris Club agreements, late interest charges have been specifically excluded from the debt consolidation.

**Leverage**

Having exposure to the full benefits arising from holding a position in a financial asset, without having to fully fund the position with own funds.

**Liability**

A liability (1) requires a *debtor* to make a payment, or payments, to a *creditor* in circumstances specified in a contract between them; or (2) specifies between the two parties certain rights or obligations, the nature of which requires them to be treated as financial. A liability has a counterpart financial claim.

**Line of Credit**

An agreement that creates a facility under which one unit can borrow credit from another up to a specified

ceiling usually over a specified period of time. Lines of credit provide a guarantee that funds will be available, but no financial asset/liability exists until funds are actually advanced.

**Loan Agreement**

The legal evidence and terms of a loan.

**Loan Guarantee**

A legally binding agreement under which the guarantor agrees to pay any or all of the amount due on a loan instrument in the event of nonpayment by the borrower.

**Locational Banking Statistics (BIS)**

The BIS locational banking statistics gather quarterly data on international financial claims and liabilities of bank offices in the reporting countries. Total positions are broken down by currency, by sector (bank and non-bank), by country of residence of the counterparty and by nationality of reporting banks. Both domestically owned and foreign-owned banking offices in the reporting countries record their positions on a gross (unconsolidated) basis, including those vis-à-vis own affiliates in other countries. These data are consistent with the residency principle of national accounts, balance of payments and external debt statistics.

**London Club**

A group of commercial banks whose representatives meet periodically to negotiate the restructuring of debts of sovereign borrowers. There is no organizational framework for the London Club comparable to that of the Paris Club.

**London Interbank Offered Rate (LIBOR)**

The London interbank offered rate for deposits, such as the six-month dollar LIBOR. LIBOR is a reference rate for the international banking markets and is commonly the basis on which lending margins are fixed. Thus, an original loan agreement or a *rescheduling agreement* may set the *interest* rate to the borrower at six-month dollar LIBOR plus 1.5 percent, with semiannual adjustments for changes in the LIBOR rate. In addition, interest rate swap rates are quoted in reference to LIBOR, i.e., the quoted rate is the fixed-rate side of the swap because the floating-rate side is LIBOR.

### London Terms

See *Concessional Restructuring*.

### Long-Maturities Option

In the context of the Paris Club, an option under which the consolidated amount is rescheduled over a long period of time, but without a reduction in the *present value* of the debt.

### Long-Term External Debt

External debt that has a maturity of more than one year. Maturity can be defined either on an original or remaining basis (see also *Original Maturity* and *Remaining Maturity*).

### Low-Income Countries

In the context of the Paris Club, countries eligible to receive concessional terms. The Paris Club decides eligibility on a case-by-case basis, but only countries eligible to receive highly concessional IDA credits from the World Bank Group are included. The World Bank classifies as low-income those countries with GNI per capita income of \$1,025 or less in 2011. Income classifications are set each year on July 1, and are fixed during the period ending on June 30 of the following year (see <http://data.worldbank.org/about/country-classifications>).

### Lower-Middle-Income-Country Terms

In the context of the Paris Club, refers to the rescheduling terms granted, since September 1990, to lower-middle-income countries. These terms are non-concessional and originally provided for flat repayment schedules, but in recent years graduated payment schedules have often been agreed upon for *commercial credits*, namely, with a maturity of up to 18 years, including a grace period of up to 8 years.

Official development assistance credits are rescheduled over 20 years, including a grace period of up to 10 years. This set of rescheduling terms also includes the limited use of debt swaps on a voluntary basis. The World Bank classifies as lower-middle income those countries with GNI per capita income of between \$1,026 and \$4,035 in 2011. Income classifications are set each year on July 1, and are fixed during the period ending on June 30 of the following year (see <http://data.worldbank.org/about/country-classifications>).

### Lyon Terms

See *Concessional Restructuring*.

## M

### Market Value

Amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties on the basis of commercial considerations only. The market value of a *debt instrument* should be based on the market price for that instrument prevailing at the time to which the position statement refers, i.e., current market prices as of the dates involved (beginning or end of the reference period). Chapter 2 provides more details (see also *Nominal Value*).

### Maturity Date (Final)

The date on which a debt obligation is contracted to be extinguished (see also *Original Maturity* and *Remaining Maturity*).

### Maturity (Defined and Undefined)

Defined maturity refers to a finite time (fixed) period at the end of which the financial instrument will cease to exist and the principal is repaid with interest. Undefined maturity refers to the absence of a contractual maturity. Undefined maturity deposits include demand deposits, checking interest accounts, savings accounts, and money market accounts. Other examples of undefined maturity debt instruments are perpetual bonds.

### Maturity Structure

A time profile of the maturities of claims or liabilities. Also known as “maturity profile” or “maturity distribution.”

### Millennium Development Goals

The Millennium Development Goals (MDGs) are eight goals—which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015—agreed to by all the world’s countries and all the world’s leading development institutions.

### Mixed Credits

A credit that contains an aid element, so as to provide concessional credit terms—such as a lower rate of interest or a longer credit period.

### **Moratorium Interest**

*Interest* charged on rescheduled debt. In the Paris Club, moratorium interest rates are negotiated bilaterally between the *debtor* and *creditor* countries and thus can differ among *creditors*. In the London Club, where all creditors are deemed to have access to funds at comparable rates, the moratorium interest rate applies equally to all rescheduled obligations under an agreement.

### **Multilateral Creditors**

These creditors are multilateral financial institutions such as the IMF and the World Bank, as well as other multilateral development banks.

### **Multilateral Debt Relief Initiative (MDRI)**

The HIPC Initiative entailed coordinated action by multilateral organizations and governments to reduce to sustainable levels the external debt burdens of the most heavily indebted poor countries. The MDRI goes further and provides for 100 percent relief to a group of low-income countries on eligible debt (debt claims on countries that have reached, or will eventually reach, the HIPC completion point) from the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund of the AfDB. The initiative is intended to help the low-income countries advance toward the United Nations' Millennium Development Goals (MDGs), which are focused on halving poverty by 2015.

### **Multilateral Tranche Loan**

A multilateral tranche loan is a loan facility that comprises a number of different tranches, typically with different maturities or other distinguishing features like terms of borrowing or currency of commitment.

### **Multiyear Rescheduling Agreement (MYRA)**

An agreement granted by official creditors that covers *consolidation periods* of two or more years in accordance with multiyear *IMF arrangements*, such as the *Extended Fund Facility* (EFF) and the *Poverty Reduction and Growth Facility* (PRGF). The modalities of the agreement are that a succession of shorter consolidations (*tranches*) are implemented after certain conditions specified in the *Agreed Minute* are satisfied, such as full implementation to date of the

*rescheduling agreement* and continued implementation of the IMF arrangements.

## **N**

### **Naples Terms**

See *Concessional Restructuring*.

### **National Numbering Agencies (NNAs)**

NNAs have the sole right to allocate *International Security Identification Number* (ISIN) codes to securities within their own jurisdiction.

### **Nationality**

Economy of residence of the head office of an institutional entity.

### **Net Flow**

From the viewpoint of a loan, the net flow is gross *disbursements* less *principal* repayments.

### **Net Present Value (NPV) of Debt**

The nominal amount outstanding minus the sum of all future *debt-service* obligations (*interest* and *principal*) on existing debt discounted at an interest rate different from the contracted rate.

The concept is closely related to that of opportunity cost: if the *debtor* has a loan that bears a 3 percent rate of interest, it is clear that the debtor is better off than by borrowing at 10 percent. Nevertheless, by discounting the future debt-service obligations at 10 percent and comparing the outcome with the amount borrowed, the NPV will tell how much the opportunity to borrow at 3 percent, rather than at 10 percent, is worth to the debtor. The NPV can be used to assess the profitability of buying back bonds, although account needs to be taken of how the buyback is to be financed.

The DAC OECD grant element is an NPV concept, since the grant element is the percentage that the NPV, using a 10 percent rate of discount, represents of the face value of the loan. In the context of the Paris Club and the HIPC Initiative, sometimes present value is misdescribed as NPV. (See *Present Value*, *Concessionality Level*, and *Grant Element*.)

### **Net Resource Transfer**

A net resource transfer is a current account deficit excluding any net interest payments.

## Nominal Value

The nominal value of a *debt instrument* is the amount that at any moment in time the *debtor* owes to the *creditor* at that moment; this value is typically established by reference to the terms of a contract between the debtor and creditor. The nominal value of a debt instrument reflects the value of the debt at creation, and any subsequent economic flows, such as transactions (e.g., repayment of *principal*), valuation changes (independent of changes in its market price), and other changes. Conceptually, the nominal value of a debt instrument can be calculated by discounting future *interest* and principal payments at the existing contractual interest rate(s) on the instrument; the latter may be fixed-rate or variable-rate. Chapter 2 provides more details (see also *Market Valuation*).

## Nonconsolidated Debt

The debt that is wholly or partly excluded from rescheduling. It has to be repaid on the terms on which it was originally borrowed, unless creditors agree otherwise.

## Nonperforming Loans

Defined as those loans for which (1) payments of principal and *interest* are past due by three months (90 days) or more, or (2) interest payments equal to three months (90 days) interest or more have been capitalized (reinvested into principal amount) or payment has been delayed by agreement, or (3) evidence exists to classify a loan as nonperforming even in the absence of a 90 day past due payment, such as when the debtor files for bankruptcy. (See *BPM6*, paragraphs 7.50–7.53). Nonperforming loans are recorded at nominal value.

## Notional (Nominal) Amount of a Financial Derivatives Contract

The notional amount is that underlying a *financial derivatives* contract and is necessary for calculating payments or receipts, but which may or may not be exchanged.

## O

### OECD Working Party on Export Credits and Credit Guarantees

This is a forum for discussing *export credit* issues and for exchanging information among—at the time of

publication of the *Guide*—32 of the 34 member countries of the OECD (only Chile and Iceland do not participate).

## Official Development Assistance (ODA)

Official flows to countries and territories on the DAC list of ODA recipients (see [www.OECD.org/dac/stats/daclist](http://www.OECD.org/dac/stats/daclist)) and to multilateral development institutions that are administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a *grant element* of at least 25 percent (using a fixed 10 percent rate of discount). ODA receipts comprise *disbursements* by bilateral donors and multilateral institutions. Lending by *export credit agencies*—with the pure purpose of export promotion—is excluded.

## Official Development Assistance (ODA) Loans

Loans with a maturity of over one year meeting the criteria set out in the definition of ODA, provided by governments or official agencies and for which repayment is required in convertible currencies or in kind.

## Official Development Bank

A nonmonetary financial corporation controlled by the public sector. It primarily engages in making long-term loans that are beyond the capacity or willingness of other financial institutions.

## Official Development Finance (ODF)

Total official flows to developing countries excluding (1) *officially supported export credits*, (2) official support for private export credits (both are regarded as primarily trade promoting rather than development oriented), and (3) grants and loans for non-developmental purposes. ODF comprises official development assistance (ODA) and other official development finance flows.

## Officially Supported Export Credits

Loans or credits to finance the export of goods and services for which an official *export credit agency* in the creditor economy provides guarantees, insurance, or direct financing. The financing element—as opposed to the guarantee/insurance element—can be extended by an exporter (supplier's credit), or through a commercial bank in the form of trade-related credit

provided either to the supplier, or to the importer (*buyer's credit*). It can also be extended directly by an export credit agency of the exporting countries, usually in the form of medium-term finance as a supplement to resources of the private sector, and generally for export promotion for capital equipment and large-scale, medium-term projects. Under the rules of the *Arrangement on Guidelines for Officially Supported Export Credits* covering *export credits* with duration of two years or more, up to 85 percent of the export contract value can be officially supported.

### Offshore Financial Center

Countries or jurisdictions with financial centers that contain financial institutions that deal primarily with nonresidents and/or in foreign currency on a scale out of proportion to the size of the host economy. Non-resident-owned or -controlled institutions play a significant role within the center. The institutions in the center may well gain from tax benefits not available to those outside the center.

### One-Off Guarantees

One-off guarantees occur in situations in which the conditions of the loan or of the security that is guaranteed are so particular that it is not possible for the degree of risk associated with it to be calculated with any degree of precision. They are recognized only as financial assets and liabilities from the time they are activated. (See *BPM6*, paragraph 5.68.)

### Organisation for Economic Co-operation and Development (OECD)

The mission of the OECD is to promote policies that will improve the economic and social well-being of people around the world. The OECD provides a forum in which governments can work together to share experiences and seek solutions to common problems. It works with governments to understand what drives economic, social and environmental change and measures productivity and global flows of trade and investment. The OECD analyses and compares data to predict future trends. It sets international standards on a wide range of things, from agriculture and tax to the safety of chemicals.

### Original Maturity

The period of time from when the financial asset/liability was created to its final maturity date.

### Other Official Flows (OOFs)

Official flows of a *creditor economy* that are not undertaken for economic development purposes or, if they are mainly for development, whose grant element is below the 25 percent threshold that would make them eligible to be recorded as ODA. They include *export credits* extended or rescheduled by the official sector.

### Own Offices

Different offices of the same entity, including head offices, branch offices, and subsidiaries. Also sometimes called “related offices.”

## P

### Paris Club

An informal group of creditor governments that has met regularly in Paris since 1956 to provide debt treatment to countries experiencing payment difficulties; the French treasury provides the secretariat. Creditors reschedule a debtor country's public debts as part of the international support provided to an economy that is experiencing debt-servicing difficulties and is pursuing an adjustment program supported by the IMF. The Paris Club includes—at the time of publication of the *Guide*—19 permanent members, associates members, and observers (including the IMF and the World Bank). The core creditors are mainly OECD member countries, but other creditors may participate as relevant for a debtor economy.

### Pass Through Funds (Funds in Transit)

Consist of funds that pass through an enterprise resident in an economy to an affiliate in another economy, so that the funds do not stay in the economy of that enterprise. These funds are often associated with direct investment. Such flows have little impact on the economy they pass through. Debt liability positions associated with these funds are recorded in the gross external debt position. These positions are classified as direct investment: intercompany lending, unless they are debt between selected financial intermediaries or nonaffiliated enterprises in which case they are classified under the relevant debt instrument.

### Permanent Debt

Loan capital that represents a permanent interest.

### Political Risk

The risk of non-payment on an export contract or project due to action taken by the importer's host government. Such action may include intervention to prevent transfer of payments, cancellation of a license, or events such as war, civil strife, revolution, and other disturbances that prevent the exporter from performing under the supply contract or the buyer from making payment. Sometimes physical disasters such as cyclones, floods, and earthquakes come under this heading.

### Positions

In contrast to the accounts that show flows, a balance sheet (including the IIP) shows the positions (also known as stocks) of assets and liabilities held at one point in time by each unit or sector or the economy as a whole. Balance sheets are normally constructed at the start and end of an accounting period but they can in principle be constructed at any point in time. Positions result from the accumulation of prior transactions and other flows. (See *2008 SNA*, paragraph 2.33.)

### Post-Cutoff-Date Debt

See *Cutoff Date*.

### Poverty Reduction and Growth Facility (PRGF)

An IMF facility known until November 1999 as the *Enhanced Structural Adjustment Facility* (ESAF). The PRGF was replaced by the Extended Credit Facility (EFC), which became operative in January 2010 (see Extended Credit Facility, EFC).

### Poverty Reduction and Growth Trust (PRGT)

In January 2010, the IMF established a Poverty Reduction and Growth Trust (PRGT) to make its financial support more flexible and tailored to the diversity of low-income countries. The PRGT is a trust fund that holds donor resources with the purpose of subsidising lending to low-income countries. The PRGT has three lending windows, the Extended Credit Facility, Rapid Credit Facility, and Standby Credit Facility.

### Precautionary and Liquidity Line (PLL)

The PLL is an IMF credit facility designed to meet flexibly the liquidity needs of member countries

with sound economic fundamentals but with some remaining vulnerabilities that preclude them from using the Flexible Credit Line (FCL). The PLL combines qualification (similar to the FCL) with focused ex-post conditions that aim at addressing the identified vulnerabilities in the context of semi-annual monitoring. Duration of PLL arrangements can be either six months or one to two years. Access under the six-month PLL is limited to 250 percent of quota in normal times, but this limit can be raised to 500 percent of quota in exceptional circumstances due to exogenous shocks, including heightened regional or global stress. One- to two-year PLL arrangements are subject to an annual access limit of 500 percent of quota and a cumulative limit of 1,000 percent of quota. The repayment terms of the PLL are the same as for the SBA.

### Premium

In the context of *export credits*, the amount paid, usually in advance, by the party to an export agency for its facilities. Cover will often not be fully effective until the premium has been paid. Premiums are normally calculated on the basis of the exposure, length of credit, and the riskiness of transacting with the importing economy. Premium income, an important source of revenue for *export credit agencies*, is intended to cover the risk of nonpayment of the credit.

### Present Value (PV)

The present value (PV) is the discounted sum of all future *debt service* at a given rate of *interest*. If the rate of interest is the contractual rate of the debt, by construction, the *present value* equals the *nominal value*, whereas if the rate of interest is the market interest rate, then the present value equals the market value of the debt. In *debt-reorganization* discussions, the present value concept is used to measure, in a consistent manner, the burden sharing of debt reduction among *creditors*. This can be illustrated by the following example.

Debtor A owes 100 to both creditor B and creditor C. The maturity of both loans is the same. Creditor B's loan has an interest rate of 3 percent and that of C an interest rate of 6 percent. The "market rate" is assumed to be 8 percent, i.e., B and C could have lent the money at this higher rate. So, for both B and C, the

opportunity cost of lending at their respective interest rates, rather than at the market rate, can be calculated by discounting future payments at the market rate of 8 percent (present value), and comparing the outcome with the outstanding nominal value of 100. If PV(B) represents the present value for B and PV(C) represents the present value for C, then:

$$PV(B) < PV(C) < 100$$

PV(B) is less than PV(C) because the size of the future payments to be made by A to B is less than those to be made to C. In turn, the payments by A to C are less than would have been the case if a market rate of interest had been charged. This is illustrated by the annual interest payments. Debtor A would annually pay 3 to B; 6 to C; and 8 at the market rate of interest.

In deciding upon burden sharing of debt reduction, since B's claims on A are already lower than those of C, despite the same nominal value, debt reduction required from B might well be less than that required from C. So, it can be seen that by using a common interest rate to discount future payments, the burden on the debtor of each loan can be quantified in a comparable manner.

### **Present Value of Debt-to-Exports Ratio (PV/X)**

*Present value* (PV) of debt as a percentage of exports (usually of goods and services) (X). In the context of the Paris Club and *HIPC Initiative*, sometimes present value is misdescribed as *net present value* (NPV). In this context NPV/X has the same meaning as PV/X.

### **Previously Rescheduled Debt**

Debt that has been rescheduled on a prior occasion. This type of debt was generally excluded from further rescheduling in both the Paris and London Clubs until 1983. Since then, however, previously rescheduled debt has frequently been rescheduled again for countries facing acute payment difficulties.

### **Principal**

The provision of economic value by the *creditor*, or the creation of debt liabilities through other means, establishes a principal liability for the debtor, which, until extinguished, may change in value over time. For *debt instruments* alone, for the use of the principal, *interest* can, and usually does, accrue on the principal amount, increasing its value.

### **Principal Repayment Schedule**

The repayment schedule of *principal* by due date and installment amount.

### **Private Creditors**

Creditors that are neither governments nor public sector agencies. These include private bondholders, private banks, other private financial institutions, and manufacturers, exporters, and other suppliers of goods that have a financial claim.

### **Provisioning**

Funds set aside in an entity's account for potential losses arising from financial claims that are not serviced by the debtor, and/or from claims on the entity arising out of insurance cover and/or guarantees given. In many *export credit agencies'* accounts, provisions are divided into general and specific provisions. General provisions apply to the overall business, while specific provisions are on a case-by-case basis. Banks make provisions.

### **Public Sector Debt**

Total public sector debt consists of all debt liabilities of resident public sector units to other residents and nonresidents.

### **Public Sector External Debt**

Total public sector external debt consists of all debt liabilities of resident public sector units to nonresidents.

### **Public Sector Debt Statistics (PSD) Database**

The Public Sector Debt Statistics (PSD) database, jointly developed by the World Bank and the International Monetary Fund, brings together detailed quarterly central government, general government, and public sector debt data of selected countries, initially mainly developing/emerging market economies. The main purpose of the PSD database is to facilitate timely dissemination in standard formats of public sector debt data. By bringing such data and meta-data together in one central location, the database supports macroeconomic analysis and cross-country comparison. The PSD database includes country and cross-country tables, and enables users to query and extract data, by country, group of countries, and specific public debt components. For more information see [www.worldbank.org/qpsd](http://www.worldbank.org/qpsd).

## Q

### Quantitative (or Cover) Limits

A ceiling on the amount of insurance or credit that an *export credit agency* will provide under certain circumstances. Limits can apply to individual buyers or to total exposure on buying countries or to maximum contract sizes.

### Quarterly External Debt Statistics (QEDS)

The Quarterly External Debt Statistics (QEDS) database, jointly developed by the World Bank and the International Monetary Fund, brings together detailed external debt data of countries that subscribe to the IMF's Special Data Dissemination Standard (SDDS) and of countries that participate in the IMF's General Data Dissemination System (GDDS). The QEDS database includes country and cross-country tables, and enables users to query and extract data, by country, group of countries, and specific external debt components. The QEDS database is a collaborative undertaking of the World Bank and the IMF, and it is part of an ongoing effort to improve the transparency, timeliness, and availability of external debt statistics. The database has been endorsed by the TFFS. For more information see [www.worldbank.org/qeds](http://www.worldbank.org/qeds).

## R

### Rapid Credit Facility (RCF)

The IMF's Rapid Credit Facility is a lending window under the PRGT that provides rapid financial assistance with limited conditionality to LICs facing an urgent balance of payments need. The RCF streamlines the Fund's emergency assistance for LICs, and can be used flexibly in a wide range of circumstances. Financing under the RCF currently carries a zero interest rate, has a grace period of five-and-one-half years, and a final maturity of ten years (see [www.imf.org/external/np/exr/facts/poor.htm](http://www.imf.org/external/np/exr/facts/poor.htm)).

### Rapid Financing Instrument (RFI)

The RFI is an IMF lending facility that was introduced to replace and broaden the scope of the earlier emergency assistance policies. The RFI provides rapid financial assistance with limited conditionality to all members facing an urgent balance of payments need. Access under the RFI is subject to an annual limit of 50 percent of quota and a cumulative limit of 100

percent of quota. Emergency loans are subject to the same terms as the FCL, PLL and SBA, with repayment within three-and-one-quarter to five years.

### Recoveries

Repayments made to an *export credit agency* by a borrowing economy after the agency has paid out on claims by exporters or banks.

### Redemption Price

It is the amount to be paid by the issuer to the holder at maturity.

### Refinancing

See *Debt Refinancing*.

### Reinsurance by Export Credit Agencies

*Export credit agencies* may reinsure amounts originally insured by a private sector insurer or commercial bank (some large official agencies are also providing reinsurance for smaller official agencies); e.g., a private insurer might keep the *commercial risk* of a loan on its own books, but seek reinsurance against specific *political risks*. In addition, some export credit agencies may receive reinsurance from their governments or purchase it in the private reinsurance market.

### Remaining (Residual) Maturity

The period of time until debt payments fall due. In the *Guide*, it is recommended that short-term remaining maturity of outstanding *external debt* be measured by adding the value of outstanding short-term external debt (original maturity) to the value of outstanding long-term external debt (original maturity) due to be paid in one year or less. These data include all arrears.

### Repayment Period

The period during which the debt obligation is to be repaid.

### Rephasing

A revision of the terms of repayment of a debt obligation.

### Reporting Banks

In *BIS* terminology, all those deposit-taking institutions (plus some non-deposit-taking financial institutions) that submit data to be included in the BIS International Banking Statistics.



### Repudiation of Debt

A unilateral disclaiming of a *debt instrument* obligation by a debtor. It is not recognized as a change in position, and does not affect the gross external debt position.

### Rescheduling

See *Debt Rescheduling*.

### Rescheduling Agreement

An agreement between a *creditor*, or a group of creditors, and a *debtor* to reschedule debt. This term is sometimes used loosely to apply to a *debt-reorganization/restructuring* agreement, one element of which is rescheduling.

### Rights Accumulation Program

An IMF program of assistance established in 1990 whereby a member economy with long overdue obligations to the IMF, while still in arrears, may accumulate “rights” toward a future disbursement from the IMF on the basis of a sustained performance under an IMF-monitored adjustment program. Countries incurring arrears to the IMF after end-1989 are not eligible for assistance under this program. Rights Accumulation Programs adhere to the macroeconomic and structural policy standards associated with programs supported by the *Extended Fund Facility* (EFF) and the *Poverty Reduction and Growth Facility* (PRGF), and performance is monitored, and rights accrue, quarterly.

## S

### Sector Classification

In the *2008 SNA* and *BPM6*, institutional sectors are formed by the grouping of similar kinds of institutional units according to their economic objectives and functions.

### Short Positions

Short positions occur when an institutional unit sells securities for which it is not the economic owner. The short position is shown as a negative asset, rather than a liability.

### Short-Term Commitments or Credits

In the context of *export credits*, short-term commitments are those that provide for repayment within

a short period, usually six months (although some *export credit agencies* define short-term credits as those with repayment terms of up to one or two years). Short-term business represents the bulk of that of most export credit agencies and normally includes transactions in raw materials, commodities, and consumer goods.

### Short-Term Debt

Debt that has maturity of one year or less. Maturity can be defined either on an original or remaining basis (see also *Original Maturity* and *Remaining Maturity*).

### Sovereign Debt

Sovereign debt is often used by financial markets and fiscal analysts as debt that has been contracted by the national government. Unlike grouping of the public sector, which is based on institutional units, “sovereign” is defined on a functional basis. Normally “sovereign issuer” of debt is the government (usually national or federal) that de facto exercises primary authority over a recognized jurisdiction whose debt are being considered. Consequently, sovereign debt is debt that has been legally contracted by the national government.

### Special Accounts

In the context of the Paris Club, deposits into special accounts were first introduced in 1983 for *debtor countries* that had a history of running into arrears. After signing the *Agreed Minute*, the debtor makes monthly deposits into an earmarked account at the central bank of one of the *creditor countries*. The deposit amounts are roughly equal to the *moratorium interest* that is expected to fall due on the rescheduled debt owed to all Paris Club creditors combined, and any other payments falling due during the *consolidation period*. The *debtor* then draws on the deposited funds to make payments as soon as the bilateral agreements with the individual Paris Club creditors are signed and as other payments fall due.

### Special Purpose Entities

Special purpose entities (SPEs) are flexible legal structures in particular jurisdictions, which offer various benefits that may include any or all of low or concessional tax rates, speedy and low-cost incorporation, limited regulatory burdens, and confidentiality.

Typical features of these entities are that their owners are not residents of the territory of incorporation, other parts of their balance sheets are claims on or liabilities to nonresidents, they have few or no employees, and they have little or no physical presence.

### Stand-By Arrangements (SBA)

The bulk of non-concessional IMF assistance is provided through SBAs. The SBA is designed to help countries address short-term balance of payments problems. Program targets are designed to address these problems and disbursements are made conditional on achieving these targets ('conditionality'). The length of an SBA is typically 12–24 months, and repayment is due within three-and-one-quarter to five years of disbursement. SBAs may be provided on a precautionary basis—where countries choose not to draw upon approved amounts but retain the option to do so if conditions deteriorate—both within the normal access limits and in cases of exceptional access. The SBA provides for flexibility with respect to phasing, with front-loaded access where appropriate.

### Stand-By Credit

A commitment to lend up to a specified amount for a specific period, to be used only in a certain contingency.

### Standby Credit Facility (SCF)

The IMF's Standby Credit Facility is a lending window under the PRGT that provides financial assistance to LICs with short-term balance of payments needs. The SCF replaced the High-Access Component of the Exogenous Shocks Facility (ESF), and can be used in a wide range of circumstances, including on a precautionary basis. Financing under the SCF currently carries a zero interest rate, with a grace period of four years, and a final maturity of eight years (see [www.imf.org/external/np/exr/facts/poor.htm](http://www.imf.org/external/np/exr/facts/poor.htm)).

### Standstill

This is an interim agreement between a *debtor economy* and its commercial banking creditors that defers principal repayments of medium- and long-term debt and rolls over short-term obligations, pending agreement on *debt reorganization*. The objective is to give the debtor continuing access to a minimum amount of trade-related financing while negotiations take place and to prevent some banks from abruptly withdrawing their facilities at the expense of others.

### Stock Figures

The value of financial assets and liabilities outstanding at a particular point in time.

### Stock-of-Debt Operation

In the context of the Paris Club, restructuring of the eligible stock of debt outstanding. These restructuring operations were granted to Egypt and Poland in 1991 and, partially, for Russia and Peru in 1996 and are being implemented for low-income countries under Naples, Lyon, and Cologne terms (see *Concessional Restructuring*), provided that certain conditions are met: the debtor economy has implemented earlier flow rescheduling agreements for at least three years and has an appropriate arrangement with the IMF.

### Straight-Line Repayment

A repayment schedule with equal installments at fixed intervals throughout the amortization schedule.

### Stress Test

A stress test is a "what if" scenario that takes the world as given but assumes a major change in one or more variables in order to see what effect this would have on various indicators. For instance, for an economy, the impact on growth, inflation, and *external debt* of a huge change in oil prices could be considered. Stress tests are particularly useful for financial institutions: for instance, an individual entity might consider the impact on net worth of a sharp movement in financial market prices, in order to help determine the appropriate level of capital to hold.

### Structural Adjustment Facility (SAF)/Enhanced Structural Adjustment Facility (ESAF)

The SAF was established by the IMF in 1986 and is no longer operational. The ESAF was established by the IMF in 1987 and was made a permanent, rather than a temporary, facility in September 1996. It was renamed the *Poverty Reduction and Growth Facility (PRGF)* in November 1999. (See *Poverty Reduction and Growth Facility (PRGF)*). The PRGF was replaced by the ECF in January 2010.

### Subordination Strategy

The policy of Paris Club creditors is that loans extended after the *cutoff date* are not subject to rescheduling;

therefore, pre-cutoff date loans are effectively subordinated to post-cutoff loans. (See *Cutoff Date*.)

### Supplier's Credit

A financing arrangement under which an exporter extends credit to the buyer.

## T

### Technical Arrears

Technical arrears occur when payments due under the existing agreement are not made, and arrears arise, even though the creditor has agreed in principle to reschedule debt but the new agreement has yet to be signed and implemented. Such arrears might typically arise in the context of Paris Club agreements between the time of the Paris Club rescheduling session and the time when the bilateral agreements are signed and implemented (see Appendix 7, paragraph 5).

### Technical Cooperation Grants

There are two basic types of technical cooperation: (1) free-standing technical cooperation (FTC), which is the provision of resources aimed at the transfer of technical and managerial skills or of technology for the purpose of building up general national capacity without reference to the implementation of any specific investment projects; and (2) investment-related technical cooperation (IRTC), which denotes the provision of technical services required for the implementation of specific investment projects.

### Terms-of-Reference Rescheduling

Paris Club rescheduling involving only a small number of *creditors*. Typically, this does not require a rescheduling meeting between the *debtor economy* and its creditors, with the agreement being reached through an exchange of letters.

### Tied-Aid Loans

Bilateral loans that are linked to purchases of goods and services by the *debtor economy* from the *creditor economy*.

### Toronto Terms

See *Concessional Restructuring*.

### Total Official Flows (Gross or Net)

The sum of *official development assistance* (ODA) and *other official flows* (OOF). Represents the total

(gross or net) *disbursements* by the official sector of the *creditor economy* to the recipient economy (*debtor economy*).

### Trade-Related Credits

Trade-related credits is a wider concept that, in addition to trade credit and advances, also captures other credits provided to finance trade activity, including through banks. It is defined as including trade credit and advances, trade-related bills, and credit provided by third parties to finance trade, such as loans from a foreign financial or export credit institution to the buyer.

### Tranche

A particular portion of a financial claim or liability with its own specific terms as opposed to the general terms governing the whole claim or liability.

### Transfer Arrears

Transfer arrears are arrears that arise not from the ability of the original debtor to provide national currency but from the inability of the monetary authorities to provide foreign exchange to another resident entity, so preventing that entity from servicing its foreign currency debt (see Appendix 7, paragraph 5).

### Transfer Clause

A provision that commits the debtor government to guarantee the immediate and unrestricted transfer of foreign exchange in all cases, provided that the private sector pays the local currency counterpart for servicing its debt.

### Transfer Risk

The risk that a borrower will not be able to convert local currency into foreign exchange, and so be unable to make *debt-service* payments in foreign currency. The risk normally arises from exchange restrictions imposed by the government in the borrower's economy. This is a particular kind of *political risk*.

### Transfers

Transfers are transactions where there is a transfer of a real resource or a financial item without a *quid pro quo*.

## U

### Undisbursed

Funds committed by the *creditor* but not yet utilized by the borrower. In BIS terminology, this refers to

open lines of credit that are legally binding on lending banks. A transaction in the *balance of payments* or a position in the *international investment position* (IIP) is only recorded when an actual *disbursement* takes place.

### Unrecovered Claims

See *Claim Payments*.

### Upper-Middle-Income Countries

In the context of the Paris Club, countries not considered *lower-middle-income* or *low-income countries*. These countries receive non-concessional rescheduling terms, originally with flat repayment schedules, but in the 1990s increasingly with graduated payment schedules that have a maturity of up to 15 years and a grace period of two to three years for *commercial credits*. Official development assistance credits are rescheduled over ten years, including a grace period of five to six years. The World Bank classifies as upper-middle income those countries with GNI per capita income of between \$4,036 and \$12,475 in 2011. Income classifications are set each year on July 1, and are fixed during the period ending on June 30 of the following year (see <http://data.worldbank.org/about/country-classifications>).

## V

### Vienna Initiative

The European Bank Coordination “Vienna Initiative” is a framework for safeguarding the financial stability of emerging Europe. The Initiative was launched at the height of the first wave of the global crisis in January 2009. It brought together all the relevant public and private sector stakeholders of EU-based cross-border banks active in emerging Europe, which own much of the banking sectors in that region and also hold a significant part of government securities. The Initiative has provided a forum for decision making and coordination that helped prevent a systemic banking crisis in the region and ensured that credit kept flowing to

the real economies during the crisis. The European Bank for Reconstruction and Development, European Investment Bank, European Commission, IMF, and the World Bank played a key role in the creation and further development of the Vienna Initiative (see [www.vienna-initiative.com/](http://www.vienna-initiative.com/)).

## W

### World Bank Group

Founded in 1944, the World Bank Group (or World Bank) consists of five closely associated institutions: the *International Bank for Reconstruction and Development* (IBRD), the *International Development Association* (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for Settlement of Investment Disputes (ICSID). The World Bank is the world’s largest source of development assistance; its main focus is on helping the poorest people and the poorest countries through IDA credits (concessional lending) and on providing IBRD loans to low- and middle-income countries for developmental purposes. To achieve its poverty-reduction mission, the World Bank focuses on investing in people, particularly through basic health and education; protecting the environment; supporting and encouraging private business development; and promoting reforms to create a stable macroeconomic environment and long-term economic growth.

### Write-Off

See *Debt Write-off*.

## Y

### Yield-to-Maturity

The yield-to-maturity rate is the rate at which the present value of future interest and principal payments, i.e., all future cash flows from the bond, equals the price of the bond.



## Appendix 4. External Debt Statistics, International Investment Position, and National Accounts

1. In the *Guide*, linkages between external debt statistics, the international investment position (IIP), and the national accounts have been developed and explained. This appendix further explains the relationship between external debt statistics and the IIP (within external sector statistics), and between the national accounts and the IIP, such that data on the IIP can be incorporated into the external account components of the rest of the world account of the national accounts system, bringing compilation and collection efficiency gains as well as analytical benefits.

### The Link between External Debt Statistics and the IIP

2. The *BPM6* gives increased emphasis to the IIP statistics in international accounts compilation and analysis. As mentioned in Chapter 4, provided that debt securities are valued at market value, the gross external debt position, as presented in the *Guide*, equals the debt liabilities in the IIP statement, i.e., the gross external debt position equals total IIP liabilities excluding all equity (equity shares and other equity) and investment fund shares and financial derivatives and employee stock options (ESOs), allowing comparability across datasets. Table A4.1 provides a summary presentation of the IIP that facilitates the identification of debt liabilities covered, and the corresponding items in the gross external debt position (as presented in Table 4.1).<sup>1</sup> The columns show the breakdown of the IIP by institutional sector, and the assets and liabilities by functional category are shown in the rows, with debt instruments separately identified in the liabilities section of the table (shaded areas

in the table do not cover debt liabilities). The last column identifies the debt item as shown in the gross external debt position (Table 4.1).

3. In the IIP, positions of financial assets and liabilities should, in general, be valued as if they were acquired in market transactions on the balance sheet reporting date (*BPM6*, paragraph 3.84). Whereas the basic valuation method for debt securities is the market value, the nominal value is encouraged as a supplementary item (*BPM6*, paragraph 7.30). The *Guide* recommends that debt instruments be valued at the reference date at nominal value, and, for debt securities, at market value as well. For instance, Table 4.1 provides information on both values for debt securities. In addition, Table 7.16 provides a framework for reconciling nominal and market valuation of debt securities included in the gross external debt position. Nonnegotiable instruments include loans, deposits, and other accounts receivable/payable, and the primary valuation for positions in these instruments is nominal value in both datasets—IIP and external debt statistics. Therefore, data consistency between debt instruments (liabilities) recorded in the IIP and in the gross external debt position can be ensured.

4. As discussed in Chapter 15, the financial structure of economies—the composition and size of the liabilities and assets on the economy’s financial balance sheet—has been an important source of vulnerability. Data series described and presented in Part I of the *Guide*—notably sector, currency and maturity breakdown of external debt data—facilitate the examination of potential vulnerabilities of balance sheets of key sectors of an economy. To support this type of analysis, a currency composition and remaining maturity analysis of the IIP is also additional information in the *BPM6*: memorandum and supplementary

<sup>1</sup> Table 4.1 is expository; for standard components of the IIP see Chapter 3 and *BPM6*, Appendix 9.

Table A4.1 International Investment Position and External Debt Statistics							
	Central Bank	Deposit-Taking Corporations, except the Central Bank	General Government	Other Sectors		IIP	EDS Corresponding Item
				Other financial corporations	Nonfinancial corporations, Households, and NPISHs		
<b>Assets</b>							
By functional category							
Direct Investment							
Portfolio Investment							
Financial Derivatives (other than reserves) and ESOs							
Other Investment							
Reserve Assets							
<b>Total Assets</b>							
<b>Liabilities</b>							
By functional category							
Direct Investment							
Equity and investment fund shares							
Debt Instruments <sup>1</sup>							DI: Intercompany Lending
Portfolio Investment							
Equity and investment fund shares							
Debt Securities							Debt securities
Financial Derivatives (other than reserves) and ESOs							
Other Investment							
Other equity							
Debt instruments							
SDRs		NA		NA	NA		SDRs (allocations)
Currency and Deposits							Currency and Deposits
Loans							Loans
Insurance, pension, standardized guarantee schemes							Other debt liabilities
Other accounts receivable/payable							
Trade credit and advances							Trade credit and advances
Other accounts receivable/payable - other							Other debt liabilities
<b>Total Liabilities</b>							
<b>of which: Total debt instruments</b>							Gross external debt position
<b>Net IIP</b>							
<b>of which: Net debt instruments</b>							Net external debt

<sup>1</sup> In the IIP standard components, debt instruments classified as direct investment are not required to be presented broken down by type of instrument. Debt securities may be separately compiled as a supplementary item.

Note: shaded areas do not cover debt liabilities. NA = Not Applicable.

tables to the standard components of the IIP respectively provide a presentation of currency composition of assets and liabilities and of remaining maturity of long-term debt liabilities, with a breakdown by sector.<sup>2</sup> These definitions and tables are consistent with the presentation adopted in the *Guide*.

### The Link Between the IIP and the National Accounts

5. As mentioned in the *BPM6*, Appendix 7, the international accounts are closely linked to the *System of National Accounts (SNA)* and there are many similarities in the underlying accounting system. The *SNA* records the exchanges between the domestic economy and the rest of the world as if the rest of the world were a distinct institutional sector of the economy. From this perspective, the international accounts mirror the rest of the world sector, recording the exchanges (flows and positions) of all resident units with the nonresident units from the domestic economy perspective.

### Financial Accounts and Balance Sheets in the SNA

6. The financial account records transactions that involve financial assets and liabilities and that take place between resident institutional units and between resident institutional units and the rest of the world. The left-hand side of the account—as presented in the *SNA*—records acquisitions of financial assets less disposals, while the right-hand side records incurrence of liabilities less their repayment.<sup>3</sup>

7. The financial account is the final account in the full sequence of accounts that records transactions between institutional units. Net saving is the balancing item of the use of income accounts, and net saving plus net capital transfers receivable or payable can be used to accumulate nonfinancial assets. If they are not exhausted in this way, the resulting surplus is called net lending. Alternatively, if net saving and capital transfers are not sufficient to cover the net accumulation of nonfinancial assets, the resulting deficit is called net borrowing.

8. The key features of financial accounts are that (1) they identify the liabilities that institutional sectors use to finance their deficits, and the financial assets that institutional sectors use to allocate their surpluses; (2) they facilitate analysis of the flow of funds between different institutional sectors of the economy; (3) they place emphasis on stock variables such as financial assets and debt; and (4) they are developed from detailed information on the various institutional sectors and their activities in financial assets/liabilities.

9. Assets, both nonfinancial and financial, and liabilities can be aggregated across all types so as to show the total value of assets less liabilities, or net worth, of an institutional unit or group of units.<sup>4</sup> Tables describing this sort of aggregation are called balance sheets. A balance sheet may be drawn up for institutional units, institutional sectors and the total economy.<sup>5</sup> A similar account is drawn up showing the stock levels of assets and liabilities originating in the total economy held by nonresidents and of foreign assets and liabilities held by residents. In the *BPM6* this account is called the IIP but is drawn up from the point of view of residents whereas in the *SNA* it is drawn up from the point of view of the rest of the world with the rest of the world being treated in the same way as domestic sectors (*2008 SNA*, paragraph 13.2). In this context, the balance sheet in the *SNA* measures the stocks of assets, both nonfinancial and financial, and liabilities aggregated across all types and institutional sectors<sup>6</sup> so as to derive at the end the net worth by institutional sector and total economy.

10. Net worth is defined as the value of all the assets owned by an institutional unit or sector less the value of all its outstanding liabilities. For the economy as a whole, the balance sheet shows the sum of non-financial assets and net claims on the rest of the world. This sum is often referred to as national wealth (*2008 SNA*, paragraph 13.4).

<sup>4</sup>See *2008 SNA*, Chapter 13.

<sup>5</sup>As well as drawing up a balance sheet showing the values of all assets held by an institutional unit, it is possible to draw up a similar account for the value of a single type of asset (or liability) held by all institutional units in the economy. This is called an asset account. A basic accounting identity links the opening balance sheet and the closing balance sheet for a given asset.

<sup>6</sup>In the *SNA*, among assets the rest of the world only has financial claims on the domestic economy.

<sup>2</sup>See *BPM6*, Appendix 9, “Additional Analytical Position Data.”

<sup>3</sup>See *2008 SNA*, Chapter 11.

11. The balance sheet completes the sequence of accounts, showing the ultimate result of the entries in the production, distribution and use of income, and accumulation accounts. The existence of a set of balance sheets integrated with the flow accounts encourages analysts to look more broadly when monitoring and assessing economic and financial conditions and behavior.

12. The balancing item on the balance sheets is net worth. For the IIP, it is the net IIP, which is mirrored by the net worth for the rest of the world sector. Unlike the *SNA's* balance sheets, the IIP covers only financial assets and liabilities. Nonfinancial assets are excluded as they do not have a counterpart liability or other international aspect.<sup>7</sup> In the case of financial claims, the cross-border element arises when one party is a resident and the other party is a nonresident. In addition, while gold bullion is an asset that has no counterpart liability, it is included in the IIP when held as a reserve asset, because of its role as a means of international payments.

### A Simplified Version of the Balance Sheet

13. The balance sheet records assets on the left-hand side and liabilities and net worth on the right-hand side, as do the accumulation accounts for changes in these items. A balance sheet relates to the values of assets and liabilities at a particular point in time. The *SNA* provides for balance sheets to be compiled at the beginning of the accounting period (with the same values as at the end of the preceding period) and at its end. The *SNA* then provides for a complete recording of the changes in the values of the various items in the balance sheet between the beginning and end of the accounting period to which the flow accounts of the *SNA* relate. Changes in net worth can thus be explained fully only by examining the changes in all the other items that make up the balance sheet (2008 *SNA*, paragraph 13.10). In Table A4.2, only the closing positions for a limited number of classes of assets are shown.

14. The economy consists of five resident sectors—nonfinancial and financial corporations, general government, households, and NPISH—all of which have relationships with the rest of the world sector. Table

A4.2 is a matrix of various balance sheets that shows nonfinancial as well as financial assets and liabilities by sector and instrument, e.g., households hold nonfinancial assets of 1545 as well as financial assets of 3465. For each financial asset/liability, the rows show total assets by sector, and the matching of liability positions. For each sector, the columns show financial assets owned or liabilities incurred, and also the net worth of the sector. The need for consistency among the rows and columns helps to minimize errors in the data.

15. Table A4.2 may be further simplified to show only the balance sheets of the total economy and the rest of the world sector. In Table A4.3, the net worth of the total economy—its national wealth, 5590—equals the sum of a country's nonfinancial assets—5103—plus its net financial claims on the rest of the world—487. In the balance sheet for the total economy, all financial assets and liabilities between residents are netted out in the consolidation to leave only the net financial assets position (positive or negative) on the rest of the world. For the rest of the world balance sheet, only financial assets and liabilities are shown, e.g., in the balance sheet figures, the value of financial assets of the domestic economy for currency and deposits is 1571 and of liabilities is 1573. This implies that the rest of the world has a net asset with the domestic economy of 2 for currency and deposits. Table A4.3 shows that the asset position of the rest of the world is 116 and the liability position 114. So in the IIP the domestic economy has a net liability position of 2 for currency and deposits.

### A More Detailed Version of Balance Sheets

16. Financial accounts may be expanded into three dimensions to track each instrument category, the financial claims of each sector on each other sector. By indicating who has lent to whom and with what instrument, such a matrix lends considerable analytical power to financial accounts. As with the two-dimensional approach described above, the interlocking row and column constraints of the three dimensional matrix provide an important check on the consistency of data. This is because for each sector, each transaction involves at least, and usually, two balance sheet changes, and similarly for each party of the transaction, each transaction involves two balance sheet changes, e.g., the issue of a new debt security by a nonfinancial corporation that is purchased by a nonresident results

<sup>7</sup>In the case where they are part of the cross-border transactions, these exchanges are covered in the current account in the goods account.



Table A4.2. Simplified Version of Balance Sheet Accounts																
Assets						Liabilities and Net Worth										
Total	Rest of the world	Total economy	NPISHs	Households	General government	Financial corporations	Non-financial corporations	Stocks and balancing items	Non-financial corporations	Financial corporations	General government	Households	NPISHs	Total economy	Rest of the world	Total
5103		5103	170	1545	846	91	2451	<b>Nonfinancial assets</b>								
3112		3112	131	923	526	63	1469	Produced non-financial assets								
2825		2825	128	766	490	50	1391	Fixed assets								
146		146	1	52	23	0	70	Inventories								
141		141	2	105	13	13	8	Valuables								
1991		1991	39	622	320	28	982	Non-produced non-financial assets								
1961		1961	39	621	312	24	965	Natural resources								
30		30	0	1	8	4	17	Contracts, leases and licenses								
0		0	0	0	0	0	0	Goodwill and marketing assets								
9613	859	8754	176	3465	387	3651	1075	<b>Financial assets/liabilities</b>							1346	9613
782	1	781	0	0	81	700	0	Monetary gold and SDRs							782	782
1687	116	1571	112	904	124	10	421	Currency and deposits <sup>1</sup>	40	1346	139	10	38	1573	114	1687
1527	138	1389	25	214	4	1046	100	Debt securities	51	1117	257	2	0	1427	100	1527
1536	74	1462	8	27	118	1240	69	Loans	918	0	337	180	49	1484	52	1536
3115	360	2755	23	1825	15	595	297	Equity and investment fund shares	2087	804	6	0	0	2897	218	3115
545	26	519	4	430	21	38	26	Insurance, pension, and standardized guarantee schemes	12	483	19	1	5	520	25	545
35	0	35	0	6	0	21	8	Financial derivatives and ESOs	7	18	0	0	0	25	10	35
386	144	242	4	59	24	1	154	Other accounts receivable/payable	263	0	31	12	35	341	45	386
								<b>Net worth</b>	148	-26	444	4805	219	5590	-487	5103

Source: BPM6, Chapter 2 and 2008 SNA, Chapter 13.

<sup>1</sup>For the purpose of this table, the counterpart liability of "monetary gold and SDRs" holdings is fully shown, as a liability of the rest of the world, to derive the net financial claims of the rest of the world (-487) which mirrors the net IIP.

Assets			Liabilities and Net Worth	
Rest of the world	Total economy	Stocks and balancing items	Total economy	Rest of the world
	13857	<b>Assets</b>		
	5103	<b>Nonfinancial assets</b>		
	3112	Produced nonfinancial assets		
	2825	Fixed assets		
	146	Inventories		
	141	Valuables		
	1991	Non-produced nonfinancial assets		
	1961	Natural resources		
	30	Contracts, leases and licenses		
	0	Goodwill and marketing assets		
859	8754	<b>Financial assets/liabilities</b>	8267	1346
1	781	Monetary gold and SDRs <sup>1</sup>		782
116	1571	Currency and deposits	1573	114
138	1389	Debt securities	1427	100
74	1462	Loans	1484	52
360	2755	Equity and investment fund shares	2897	218
26	519	Insurance, pension, and standardized guarantee schemes	520	25
0	35	Financial derivatives and ESOs	25	10
144	242	Other accounts receivable/payable	341	45
		<b>Net worth</b>	5590	-487

Source: *BPM6*, Chapter 2 and *2008 SNA*, Chapter 13.

<sup>1</sup>For the purpose of this table, the counterpart liability of "monetary gold and SDRs" holdings is fully shown, as a liability of the rest of the world, to derive the net financial claims of the rest of the world (-487) which mirrors the net IIP.

in the following entries: the nonfinancial corporation reports the increase in *debt securities* liabilities, and an increase in *currency and deposit* assets; while the non-resident reports an increase in *debt securities* assets, and a reduction in *currency and deposits* assets.

17. The full three-dimensional matrix is an important analytical tool but, because of the cost and/or the conceptual complexity, relatively few countries have full flow of funds data.<sup>8</sup> Table 27.4 in the

<sup>8</sup>The flow of funds is a three dimensional presentation of financial statistics where both parties to a transaction as well as the nature of the financial instrument being transacted are elaborated. A similar three dimensional presentation is also presented in respect of the stocks of financial assets and liabilities where the creditor and debtor of each instrument are shown.

*2008 SNA*, not shown here, illustrates the type of detail that a country may wish to develop. This format facilitates the more detailed financial analysis just described by showing transactions in assets cross-classified by type of asset and by the debtor sector in the first part of the table, and the type of liability cross-classified by the creditor sector in a similar, second part. The sectors transacting in assets or liabilities form the columns of the table while the type of asset, disaggregated by sector of debtor (or creditor in the second part of the table), is shown in the rows. It is also instructive to compile exactly similar tables in terms of the stocks of financial assets and liabilities. Using both matrices, all assets, liabilities, and counterpart combinations can be found.

### Comparison Summary of the Rest of the World Balance Sheet Account and the IIP Classification

18. Appendix 7 of *BPM6* makes a summary account of the complete concordance between the *SNA* and the *BPM6* in respect to residency, valuation, time of recording, conversion procedures and coverage of flows and stocks. Additionally, Chapter 2 of *BPM6*—Overview of the Framework—includes a separate annex (Annex 2.2) illustrating with a numeric example (1) the overview of the integrated economic accounts as presented in the 2008 *SNA* and (2) the links between the financial instruments and the functional categories including the conversion of data from instrument to functional category (Tables A4.2 and A4.3 above are based on this numerical example). Furthermore, BP and IIP standard components (see *BPM6*, Appendix 9) include the *SNA* codes, where appropriate, which facilitates comparison between the international accounts and the *SNA*.

19. The classification system of the *SNA* and *BPM6* employs consistent coverage and terminology. There is, however, a major presentational difference regarding the grouping of the financial assets and liabilities by functional categories as primary level of classification in the external accounts with impact on the financial account, the IIP and the investment income, and the use of the instruments and sectors by the *SNA* for the same categories.<sup>9</sup> The functional categories are the primary classification used for each of financial transactions, positions, and income in the international accounts.

20. Five functional categories of investment are distinguished in the international accounts: (1) direct investment, (2) portfolio investment, (3) financial derivatives (other than reserves) and employee stock

options, (4) other investment, and (5) reserve assets. The functional categories are built on the classification of financial assets and liabilities, but with an additional dimension that takes into account some aspects of the relationship between the parties and the motivation for investment. However, data by functional category are further subdivided by instrument and institutional sector, which makes it possible to link them to the corresponding *SNA* and monetary and financial statistics items. Table A4.4 (Table 6.1 of *BPM6*) shows the linkages between the financial assets classification and the functional categories.<sup>10</sup>

21. Table A4.5 shows the 2008 *SNA* financial instruments classification and the correspondence of these instruments with *BPM6* broad categories: equity, debt instruments, and other financial assets and liabilities.<sup>11</sup> This correspondence makes it possible to link financial instruments in *SNA* and IIP with related debt liabilities covered in the gross external debt position; it also points out to the need for validation of the different datasets by their respective compilers, in particular when different source data are used for some of the items.

22. Other differences refer to the breakdown of the institutional sectors and their groupings. While consistent in coverage, the classification of institutional sectors differs according to the importance given to sectors and subsectors in the two datasets. Table A4.6 illustrates the correspondence between the two classification systems. For more details on the classifications and the correspondence between *SNA* and international accounts items see *BPM6*, Appendix 7 and selected tables in Chapter 2.

<sup>9</sup>In addition, the classification of services in the balance of payments is largely product-based, consistent with the Central Product Classification (CPC); it differs from the *SNA*, though, for a few products, n.i.e., travel, construction, and government goods and services n.i.e., are identified in *BPM6*, and are related to the provider/acquirer rather than product itself. To ensure consistency the *SNA* classifies by product (CPC) the goods and services included in these items in the balance of payments.

<sup>10</sup>As shown in Table A4.4, monetary gold consists of gold bullion and unallocated gold accounts. Gold bullion has no counterpart liability. However, the counterpart liability of unallocated gold accounts is in deposits (other investment). See Appendix 1, Gold Accounts: Allocated and Unallocated.

<sup>11</sup>The *Guide* clarifies that monetary gold consists of gold bullion and unallocated gold accounts. Gold bullion has no counterpart liability; however, the counterpart liability of unallocated gold accounts is in deposits (see paragraph 7.51).

Table A4.4 Link between Financial Assets Classification and Functional Categories

2008 SNA Financial Assets and Liabilities Classification	Functional categories				
	DI	PI	FD	OI	RA
<b>AF1 Monetary gold and SDRs</b>					
<b>AF11 Monetary gold:</b>					
Gold bullion					X
Unallocated gold accounts					X
AF12 Special drawing rights				X <sup>1</sup>	X <sup>1</sup>
<b>AF2 Currency and deposits:</b>					
AF21 Currency				X	X
AF22 Transferable deposits					
AF221 Interbank positions				X	X
AF229 Other transferable deposits	X			X	X
AF29 Other deposits	X			X	X
<b>AF3 Debt securities</b>	X	X			X
<b>AF4 Loans</b>	X			X	X
<b>AF5 Equity and investment fund shares:</b>					
<b>AF51 Equity</b>					
AF511 Listed shares	X	X			X
AF512 Unlisted shares	X	X			x <sup>2</sup>
AF519 Other equity	X			x	
<b>AF52 Investment fund shares or units:</b>					
AF521 Money market fund shares or units	x	X			X
AF522 Other investment fund shares or units	x	X		x	X
<b>AF6 Insurance, pension, and standardized guarantee schemes:</b>					
AF61 Nonlife insurance technical reserves	x			X	
AF62 Life insurance and annuity entitlements	x			X	
AF63 Pension entitlements				X	
AF64 Claims of pension funds on pension managers	X			X	
AF65 Entitlements to non-pension benefits				X	
AF66 Provisions for calls under standardized guarantees	X			X	
<b>AF7 Financial derivatives and employee stock options</b>					
<b>AF71 Financial derivatives:</b>					
AF711 Forward-type contracts			X		X
AF712 Options			X		X
AF72 Employee stock options			X		
<b>AF8 Other accounts receivable/payable:</b>					
AF81 Trade credit and advances	X			X	
AF89 Other accounts receivable/payable	X			X	

Source: *BPM6*, Table 6.1.

Note: DI = direct investment; PI = portfolio investment; FD = financial derivatives (other than reserves) and employee stock options; OI = other investment; RA = reserve assets.

X shows applicable functional categories (x shows cases considered to be relatively uncommon) for the most detailed instrument categories.

<sup>1</sup>SDRs: Assets = Reserve assets; Liabilities = Other investment.

<sup>2</sup>Unlisted shares must be liquid, as stated in the *BPM6*, paragraph 6.87.

**Table A4.5 2008 SNA Financial Instruments Classification (with Corresponding BPM6 Broad Categories) (Includes 2008 SNA codes)**

2008 SNA Financial Assets and Liabilities Classification	Broad International Accounts Category (BPM6)
AF11 Monetary gold	
Gold bullion	}Other financial assets
Unallocated gold accounts	}Debt instruments
AF12 Special drawing rights	}Debt instruments
AF2 Currency and deposits	}Debt instruments
AF21 Currency	}
AF221 Interbank positions	}
AF229 Other transferable deposits	}
AF29 Other deposits	}
AF3 Debt securities	}Debt instruments
AF4 Loans	}Debt instruments
AF5 Equity and investment fund shares	}Equity
AF51 Equity	}
AF511 Listed shares	}
AF512 Unlisted shares	}
AF519 Other equity	}
AF52 Investment fund shares or units	}
AF521 Money market fund shares or units	}
AF522 Other investment fund shares or units	}
AF6 Insurance, pension, and standardized guarantee schemes	}Debt instruments
AF61 Nonlife insurance technical reserves	}
AF62 Life insurance and annuity entitlements	}
AF63 Pension entitlements	}
AF64 Claims of pension funds on pension managers	}
AF65 Entitlements to nonpension benefits	}
AF66 Provisions for calls under standardized guarantees	}
AF7 Financial derivatives and employee stock options	}Other financial assets
AF71 Financial derivatives	} and liabilities
AF711 Forward-type contracts	}
AF712 Options	}
AF72 Employee stock options	}
AF8 Other accounts receivable/payable	}Debt instruments
AF81 Trade credit and advances	}
AF89 Other accounts receivable/payable	}

Source: BPM6, Table 5.3.

**Table A4.6 Conversion—Institutional Sector Breakdown SNA—International Accounts  
Sectors as they are in the 2008 SNA and BPM6**

2008 SNA		BPM6
Nonfinancial corporations	←	Central bank
Financial corporations	←	Deposit-taking corporations, except the central bank
Central bank	←	General government
Deposit-taking corporations, except the central bank	←	Other sectors
		Other financial corporations
Money market funds	↔	Money market funds
Non MMF investment funds	↔	Non MMF investment funds
Other financial intermediaries except insurance corporations and pension funds	↔	Other financial intermediaries except insurance corporations and pension funds
Financial auxiliaries	↔	Financial auxiliaries
Captive financial institutions and money lenders	↔	Captive financial institutions and money lenders
Insurance corporations	↔	Insurance corporations
Pension funds	↔	Pension funds
General government	←	Nonfinancial corporations, households and NPISHs
		Nonfinancial corporations
Households	↔	Households
Nonprofit institutions serving households	↔	Nonprofit institutions serving households

Source: *BPM6 Compilation Guide*, Appendix VI.A.



# Appendix 5. Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI)<sup>1</sup>

1. The objective of the Heavily Indebted Poor Countries (HIPC) Initiative of the IMF and World Bank is to reduce external debt positions of eligible low-income countries to sustainable levels and create room for increased social poverty reducing spending. In this appendix, the HIPC Initiative is described, along with Debt Relief Analysis (HIPC DRA), a building block of the HIPC Initiative. Finally, beyond HIPC assistance, the Multilateral Debt Relief Initiative (MDRI) is briefly addressed.

## HIPC Initiative

### Origin and Description of the HIPC Initiative

2. For a number of low-income countries, it was recognized in the second half of the 1990s, by official creditors in particular, that the external debt situation was becoming extremely difficult. For such countries, even full use of traditional mechanisms of rescheduling and debt reduction—together with continued provision of concessional financing and pursuit of sound economic policies—would not be sufficient to attain sustainable external debt levels within a reasonable period of time and without additional external support. The HIPC Initiative adopted in September 1996 is a comprehensive, integrated, and coordinated framework developed jointly by the IMF and the World Bank to address these external debt problems of the HIPCs. Following a comprehensive review launched in early 1999, the Initiative was enhanced in September 1999 to provide faster, deeper, and broader debt relief, and

to strengthen the links between debt relief, poverty reduction, and social policies.

3. The Initiative is designed to enable HIPCs that have a strong track record of economic adjustment and reform to achieve a sustainable debt position over the medium term. Central to the Initiative are the country's continued efforts toward macroeconomic and structural adjustment and social reforms, with an emphasis on poverty reduction. The latter is encompassed in a Poverty Reduction Strategy Paper (PRSP) that is developed by the authorities through a broad-based participatory process. These efforts are complemented by a commitment from the international financial community to tackle the country's external debt problem in a comprehensive and coordinated fashion.

### Eligibility Criteria and the Structure of the HIPC Initiative

4. A country wishing to receive debt relief under the enhanced HIPC Initiative would go through a three-stage process consisting of a preliminary stage, decision point, and completion point.

5. To receive assistance under the HIPC Initiative, a country needs to have satisfied the following set of criteria:

- Be eligible for concessional assistance from the IMF and World Bank
- Face an unsustainable debt burden as specified in the HIPC framework (see paragraph 6 below) after application of traditional debt-relief mechanisms<sup>2</sup>

<sup>1</sup>This chapter draws on work at the IMF's Strategy, Policy, and Review Department (SPR). Additional readings on the HIPC and MDRI Initiatives can be found at: [www.imf.org/external/np/exr/facts/hipc.htm/](http://www.imf.org/external/np/exr/facts/hipc.htm/).

<sup>2</sup>Such as a Paris Club stock-of-debt operation on a Naples terms 67 percent present value reduction with at least comparable action from bilateral creditors. Table 8.2 in Chapter 8 sets out the evolution of Paris Club rescheduling terms.

- Establish a track record of reform and sound policies through IMF and World Bank supported programs

6. The sustainability of the external debt position is determined by comparing debt burden indicators to the HIPC targets. These targets are set at 150 percent for the ratio of the present value of debt to exports under the exports window and 250 percent for the present value of the debt to government revenue under the fiscal window.

7. Exports are measured by the three-year backward-looking average of exports of goods and services converted at the average exchange rate. The three-year average is used to eliminate the effects of transitory factors. Revenues are measured by the base year central government revenues (excluding grants) converted at the end-of-period exchange rate. The net present value (NPV) amount of assistance is calculated as the reduction of the NPV of debt after traditional debt relief that is necessary to bring the NPV of debt to exports to the threshold level of 150 percent or the NPV of debt to revenue to 250 percent.<sup>3</sup> A country receives assistance according to whichever of these amounts is higher. To be eligible under the fiscal window, however, countries need to meet the threshold of central government revenue collection to GDP (at least 15 percent) and the openness criterion of exports-to-GDP (at least 30 percent).

Ratios of NPV of Debt	Thresholds
NPV of debt to exports	150 percent
NPV of debt to fiscal revenues	250 percent
The fiscal revenue threshold only applies if	
Exports to GDP are at least	30 percent
Revenue to GDP are at least	15 percent

<sup>3</sup>While the term NPV is commonly used in this Appendix, frequently it would be more accurate to describe the calculation as present value—discounting future interest and principal payments by an interest rate—and this is the approach taken in the *Guide*.

8. If a country satisfies all eligibility criteria and requests HIPC Initiative assistance, a preliminary HIPC Initiative document (prepared jointly by the IMF and the World Bank) will be issued to the Executive Boards of the IMF and World Bank informing them that the country meets the HIPC Initiative eligibility criteria. This document will include a discussion of the debt situation and the policy track record and a loan-by-loan HIPC DRA; provide preliminary estimates of the costs and timing of debt relief; and discuss in broad terms the conditionality envisaged for reaching the completion point. Eligibility will be confirmed at the HIPC decision point.

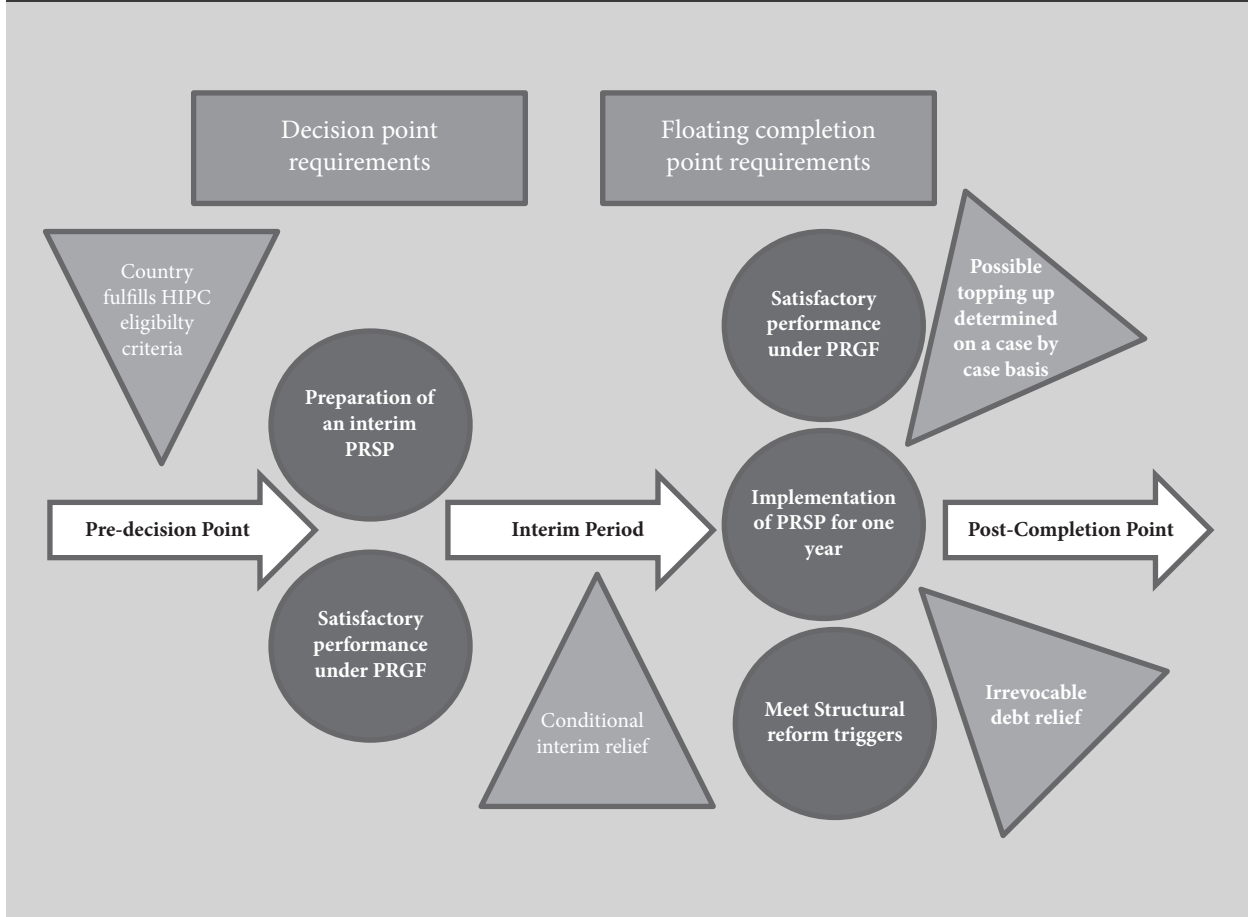
9. An eligible country qualifies for the HIPC Initiative decision point if its debt burden indicators are above the HIPC Initiative thresholds using the most recent data for the year immediately prior to the decision point, it has established a satisfactory track record of strong policy performance under respective IMF- and IDA-supported programs, and has a satisfactory poverty reduction strategy in place.

10. Once a country has met the above set of criteria, the Executive Boards of the IMF and World Bank formally decide on its eligibility for debt relief, and the international community commits to reducing debt to a level that is considered sustainable. This milestone under the HIPC Initiative is referred to as the decision point. Once a country reaches its decision point, it may immediately begin receiving interim relief on its debt service falling due.<sup>4</sup> The next step is the completion point when all the debt relief is expected to be delivered. In order to receive full debt relief committed at the decision point, a country must establish a further track record of good performance under programs supported by loans from the IMF and the World Bank, implement satisfactorily key reforms agreed at the decision point, and adopt and implement its PRSP for at least one year. Once a country has met these criteria, it can reach its completion point; at this stage, a completion point document is jointly issued by the Executive Boards

<sup>4</sup>Bilateral and commercial creditors are generally expected to reschedule obligations coming due. There are limits to the maximum assistance that the IMF and World Bank can provide during the interim period.



Figure A5.1 Review of the HIPC Process



of the IMF and World Bank. Figure A5.1 sets out the process in diagrammatical form.

### Calculations of Overall Assistance

11. Assistance under the HIPC Initiative is defined as the present value reduction required to lower external debt at the decision point to the Initiative's targets. The amount of assistance is calculated at the decision point, using the actual data on debt, fiscal revenue, exports, and the discount and exchange rates of the last (fiscal) year prior to the decision point (base year). The NPV of debt is calculated using the six-month (prior to the end of the base year) average CIRRs (commercial interest reference rates provided by the OECD), and the year-end exchange rates. The NPV amount of assistance is calculated as

the reduction of the NPV-of-total-debt after full use of traditional debt relief mechanisms (i.e., a stock of debt operation on Naples terms) necessary to bring the NPV-of-debt to exports (or to central government revenue under the revenue window) to the threshold level of 150 percent (250 percent under the revenue window).<sup>5</sup>

12. Under exceptional circumstances, the HIPC Initiative provides the option of additional debt relief ("topping-up") at the completion point beyond the amount committed at the decision point. This topping up assistance can be provided to HIPCs whose debt

<sup>5</sup>See footnote 3 above regarding the use of the term NPV in this Appendix.

ratios at the completion point exceeds the HIPC Initiative's threshold due to exogenous factors that lead to a fundamental change in their economic circumstances.

### Burden-Sharing Among Creditors and Delivery of Assistance

13. One of the Initiative's guiding principles is broad and equitable participation of all creditors (multilateral, official bilateral, and commercial) in providing assistance. The country is required to seek at least comparable treatment from its other official bilateral and commercial creditors.

14. Multilateral creditors take action proportional to bilateral creditors to reduce the present value of their claims on the country. Each multilateral institution chooses the vehicle to deliver its share of assistance (derived in proportion to its share in the present value of multilateral claims at the decision point). The IMF's contribution is made in the form of grants financed from PRG-HIPC Trust resources.<sup>6</sup> The European Union provides grants.

15. The World Bank is committed to take action after the decision point—through the selective use of IDA grants and allocations—and at the completion point. The principal vehicle for the Bank's participation, together with some other multilateral creditors, is the HIPC Trust Fund. This Trust Fund provides relief to eligible countries on debt owed to participating multilaterals and is administered by IDA, with contributions from participating multilateral creditors and bilateral donors. To provide relief on debt owed to IDA, the Bank made transfers from its IBRD net income and surplus to the HIPC Trust Fund.

### Debt Eligible for HIPC Assistance

16. The debt contracted with multilateral and bilateral creditors, covered by the HIPC Initiative, is limited to public and publicly guaranteed debt, i.e., external debt liabilities of the public sector<sup>7</sup> and external debt liabilities of the private sector the servicing of which is

contractually guaranteed by a public unit resident in the same economy as the debtor (see Chapter 5). The debt comprises:

- All medium- and long-term government and government-guaranteed external debt
- Short-term debt<sup>8</sup> only if it has long been in arrears
- Debt of public enterprises defined as “at least 50 percent owned by the government”
- Debt of public enterprises being privatized, if the debt remains with the government

### Treatment of Arrears

17. Countries seeking assistance under the HIPC Initiative need to work toward elimination or reduction of existing arrears and the nonaccumulation of new external payments arrears. All arrears to multilateral creditors are expected to be cleared, or included in an agreement on a schedule for their clearance before the decision point is reached. However, clearance of such arrears needs to be consistent with a country's financing constraint. In addition, concessionality that is granted in arrears-clearance operations by multilateral creditors can count toward assistance required under the Initiative, on a case-by-case basis.

### HIPC DRA

18. HIPC DRAs are central to the work of the HIPC Initiative. These are prepared, on a tripartite basis, jointly by the country authorities, the World Bank, and the IMF and, where appropriate, by the relevant regional development banks, such as the AfDB and the Inter-American Development Bank.

19. In preparation for the decision point discussion, a HIPC DRA is carried out to determine the current external debt situation of the country. This is essentially a medium-term balance of payments projection that assesses the debt burden of the country and its capacity to service those obligations. If external debt ratios for that country fall above applicable targets after application of traditional debt-relief mechanisms, HIPC Initiative assistance is considered.

20. The HIPC DRA is undertaken on the basis of debt stock and flow projections. All the information needs to be obtained on a loan-by-loan basis, disaggregated

<sup>6</sup>Trust for Special Poverty and Growth Operations for the Heavily Indebted Poor Countries and Interim Extended Credit Facility Subsidy Operations.

<sup>7</sup>The public sector comprises the general government, the central bank, and those units in the deposit-taking corporations, except the central bank, and other sectors that are public corporations; see Chapter 5.

<sup>8</sup>Debt that has an original maturity of one year or less.

by creditor and currency. The stock of debt is the amount outstanding at the end of the latest available fiscal or calendar year, depending on whether the country operates on a fiscal or calendar year basis. Projections of financial flows consist of expected amortization payments, disbursements on existing debt, and new loans.

21. Countries seeking assistance under the HIPC Initiative are expected to fully reconcile all debt data on a loan-by-loan basis with the creditor billing records before the decision point.<sup>9</sup> The reconciliation process refers to the position and flows. If a loan is amortized according to its original schedule (if there are no adjustments such as rescheduling, forgiveness, cancellations, supplemental commitments, arrears, or prepayments), the periodic flows depend mainly on the original terms of the loan. Any adjustments to the loan amount, such as write-offs or rescheduling, have to be taken into account, so that a reconciled debt service is agreed (and, by extension, the present value of the debt). The information needed by a HIPC country compiler is set out in Table A5.2.

22. The consistency of stock and flow data on existing debt needs to be assessed. Simple equations can help the data compiler to complete this task, such as:

- The sum of future repayments of loan principal equals the outstanding debt (assuming no accrual of interest costs)
- The sum of future disbursements of loan principal equals the undisbursed balance
- For interest projections, egregious errors could be checked by calculating the implied interest rate (interest  $t$ /stock of debt  $t-1$ ) for a reference year and comparing it to the interest rate recorded in the original terms; or each loan there is a declining interest charge as the years progress and the debt stock is being reduced with each amortization

23. Regarding new loans, given certain underlying assumptions, the expected financing gap on the balance of payments is projected. This is the baseline scenario. Assumptions have to be made about how the gap is to be filled—by grants, concessional loans, or com-

**Table A5.2 Data Needed by a HIPC Country Compiler**

**General information**

- Debtor
- Debtor type (central bank, public enterprises, etc.)
- Creditor
- Creditor type (official, bilateral, commercial banks)
- Debtor loan identification
- Creditor loan identification
- Project title
- Loan type (supplier's credit, export credit, etc.)
- Date of signature
- Committed amount and currency of the loan
- Disbursed amount
- First and last date of amortization
- Grace period
- Maturity
- Interest rate and other charges (fixed or variable interest rate)
- Penalty on arrears
- Repayment schedule (equal installments, annuity, etc.)
- Cutoff date
- Grant element
- Identification of ODA loans

**At the end of a period**

- Stock of debt
- Arrears on principal (on a loan-by-loan basis)
- Arrears on interest
- Exchange rates at the end-of-period and average exchange rate of the year
- Average six-month CIRRs

**Disbursements**

- On "pipeline" debt
- New debt

**Macroeconomic data**

- Gross domestic product
- Balance of payments
- Government finance statistics

Note: ODA, official development assistance; CIRRs, Commercial Interest Reference Rate (OECD).

<sup>9</sup>The preliminary HIPC document data might be on the basis of partially reconciled data.

mercial borrowing. The terms of any gap-filling loans can be assumed to be the same as the assumptions on new disbursement terms, or they can vary according to the assessment of willingness to fill the financing gap—if this is possible to assess. For instance, new borrowing to finance the gap can be introduced into the HIPC DRA framework as two separate loans for each year. The first might be assumed to be available on IDA terms, while the remainder is secured at less concessional terms, but still at a concessional rate.

24. Interest charges on new borrowing enter the debt-service stream six months to one year after they are assumed to be committed, and the repayments of the principal become due after the grace period ended. So, for each year, the balance of payments financing gap is established, with any resultant new borrowing being fed back into HIPC DRA as a new loan. Hence, the balance of payments and the HIPC DRA data are obtained interactively over the projection period, and the new debt-service flows taken into account in calculating the present value<sup>10</sup> and debt-service indicators that are presented in the decision point document. This document is the basis for the Bank and IMF Boards' decisions on the eligibility and amount of assistance for the country.

25. Furthermore, sensitivity analysis is undertaken—the decision point document includes the results of alternative macroeconomic scenarios, thus providing a quantitative assessment of the impact of downside risks of the baseline balance of payments scenario. Modified assumptions are applied to external sector variables, such as international prices and trade volumes, and availability and terms of the financing items in the balance of payments. A modification to an assumption may have numerous direct and secondary effects on the balance of payments projections and the whole macro framework. In principle there are two ways for reflecting the impact of the envisaged shock. The first would be to capture only the immediate direct effect of any adverse shock on the balance of payments, which is reflected in lower credit entries or higher debit entries along with

a higher additional financing gap. The additional financing gap would then be covered by new borrowing, which in turn would raise the debt ratios. This is normally the preferred approach for HIPC alternative scenarios.

26. The alternative approach takes into account secondary effects, such as slower economic growth, which would typically dampen the initial increase in the financing gap, e.g., a significant shortfall in coffee exports would, in the first instance, cause a higher balance of payments financing gap. In addition, however, it would also lead to slower GDP growth and lower import demand, which would partially compensate for the initial increase in the financing gap. However, this approach is applied only in cases where the first approach implies highly unrealistic outcomes.

#### ***Interest rate and currency assumptions under the HIPC DRA***

27. The currency-specific CIRRs used in HIPC DRAs to calculate the present value of external debt are averages over the six-month period up to the reference date. For those currencies for which no CIRRs are available but that are pegged to another currency, such as the U.S. dollar, the CIRRs for the latter is used. In the absence of an exchange rate arrangement, as well as for the units of account used by various multilateral institutions, the SDR rate should be applied.

28. The present value of external debt is converted from its currency components into U.S. dollars using the actual end-of-period exchange rates—the same date as the reference date for the gross external debt position. These rates are applied to base-year calculations, as well as to projections.

#### **Beyond HIPC Assistance**

29. In 2005, to help accelerate progress toward the United Nations Millennium Development Goals (MDGs), the HIPC Initiative was supplemented by the Multilateral Debt Relief Initiative (MDRI). The MDRI allows for 100 percent relief on eligible debts by three multilateral institutions—the IMF, the World Bank, and the AfDB—for countries completing the HIPC Initiative process. The MDRI goes further than the HIPC Initiative by providing full debt relief to free up additional resources to help these countries reach

<sup>10</sup>Debt service on new borrowing does not affect the external debt position in the reference year used for decision point calculation of assistance.

the MDGs.<sup>11</sup> Unlike the HIPC Initiative, the MDRI does not propose any parallel debt relief on the part of official bilateral or private creditors, or of multilateral institutions beyond the IMF, IDA, and the AfDB.<sup>12</sup> However, in early 2007, the Inter-American Development Bank also decided to provide similar debt relief to the five HIPCs in the Western Hemisphere.

30. At the G-7 summit in June 1999, G-7 leaders called for additional action on a bilateral basis on top of HIPC Initiative assistance, namely to forgive all ODA debt for HIPCs qualifying for assistance under

the Initiative, and to give new ODA preferably in the form of grants. Subsequently, a number of Paris Club creditors indicated their willingness to undertake such actions. These bilateral actions are outside of the scope of HIPC Initiative assistance, and are not included in the debt reduction assumed in the debt sustainability analysis under the HIPC, but are presented as an estimate of the additional NPV reduction that could be forthcoming through additional bilateral action. The impact of additional bilateral action varies greatly from country to country.

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<sup>11</sup>All countries that reach the completion point under the HIPC Initiative, and those with per capita income below \$380 and outstanding debt to the Fund at end-2004, are eligible for the MDRI. To qualify for MDRI debt relief, the IMF Executive Board also requires that these countries be current on their obligations to the IMF and demonstrate satisfactory performance in macroeconomic policies, implementation of a poverty reduction strategy, and public expenditure management.

<sup>12</sup>Further information on the MDRI is available in *PSDS Guide*, Chapter 4.





# Appendix 6. Data Quality Assessment Framework (DQAF) for External Debt Statistics

*(Disclaimer: This appendix does not follow the numbering convention of the other appendices. It conforms to the structure and codes of the Data Quality Assessment Framework (DQAF) for External Debt Statistics.)*

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## Appendix 6. 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).<sup>1</sup>

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.

#### C. Content of the Framework

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

0. **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

<sup>1</sup>The first three levels are common with other DQAFs that have been 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.



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:

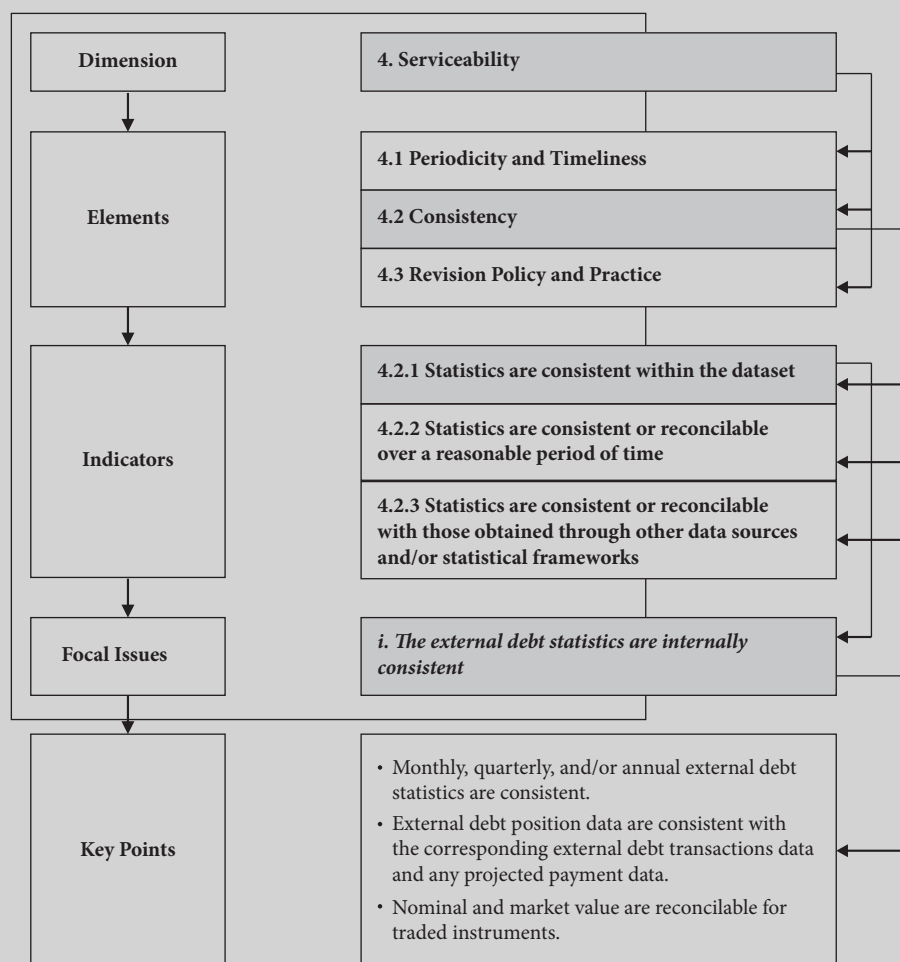
- 4.1 periodicity and timeliness,
- 4.2 consistency, and
- 4.3 revision policy and practice.

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 September 2013, 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)<sup>2</sup> 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).

#### 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.

<sup>2</sup>See *External Debt Statistics: Guide for Compilers and Users (Guide)*, paragraph 10.4.

- 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.
  - 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, e.g.:
  - 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.
  - 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).
  - 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”).
  - 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 non-residents 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).<sup>3</sup>
- 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.<sup>4</sup>

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

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



- 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).
  - 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), e.g.:
  - 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, irrespective 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)<sup>5</sup> 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 (1) government units that exist at each level—central,<sup>6</sup> state, or local—of government within the national economy; (2) all social security funds operated at each level of government; (3) all nonmarket nonprofit institutions that are controlled and mainly financed by government units; and (4) 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: (1) central banks; (2) currency boards; and (3) government-affiliated agencies that are separate institutional units and primarily perform central bank activities (see *Guide*, paragraph 3.5).

<sup>5</sup>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.

<sup>6</sup>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).<sup>7</sup>
- The other sectors category comprises: (1) other financial corporations, (2) nonfinancial corporations, and (3) households and nonprofit institutions serving households sectors (NPISH) (see *Guide*, paragraphs 3.8 to 3.11).
  - The other financial corporations subsector comprises (1) money market funds (MMFs); (2) non-MMF investment funds; (3) other financial intermediaries except insurance corporations and pension funds; (4) financial auxiliaries; (5) captive financial institutions and money lenders; (6) insurance corporations; and (7) 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:
  - 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).<sup>8</sup>

<sup>7</sup>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 MFSM (see *Guide*, paragraph 3.6, footnote 8).

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

- Trade credit 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 (1) nonlife insurance technical reserves; (2) life insurance and annuity entitlements; (3) pension entitlements, claims of pension funds on pension managers, and entitlements to non-pension funds; and (4) 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 but 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).
- 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).<sup>9</sup> Therefore:
  - Long-term debt is defined as debt with an original maturity of more than one year or with no stated maturity.
  - 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).<sup>10</sup> 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 subcategory 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

<sup>9</sup>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).

<sup>10</sup>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.

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

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

### 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 affiliates<sup>11</sup> 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 credit and advances to nonresidents.
- Deposits in domestic banks owed to nonresidents.
- Noncash debt to nonresidents.
- Intercompany lending between entities in a direct investment relationship.
- 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).

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

- 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.
- 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).
  - 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)*<sup>12</sup>
    - 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.
- 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).
- *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).

<sup>12</sup>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.

- 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.
- 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; e.g., 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).
- 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).
- 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*.**

## 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:
  - 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 (i.e., 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).<sup>13</sup>
- Deviations from the above recording are kept under review (see also 5.2.1).

<sup>13</sup>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 (1) debt securities issued abroad by the private sector, (2) external loan liabilities of the private sector, (3) trade credit and advances liabilities, (4) miscellaneous accounts payable and dividends once the shares go ex-dividend and until they are settled; and (5) Direct investment: Intercompany lending liabilities.
  - 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.
  - 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 into 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 into 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 deposit-taking corporation's external debt, when deposit-taking corporation's 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 non-sampling 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, e.g.:
  - 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).
- 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 sources 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.
  - 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.
  - 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).<sup>14</sup>
- Coverage of debt securities issued in international markets is crosschecked against the international securities statistics of the Bank for International Settlements (BIS).<sup>15</sup>
- 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).<sup>16</sup>
- Coverage of Direct investment: Intercompany lending is compared against the results of the data published by the Coordinated Direct Investment Survey (CDIS).<sup>17</sup>

<sup>14</sup>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 [www.jedh.org/](http://www.jedh.org/).

<sup>15</sup>BIS data are available at [www.bis.org/statistics/index.htm](http://www.bis.org/statistics/index.htm).

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

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

### 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.
- 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<sup>18</sup>
  - 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-term and long-term) and provided on an original maturity basis and by type of instrument, as set out in *BPM6*.<sup>19</sup>
- GDDS<sup>20</sup>
  - Public and publicly guaranteed external debt position data, broken down by maturity, are disseminated quarterly.<sup>21</sup>
  - The associated public and publicly guaranteed external debt service schedules are disseminated twice yearly with data for four quarters and two semesters ahead.
  - Private external debt not publicly guaranteed position data are disseminated with annual periodicity.

<sup>18</sup>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).

<sup>19</sup>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*.

<sup>20</sup>See *Guide*, Box 4.1.

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

#### 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).
- GDDS<sup>22</sup>
  - 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.
  - 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.*

#### 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 statistics.*

- 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.*

<sup>22</sup>See *Guide*, Box 4.1.

- 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; e.g., 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*,<sup>23</sup> 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.*

- SDDS<sup>24</sup>
  - Quarterly data on the domestic-foreign currency breakdown of the external debt position are disseminated within one quarter after the reference date.<sup>25</sup>
  - 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 reference period;<sup>26</sup> data can be broken down into institutional sector—general government, central bank,

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

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

<sup>25</sup>Additional breakdown by maturity (see *Guide*, Table 7.6) or by institutional sector and maturity (see *Guide*, Table 7.7) are preferred.

<sup>26</sup>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).

deposit-taking corporations, except the central bank, and other sectors.<sup>27</sup>

- 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).<sup>28</sup>

**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.
  - 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.

<sup>27</sup>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.

<sup>28</sup>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.

**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).
- External debt positions data are available in formats consistent with the World Bank's Quarterly External Debt Statistics (QEDS) database.<sup>29</sup>
- 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.

<sup>29</sup>Available at [www.worldbank.org/qeds](http://www.worldbank.org/qeds).

- 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.

## 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.
  - 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 e-mail 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.





## Appendix 7. Treatment of Arrears in the Gross External Debt Position

### Introduction

1. In the 2003 *Guide*, the nonpayment, when due, of principal and/or interest resulted in a reduction in the amount outstanding of the appropriate instrument, such as a loan, and an increase in arrears (a short-term liability that was included under *other debt liabilities*), leaving the external debt position unchanged (see 2003 *Guide*, paragraph 2.29).<sup>1</sup> In the gross external debt position, the debt was extinguished and a new short-term debt liability was created. In line with *BPM6*, the treatment has changed; when arrears related to the late payment of principal and interest on debt instruments occur, no transactions should be imputed, but the arrears should continue to be shown in the same instrument until the liability is extinguished. Then, arrears are identified as a supplementary category of the original asset or liability, rather than treated as the repayment of the original liability and the creation of a new short-term liability.

2. This appendix summarizes the treatment of arrears in the gross external debt position, the way they are classified and presented, and identifies main changes introduced in the *Guide*. In summary (see discussion below), the treatment of arrears in the *Guide* is fully consistent with *BPM6*, and because data on arrears are important in their own right, the *Guide* recommends that detailed data on arrears (similar to that required by the 2003 *Guide*) continue to be presented, if significant.

3. Arrears are defined as amounts that are past due-for-payment and unpaid. Only the amounts past due are classified as arrears. A liability ceases to be in arrears if all overdue payments are met. Arrears can

arise both through the late payment of principal and interest on debt instruments (which are recorded in the original debt instrument) as well as through late payments for nondebt instruments and other transactions (which are recorded in a new debt instrument).

### *Arrears on debt instruments*

4. Debt service payments may be missed for a variety of reasons beyond simply the inability or unwillingness of the debtor to meet its payment obligations. A failure by a debtor economy to honor its debt obligations (default, unilateral moratorium, etc.) is not debt reorganization because it does not involve an arrangement between the creditor and the debtor (see Chapter 8). Such failure gives rise to arrears.

5. Different types of arrears are identified below. If the amounts of these different types of arrears are significant, it is encouraged that these amounts be separately identified and disseminated by the compiling economy.

- Arrears resulting from inability or unwillingness of the debtor to pay (the most common or frequent type)
- Sometimes arrears arise not from the ability of the original debtor to provide national currency but from the inability of the monetary authorities to provide foreign exchange to another resident entity, so preventing that entity from servicing its foreign currency debt. These so-called *transfer arrears* remain those of the original debtor sector
- Another circumstance may be when the creditor has agreed in principle to reschedule debt, i.e., reorganize payments that are falling due—but the agreement has yet to be signed and implemented. In the meantime, payments due under the existing agreement are not made, and arrears arise—so-called *technical arrears*. Such arrears might typically arise in the context of Paris Club

<sup>1</sup>This treatment of arrears was fully consistent with *BPM5* (see *BPM5*, paragraph 458).

agreements between the time of the Paris Club rescheduling session and the time when the bilateral agreements are signed and implemented. If the agreement in principle lapses before the agreement is signed, then any accumulated arrears are no longer technical arrears

- *Involuntary arrears* resulting from developments in the creditor country that prevents the debtor from making payments (e.g., in cases of war or international economic sanctions against the creditor country)<sup>2</sup>
- *Validation arrears* resulting from disagreement between the creditor and the debtor on the amounts due
- *Litigation arrears* resulting from major disputes about the legitimacy of debt liabilities.

6. For arrears arising from a debt contract, interest should accrue at the same interest rate as on the original debt, unless a different interest rate for arrears was stipulated in the original debt contract, in which case this stipulated interest rate should be used. The stipulated rate may include a penalty rate in addition to the interest rate on the original debt. Typically, the first type of arrears and transfer types of arrears can involve penalties, while technical and involuntary arrears may not; penalty rates in validation and litigation arrears would be treated on a case-by-case basis.

7. According to the accrual basis, repayments of debts (both periodic payments and amount to be paid at maturity) are recorded when they are extinguished (such as when they are paid, rescheduled, or forgiven by the creditor). When arrears related to the late payment of principal and interest on debt instruments occur, no transactions should be imputed. If interest is not paid when due, the gross debt position will increase by the amount of interest that has accrued during the period and is in arrears at the end of the period. However, if the contract provided for a change in the characteristics of a financial instrument when it goes into arrears, this change should be recorded as a reclassification in the gross external debt position.<sup>3</sup>

<sup>2</sup>Involuntary arrears may also include cases whereby payments are not made because the creditor does not bill the debtor in a timely manner.

<sup>3</sup>This reclassification is recorded in the international accounts in the other changes in the financial assets and liabilities account.

8. While a debt instrument that includes arrears might be valued at both nominal and market value, if relevant (this *Guide* recommends that both market and nominal values be provided for debt securities—see paragraph 2.33), when arrears are separately presented (such as in Table 4.2) and/or identified as memorandum to tables, they should be valued at nominal value.<sup>4</sup> This is because it is a measure of the overdue amount that the debtor owes to the creditor, according to the terms of the contract between the two parties.

9. Incurring arrears does not involve a transaction, because it is a unilateral act of one party. Therefore, it is not shown as giving rise to entries in the standard presentation of the financial account of the balance of payments. Nevertheless, arrears related to exceptional financing are recorded as transactions in the analytical presentation of the balance of payments.<sup>5</sup>

#### *Arrears on nondebt instruments and other transactions*

10. Arrears can also arise through late payments for nondebt instruments and other transactions. For instance, a financial derivative contract is not a debt instrument (see Chapter 3) but if it comes to maturity and a payment is required but not made, arrears are created.

11. Consistent with the accrual principle, an overdue obligation to settle a financial derivative contract is not recorded as a transaction in the balance of payments; however, the obligation is reclassified to a debt liability because of the change in the nature of the claim (see *BPM6*, paragraphs 3.56 and *2008 SNA*, paragraph 3.175). Once a financial derivative reaches its settlement date, any unpaid overdue amount is classified as *other debt liabilities* in the gross external debt position (in the IIP is reclassified as *other*

<sup>4</sup>If arrears are traded on secondary markets, as sometimes occurs, then a separate market value could be established.

<sup>5</sup>This treatment is because, although the accumulation of arrears is not a transaction, it is an action the authorities may take to manage their payments requirements (the analytical presentation of the balance of payment is focused on the actions of the authorities to meet balance of payments needs, and accumulating arrears is an action the authorities can take for this purpose). Exceptional financing and recording of arrears within exceptional financing are discussed in Appendix 1 of *BPM6*.

*accounts payable-other*), as its value is fixed, and thus the nature of the claim becomes debt (see *BPM6*, paragraph 5.82).

12. Similarly, arrears related to late payments of taxes, purchase and sale of securities, securities lending fees, gold loan fees, wages and salaries, dividends, and social contributions are classified as *other debt liabilities* in the gross external debt position (*other accounts payable—other* in the IIP; see paragraph 3.42 and *BPM6*, paragraph 5.73).

13. Also, if goods and/or services are supplied and not paid for on the contract payment date or a payment for goods and/or services is made but the goods and/or services are not delivered on time, then arrears are created. These new debt liabilities for late payments or late delivery of goods and/or services should be also recorded as *trade credit and advances* in the gross external debt position (see paragraph 3.43) as well as in the IIP. These arrears are typically nonnegotiable instruments and their primary valuation is nominal value.

14. If an item is purchased on credit and the debtor fails to pay within the period stated at the time the purchase was made, any extra charges incurred should be regarded as interest and accrue until the debt is extinguished (see *BPM6*, paragraph 11.71).

### Presentation of Data on Arrears

15. In macroeconomic statistics, arrears should continue to be shown in the same instrument<sup>6</sup> until the liability is extinguished, and they are not separately identified as a debt instrument. Information on arrears is useful for various kinds of policy analyses and solvency assessments and should supplement the debt statistics where significant. Compilers will need to collect and disseminate information on debt-service payments in arrears because this information is no longer presented separately in an accrual basis of recording system. Information on arrears should continue to be collected from their creation, i.e., when payments are not made, until they are extinguished,

such as when they are repaid, rescheduled, or forgiven by the creditor.

16. The *Guide* recommends that total value of arrears by sector be separately identified in memorandum to Table 4.1 (arrears are recorded until the liability is extinguished and are presented in nominal value in the memorandum). Such information is of particular analytical interest to those involved in external debt analysis, since the existence of arrears indicates the extent to which an economy has been unable to meet its external obligations. This information on arrears is essentially the same as that in the body of Table 4.1 of the 2003 *Guide*. Similarly, total value of arrears by sector is separately identified in memorandum to Table 5.1 that presents the gross external debt position on the basis of a public-sector-based approach.

17. The 2003 *Guide* encouraged a further disaggregation of arrears into arrears of principal and of interest in the gross external debt position table, for economies in which arrears are very significant (see 2003 *Guide*, paragraph 4.5). The *Guide* introduces a new memorandum table, Table 4.2, which presents arrears at nominal value by sector and disaggregated into arrears of principal and interest.

18. The value of arrears is also separately identified in memorandum to Tables 4.3 (Gross External Debt Position: Short-Term Remaining Maturity—Total Economy) and 7.1 (Gross External Debt Position: Short-Term Remaining Maturity—By Sector).

19. The treatment of arrears in the *Guide* is fully consistent with *BPM6*. In both, the gross external debt position and the IIP, arrears on debt instruments are recorded under the appropriate debt instrument, while arrears on nondebt instruments and other transactions are recorded as new debt liabilities within the appropriate instrument, i.e., either *trade credit and advances* or *other debt liabilities* in the gross external debt position—see paragraphs 11–13 above—and either *trade credit and advances* or *other accounts payable-other* in the IIP.

<sup>6</sup>As mentioned above, a new debt instrument is created when arrears arise through late payments for nondebt instruments and other transactions.

**Box A7.1 Arrears by Sector**

The *Guide* introduces a new memorandum table, Table 4.2, which presents arrears at nominal value by sector disaggregated into arrears of principal and interest. The first level of disaggregation is by institutional sector. The primary disaggregation is by the four sectors of the compiling economy described in Chapter 3—*general government, central bank, deposit-taking corporations, except the central bank, and other sectors*. A disaggregation of the other sectors into *other financial corporations, nonfinancial corporations, and households and nonprofit institutions serving households* is provided. Intercompany lending between entities in a direct investment relationship is separately presented. The second level of disaggregation is by principal and interest (interest includes accrued interest on arrears of principal and interest).

**Table 4.2 Gross External Debt Position: Arrears by Sector<sup>1,2</sup>**

	End Period
<b>General Government</b>	
Principal	
Interest	
<b>Central Bank</b>	
Principal	
Interest	
<b>Deposit-Taking Corporations, except the Central Bank</b>	
Principal	
Interest	
<b>Other Sectors</b>	
Principal	
Interest	
Other financial corporations	
Principal	
Interest	
Nonfinancial corporations	
Principal	
Interest	
Households and nonprofit institutions serving households (NPISHs)	
Principal	
Interest	
<b>Direct Investment: Intercompany Lending</b>	
Principal	
Interest	
Debt liabilities of direct investment enterprises to direct investors	
Principal	
Interest	
Debt liabilities of direct investors to direct investment enterprises	
Principal	
Interest	
Debt liabilities between fellow enterprises	
Principal	
Interest	
<b>Total Economy</b>	

<sup>1</sup>Valued at nominal value.

<sup>2</sup>Interest includes accrued interest on arrears of principal and interest.



# Appendix 8. Private Sector External Debt

## Introduction

1. Appendix 8 brings together a topic—private sector external debt—that cuts across different chapters. It seeks to give an overview of this topic. This appendix is designed in a “signpost” style, i.e., it gives only a brief introduction and provides references as to where more information is available in the chapters, rather than duplicate the information.

2. This appendix discusses the compilation of private sector external debt from a conceptual viewpoint, and sets out the distinct compilation principles and practices that apply to private sector external debt in comparison with those applied to the public sector external debt.

## Definition of Private Sector External Debt

3. In the *Guide*, as in the *2008 SNA* and *BPM6*, the institutional units and the financial instruments in which they transact, are grouped into sectors and categories, respectively, so as to enhance the analytical usefulness of the data. The institutional sector classification groups the institutional units within sectors with common economic objectives and functions: *general government*, *central bank*, *deposit-taking corporations except the central bank*, and *other sectors: other financial corporations, nonfinancial corporations, and households and nonprofit institutions serving households*.

4. To compile the private sector external debt position, the first determination is whether or not a resident unit is in the private sector. In this regard, Chapter 5, paragraph 5.5 clarifies that in comparison with the institutional sector approach outlined in Chapter 3 (see paragraphs 3.4–3.12), the public sector comprises the *general government*, the *central bank*, and those units in the *deposit-taking corporations, except cen-*

*tral bank*, and *other sectors* that are public sector corporations. Hence, the private sector comprises those units in the *deposit-taking corporations, except central bank*, and *other sectors* that are not public sector corporations.<sup>1</sup> A public sector corporation is defined as a nonfinancial or financial corporation that is subject to control by government units, with control over a corporation defined as the ability to determine general corporate policy (see more detailed information in paragraph 5.5).<sup>2</sup> Therefore, the ability of the government unit to determine general corporate policy of the corporation is the decisive factor as to whether a corporation is a private or a public unit. Table A8.1 provides an overview of the coverage of private and public sector external debt in terms of institutional sectors.

5. Some ambiguous issues might arise in relation to (1) the classification of a resident unit as a public or a private sector unit, and (2) whether Direct investment: Intercompany lending may include public sector debt.

6. Any domestic institutional unit not meeting the definition of public sector is to be classified as private sector. However, the classification might not be straightforward in cases such as corporations that are jointly owned by public and private sector units (because the arrangements for the control of

<sup>1</sup>In terms of institutional sector attribution, the classification of a private sector corporation as a *deposit-taking corporation, except the central bank, other financial corporation, or nonfinancial corporation* depends on the nature of the economic activity it undertakes.

<sup>2</sup>“General corporate policy” refers to, in a broad sense, the key financial and operating policies relating to the corporation’s strategy objectives as market producer. See *2008 SNA*, paragraphs 4.77–4.80 for more details. For a definition of control of a corporation by a government unit and a definition of a public corporation, see *Public Sector Debt Statistics: Guide for Compilers and Users* (2011), paragraphs 2.17 and 2.19, respectively.

Table A8.1 Coverage of Private and Public Sector External Debt in Terms of Institutional Sectors

	Private Sector External Debt	Public Sector External Debt
General Government		✓
Central Bank		✓
Deposit-Taking Corporations, except the Central Bank	✓	✓
Other Sectors	✓	✓
Direct Investment: Intercompany Lending	✓	✓

corporations can vary considerably) and/or public-private partnerships. External debt compilers should consult with government finance statistics compilers to ensure consistent treatments. In disseminating data, compilers are encouraged to provide methodological notes (metadata) explaining the concepts, definitions, and methods used in compiling the data. For any presentation of gross external debt position of the private and public sectors, it is particularly important for the compiler to indicate the coverage of institutional units included in each sector.

7. Sometimes public sector external borrowing is on-lent to a private sector corporation; if a public sector unit borrows externally, it is this public unit—and not the private sector unit—that records the external debt. On the other hand, central government and public corporations sometimes borrow from resident banks instead of directly from foreign banks. If the bank borrows externally, it is the bank that records the external debt.

8. *Direct investment: Intercompany lending* covers borrowing of funds—including debt securities and trade credit and advances—from direct investors and related subsidiaries, branches, and associates (see paragraph 3.17). However, intercompany debt liabilities between two selected affiliated financial intermediaries are not classified as *intercompany lending*; they are rather classified by type of financial instrument (such as loans, debt security, etc.), and are attributed to the institutional sector of the debtor entity (see paragraph 3.20). *Direct investment: Intercompany lending* in the presentation of the gross external debt position may include external debt of both private and public corporations; the *Guide* recommends that borrowing for fiscal purposes by the general government through a nonresident entity owned or controlled by the government be classified as *general government* debt and

not as *Direct investment: Intercompany lending* debt (see Appendix 1, Part 2 for detailed information on the definition and classification of borrowing for fiscal purposes).

### Presentation of Private Sector External Debt

9. Chapter 5 provides tables for the presentation of the gross external debt position in which the public sector is highlighted, and, consequently, the presentation of the gross external debt position of the private sector is also addressed. For convenience, this presentation is described as being a *public-sector-based approach*. The data for the tables in Chapter 5 should be compiled using the concepts outlined in Chapters 2 and 3, except the debt of resident entities should be attributed according to whether the debtor is a unit of the public sector or not, and if not, by whether the debt instrument is guaranteed or not by a public sector unit. The tables of Chapter 5 are essential in circumstances where the public sector is centrally involved in external debt borrowing activity, both as a borrower or guarantor.

10. As the concepts and definitions for its measurement remain consistent throughout the *Guide*, the gross external debt position for the whole economy—depending on whether debt securities are valued at nominal or market value—should be the same regardless the classification of external debt that is followed in the presentation tables.

11. As private sector debt becomes more important in the economy, more detailed breakdowns of private sector debt are required, such as provided in the tables of Chapter 4. As mentioned above, private sector data are attributed to different institutional sectors. Therefore, the presentation of the gross external debt posi-

tion as set out in Table 4.1 can be adopted to identify public and private sector external debt within each institutional sector, i.e., within *deposit-taking corporations, except central bank, other sectors, and intercompany lending* between entities in a direct investment relationship.

### Compilation of Private Sector External Debt

12. It is recognized that compiling comprehensive data for the private sector presents a greater degree of difficulty than for the public sector due to the potentially wide range of private entities that have external debt. Problems can arise from the limitations inherent in the available information sources. The *Guide* encourages comprehensive coverage of external debt but in all instances, the importance and relevance of the data needs to be weighed against the likely costs of collection, and lower cost sources and methods should be investigated to ascertain if they could produce data of an acceptable degree of accuracy and reliability.

13. Chapter 10 considers the strategies that need to be considered as the regulatory environment for cross-border financial transactions changes.

14. In circumstances where controls on foreign borrowing are still in place, it is possible for the central bank to compile information on private sector borrowing from information provided by borrowers for regulatory purposes, such as when they seek approval for foreign borrowing. Also, commercial banks might well be required to report on foreign transactions of their private sector clients. However, as liberalization of financial transactions proceeds, and such information becomes less readily available, there is a need to develop methods of collecting data on private sector debt through other means. Part of this strategy involves considering whether there is a need to strengthen the statistical infrastructure, and the introduction of new collection techniques also need to be considered (see paragraph 10.16).

15. Figure 10.1 highlights that in an environment with strict controls, data are provided primarily from administrative sources, such as foreign investment boards, and from commercial banks, for their own and their domestic clients' transactions. As financial transactions are increasingly liberalized, the information that enterprises need to report directly increases,

in terms of the number of enterprises and the information required. The information provided by the public sector and commercial banks on their own debt remains broadly unchanged throughout (see paragraphs 10.17–10.20). Chapter 12 discusses the collection of these data from *deposit-taking corporations* and *other sectors* when financial transactions are liberalized.

16. Compilation practices of private sector external debt in general differ depending on (1) whether the private sector external debt is publicly guaranteed<sup>3</sup> or not, (2) whether the unit is a deposit-taking corporation, other financial corporation, or nonfinancial corporation, (3) the type of debt instrument, and (4) the nonresident creditor sector.

17. The compilation of general government, and more broadly, nonfinancial public sector external debt statistics is covered in Chapter 11. In many countries, data on private sector external debt that is publicly guaranteed could be sourced from available public sector records or statistics (see, e.g., paragraphs 11.1, 11.3, and 11.19).

18. *Deposit-taking corporations* are closely regulated in nearly all countries—and so are usually identifiable to the statistical agency—and have to report balance sheet data to central banks or regulatory agencies both for supervisory and monetary policy purposes. These reports can be a major source of information on the outstanding external debt of banks (see Chapter 12, paragraphs 12.5–12.9). Similarly, *Other Financial Corporations* data might be compiled in some countries within the frame of monetary and financial statistics. If this is the case, external debt compilers could draw on this data source (see paragraphs 12.15–12.16). In addition, financial corporations, such as investment funds, insurance companies, and pension funds may report their balance sheets to supervisory authorities. If this is the case, those reports could be accessible to statistical authorities as a data source.

19. When no comprehensive exchange controls exist, data on loans and other external debt of *other sectors* are best obtained through periodic surveys of those

<sup>3</sup>Publicly guaranteed private sector external debt is defined as the external debt liabilities of the private sector, the servicing of which is contractually guaranteed by a public unit resident in the same economy as the debtor (see Chapter 5).

enterprises (including *other financial corporations*) that are involved in external transactions. Enterprise surveys are discussed in Chapter 12 (see paragraphs 12.17–12.31). A variation of the enterprise surveys that is also discussed is the establishment of so-called *direct reporting companies* (see paragraph 12.32). Some external debt compilers use so-called registers of external loans to obtain data on loans received by the nonbank sector (see paragraph 12.33).

20. Debt liabilities between affiliates might be also collected within the framework of direct investment surveys, such as the Coordinated Direct Investment Survey (CDIS) for participant economies, and these data could be used for the compilation of external debt statistics; in addition, CDIS mirror data may be compared to an economy's own estimates vis-à-vis the counterpart (see paragraphs 12.45–12.46).

21. Instrument-by-instrument data are generally available for public sector debt; however it may be difficult to collect data on this basis from the private sector. Surveys and other collections in many countries request aggregate data, which implies that survey forms should be designed to be most efficient in obtaining the desired information. The collection of data on different debt instruments may involve different degrees of difficulty, e.g., data on long-term loans are easier to collect than data on short-term debt, particularly trade credit and advances. For cost-benefit reasons, many countries collect detailed data on long-term loans and only aggregate data for short-term debt.

22. For debt securities, the use of a security-by-security database potentially provides great flexibility in meeting requirements for external debt statistics, although creating and maintaining such a database can be an expensive resource, so that costs and benefits need to be carefully considered. To fully utilize the potential of such information, the compiler is advised to develop or acquire a database that contains detailed information on individual securities—price, country of issuer, industrial sector of issuer, etc.—and that uniquely identifies securities through a security identification code. Through such a database, individual securities that are reported with an identification code can be located in the database, and the associated information can be drawn upon to compile information not only on outstanding positions but, depending on the scope of the associated information contained,

statistics on the debt-service payments schedule, the currency composition of external debt, etc. (see Box 13.2).

23. The identification of nonresident holders of debt securities usually presents particular challenges: in particular, the resident issuer is, in many cases, not in a position to identify the owner of their debt securities, and so may be unaware of whether the creditor is a resident or nonresident (see paragraphs 13.2–13.3). The measurement of external debt in the form of *debt securities* is discussed in Chapter 13: both the measurement of nonresident investment in domestically issued debt securities (see paragraphs 13.13–13.29) and foreign investment in debt securities issued abroad (see paragraphs 13.30–13.32) are addressed. An important starting point in deciding how to measure positions (and flows) in debt securities is ascertaining how and through which channels debt security investment flows into and out of the country (see paragraphs 13.8–13.12).

24. Finally, data owed to some creditors might be available from external sources, such as debt owed to international financial organizations, or data on non-bank liabilities to foreign banks that could be cross-checked with the international banking statistics from the Bank for International Settlements (BIS) (see paragraph 12.31 and [www.bis.org/statistics/](http://www.bis.org/statistics/)). Some compilers may use the BIS data from nonresident banks on loans to resident nonbanks to supplement other external debt data sources (see Appendix 3, Locational Banking Statistics [BIS]).

## Other Issues

25. Debt-reorganization transactions are a feature of external debt activity (see Box 8.1). Chapter 8 discusses the debt reorganization and provides guidance on how they affect the measurement of the gross external debt position. These guidelines apply to debt-reorganization transactions of private sector external debt. These private sector transactions are conducted on a case-by-case basis, sometimes under the London Club. The four main types of debt reorganization, i.e., *debt forgiveness*, *debt rescheduling* or *refinancing*, *debt conversion*, and *debt assumption* are presented (see paragraphs 8.8–8.10), and the statistical treatment for each one of them is discussed. For instance, *debt rescheduling and refinancing* involves a change



in an existing debt contract and/or replacement by a new debt contract, generally with extended debt service payments (see paragraphs 8.17–8.18); and any agreed change in the terms of a debt instrument is to be recorded as the creation of a new debt instrument, with the original debt extinguished (see paragraphs 8.22–8.24). Similarly, for both *debt conversions and debt prepayments*, a reduction in the gross external debt position is recorded to the value of the debt instruments that are extinguished, irrespective of the value of the counterpart claim (or assets) being provided (see paragraph 8.35).

26. The presentation of additional information on selected explicit contingent liabilities for the whole economy is recommended in Chapter 4 (Table 4.7 Total Guaranteed External Debt Position) and in Chapter 9, where Table 9.3 presents external debt according to an “ultimate” risk concept—augmenting residence-based data to take account of the extent to which external debt is guaranteed by residents for nonresidents. Countries could potentially have debt liabilities to nonresidents in excess of those recorded as external debt on a residence basis if their residents provide guarantees to nonresidents that might be called. Also, branches of domestic institutions located abroad could create a drain on the domestic economy if they ran into difficulties and their own head offices need to provide funds. Indeed the latter circumstances

arose for some economies during the global crisis of 2008–2009 (see paragraph 9.42).

27. It may be challenging to obtain data to compile these tables on selected explicit contingent liabilities for the private sector. These “off-balance-sheet” obligations include (1) the value of guarantees of residents’ external debt liabilities (liabilities of a unit of a resident sector, the servicing of which is contractually guaranteed by a unit of another sector resident in the same economy as the debtor—see paragraph 4.20), and (2) cross-border guarantees, i.e., the debt of a nonresident to a nonresident on which payments are guaranteed to the creditor(s) by a resident entity under a legally binding contract, and debt of a legally dependent nonresident branch of a resident entity that is owed to a nonresident (see paragraph 9.44).

28. Linkages and consistency between external debt and IIP statistics are discussed in paragraphs 7.48–7.51 and Appendix 4. Gross external debt liabilities are classified in the IIP by institutional sector (and debt liabilities between two affiliates are included in *direct investment*). As debt liabilities of *deposit-taking corporations, except the central bank and other sectors*, and debt liabilities included in *direct investment*, could include external debt of public and private sectors, in principle, there is no straightforward way of compiling private sector external debt from the standard IIP statement.<sup>4</sup>

<sup>4</sup>*BPM6* indicates that public corporations may be shown as “of which” items for the financial and nonfinancial corporations sectors and subsectors as supplementary items, when relevant (see *BPM6*, paragraph 4.108).





## Appendix 9. Main Changes From the 2003 *External Debt Statistics Guide*

A detailed list of changes made in the *External Debt Guide (Guide)* is provided below, focusing on the conceptual framework (Part I of the *Guide*). The comparison is with the 2003 *External Debt Statistics Guide*. The conceptual framework is fully consistent with *BPM6*, allowing comparability of external debt, IIP, and other macroeconomic statistics.

### Chapter 2. The Measurement of External Debt: Definition and Core Accounting Principles

The definition of external debt is such that it includes all liabilities recognized by the 2008 *SNA*—except for equity (both equity shares and other equity) and investment fund shares, and financial derivatives and employee stock options (ESOs)—that are owed by residents to nonresidents. These liabilities are known as debt liabilities (paragraph 2.11).

The concepts of flows and positions are clarified (paragraphs 2.13 and 2.14).

Residence is determined by where the debtor and creditor have their center of predominant economic interest. The terms “economy,” “economic territory,” and “center of predominant economic interest” are defined (paragraphs 2.9 and 2.15–2.16).

The inclusion of currency or economic unions as another type of economic territory is clarified (paragraph 2.16).

The requirements for recognizing a branch as a separate unit are discussed (paragraph 2.18).

Special features and treatment of special purpose entities (SPEs) and other similar structures are discussed (paragraph 2.20 and Appendix 3).

The definition of multiterritory enterprises is provided, and the treatment of their gross external debt position is discussed (paragraph 2.20 and Appendix 1, Part 2).

The concept “economic ownership” is introduced to determine the time of recording (paragraph 2.25).

The time of recording of dividends is defined as when the stocks or shares go ex dividend (paragraph 2.27), rather than when dividends were declared payable.

When arrears on principal and/or interest payments occur, they should continue to be shown in the same debt instrument until the liability is extinguished (paragraph 2.31) rather than recording arrears under other debt liabilities—short-term.

A comparison matrix of the valuation of debt instruments is presented (Box 2.2).

Valuation of nonperforming loans and deposits at deposit-taking corporations in liquidation is discussed (paragraphs 2.41 and 2.42, and Appendix 3).

Valuation of new debt instrument category “insurance, pension funds, and standardized guarantee schemes” is discussed (paragraph 2.45).

Emphasis on the maturity attribution of external debt on a remaining maturity basis (long- and short-term) is made (paragraph 2.61).

The method of calculation of positions of index-linked debt instruments is clarified (paragraphs 2.92–2.96).

Guidance on the accrual of interest costs on instruments with grace periods of interest is provided (paragraphs 2.97 and 2.99, and Box 2.4 and 2.5).

### Chapter 3. Identification of Institutional Sectors and Financial Instruments

The institutional sector classification is amended to be consistent with the *BPM6* in the cases of the central bank, and of deposit-taking corporations, except the central bank (paragraphs 3.2, 3.5, and 3.6).

“Banks” are renamed “other deposit-taking corporations,” but the substance of this institutional sector remains unaffected (paragraph 3.6).

The “nonbank financial corporations” subsector is renamed “other financial corporations” (paragraphs 3.8–3.9).

Direct investment is broken down into three categories—investment by a direct investor in its direct investment enterprise, by a direct investment enterprise in its own direct investor, and investment between fellow enterprises; the final category is added (paragraph 3.15).

The exclusion of debt positions between affiliated financial corporations is specified as being for deposit-taking corporations, investment funds, and other financial intermediaries except insurance companies and pension funds (paragraph 3.20).

Permanent debt between affiliated financial intermediaries is treated in the same way as nonpermanent debt. Previously, permanent debt between affiliated financial intermediaries was included in the debt position recorded under direct investment (paragraph 3.20).

The *Guide* recommends that borrowing for fiscal purposes through a nonresident entity owned or controlled by the government should be included in general government and not in Direct investment: Intercompany lending (paragraph 3.17 and Appendix 1, Part 2).

On the classification of financial instruments, the *Guide* gives prominence to six categories of instruments in particular: debt securities, loans, currency and deposits, trade credit and advances, special drawing rights (SDRs), and other debt liabilities; previously five categories were recognized—SDRs were not recognized as liabilities (paragraph 3.3).

“Bonds and notes” and “money market instruments” are replaced as terms by long-term and short-term debt securities, respectively (paragraphs 3.22–3.23).

The functional category “financial derivatives” is renamed. “(Other than reserves)” is added to distinguish it from the instrument classification financial derivatives and ESOs, which has different coverage. ESOs are also included (paragraphs 3.26, 3.45, and Appendix 1, Part 1).

“Other equity” included in other investment in the IIP, is equity that is not in the form of securities, nor included in direct investment or reserve assets. “Other equity” is not a debt instrument (paragraph 3.29).

In line with *BPM6*, unallocated gold accounts liabilities are classified as deposits (paragraph 3.30 and Appendix 1, Part 1).

As a convention, to assure symmetry, all interbank positions (other than securities and accounts receivable/payable) are classified under deposits (paragraph 3.32 and Appendix 3).

The measurement of overnight deposits positions is clarified (paragraph 3.30 and Appendix 1, Part 2).

Repayable margins in cash are a debt liability and should be classified as “deposits” (particularly, if the debtor’s liabilities are included in broad money); otherwise, in “other debt liabilities” (Appendix 1, Part I).

The allocation of bank accounts jointly held by residents of different economies is discussed (paragraph 3.33 and Appendix 1, part 2).

The treatment of loans involved in repos and gold swaps is clarified. Gold swaps can be classified as a loan or a deposit (paragraph 3.37 and Appendix 1, Part 1).

“Insurance, pension, and standardized guarantee schemes” has been identified as a new debt instrument category under other investment in the IIP. These reserves, entitlements, and provisions represent debt liabilities of the insurer, pension fund, or issuer of standardized guarantees, and a corresponding financial asset of the policyholders or beneficiaries. Guidance on the maturity attribution of these debt liabilities is provided (paragraph 3.40).

“Trade credit and advances” replaces the term “trade credits” (paragraph 3.41).

Imputed liabilities for “trade credit and advances” required by the imputed flows for goods for processing are eliminated (as an implication of removing the previous imputation of change of ownership) (Appendix 1, Part 2, Processing of Goods).

External debt liabilities may arise from the external financing of goods under merchanting (paragraph 3.41 and Appendix 1, Part 2, Merchanting of Goods).

Progress payments (or stage payments) on high-value capital goods do not give rise to “trade credit and advances” unless there is a difference in timing between the change in ownership of these high value goods and the payments. Previously, it was assumed that the change of ownership occurs at completion; therefore, progress payments were recorded as “trade credits” debt of the exporter (paragraph 3.41 and Appendix 1, Part 2).

Classification of arrears arising from the late payment of debt instruments (principal and interest) as well as from the late payment of other instruments and transactions is discussed (paragraph 3.43 and Appendix 7).

The concept of reserve-related liabilities is introduced (paragraph 3.47).

#### **Chapter 4. Presentation of the Gross External Debt Position**

Emphasis on reporting data on debt securities at both nominal and market value is made (paragraph 4.5 and Tables 4.1, 4.3, 5.1, 5.2, and 7.1).

Debt securities, separately identified by sector and original maturity, are valued in memorandum items to Table 4.1 either at market value if they are presented at nominal value in the table or at nominal value if they are presented at market value in the table (paragraph 4.5 and Table 4.1).

The instrument classification of the gross external debt position includes the extension of “currency and deposits” and “trade credit and advances” to all sectors and subsectors (paragraph 3.30 and Table 4.1).

SDR allocations are separately identified as long-term external debt liabilities under general government and central bank (Table 4.1).

Debt securities are classified as short-term and long-term rather than money market instruments and bonds and notes, respectively (Table 4.1).

“Other debt liabilities” comprise “insurance, pension, and standardized guarantee schemes,” and “other accounts payable–other” (Table 4.1 and paragraph 3.3).

“Insurance reserves, pension entitlements, and standardized guarantee provisions” can potentially be classified by the maturity; however, if data are not available, a convention that they are all long-term can be adopted (paragraph 3.40 and Table 4.1).

Table 4.1 separately presents Direct investment: Inter-company lending broken down into three categories (paragraph 4.3 and Table 4.1).

Arrears are separately identified by sector in a memorandum item to Table 4.1 (paragraph 4.4 and Table 4.1).

Memorandum Table 4.2 has been added to provide information on external debt arrears of the total economy by sector and broken down by principal and interest (paragraphs 4.9–4.10).

Memorandum Table 4.3 has been added for the presentation of gross external debt position data on a short-term remaining maturity basis for the total economy (paragraphs 4.11–4.13). Arrears are always short-term remaining maturity obligations but the original maturity of the instrument could be short or long term.

Memorandum Table 4.7 has been added to provide information on the total guaranteed external debt position by sector of the guarantor and residency of the debtor (paragraph 4.20).

#### **Chapter 5. Public and Publicly Guaranteed External Debt**

Specific guidance on the classification of a corporation as a public sector unit is provided (paragraph 5.5).

Arrears are separately identified in a memorandum item to Tables 5.1 and 5.2 (paragraph 5.8).

Debt securities, separately identified by original maturity, are valued in memorandum items to Tables 5.1 and 5.2, either at market value if they are presented at nominal value in the table or at nominal value if they are presented at market value in the table (paragraph 5.8, and Tables 5.1 and 5.2).

Table 5.3 has been added to present the gross external debt position separately identifying the public sector debt, publicly guaranteed private sector debt, and private sector debt not publicly guaranteed broken down by original maturity (paragraph 5.11).

#### **Chapter 6. Further External Debt Accounting Principles**

Box 6.1 on trade-related credit has been added (Box 6.1).

The terms “currency of denomination” and “currency of settlement” are introduced and discussed (paragraph 6.13 and Appendix 3).

SDRs are considered to be foreign currency in all cases (paragraph 6.12).

Unallocated gold accounts and other unallocated accounts in other precious metals giving title to claim the delivery of gold or other precious metals are treated as debt denominated in foreign currency (paragraph 6.13).

“Foreign” issued securities are renamed “internationally” issued securities (paragraph 6.21).

Factors to take into account to classify external debt as concessional or nonconcessional are discussed (paragraphs 6.22–6.24).

The concept of FISIM is introduced in *BPM6*. FISIM, when applicable, is to be included with interest in the debt-service payment schedule. Thus, the generation of FISIM does not affect the gross external debt position (paragraph 6.34 and Appendix 1, Part 2).

## Chapter 7. Further Presentation Tables of External Debt

Table 7.4 has been added to present a debt service payment schedule for public and publicly guaranteed private sector external debt with a more detailed time frame (paragraph 7.15).

Guidance on the recording of SDRs in debt-service payment schedule tables is discussed (paragraph 7.16).

Table 7.5 has been added to present the principal and interest payments due in one year or less on the outstanding external debt, consistent with the encouraged SDDS external debt table (paragraph 7.20).

Table 7.7 has been added to present further disaggregation of foreign and domestic currency external debt by institutional sectors and instruments (paragraph 7.25).

Table 7.13 has been added to present the public and publicly-guaranteed private sector external debt position data by creditor sector based on an alternative creditor sector classification. Paris Club creditors’ data are separately identified in a memorandum item of the table (paragraph 7.46).

Table 7.14 separately identifies unallocated gold accounts included in monetary gold as their counter-

part liabilities are classified as deposits (paragraphs 7.49 and 7.51, and Appendix 1, Part 1).

Emphasis on how changes in the external debt position result from transactions, valuation changes, and other changes in volume during the reference period is given (paragraph 7.53 and Table 7.15).

## Chapter 8. Debt Reorganization

Debt assumption is included as one of the four main types of debt reorganization. The order of presentation of the four main types of debt reorganization follows *BPM6*, Appendix 2 (paragraphs 8.8 and 8.41–8.45).

“Debt service moratorium extended by creditors” and “debt service falling due between Paris Club agreed minute date and specified implementation date” are discussed as special cases of debt rescheduling (paragraphs 8.20–8.21).

Table 8.1 for the presentation of data on debt reduction has been extended to include position data before and after debt reorganization (Table 8.1).

The content of Box 8.1 has been extended to cover sovereign debt restructuring with private creditors by type of creditor (Box 8.1).

The treatment of “debt payments on behalf of others” is clarified (paragraphs 8.55–8.56).

The effect of debt defeasance on the gross external debt position and its classification by debtor sector is discussed (paragraph 8.57 and Appendix 1, Part 2).

## Other Changes

Appendix 4 has been extended to further explain the relationship between external debt and IIP statistics.

The Data Quality Assessment Framework (DQAF) for external debt statistics is introduced as new Appendix 6.

Appendix 7 has been added to summarize the treatment of arrears in the gross external debt position and the way they are classified and presented.

Appendix 8 has been added to bring together private sector external debt issues that cut across different chapters. It seeks to give an overview of this topic.

The former Part IV on the work of international agencies was removed from the *Guide*. Revised text has been posted on the TFFS website and will be updated as necessary.



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