



# 4

## Classification of Financial Assets and Liabilities

### I. Introduction

**4.1** This chapter describes the principal characteristics of financial assets and liabilities, and their classification by type of financial instrument within the framework of monetary and financial statistics. The recommended classification at its highest level follows that of the *System of National Accounts 2008 (2008 SNA)*. This chapter also includes three annexes: Annex 4.1 presents examples of debt securities issued through securitization; Annex 4.2 deals with the recommended treatment of accounts with the IMF in monetary statistics; while Annex 4.3 discusses topics related to Islamic financial institutions and instruments.

**4.2** Financial instruments comprise the full range of financial contracts made between institutional units. Financial instruments include financial assets and other financial instruments. Financial assets have demonstrable value. Other financial instruments (e.g., financial guarantees, lines of credit, or loan commitments) are contingent or conditional upon the occurrence of uncertain future events. They are outside the financial assets boundary and therefore not included in the monetary and financial statistics (see paragraphs 4.220–4.221).

### II. Financial Assets and Liabilities

#### A. Definition of Financial Assets and Liabilities

**4.3** *An asset is a store of value, over which ownership rights are enforced and from which their owners may derive economic benefits by holding or using them over a period of time.* Financial assets are a subset of economic assets that are financial instruments.

**4.4** Most financial assets are financial claims arising from contractual relationships entered into when one institutional unit provides funds or other resources

to another. These contracts are the basis of creditor/debtor relationships through which asset owners acquire unconditional claims on economic resources of other institutional units. The creditor/debtor relationship provides asset and liability dimensions to a financial instrument. From this a financial claim, and hence a liability, can be defined. There are no nonfinancial liabilities recognized in macroeconomic statistics; thus the term *liability* necessarily refers to a liability that is financial in nature.<sup>1</sup>

**4.5** *A financial claim is an asset that typically entitles the creditor to receive funds or other resources from the debtor under the terms of a liability.* Each claim is a financial asset that has a corresponding liability.

**4.6** *A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide funds or other resources to another unit (the creditor).* Usually, a liability is established through a legally binding contract that specifies the terms and conditions of the payment(s) to be made and payment according to the contract is unconditional.

**4.7** Financial assets consist of all financial claims, including shares or other equity in corporations, plus gold bullion held by monetary authorities as a reserve asset. Equity is regarded as a claim; it represents a claim of the owner on the residual value of the entity after the claims of all creditors have been met. Gold bullion included in monetary gold is considered to be a financial asset because of its role as a means of international payments and a store of value for use in reserve assets.<sup>2</sup>

<sup>1</sup> In contrast, the International Financial Reporting Standards (IFRSs) recognize nonfinancial liabilities under certain conditions.

<sup>2</sup> Reserve assets 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 to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy).

4.8 In this *Manual*, provisions for losses on assets that are internal to the reporting institutional unit are treated as liabilities and classified under *Other accounts payable [MS]*. Such provisions are not recorded in the 2008 SNA, except in the case of expected losses on nonperforming loans, which appear as memorandum items in the balance sheets.<sup>3</sup>

### **B. Legal and Economic Ownership**

4.9 Two types of ownership can be distinguished in macroeconomic statistics: legal ownership and economic ownership. *The legal owner of nonfinancial and financial assets and liabilities is the institutional unit entitled by law and sustainable under the law to claim the associated benefits. The economic owner of nonfinancial and financial assets and liabilities is the institutional unit entitled to claim the benefits associated with their use by virtue of accepting the associated risks.*

4.10 Every nonfinancial and financial asset and liability has both a legal and an economic owner. In most cases, the economic owner and the legal owner are the same. Where they are not, the legal owner has passed the risk involved in using the resource in an economic activity to the economic owner as well as associated benefits. In monetary and financial statistics, when the expressions “holder(s),” “holding(s),” “ownership,” or “owner” are used, and the legal and economic owners are different, the reference should generally be understood to be to the economic owner.

4.11 In general, a change in legal ownership also involves a change in economic ownership. In some cases, however, a change of economic ownership takes place even though the legal ownership remains unchanged (e.g., financial leases). In other cases, there is no change in economic ownership, even though there is a change in legal ownership (e.g., repurchase agreements).

## **III. Classification of Financial Assets and Liabilities**

4.12 The classification scheme of the 2008 SNA is used to classify financial assets and liabilities in this *Manual*. This classification system is based primarily on:

and serving as a basis for foreign borrowing). (See the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)*, paragraph 6.63.)

<sup>3</sup> See 2008 SNA, paragraphs 3.41 and 13.66–13.68.

(1) the liquidity of the asset, which subsumes other more specific characteristics such as negotiability, transferability, marketability, or convertibility, as well as divisibility; and (2) the legal characteristics that describe the underlying creditor/debtor relationship. Although not explicitly identified, these specific characteristics of liquidity play a major role in determining the categories.

4.13 The financial asset and liability classification facilitates the analysis of transactions and positions between institutional units and serves as a framework for assessing the sources and uses of financing and degree of liquidity of these units. This classification is intended to provide broad categories that allow international comparability and the inclusion of new instruments within the broad categories identified in the 2008 SNA.

4.14 Table 4.1 shows the main categories of financial assets for the compilation of monetary statistics, as classified in the 2008 SNA.

### **A. Monetary Gold and SDRs**

4.15 Monetary gold and Special Drawing Rights (SDRs) are financial assets that are usually held only by monetary authorities.

Monetary gold [F11]

4.16 *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 a reserve asset.*<sup>4</sup> It comprises gold bullion (including gold held in allocated gold accounts) and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. All monetary gold is included in reserve assets or is held by international financial institutions.

4.17 For gold bullion, there is no corresponding liability. Except in limited institutional circumstances when reserve assets may be held by other institutions, gold bullion can be a financial asset only for the central bank or central government. Gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per thousand. Gold bullion holdings that are not part of reserve assets are classified as non-financial assets.

<sup>4</sup> See the definition of reserve assets in footnote 2 in this chapter.

Table 4.1 Classification of Main Financial Assets

2008 SNA	1993 SNA <sup>1</sup>
Monetary gold and Special Drawing Rights [F1] <sup>2</sup>	Monetary gold and Special Drawing Rights
Currency and deposits [F2]	Currency and deposits
Debt securities [F3]	Securities other than shares
Loans [F4]	Loans
Equity and investment fund shares [F5]	Shares and other equities
Insurance, pension, and standardized guarantee schemes [F6]	Insurance technical reserves
Financial derivatives and employee stock options (ESOs) [F7]	Financial derivatives
Other accounts receivable/payable [F8]	Other accounts receivable/payable

Source: 2008 SNA, paragraphs A1.26 and A1.39, and 1993 SNA, Annex V.

<sup>1</sup> Classification of major financial assets in the 1993 SNA is shown for ease of reference. In the case of *Insurance, pension, and standardized guarantee schemes* and *Financial derivatives and ESOs* there is not a direct correspondence with the 1993 SNA categories.

<sup>2</sup> Square brackets indicate the 2008 SNA codes for transactions in financial assets and liabilities.

Note: 2008 SNA = *System of National Accounts 2008*; 1993 SNA = *System of National Accounts 1993*.

**4.18** An *allocated gold account* provides ownership of a specific piece of gold, whereas an *unallocated gold account* does not give the holder the title to physical gold but provides a claim against the account operator to deliver gold (see also paragraph 4.44). Both allocated and unallocated gold accounts can be opened by any sector or subsector with a financial corporation (FC) that offers such services.

**4.19** Allocated gold accounts are classified as monetary gold when held by monetary authorities (or other units authorized by them) as reserve assets, or as a nonfinancial asset when not held as reserve assets. Unallocated gold accounts that give title to claim the delivery of gold are classified as monetary gold when held by monetary authorities (or other units authorized by them) as reserve assets. Unallocated gold account assets not held as reserve assets, and all unallocated gold account liabilities, are classified as deposits in foreign currency. The same principle applies to unallocated accounts for other precious metals.

**4.20** Nonmonetary gold, which can be in the form of bullion, gold powder, and gold in other unwrought or semi-manufactured forms, or gold coins, may be held as either a store of value or for industrial purposes. In some cases, a central bank may own gold bullion that is not held as a reserve asset and thus should be classified as nonmonetary gold.

Special Drawing Rights [F12]

**4.21** *SDRs are international reserve assets created by the IMF and allocated to its members that are SDR Department<sup>5</sup> participants (currently all IMF member countries) to supplement existing official reserves.* SDRs are held by member countries (central banks or central governments) that participate in the SDR Department. Other holders of SDRs include the IMF, through the General Resources Account (GRA) within the General Department, and international organizations and monetary institutions prescribed by the IMF.<sup>6</sup> SDRs are transferable among SDR Department participants, prescribed holders, and the IMF GRA.<sup>7</sup> SDR holdings represent assured and unconditional rights to obtain freely usable currency.

**4.22** SDRs are assets representing claims on the SDR Department participants collectively and not on the

<sup>5</sup> The SDR Department of the IMF, an accounting entity rather than an organizational unit of the IMF, records and administers all transactions and operations involving SDRs. The Articles of Agreement require that the General and SDR Departments be kept strictly separated. (See *IMF Financial Operations*.)

<sup>6</sup> See *IMF Financial Operations*, page 87.

<sup>7</sup> The GRA refers to the principal account of the IMF, consisting of a pool of currencies and reserve assets largely representing the paid subscriptions of member countries' quotas. The GRA is the account from which the regular lending operations of the IMF are financed (see paragraph 4.241 and *IMF Financial Operations*, Chapter 2).

IMF. A holder of SDRs may sell some or all of its SDR holdings to another participant or holder and receive in return a freely usable currency.

**4.23** SDR holdings and SDR allocations should be recorded as gross assets and liabilities in the balance sheet of the entity that under domestic law is responsible for a member's SDR Department positions, usually the central bank and in some cases the central government. Therefore, allocations of SDRs increase claims on nonresidents (reserve assets) and liabilities to nonresidents (foreign liabilities), initially by the same amount.

**4.24** SDR allocations are classified as *debt liabilities to nonresidents*<sup>8</sup> because (1) interest is payable to the SDR Department on the cumulative allocation, and arrears arise if payments are not made on time;<sup>9</sup> and (2) a country would be required to repay its allocation of SDRs in certain circumstances such as upon termination of its participation in the SDR Department, cancellation of SDRs, or upon liquidation of the SDR Department. Annex 4.2 provides more detailed discussion on IMF-related accounts and their treatment in monetary and financial statistics.

## B. Currency and Deposits

### Currency [F21]

**4.25** *Currency consists of notes and coins that are of fixed nominal values and are issued or authorized by central banks or governments.* Currency is divided into domestic currency and foreign currency.

**4.26** Domestic currency is the one that is legal tender in the economy and is issued by the central bank or government of that economy or of the common currency area to which the economy belongs. Any currencies that do not meet this definition are foreign currencies to that economy, representing claims on nonresident central banks or governments.

**4.27** Some countries issue gold or precious metal coins, which are held for their intrinsic value, or commemorative coins, which are held for their numismatic

value. If not in active circulation, such coins should be classified as nonfinancial assets rather than as financial assets. Those commemorative coins that differ only slightly from the standard coins in circulation, are issued at or near their face value, are fungible with the standard coins in circulation, and for which the issuing authority has a liability to redeem them, are classified as currency (see also paragraph 6.25).

**4.28** Central bank or central government holdings of unissued currency are nonfinancial assets and are valued at cost.

### Deposits

**4.29** *Deposits are nonnegotiable contracts that represent the placement of funds available for later withdrawal.* A deposit is usually a standard contract, open to the public at large, that allows the placement of variable amounts of money. Deposits include all claims that are (1) on the central bank, other depository corporations (ODCs), other financial corporations (OFCs), and, in some cases, other institutional units; and (2) represented by evidence of deposit. The category of deposits comprises transferable deposits and other deposits.

### Transferable deposits [F22]

**4.30** *Transferable deposits comprise all deposits that are (1) exchangeable for banknotes and coins on demand at par and without penalty or restriction; and (2) directly usable for making payments to third parties by check, draft, giro order, direct debit/credit or other direct payment facility.*

**4.31** Judgment must be applied in the national context in deciding whether deposits with less-than-full transferability features should be classified as transferable deposits because some types of deposits embody only limited features of transferability. For example, some deposits have restrictions such as on the number of third-party payments that can be made per period and/or on the minimum size of the individual third-party payments. Usually, deposits with limited features of transferability are excluded from the category of transferable deposits and treated as other deposits.

### Special cases

**4.32** *Cashier's checks.* A cashier's check is a check purchased by a depository corporation's (DC) customer

<sup>8</sup> In the *System of National Accounts 1993 (1993 SNA)* and the fifth edition of the *Balance of Payments Manual (BPM5)*, SDR holdings were classified as financial assets without a corresponding liability. In the *Monetary and Financial Statistics Manual (MFSM)*, SDR allocations were classified as *Shares and other equity*.

<sup>9</sup> Given that the rate of interest earned by members holding SDRs is the same as the rate of interest owed by those with SDR allocations, no settlement payment is made if the levels of holdings and allocations are equal for a member.

and drawn on the own account of a DC. It is signed by the DC's cashier and is made payable to the party specified by the purchaser of the check. Whether purchased with currency or through deposit withdrawal, a cashier's check should be included within transferable deposit liabilities of the DC on which it is written. For deposit classification by sector, the bank check should be attributed to the economic sector of the purchaser of the check, rather than to the economic sector of the recipient of the check.

**4.33 Bank draft (or teller's check).** Less commonly, a DC's customer may purchase a *bank draft* (sometimes called a *teller's check*) that is a check or similar instrument written by a DC against funds in its deposit account at another DC. For a bank draft purchased by one of its customers, a DC should record (1) a reduction in deposit liabilities, arising from a withdrawal from the customer's deposit holdings (or an increase in the DC's currency holdings, if the check was purchased with cash); and (2) a reduction in its deposit holdings at the DC on which the draft was written.<sup>10</sup> A bank draft (or teller's check) should be included within transferable deposit liabilities (and broad money liabilities if the customer is a money holder), of the DC on which it is written when the draft is presented for payment. While the bank draft is being held by the purchaser of the draft or is in transit to the payee, it is not included in broad money.<sup>11</sup>

**4.34 Deposit overdrafts.** Depositors in some countries are authorized to obtain funding in the form of an *overdraft*—a check or other item in an amount that overdraws a transferable deposit account. All outstanding claims arising from overdrawn deposit accounts should be classified as loans rather than as negative balances in depositors' accounts, regardless of whether the depositor intentionally created the overdraft or inadvertently had insufficient funds in the account.

<sup>10</sup> The DC should record a reduction in its deposit holdings at the other DC, even though the corresponding entry will not be made in the other DC's accounts until the item has been presented for payment through the clearing system.

<sup>11</sup> The exclusion from broad money is achieved automatically because when one of its customers (money-holding units) purchases a bank draft, the DC reduces its deposit liabilities to that customer, while the DC on which the draft was written still includes this amount within its deposit liabilities to another ODC (a money-issuing unit).

**4.35 Traveler's check.** *Traveler's checks* are issued by financial or nonfinancial corporations (NFCs) to provide a medium of exchange with characteristics of both currency and transferable deposits. One feature of traveler's checks is that they provide a safer way to carry funds than currency as a security feature is provided against lost or stolen checks by the issuing party.<sup>12</sup> Traveler's checks should be included within transferable deposit liabilities of the issuing DC. (See also paragraph 6.29.)

**4.36 IMF No. 1 Account, IMF No. 2 Account, and IMF Securities Account.** Deposit liabilities of central banks include the *IMF No. 1 Account* and *IMF No. 2 Account*, which are transferable deposits that the IMF holds in central banks of member countries. Securities that have been substituted for *IMF No. 1 Account* liabilities should also be classified as transferable deposits, because these liabilities have the characteristics of demand deposits rather than debt securities and, in particular, are encashable on demand by the IMF.<sup>13</sup>

**4.37 Reserve deposits.** Reserve deposits are deposits at the central bank that ODCs use to satisfy reserve requirements for eligible liabilities. All reserve deposits of ODCs that satisfy reserve requirements, including any excess reserves,<sup>14</sup> based on the averaging of reserve holdings over a period (as well as used for settlement purposes) are classified as transferable deposits unless they are illiquid. Reserve deposits that are pre-specified fixed amounts or required reserves (without averaging), including excess reserves, are classified as other deposits (i.e., nontransferable deposits). (See Annex 6.3.)

**4.38 Electronic money** is a payment instrument whereby monetary value is electronically stored on a physical device or remotely at a server and represents a claim on the issuer. To qualify as electronic money, the payment instrument must represent general purchasing power (i.e., it may be used for making payments to a variety of other entities). Electronic money

<sup>12</sup> Specific checks are given unique check numbers, similar to a normal check. When a lost or stolen check is identified, it is simply canceled and the individual is reissued a new check.

<sup>13</sup> If net recording is followed, there will be no entries for *IMF No. 1 Account* and *IMF Securities Account* in the sectoral balance sheet for the central bank.

<sup>14</sup> Excess reserves are deposits held at the central bank in excess of those required.

that can be used for direct payments to third parties qualifies as a transferable deposit.

**4.39** In comparison with currency, which has only physical security features, electronic money uses cryptography to authenticate transactions and to protect the confidentiality and the integrity of the data processing. One common type of electronic money is the “electronic purse,” where monetary value of small amounts is stored on payment cards for use in making small payments. Other examples of electronic money include prepaid cards (except those designed to address specific needs and that can be used only in a limited way (see paragraph 3.137); web-based electronic money (such as PayPal, if monetary value is electronically stored); and mobile money, which is electronic money accessible via a mobile phone or a mobile device to make direct payments to third parties.

**4.40** Not all electronic payments involve electronic money. For instance, credit cards or debit cards are not electronic money because no monetary value is stored on them; neither are store cards, because they are similar to credit cards but with use limited to only the issuing stores. Internet-based currency, such as Bitcoins,<sup>15</sup> is not electronic money because it does not meet the definition of currency, as it is not issued or authorized by a central bank or government, and additionally is not widely accepted as a medium of exchange.

**4.41** Both FCs and NFCs can issue electronic money. Regardless of the issuing sector, electronic money is classified as deposits rather than currency. Closed circulation of electronic money is when recipients of funds are required to forward evidence of ownership to the issuer for redemption. Less common is open circulation, which allows the funds to be transferred through a sequence of buyer-to-buyer transactions without involvement of the issuer of the electronic money.

**4.42** Data collection is straightforward for electronic money under closed circulation issued by ODCs, given that accounting for transactions and balances for the electronic money and for regular transferable deposits are similar. In the loading of funds to the electronic money device, the ODC depositor acquires electronically stored money on a device in

exchange for transferable deposits or currency. The ODCs’ transactions with the recipients of the electronic funds are similar to electronic settlements for other types of transferable deposits.

*Other (or nontransferable) deposits* [F29]

**4.43** *Other (or nontransferable) deposits comprise all claims, other than transferable deposits, that are represented by evidence of deposit.* Other deposits include:

- a. Sight deposits that permit immediate cash withdrawals but are not useable for direct payments to third parties.
- b. Savings deposits<sup>16</sup> that are accounts with deposit-taking institutions that pay interest but cannot be used for direct payments to third parties (for example, by writing a check). These accounts enable customers to set aside a portion of their liquid assets while earning interest.
- c. Fixed-term deposits (also known as term deposits or time deposits) that are provided by deposit-taking institutions to their customers with a higher rate of interest than a regular savings account. These are with maturities ranging from a month to a few years. When a fixed-term deposit is set, the fund can only be withdrawn after the term has ended or by giving a predetermined number of days’ notice.
- d. Nonnegotiable certificates of deposits.
- e. Deposits of limited transferability that are excluded from the category of transferable deposits.
- f. Transferable deposits that have been posted to depositors’ accounts but cannot be drawn upon until the deposited items (e.g., checks or drafts) have been collected by the depository corporations that accepted them.
- g. FCs’ liabilities in the form of shares (such as issued by savings and loan associations, building societies, and credit unions) arising from members’ deposits that are legally or in practice redeemable immediately (but are not useable for direct third-party payments) or at short notice.

<sup>15</sup> Bitcoins are classified as nonfinancial assets.

<sup>16</sup> Deposits that are called *savings deposits* but are equipped with automatic transfer service features should be classified as transferable deposits.

- h. The reserve tranche position in the IMF, which represents the payment of the foreign exchange component of the IMF quota subscription (see paragraph 4.246b). The reserve tranche position is a claim on the IMF and an international reserve asset.
- i. Repayable margin payments in cash related to different financial contracts, such as financial derivatives and repos (see paragraphs 4.47–4.49).
- j. Repurchase agreements with money-holding sectors resembling a deposit, where the DC is the cash-taker.<sup>17</sup> These repurchase agreements may be included in broad money. (See paragraph 6.36.)

### Special cases

#### Unallocated accounts for precious metals

**4.44** Unallocated gold accounts assets, other than monetary gold, are classified as other deposits in foreign currency. All unallocated gold accounts liabilities, including counterpart accounts for monetary gold, are classified as other deposits in foreign currency (see paragraph 4.19). The same principle applies to unallocated deposit accounts for other precious metals (e.g., silver or platinum). Unallocated deposit accounts for other precious metals are included in foreign currency deposits. Allocated deposit accounts for all metals, other than for gold held by monetary authorities as reserve assets,<sup>18</sup> are included in non-financial assets. Conceivably, unallocated deposit accounts could arise for commodities other than precious metals.

#### Interbank positions

**4.45** The *2008 SNA* (paragraphs 11.56–57) recommends that interbank positions in loans and deposits be shown as a separate category of transferable deposits. The borrowing and lending within the deposit-taking subsector, which may be substantial, is of a different economic nature from their intermediation

activities involving other sectors. In monetary statistics, all assets and liabilities (except equity liabilities) are classified by sectors/subsectors of counterparts, including for the central bank and ODCs, so that inter-DC positions are identified by all relevant instrument categories. Further, memorandum items in the sectoral balance sheets for the central bank and ODCs separately identify claims on and liabilities to MMFs, allowing the compilation of interbank positions as defined in the *2008 SNA* (see Table 2.2). When the parties are uncertain as to whether the interbank position is a loan or a deposit, this *Manual* recommends recording it under other deposits.

#### Restricted deposits

**4.46** Restricted deposits are those for which withdrawals are restricted on the basis of legal, regulatory, policy, or commercial requirements. Such deposit withdrawal restrictions do not include limitations on the early withdrawal of deposits that have agreed maturities. A fixed-term deposit withdrawal prior to maturity may not be allowed or, if allowed, typically carries a penalty for early withdrawal. Such withdrawal conditions are treated as standard maturity provisions of fixed-term deposits, rather than as restrictions. Examples of restricted deposits are:

- a. Import deposits required in advance of imports as evidence of available funds.
- b. Compulsory savings deposits that can be accessed only after a specified period or from which withdrawals may be made only for specified purposes (e.g., home purchase or retirement).
- c. Escrow deposit accounts that cannot be accessed until the appropriate conditions and obligations have been fulfilled.
- d. Judicial deposits paid to a court, in the name and to the credit of such a court.
- e. Fiduciary deposits, which are placed with an ODC (the recipient) by a trustee, typically another ODC or OFC on behalf of another party (the beneficiary).
- f. Foreign currency deposits that are blocked (i.e., withdrawal allowed only under certain circumstances or conditions) because of national policies (e.g., rationing of foreign currency).

<sup>17</sup> Money holders usually deposit funds with ODCs rather than provide loans to them. Repurchase agreements with counterparts other than money-holding sectors where the DC is the cash-taker should be classified as loans. Although OFCs are money-holders, they may provide loans, some of them in the form of repurchase agreements, to ODCs as part of their intermediation function.

<sup>18</sup> Such gold is classified as monetary gold.

- g. Impaired deposits that are expected to be partially or totally uncollectible (that have not yet been written off), including frozen deposits in FCs that are under liquidation or reorganization.

### Margin deposits

**4.47** Margins are payments of cash or deposits of collateral that cover actual or potential obligations incurred. The required provision of margin reflects counterparty risk and is standard in financial derivative markets (see also financial derivative section, later in this chapter). The classification of margins depends on whether they are repayable or nonrepayable.

**4.48** Repayable margin consists of cash or other collateral deposited to protect a counterparty against default risk. Ownership of the margin remains with the unit that deposited it. Although its use may be restricted, a margin is classified as repayable if the depositor retains the risks and rewards of ownership—such as the receipt of income or exposure to holding gains and losses. At settlement, a repayable margin (or the amount of repayable margin in excess of any liability owed on the financial contract) is returned to the depositor. In organized markets, repayable margin is sometimes known as *initial margin*.

**4.49** Repayable margin payments are transactions in deposits, not transactions in the associated financial assets (e.g., financial derivatives). Repayable margin deposits made in cash are classified as other deposits (particularly if issued by ODCs and included in broad money) or in other accounts receivable/payable (especially if placed with financial auxiliaries). When a repayable margin deposit is made in a non-cash asset (i.e., debt securities), no transaction or a new position in stocks is recorded in the balance sheets because no change in economic ownership has occurred.

**4.50** Nonrepayable margin payments are transactions in financial derivatives, and not in deposits. In organized exchanges, nonrepayable margin is paid daily to meet liabilities recorded as a consequence of the daily marking of derivatives to market value. The payments reduce the liability created through the

financial derivative with the contra-entry a reduction in another financial asset (likely in currency or deposits). The receipt of nonrepayable margin is recorded as a reduction in the financial derivative asset; the contra-entry is an increase in another financial asset (probably in currency or deposit).

**4.51** In some countries, repayable and nonrepayable margins are recorded in a single account, and it may be difficult to distinguish. The institutional arrangements (i.e., the types of units making payments and types of instruments used) must be reviewed. The key test is whether the margin is repayable or whether payment of the margin represents an effective transfer of ownership between counterparties to the financial contract.

### C. Debt Securities [F3]

**4.52** *Securities are financial claims that have the characteristic feature of negotiability.* In this *Manual* (and the 2008 SNA and other statistical manuals), a financial asset is negotiable if its legal ownership is readily capable of being transferred from one unit to another unit by delivery or endorsement. Securities are negotiable instruments that are designed to be traded usually on an organized exchange or in the over-the-counter (OTC) market.<sup>19</sup> The OTC market involves parties negotiating directly with one another, rather than on a public exchange. Some securities may be legally negotiable, but there might not be, in fact, a liquid market where they can be readily bought or sold. Negotiability is a matter of the legal form of the instrument, and evidence of actual trading is not required.

**4.53** Securities comprise debt securities and equity securities. Debt securities are discussed in this subsection, while equity securities are discussed in the subsection *Equity and Investment Fund Shares* in this chapter.

**4.54** *Debt securities are negotiable financial instruments serving as evidence of a debt.* They include bills,

<sup>19</sup> For a detailed discussion of debt security features see *Handbook on Securities Statistics*, paragraphs 2.8–2.23. The *Handbook on Securities Statistics* deals with the conceptual framework for the compilation and presentation of securities statistics, elaborating on issues such as securities' issuers, holders, currency, maturity, and type of interest rate.

bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, and similar instruments usually traded in the financial markets.

4.55 Common types of debt securities are those sold on:

- a. A *coupon basis*, stipulating that periodic interest, or coupon, payments will be made during the life of the instrument and that the principal will be payable at maturity.
- b. An *amortized basis*, stipulating that interest and principal payments will be made in installments during the life of the instrument.
- c. A *discount, or zero coupon, basis*, whereby a security is issued at a price that is less than the face (or par) value of the security, and all interest and principal are payable at maturity.
- d. A *deep discount basis*, whereby a security is issued at a price that is less than face value, and the principal and a substantial part of the interest is payable at maturity.
- e. An *indexed basis*, which ties the amount of interest and/or principal payment to a reference index, such as a price index, an interest rate, an exchange rate index, or to a price of a commodity (e.g., gold).

4.56 Box 4.1 shows examples of some common types of debt securities. Box 4.2 presents examples of debt securities issued and traded in international markets.

4.57 ***Bills are debt securities that give the holders the unconditional right to receive stated fixed sums on a specified date.*** Bills are generally issued with short-term maturities at a discount to face value that depends on the rate of interest and the time to maturity; they are usually traded in organized markets. Examples of such short-term securities are treasury bills, negotiable certificates of deposit, promissory notes, bankers' acceptances, and commercial paper.

4.58 ***Bonds and debentures are long-term debt securities that give the holders the unconditional right to fixed payments or contractually determined variable payments on a specified date or dates, that is, the earning of interest is not dependent on earnings of the debtors.*** Bonds and debentures also give holders the unconditional right to fixed sums as payments to the creditor on a specified date or dates.

#### Box 4.1 Debt Securities: Some Common Types

##### Short-term securities sold on a zero coupon (or discount) basis

- Treasury bills and other securities issued by a central government or its agencies
- Other securities issued by state and local government
- Commercial and financial papers issued by financial and nonfinancial corporations
- Negotiable certificates of deposit issued by other depository corporations (ODCs)
- Bankers' acceptances

##### Long-term securities sold on a fixed-rate coupon basis

- Central government bonds
- Bonds issued by state and local governments
- Corporate bonds
- Negotiable certificates of deposit issued by ODCs
- Preferred stock (if qualifying as debt rather than equity)

##### Pass-through and other asset-backed securities (including principal-only and coupon-only strips)

- Collateralized mortgage obligations
- Collateralized debt obligations
- Mortgage-backed bonds

##### Debentures: unsecured or uncollateralized debt security backed only by the creditworthiness of the issuer

##### Debt securities with embedded financial derivatives

- Denominated in a foreign currency<sup>1</sup>
- Variable interest rate (including with interest caps, floors, or collars)<sup>1</sup>
- Interest and/or principal indexed to equity values, commodity prices, or other reference variables
- Callable at the option of the issuer
- Puttable at the option of the holder
- Convertible to equity shares
- Extendable maturity
- Credit derivative features

<sup>1</sup> Included under the broadest characterization of embedded financial derivatives.

### Box 4.2 Debt Securities: Some Types Traded in International Markets<sup>1</sup>

**Short-term securities.** Eurocurrency instruments, denominated in U.S. dollar, euro, yen, etc.

- *London certificates of deposit.* Negotiable certificates of deposit issued by a London bank or a London branch of a foreign bank
- *Euro commercial paper and euronotes*
- *Euro bankers' acceptances.*

**Long-term securities.** International bonds are those issued outside the domestic market of the borrower.

- *Global bonds.* Simultaneously placed in the euro area and one or more domestic markets with securities fungible between the markets
- *Eurobonds.* Issued by a borrower in a foreign country, denominated in a euro currency (U.S. dollar, euro, yen, etc.), and underwritten and sold by an international syndicate of a financial corporation
- *Floating-rate notes (FRNs).* Medium- to long-term securities with variable rates usually linked to the London interbank rate (offer, bid, or average rate).

<sup>1</sup> For descriptions of these and other instruments, see the *Coordinated Portfolio Investment Survey Guide* (2002), Appendices V and VI.

Specific types of debt securities<sup>20</sup>

**4.59 Negotiable loans.** Loans that have become negotiable de facto are to be reclassified from loans to debt securities. For such reclassification, there needs to be evidence of secondary market trading, including the existence of market makers and frequent quotations of the instruments, such as provided by bid-offer spreads.

**4.60 Preferred shares.** Nonparticipating preferred stocks or shares (also called preference shares) that pay a fixed income but do not provide for participation in the distribution of the residual value of an incorporated enterprise on dissolution are included in debt securities.

<sup>20</sup> Appendix I of the *External Debt Statistics: Guide for Compilers and Users* (2013) provides detailed information on specific types of financial instruments and transactions, and their classification in the gross external debt position.

**4.61 Convertible bonds** are fixed interest rate bonds that may be converted into equity and should also be classified as debt securities prior to the time when they are converted.

**4.62 Bankers' acceptances (BA)** are treated as debt securities from the time of acceptance (even though funds may not be exchanged until a later stage) and classified under the category of debt securities. A BA involves the acceptance by an FC, in return for a fee, of a draft or bill of exchange and the unconditional promise to pay a specific amount at a specified date. A BA must be tradable. The BA represents an unconditional claim on the part of the holder and an unconditional liability on the part of the accepting FC; the FC's counterpart asset is a claim on its customer. (See also *Bills of exchange and acceptances* in the subsection *Loans*.)

**4.63 Private placements of debt securities** involve an issuer selling debt securities directly to a small number of investors without public offering. The creditworthiness of private placements is not assessed by credit rating agencies and as the securities are generally not resold or re-priced, their secondary market is thin. To the extent that some private placements can be (and are) traded among investors, the criterion of negotiability for debt securities is met.

**4.64 A structured debt security** combines a debt security, or a basket of debt securities, with a financial derivative, or a basket of financial derivatives. This financial derivative, or the basket, is embedded in and is, therefore, inseparable from the debt security. When the debt security and financial derivative components of a financial instrument are separable from each other, they should be classified accordingly; but if they cannot be separated, then the instrument should be valued and classified according to its primary characteristics, either as a debt security or financial derivative.<sup>21</sup>

**4.65 Depository receipts (DRs)**<sup>22</sup> allow a nonresident institutional unit to introduce its equity or debt into

<sup>21</sup> For more detailed discussion on structured debt securities see the *Handbook on Securities Statistics*, Annex 2.

<sup>22</sup> The most common categories are American depository receipts (ADRs) and Global depository receipts (GDRs), both most often denominated in U.S. dollars, but sometimes in euros. ADRs are traded on U.S. exchanges such as the New York Stock Exchange and American Stock Exchange, while GDRs are commonly listed on European stock exchanges such as the London Stock Exchange.

another market in a form more readily acceptable to the investors in that market. A resident deposit-taking corporation will acquire the underlying securities and then issue receipts in a currency more acceptable to the investor. After issuance, DRs can be traded freely among investors, either on a stock exchange or OTC. DRs are classified according to the underlying financial instrument backing them (i.e., as debt securities or equity). This is because the issuer (the deposit-taking corporation) does not take the underlying securities onto its balance sheet, but rather acts as a facilitator.

**4.66** A *promissory note* is an unconditional promise to pay a certain sum on demand on a specified date. Promissory notes are one specific type of debt securities within the category *bills*, which give holders the unconditional rights to receive the stated sums on a specified date. Bills are issued and usually traded in organized markets at a discount to face value depending on the rate of interest and the time to maturity.

Debt securities issued through securitization

**4.67** *Securitization involves the issuance of debt securities that are backed by financial assets (such as mortgage loans, claims on credit card holders, car loans, commercial and industrial loans), non-financial assets, or future income streams (such as from music record or ticket sales).* Although future income streams are sometimes used in securitization transactions, these future streams are not recognized as an asset in macroeconomic statistics.<sup>23</sup> Securitization of assets provides liquidity in assets that are otherwise not so liquid. For example, an originating mortgage lender could sell a portfolio of loans to a special purpose vehicle that issues securities to investors that are “backed” by the loans. In cases in which the originator issues asset-backed securities on its own books, the securitization may take place without the creation of a separate entity. Examples of debt securities issued through securitization are provided in Annex 4.1.

Other categories are *European depository receipts* and *International depository receipts*. Based on a determined ratio, each DR may be issued as representing a single or more than one share of the underlying equity.

<sup>23</sup> The *Handbook on Securities Statistics* (Chapter 6) provides a description of three broad types of securitization schemes and the range of debt securities issued under these schemes.

Indexed securities

**4.68** Indexed debt securities are instruments for which either the coupon payments (interest) or the principal or both are linked to an index such as a price index, an interest rate, an exchange rate index, or the price of a commodity. These securities are classified as variable-rate instruments. The recording of revaluations and interest for indexed financial instruments is discussed in Chapter 5 (paragraphs 5.53–5.59 and Annex 5.2, paragraph 5.271).

#### **D. Loans [F4]**

**4.69** *Loans are financial assets that are (1) created when a creditor lends funds directly to a debtor, and (2) evidenced by documents that are not negotiable.*<sup>24</sup>

**4.70** The category of loans includes overdrafts, mortgage loans, installment loans, hire-purchase credit, loans to finance trade credit, and payday loans. Claims on, or liabilities to, the IMF that are in the form of loans are also included in this category.<sup>25</sup> An overdraft arising from the overdraft facility of a transferable deposit account is classified as a loan. Repurchase agreements, gold swaps, and financing by means of a financial lease are classified as loans, with few exceptions, as explained in the remainder of this subsection. Undrawn lines of credit are not recognized as an asset as they are only potential claims. Accounts receivable/payable, which are treated as a separate category of financial assets, and loans that have become debt securities are also excluded from loans.

Repurchase agreements and securities lending

**4.71** *A securities repurchase agreement (repo) is an arrangement involving the sale of securities for cash, at a specified price, with a commitment to repurchase the same or similar securities at a fixed price either on a specified future date (often one or a few days hence, but also further in the future) or with an “open” maturity.*<sup>26</sup> A repo is viewed from the perspective of the provider of the securities (i.e., the cash

<sup>24</sup> Negotiability is defined in paragraph 4.52. Loans may be traded, but their legal form is not designed for negotiability in the same way as debt securities.

<sup>25</sup> Annex 4.2 of this chapter contains a detailed discussion on IMF-related accounts.

<sup>26</sup> “Open” maturity is where both parties have the option to agree daily to renew or terminate the agreement. Such an arrangement avoids settlement costs if both parties wish to rollover the repo on a continuing basis.

taker). The agreement is called a reverse repo when viewed from the perspective of the securities taker (i.e., the cash provider).

**4.72** Repos convey the legal ownership of the securities to the cash provider, which entitles the cash provider to sell the securities to a third party (on-selling). Despite conveyance of the legal ownership to the cash provider, the economic ownership is retained by the cash taker (i.e., the securities provider), as the cash taker retains the market risk and ownership benefits, other than the right of sale, including holding gains or losses and interest income on the securities. Because of these features, a repo is similar to a loan that is collateralized by the securities underlying the agreement.

**4.73** Repos may be used for a variety of different purposes, for example, as a means of financing the acquisition of the underlying instrument, for cash borrowing, or as a means of covering a negative position (“short” position) in the security. In some circumstances, substitution of the securities may be permitted.<sup>27</sup> To provide for protection against adverse movements in the price of the security, a “haircut” is subtracted from the market value of the asset used as collateral; with the size of the “haircut” reflecting the perceived risk associated with holding the asset. An additional margin deposit may be required to cover residual counterparty risk. Repurchase agreements are usually “cash-driven,” where the motivation is to obtain cash with the security provided as collateral; but they may be “security-driven,” where the motivation is to obtain a security when it has “gone special” (i.e., when it has become difficult to obtain).

**4.74** A buy-sell-back is one type of repo, which involves a spot sale of a security with a simultaneous forward purchase. Buy-sell-backs have the same economic effect as a securities repo. The main difference between the two arrangements is that in a repo both transactions are conducted under the same contract, whereas under a buy-sell-back the transactions are conducted under two legally independent contracts: a spot transaction and the opposite forward transaction.

**4.75** In macroeconomic statistics, securities repurchase agreements are treated as collateralized loans or deposits, rather than as outright sales of securities.

<sup>27</sup> Similar securities can be substituted if permitted under the agreement. “Similar” may be defined narrowly or broadly, depending on the circumstances.

Generally, a repurchase agreement is classified as a loan. However, repurchase agreements with money-holding sectors resembling a deposit, where the DC is the cash taker, should be classified as other deposits and may be included in broad money. The securities should remain on the balance sheet of the cash taker and a new financial asset (i.e., a loan or a deposit) should be recorded as an asset of the cash provider and a liability of the cash taker.

**4.76** Securities acquired under reverse repos may in turn be repoed. In such circumstances, the securities under repo support two loan transactions—the cash provider’s claim on the cash taker under the original repo and the claim of the “on-buyer” (i.e., the cash provider under the new repo) on the original cash provider (i.e., the cash taker under the new repo, who is also the cash provider under the first repo/reverse repo). The party with the loan asset from the reverse repo does not net it against the loan payable in the subsequent repo, because the counterparties to the two transactions are different. Double-counting of the holding of the security should not arise in such a case, because the securities underlying both the first and the second repos continue to be recorded only on the balance sheet of the original cash taker.

**4.77** Consistent with the 2008 SNA and other statistical manuals, this *Manual* makes a specific recommendation on the statistical treatment of securities that are acquired under reverse repo and are on-sold outright. Although a cash provider should not record the acquisition of a security under a reverse repo as a transaction in securities, if the security so acquired is on-sold outright, a transaction in the security should be recorded by the cash provider (and by the outright purchaser). This is known as “short selling”<sup>28</sup>—the sale of a financial asset not currently held on balance sheet—and results in a recorded short position in the security for the on-seller. This treatment reflects the economic ownership in that the holder of the negative position is exposed to the risks and rewards of the security, in an equal and opposite way, as the party in a long position. Interest accrues on the negative position negatively (i.e., the negative position becomes larger). In aggregate, the recording of a negative position overcomes the

<sup>28</sup> This treatment should be applied to the recording of all short sales of securities, whether or not associated with repos.

double counting that would otherwise result from the security being recorded as an on-balance-sheet asset holding of the third party that has purchased it outright, as well as still being recorded on balance sheet as a security asset holding of the cash taker under the repo.

**4.78** In this instance, additional information may be required for a fuller understanding of the repo market and to determine who is holding the instrument. It is useful for the analysis of liquidity, leverage, and vulnerability, to identify the parties to repo transactions. Accordingly, it is recommended that when a repo (reverse repo) is undertaken, data on the counterparty to the repo (reverse repo) transaction (resident sector or nonresident) and the instrument and sector of issuer (e.g., government debt security) are made available to the compilers, for ensuring appropriate recording in sectoral balance sheets.

**4.79** *A tri-party repo is a transaction mediated by a third party, typically a custodian bank or central counterparty, to reduce counterparty risk for the lender.* Tri-party repos are structured in a way that transfers the risk to the third party as follows: (1) the borrower enters into a repurchase agreement with the third party, borrowing the required amount and pledging collateral to the third party as required; (2) the lender enters into a reverse repurchase agreement with the third party; and (3) the third party administers the transaction and the collateral, acting as the direct counterparty to the seller and the buyer, thus assuming the risk of default of the borrower.<sup>29</sup>

**4.80** *Securities lending is an arrangement whereby a security holder transfers securities to a borrower, subject to the stipulation that the same (or similar)<sup>30</sup> securities be returned on a specified date or on demand.* “Full, unfettered ownership” is transferred to the borrower, but the risks and benefits of ownership (economic ownership) remain with the original owner.<sup>31</sup> The practice is undertaken by owners of

securities to raise the return on the securities and/or to reduce the cost of custody.

**4.81** Securities lending arrangements are divided into two major categories that are delineated by the type of collateral—either cash or securities—that is provided to the lender of the securities.<sup>32</sup> The borrower of the securities usually provides collateral that is of equal value to, or greater value than, the value of the securities being lent.

**4.82** Securities lending backed by cash collateral is similar to a repo, has the same economic effect as a repo, and so is treated statistically in the same way as a collateralized loan.

**4.83** Securities lending that is backed by collateral other than cash (or that is not collateralized) should not be treated as a transaction and should be recorded off balance sheet by both the lender and borrower of the securities. If the securities are on-sold outright to a third party, the “borrower” of the securities should record a security transaction, and a reduction in security assets, resulting in a “short” position in that security asset. Similar to repos, this approach overcomes the double counting that would otherwise result, in the aggregate, from the security being recorded as an on-balance-sheet asset holding of the third party that has purchased it outright as well as still being recorded on balance sheet as a security asset holding of the original lender of the securities.<sup>33</sup>

**4.84** Similar to securities received under a repo that are on-sold, additional information may be required when a security acquired under a securities lending transaction has been on-sold.

Gold swaps and gold loans

**4.85** *A gold swap<sup>34,35</sup> involves an exchange of gold for foreign exchange with an agreement that the transaction be reversed at an agreed future date at an*

<sup>29</sup> In some instances, collateral is not provided.

<sup>30</sup> The collateral might, conceivably, be provided in part in securities and the rest in cash. If so, the securities lending should be recorded as a loan in the amount of the cash collateral and, in all other respects, should not be recorded on the balance sheets of the lender and borrower of the securities.

<sup>31</sup> These swaps should not be confused with interest rate or currency swaps that are financial derivatives, as described later in this chapter.

<sup>32</sup> Gold swaps may be more broadly defined to include arrangements involving nonmonetary gold and parties other than qualified holders of monetary gold.

<sup>29</sup> See European Central Bank (2012), pages 119–120.

<sup>30</sup> Similar securities can be substituted, if permitted under the lending arrangements.

<sup>31</sup> If the original owner does not retain these elements of ownership, the provision of the securities should be viewed as an outright sale.

**agreed gold price, so that the original owner remains exposed to the gold market.** Gold swaps are forms of repurchase agreements undertaken between central banks or between a central bank and other types of FCs. Its features are similar to those of a repo and, therefore, they should be treated in a similar way.

**4.86** Gold swaps should be recorded as collateralized loans when they involve the exchange of gold for foreign exchange. Consequently, the gold remains on the balance sheet of the original owner and is not taken onto the balance sheet of the cash provider—in the same manner in which a repurchase agreement is recorded. If gold received under a gold swap is swapped again, the same treatment applies: it is treated as a collateralized loan by both parties. In the event that the gold received under a gold swap is sold outright, the seller (if not a monetary authority) should record a “short” holding of nonmonetary (i.e., commodity) gold and the purchaser (if not a monetary authority) should record on its balance sheet a holding of nonmonetary (i.e., commodity) gold. If the gold acquired under a gold swap is sold outright by a nonmonetary authority to a monetary authority, monetization will be involved.<sup>36</sup> If gold received under a gold swap is sold outright by a monetary authority (whether to a monetary authority or another party), it should record on its balance sheet a negative position in monetary gold. The transaction will involve demonetization if the counterparty in this instance is not a monetary authority.

**4.87** Gold loans (or gold deposits) may be undertaken to obtain an income return on gold. The gold that is placed on loan (or deposit) may be either a financial asset (i.e., monetary gold) or a nonfinancial asset (i.e., nonmonetary gold). The gold remains on the books of the gold lender, and the lender retains the exposure to the market risk arising from movements in the market price of gold. Gold loans (or deposits) are not backed by cash collateral and, in some cases, are not backed by any collateral. However, the gold may be on-sold by the borrower. This *Manual* (and the

<sup>36</sup> This could create the situation where monetary gold is overstated, in aggregate, as far as the same holding of gold would be reported on the balance sheet of two monetary authorities at the same time. If both the originator of the gold swap and the outright purchaser are monetary authorities, and the outright seller is not a monetary authority, there will be no offsetting negative position: the negative position will be recorded by the nonmonetary authority in nonmonetary gold.

*2008 SNA* and other statistical manuals) recommends that gold loans be treated as off-balance-sheet items (i.e., not recorded as assets or liabilities, and transactions). If the gold is on-sold, however, the on-selling party (i.e., the gold borrower) should record a gold transaction, in the same manner as to gold swaps. (See also paragraph 4.44.)

**4.88** Recording repos, securities lending, gold swaps and gold loans (reverse transactions) under the collateralized loan approach as set out in this *Manual*, is in line with the economic ownership principles in the *2008 SNA*.

#### Financial leases

**4.89** A financial lease is a contract under which the lessor, as legal owner of an asset, conveys substantially all the risks and rewards of ownership of the asset to the lessee. The lessee, therefore, becomes the economic owner of the asset. A financial lease involves imputing a loan. Under a financial lease, the lessor is shown as making a loan to the lessee, which the lessee uses to acquire the asset. Thereafter, the leased asset is shown on the balance sheet of the lessee and not of the lessor, the corresponding loan is shown as an asset of the lessor and a liability of the lessee. Payments under the financial lease are treated not as rentals on the asset but as payments of interest, possibly a service charge (financial intermediation services indirectly measured), and repayments of principal on the imputed loan. Such financial leases are classified as loans.

**4.90** The statistical treatment of financial leases is designed to move away from the legal arrangements to capture the economic substance of such arrangements, by treating assets under a financial lease as if they were acquired and owned by the user who financed the acquisition with a loan. For example, if a bank leases a cargo vessel to a transportation company, the company is deemed to have taken economic ownership of the vessel. The vessel is therefore shown as an asset in the balance sheet of the transportation company, while a loan is recorded as a liability.

**4.91** Examples of situations that would usually lead to a recording of a financial lease include:

- a. The lease transfers legal ownership to the lessee at the end of the lease term; or
- b. The lease has the option for the lessee to acquire legal ownership at the end of the lease term at a

price that is sufficiently low that the exercise of the option is reasonably certain; or.

- c. The lease term is for the major part of the economic life of the asset; or
- d. At inception, the present value of the lease payments amount to substantially all of the value of the asset; or
- e. If the lessee can cancel the lease, the lessor's losses are borne by the lessee; or
- f. Gains or losses in the residual value of the residual asset accrue to the lessee; or
- g. The lessee has the ability to continue the lease for a secondary period for a payment substantially lower than market value.

**4.92** These conditions in the lease contract may not, however, demonstrate conclusively that substantially all of the risks have been conveyed; for example, if the asset is conveyed to the lessee at the end of the lease at its fair value at that time, then the lessor holds substantial risks of ownership. The lease is then called an operating lease. Financial leases are also called finance leases, capital leases, or full-payout leases, highlighting that the motivation is to finance acquisition of the asset. Accounting practices recognize financial leases in the same way as in macroeconomic statistics.

#### Credit card debt

**4.93** Credit cards are used as a convenient means of payment for purchases and as a means of financing purchases. Cardholders usually do not incur financing charges if the entire balance due for their credit-card purchases is paid within each billing cycle, typically monthly. Card holders who carry credit card balances on a month-to-month basis are charged interest on all outstanding balances, including the balances generated by new credit card purchases during the month leading up to the billing cycle. All credit card balances should be classified as loans, and interest accrued and not yet paid are recorded as for loans.

#### Loan participations

**4.94** A loan participation occurs when two or more investors (usually FCs) jointly fund a loan to a single borrower, either through a loan syndication—a loan origination by a syndicate, or group, consisting of a

lead creditor and one or more other creditors who jointly finance the loan—or when portions of an outstanding loan that was originated by one creditor are purchased by various creditors. Each syndicate member records the amount of the loan participation that the member has funded.

**4.95** A loan participation should be disaggregated by economic sector of the debtor and each creditor. Debtor-creditor relationships for loan participations are determined by contractual arrangements. If the loan participation is on an assignment basis (the most prevalent type), each participant has a direct creditor claim on the debtor. If the loan participation is on a nonassignment basis, the initial contract between a single creditor and the debtor remains intact, but the original creditor incurs a liability to each purchaser of a participation in the loan. The entries for the loan transactions are:

- a. Assignment basis. Each participant classifies the amount of the loan participation as a direct claim on the original debtor. The debtor records the loan participations as individual loans, disaggregated by economic sector of the creditor. The originator of the loan participation would show a loan claim on the debtor only to the extent that the originator retained a participation in the loan.
- b. Nonassignment basis. The original creditor/debtor relationship remains intact, and a new set of creditor/debtor relationships is created. The original creditor continues to record a loan claim on the debtor, and the debtor continues to record a loan to the original creditor—in the full outstanding amount of the loan. In addition, the original creditor records a loan liability to each participant in the outstanding amount of participation, classified by economic sector of the participant. Each participant shows the outstanding amount of the participation as a loan claim on the original creditor, classified by the economic sector of the original creditor. An FC may specialize in originating loans that are to be sold (usually, shortly after origination) to another FC that intends to hold the loans to maturity.

**4.96** Loan participations that, after initial purchase, are to be held to maturity should continue to be clas-

sified as loans. If structured as a negotiable instrument, all syndicate participants should classify the loan participations as debt securities, resulting in the single classification, as debt securities, for the entire syndicated loan.

**4.97** Collection and disbursement of the interest and principal payments are usually on a pass-through basis. The FC that sold the loan participations (or its agent) records the interest and principal payments receivable from the debtor and, for a fee, passes the amounts payable to the loan participants (even if the seller of the loan participations no longer holds a participation share).

#### Bills of exchange and acceptances

**4.98** A bill of exchange is an unconditional order written and signed by one party (drawer of the bill), requiring the party to whom it is addressed to pay on demand, or at a fixed or determinable future time, a specified sum to order or to the bearer. Bills of exchange—sometimes called *trade bills* or simply *bills*—are most often associated with foreign trade, but also may be used for domestic trade. Bills of exchange are often called *sight drafts* or *time drafts*, depending on whether payable on demand or payable by a specified future date. A bill of exchange is an *order to pay*, rather than a *promise to pay*. When it is received and “accepted”—stamped<sup>37</sup> and signed—by the party on whom it is written (i.e., the drawee), the bill of exchange becomes a promissory note<sup>38</sup> and is designated as an *acceptance*.<sup>39</sup>

**4.99** An acceptance is classified within loans, debt securities, or trade credit, depending on the characteristics of the credit instrument. Those acceptances that are eligible for rediscounting in a secondary market or by a central bank are usually known as bankers’ acceptances and classified as debt securities (see paragraph 4.62). Acceptances ineligible for rediscounting are designated as other acceptances and are classified as loans or trade credit depending on the nature of

the acceptance.<sup>40</sup> The loans and debt securities created through acceptances include:

- a. Exporter credit. The drawer (exporter) may hold the acceptance and, at maturity, receive payment (usually channeled through the exporter’s bank) from the drawee (importer). The drawer would classify the acceptance as a trade credit claim on the drawee.
- b. Export bill. Instead of holding the acceptance, the drawer (exporter) may rediscount the acceptance at a DC. If ineligible for further rediscounting, the acceptance should be classified as a loan that the DC has extended to the drawee (importer). If eligible for rediscount in the bankers’ acceptances (BA) market and/or at the central bank, the acceptance should be classified within debt securities and, for purposes of sectoral classification, should be attributed to the economic sector of the drawee (importer), who is the original issuer.
- c. Import bill. An importer may arrange an acceptance that calls for the exporter to be paid from the proceeds of a loan that the importer obtains from an ODC that will make the payment. The credit advanced to the importer is classified as a loan by the ODC. The loan remains in the DC’s loan portfolio until repaid by the importer.
- d. Banker’s acceptances. Export and import bills that meet the BA eligibility requirements are sold to BA investors, principally to FCs, NFCs, and nonresident institutions. For classification by debtor, the BA should be attributed to the economic sector of the drawee of the bill of exchange. For example, the BA based on an export bill drawn on an importer should be classified within debt securities issued by nonfinancial corporations (assuming the importer is a nonfinancial corporation). The purchaser of a BA that originated as an import bill drawn on an ODC should classify the BA within debt securities in the subcategory for claims on ODCs.
- e. Own acceptances. A DC may repurchase its own acceptances that it earlier issued in the

<sup>37</sup> Traditionally, a stamp and signature were required, but modern drafts may not be stamped, but are subject to other forms of acceptance, such as electronic signatures, etc.

<sup>38</sup> See paragraph 4.66 for the definition of promissory notes.

<sup>39</sup> A check written on a bank is a bill of exchange that, because payable on demand, is sometimes called a sight draft. A bank “accepts” a check by making the ordered payment.

<sup>40</sup> ODCs provide a variety of off-balance-sheet services for bills of exchange and acceptances, including letters of credit that support the origination of bills of exchange and cross-border transmission of documentation for the bills and acceptances.

bankers' acceptance market. Holdings of own acceptances, representing a DC's liability to itself, should be deducted from the liability account for bankers' acceptance outstanding. The repurchased own bankers' acceptance can be reintroduced as a debt security, if the DC decides to rediscount them in the bankers' acceptance market during the remaining term to maturity.

#### Nonperforming loans

**4.100** *A loan is nonperforming when (1) payments of interest and/or principal are past due by 90 days or more; or (2) interest payments equal to 90 days or more have been capitalized or delayed by agreement; or (3) evidence exists to reclassify a loan as nonperforming even in the absence of a 90-day past due payment, such as when the debtor files for bankruptcy.*

Once a loan is classified as nonperforming, it (or any replacement loans) should remain classified as such until payments are received or the principal is written off on this or subsequent loans that replace the original.

**4.101** Impaired loan trading. Loans sold in secondary markets range from high-quality loans (those with little credit risk) to nonperforming or otherwise impaired loans for which repayment is highly uncertain, or even unlikely. Transactions in nonperforming or otherwise impaired loans often involve purchases at deep-discounted prices (i.e., at well below the nominal value, or carrying amount, of the loans), reflecting the potential default on interest and principal payments for significant proportions of the loan portfolios purchased. These instruments should be classified as loans even if sold at a fraction of nominal value unless there is evidence of secondary-market trading, including the existence of market makers, and frequent quotations of the instruments, such as provided by bid-offer spreads. In the latter case, they are classified as debt securities and recorded at market value.

#### Distinction between deposits and loans

**4.102** As a general principle, all financial instruments that can be used for direct payments to third parties should be classified as transferable deposits, regardless of the designation of the instrument (i.e., checking account, current account, giro account, nostro/vostro account, etc.). Transferable deposits cannot

be classified as loans, because loans are not usable for payments to third parties.

**4.103** Differentiating between an other deposit and a loan can be more difficult, in particular for interbank transactions. This *Manual* recommends that classification as an other deposit or as a loan is based on the instrument characteristics specified in the documentation, focusing on whether an early withdrawal for the creditor is possible or not. If the creditor does not have an option of early withdrawal, the instrument should be classified as a loan unless the creditor is a household or a nonfinancial corporation. Regardless of the classification, the financial instrument should have the same classification in the accounts of the creditor (holder of the financial asset) and the debtor (issuer of the liability).

#### Other deposits

**4.104** Deposits in broad money (see Chapter 6). The issue of distinguishing between a loan and a deposit does not arise for a financial instrument that is included in broad money. In particular, broad money does not include a separate component for loans. Any financial instrument that, in national terminology, is designated or informally described as a loan is classified as an other deposit, if the financial instrument is included in broad money.

**4.105** Zero-interest deposits. The issue of distinguishing between a loan and a deposit does not arise for a financial instrument that is non-interest bearing. Loans are generally recognized as interest-bearing instruments (with some minor exceptions such as a credit card debt that is paid within the specified period). The most common category of zero-interest deposits are transferable deposits.

**4.106** Deposits with non-formula-based variable interest rates. This category relates to savings accounts. The amount and timing of an increase or decrease in interest rate is at the discretion of the DC in which the deposit is placed. The new interest rate applies to all deposit accounts (new accounts and those outstanding) in the category. This type of interest-rate mechanism does not typically exist for loans.

**4.107** Insured deposits. Deposit insurance is a means of ensuring that depositors (usually with a predefined limit) will recover all or part of their deposit balances in DCs that have been liquidated. Credit guarantees

applied to loans and debt securities are similar to deposit insurance. An insured deposit and a loan subject to third-party guarantee can be distinguished on the basis of the institutional arrangements and the nature of asset coverage. Deposit insurance is usually provided by an institutional unit<sup>41</sup>—the insuring agency—that specializes in insuring broad categories of DCs' liabilities. In contrast, credit guarantees apply to an individual loan or loan portfolio (or specific set of securities). Loans subject to credit guarantees are a means of ensuring that creditors (primarily, central governments and corporate lenders) are covered in the event of default by a borrower or issuer of securities.

**4.108 Deposits in the form of repurchase agreements.** Repurchase agreements are classified as other deposits if they are contracted with money holders and the DC is the cash taker (see paragraph 4.75). All other repurchase agreements (and all collateral-based security lending arrangements) are classified as loans.

**4.109 Margin deposits.** Investors hold deposits to meet the daily settlement requirements for financial futures and for other purposes. Margin deposits held at DCs are classified as deposits. Margin deposits held at a financial auxiliary are classified as deposits, if the general ledger of the financial auxiliary includes deposit accounts. If not, the financial auxiliary may include the margin deposits in the category of *Other accounts payable [MS]—other*. The margin accounts are not classified as loans (see also paragraphs 4.47–4.51).

**4.110 Deposits incorporated in residential mortgage loan contracts.** This type of arrangement—called an *offset mortgage*—combines a mortgage loan and one or more deposit accounts that the mortgagee holds at the lending institution. The outstanding balances in the deposit accounts are deducted from (i.e., offset against) the outstanding amount of the mortgage loan so as to obtain the net outstanding amount for calculation of monthly loan payments. Under flexible offsetting arrangements, the deposit offset can be used to (1) reduce monthly loan payments, (2) occasionally skip monthly payments, or (3) accelerate repayments to shorten the effective maturity of the mortgage loan. Under some arrangements, the mortgagee's credit-card debt and other types of non-mortgage borrowing can be consolidated with the mortgage loan and

the deposit offset. Despite the account consolidation, the mortgagee/depositor retains access to the deposit accounts and receives monthly statements that show the activity of the individual deposit and loan accounts. The deposit and loan components of the offset mortgage are recorded separately in the categories of *Deposits* and *Loans*, respectively.

### *Loans*

**4.111 Collateralized loans.** Many business loans, commercial and residential mortgage loans, and consumer loans for the purchase of automobiles and other durable goods are backed by collateral. Loans that investors acquire from securities brokers and dealers are usually collateralized by securities or other financial assets that the investors are purchasing (or by other securities or other financial assets that the investors already hold). Deposit contracts do not include collateral requirements.

**4.112 Loans with protective covenants.** Protective covenants appear in some loan contracts, but not in deposit agreements. Protective covenants may stipulate specific actions that a borrower must take (e.g., maintain at least a specified amount of working capital throughout the life of a loan). Other protective covenants may specify actions that a borrower must not take without the lender's approval (e.g., expansion of fixed assets, acquisition of additional external financing, entry into a merger, establishment of a subsidiary, or replacement of the senior management of the borrowing firm).

**4.113 Loans with supporting balance requirements.** Loan contracts can specify that, throughout the life of a loan, a borrower must maintain a required amount (or average amount) of deposits in the depository corporation that makes the loan. Similar requirements do not exist for deposits.

**4.114 Loans backed by letters of credit and or other trade-related documentation.** Trade bills, letters of credit, and other trade-related documents are used to facilitate the lending associated with the acquisition of imports (or sometimes domestic goods). Financial instruments backed by such documentation are classified as loans. Similar arrangements do not exist for deposits. Credit in the form of bankers' acceptances that are tradable instruments should be classified as debt securities.

<sup>41</sup> This does not apply in cases when a deposit insurance or a financial guarantee scheme is part of the general government.

**4.115 Loans made under commitment.** Loan commitments, which once were informal credit lines available to corporate customers who kept adequate deposit balances at lending institutions, and are now firm agreements that lay out lending institutions' obligations to provide credit in the future (including the amount of credit available and the interest rate to be charged), in return for customers' payments of fees to guarantee the credit availability. All credit extended under informal credit lines or formal loan commitments (including revolving credit arrangements) are classified as loans.

Distinction between loans and debt securities

**4.116** The defining feature that distinguishes between loans and debt securities is that the former are non-negotiable financial contracts (evidenced by nonnegotiable documents), whereas the latter are negotiable instruments.<sup>42</sup> Loans that become negotiable or tradable should be reclassified from loans to debt securities (see paragraph 4.59). In other words, debt securities should include loans that have become negotiable de facto. These debt securities result from the conversion of loans, with the recording of two other changes in the volume of assets (OCVA) flows, that is, liquidation of the loan and creation of the new debt security (see paragraph 5.21e).

### ***E. Equity and Investment Fund Shares [F5]***

Equity [F51]

**4.117 *Equity comprises all instruments and records acknowledging claims on the residual value of a corporation or quasi-corporation after the claims of all creditors have been met.*** Equity is treated as a liability of the issuing institutional unit.

**4.118** Ownership of equity in legal entities is usually evidenced by shares, stocks, participations, DRs, or similar documents. Shares and stocks have the same meaning. Participating preferred shares are those that provide for participation in the residual value on the dissolution of an incorporated enterprise. Such shares are also equity securities, whether or not the income is fixed or determined according to a formula.

<sup>42</sup> Similar to the case between loans and debt securities, the defining feature that distinguishes between deposits and debt securities is that the former are nonnegotiable financial contracts (evidenced by nonnegotiable documents), whereas the latter are negotiable instruments.

**4.119 Shares** (often called common stock) of a corporation may be widely held among many investors, closely held among a few investors, held within a single family, or held exclusively by one corporation or an individual. Shares in a corporation may be traded on securities exchanges, in OTC markets, or not traded.

**4.120** Share holdings of FCs include shares of their own subsidiaries, as well as shares of unrelated corporations. Financial holding companies (see paragraph 3.183) hold shares of subsidiaries (principally, FCs) that they own and control. Subject to national law and regulation, FCs may hold shares in DCs, OFCs, NFCs, and foreign corporations. In a few countries, FCs (and, in some countries, other investors) hold central bank shares.

**4.121** Corporations sometimes purchase their own shares in the market. The reacquired shares (called treasury shares) are not classified as asset holdings (i.e., as a corporation's claim on itself) but rather are deducted from funds contributed by owners within the liability account for *Equity and investment fund shares* (see paragraph 5.157).

**4.122** In the 2008 SNA (but not in this *Manual* for purposes of compiling monetary statistics), equities are subdivided into:

- a. Listed shares
- b. Unlisted shares
- c. Other equity.

**4.123** Both listed and unlisted shares are negotiable and are, therefore, equity securities.

**4.124 Listed shares** are equity securities listed on an exchange. They are also referred to as quoted shares. The existence of quoted prices of shares listed on an exchange means that current market prices are readily available.

**4.125 Unlisted shares** are equity securities not listed on an exchange. Unlisted shares can also be called *private equity*; venture capital usually takes this form. Unlisted shares tend to be issued by subsidiaries and smaller scale enterprises, and they typically have different regulatory requirements, but neither qualification is necessarily the case.

**4.126 Other equity** is equity that is not in the form of securities. It can include equity in quasi-corporations (such as branches, trusts, and partnerships), unincor-

porated funds, and notional units for ownership of real estate and other natural resources. The ownership of some international organizations is not in the form of shares and so is classified as other equity. Ownership of currency union central banks is included in other equity.

**4.127** Other equity is principally in the form of the accumulation of proprietor's net additions to the equity of quasi-corporate enterprises—derived as (1) funds or other resources (including fixed or other assets) that the owners provide for capital investment by quasi-corporate enterprises; (2) accumulated retained earnings; *less* (3) withdrawals from quasi-corporate enterprises, which could include withdrawals of income, proceeds from the sale of fixed or other assets, transfers of fixed or other assets, and withdrawals taken from accumulated savings and reserves.

**4.128** For quasi-corporations, all equity (including retained earnings and reserves) is assumed to be held by the owners. In some cases, the owners may provide financing to a quasi-corporation through the extension of loans, placement of deposits, purchase of debt securities issued by the quasi-corporation, or provision of trade credit to the quasi-corporation. The owners and the quasi-corporations should record such claims/liabilities as respectively loans, deposits, etc., in line with the contractual financial instrument, rather than as additions to the equity of quasi-corporations. The owner may also provide nonfinancial assets such as machinery, and this increases the value of other equity in the quasi-corporation to the owner.

**4.129** Shares include DRs, if their underlying instruments are shares (see paragraph 4.65).

#### *Equity liability [MS]*

**4.130** In the context of the monetary statistics (but not financial statistics), FCs' total liabilities in the form of equity (except MMF and non-MMF investment fund shares)<sup>43</sup> are recorded at book value, the difference between the value of the balance sheet assets and liabilities other than equity liabilities. This measure of equity liabilities is labeled "*Equity liability [MS]*" in this *Manual*.

<sup>43</sup> For the treatment in monetary statistics of MMF and non-MMF investment fund shares, see paragraphs 4.134–4.136.

**4.131** For the purposes of monetary statistics, *Equity liability [MS]* can be divided into the following separate components:

- a. Funds contributed by owners, which include the total amount from the initial and any subsequent issuance of shares, stocks, or other forms of ownership of corporations and quasi-corporations.
- b. Retained earnings, which constitute all previous years' after-tax profits that have not been distributed to shareholders or appropriated as general or special reserves.<sup>44</sup>
- c. Current year result, which represents the accumulation of profit or loss since the beginning of the fiscal year.
- d. General and special reserves, which are appropriations of retained earnings.<sup>45</sup>
- e. Valuation adjustment, which shows the net counterpart to changes in the value of assets and liabilities on the balance sheets of FCs, excluding those changes in value (i.e., gains or losses) that are recorded in net profit or loss for the period under IFRSs or national financial reporting standards (see paragraph 2.58).

**4.132** *Equity liability [MS]* is reconciled with the 2008 SNA concepts as presented in Figure 2.2,<sup>46</sup> and it is consistent with the valuation approach for unlisted equity called *own funds at book value* described in

<sup>44</sup> In principle, net profit or loss can be transferred to retained earnings in each period, as the profit or loss is recorded. In practice in many countries, net profit or loss is transferred to retained earnings on a quarterly or annual basis. In the periods between transfers to retained earnings, profit or loss is transferred on a cumulative basis to a separate account within equity. In national financial reporting standards, this account may be designated as results for the period, or accumulated profit or loss, or by some other name. In monetary statistics, retained earnings should include all profit or loss that has accumulated in previous periods and has been officially transferred to retained earnings; current year result should include the current period profit or loss that has not been officially transferred to retained earnings.

<sup>45</sup> In many cases, general reserves are required by law to provide the entity and its creditors with an added measure of protection from the effects of losses. Special reserves also provide added protection, but from the effects of losses that may arise from specific activities of the corporation or quasi-corporation.

<sup>46</sup> Recording the market value of the equity liability by counterparty sector on a frequent basis presents difficulties for monetary statistics compilers, given that the primary source data of FCs' accounting records do not provide such information, although estimation of such data may be made on a less-frequent basis.

the 2008 SNA (paragraphs 13.71e and 13.88), which is applicable for quasi-corporations such as foreign-owned branches. Data for these categories support the balance sheet identity in the sectoral balance sheets and provide the necessary details for the analysis of the structure of FCs' equity.

**4.133** The accounting rules for *Equity liability [MS]* are described in Chapter 5 of this *Manual*.

Investment fund shares or units [F52]

**4.134** This category includes shares or units issued by all kinds of investment funds, including MMFs and non-MMF investment funds described in Chapter 3 (see paragraphs 3.144–3.146 and 3.149–3.151). Those units acquiring shares in the funds thus spread their risk across all the instruments in the fund.

**4.135** MMF shares or units. As described in paragraph 3.146, MMF shares—with or without third-party payment features—are close substitutes for deposits and are included in broad money. For the compilation of monetary statistics, MMF shares or units should be separately identified on the asset and liability side of the sectoral balance sheets, with a further disaggregation on the liability side between MMF shares included in or excluded from broad money based on the creditor sector, and sectored by counterpart holding sector.

**4.136** Non-MMF investment fund shares or units. As discussed in paragraph 3.149, these entities allow individual investors to acquire participation in a pool of financial assets and possibly real estate. The shares or units are not transferable and are typically not regarded as substitutes for deposits. For the compilation of monetary statistics, non-MMF investment fund shares or units should be separately identified on the asset and liability side of the sectoral balance sheets, with a further disaggregation on the liability side by counterpart holding sector.

### ***F. Insurance, Pension, and Standardized Guarantee Schemes [F6]***

**4.137** IPSGS all function as a form of redistribution of income or wealth mediated by financial institutions. The redistribution may be between individual institutional units in the same period or for the same institutional unit over different periods, or a combination of the two. Units participating in the schemes

contribute to them and may receive benefits (or have claims settled) in the same or later periods.

**4.138** This section deals mainly with the classification of respective asset and liability accounts of insurance corporations, pension funds, and standardized guarantee schemes included in the OFCs subsector, as reflected in the sectoral balance sheets in the monetary statistics. The accounts within this category receive separate treatment, owing to the specialized treatment of these accounts in national financial reporting standards and macroeconomic statistics.

**4.139** Insurance, pension, and standardized guarantee schemes (IPSGS) are usually intermediated by FCs. There are five categories of reserves applicable to IPSGS:

- a. Nonlife insurance technical reserves
- b. Life insurance and annuities entitlements
- c. Pension entitlements and nonpension entitlements
- d. Claims of pension funds on pension managers
- e. Provisions for calls under standardized guarantees.

**4.140** These reserves, entitlements, and provisions, except for claims of pension funds on the pension fund manager, represent liabilities of the insurer, pension fund, or issuer of standardized guarantees and a corresponding asset of the policyholders or beneficiaries. Only claims related to nonlife insurance technical reserves, claims of pension funds on the pension manager, and claims related to provisions for calls under standardized guarantees may appear as assets in the balance sheets of FCs. Further, only life insurance, and annuity and pension entitlements may appear as liabilities in the balance sheets of FCs, the beneficiaries and policyholders for which are households.

**4.141** 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. The aggregate value of liabilities can be estimated actuarially.

**4.142** In macroeconomic statistics, the term insurance is treated as a form of nonlife insurance. A policy that provides a benefit in the case of death within a given period, but in no other circumstances, is usually called term insurance and should be regarded

as nonlife insurance because, as with other nonlife insurance, a claim is payable only if a specified contingency occurs within the specified time frame, and not otherwise.

Nonlife insurance technical reserves [F61]

**4.143** Nonlife insurance provides cover to the policyholders against loss or damage suffered as a result of accident, fire, property loss, health-related expenses, etc. *Nonlife insurance technical reserves consist of prepayments of net nonlife insurance premiums and reserves to meet outstanding nonlife insurance claims.* This definition applies to both nonlife direct insurance and reinsurance:

- a. Prepayments of net nonlife insurance premiums. A buyer of an insurance coverage (the “insurance policy”) pays for this service an amount—called a premium—to the insurance provider. Typically, the client prepays the premium (the cost of the insurance policy) at the beginning of the period of insurance coverage. The insurance provider earns income from the insurance service provided to the client on an accrual (pro-rated) basis.<sup>47</sup> The category includes prepayments for nonlife insurance policies which cover a wide variety of events such as accident, sickness, fire, theft, etc. The category also includes less-common types of premium payments, including those for reinsurance and deposit insurance.<sup>48</sup> The category includes prepayments that insurance corporations have made to other insurance corporations—for example, a life insurance corporation’s prepayments for fire insurance provided by a nonlife insurance corporation. It also includes reserves

<sup>47</sup> These prepayments are similar in some respects to prepayments for some types of goods (e.g., subscriptions to publications) and some types of non-insurance services (e.g., dues for memberships in organizations). Prepayment of insurance premiums is classified separately in insurance technical reserves, because of the specialized treatment of insurance corporations’ output in the national accounts statistics.

<sup>48</sup> Deposit insurance included in this category should be distinguished from deposit protection schemes, also known as deposit insurance provided to the general public. The former relates to deposit insurance policies at the initiation of the deposit holders who pay an insurance premium for the insurance service, whereas the latter relates to ODCs’ participation in deposit-protection schemes, which is usually mandatory under national legislation and in which the participating ODCs pay fees or contributions to the scheme.

for unexpired risks, which are reserves created at the discretion of the insurer if it considers that the funds kept in the unearned premium reserve are not enough to cover the perceived risk.

Prepayment of nonlife insurance premiums is one of the categories of IPSGS for which there are both asset and liability positions in the sectoral balance sheets of FCs. Assets cover the amount of FCs’ prepayments for insurance services to all resident and nonresident insurers; liabilities cover the prepayment of insurance premiums received from all resident and nonresident policyholders by a resident insurance corporation.

Prepayments in the asset account for IPSGS need to be disaggregated by prepayments made to resident (with breakdowns into ODCs<sup>49</sup> and OFCs) and nonresident insurers. The disaggregation is needed to facilitate the compilation of total claims on and liabilities to (1) resident individual institutional sectors, and (2) nonresidents, as shown in the consolidated surveys compiled from the sectoral balance sheets discussed in Chapter 7.

- b. Reserves to meet outstanding nonlife insurance claims are funds set aside by insurance corporations to cover the amounts that they expect to pay out with respect to valid claims that are not yet settled or claims that may be disputed. Reserves against such outstanding claims are considered to be assets of the beneficiaries and liabilities of the insurance corporations. Policy benefits due to claimants are considered assets of the claimants. Until paid, these assets are held by insurance corporations as reserve liabilities.

Other reserves, such as equalization reserves, may be identified by insurers; these are recognized as liabilities and corresponding assets, only when there is an event that gives rise to a liability. Otherwise, equalization reserves are internal accounting entries by the insurer that represent saving (recorded under the general and special reserves component of equity) to cover irregular catastrophes and, thus, do not represent any existing corresponding claims for policyholders.

<sup>49</sup> ODCs may also engage in insurance business.

**4.144** For nonlife insurance, investment income attributable to policyholders generated from the assets corresponding to nonlife insurance technical reserves is treated as if it were (1) payable by the insurance corporations to policyholders, and (2) payable back to the insurance corporations in the form of premium supplements.

#### *Reinsurance*

**4.145** Reinsurance is insurance where both parties to the policy are providers of insurance services. That is, reinsurance allows insurance risk to be transferred from one insurer to another. Many insurers act as both direct insurers and reinsurers. There may be chains of transferring risk, from insurer to reinsurer to secondary reinsurer and so on. Transactions and positions between the direct insurer and the reinsurer should be recorded as a separate set of transactions and positions rather than on a net basis—that is, no consolidation takes place between the transactions of the direct insurer as the issuer of policies to its clients on the one hand and the holder of a policy with the reinsurer on the other, and the claim of the original issuer of policies on the reinsurance corporation is not netted out from its liabilities to beneficiaries. Reinsurance activities are classified and recorded in the same way as direct nonlife insurance.

#### Life insurance and annuity entitlements [F62]

**4.146** *Life insurance and annuities entitlements are financial claims policyholders have against an institutional unit offering life insurance or providing annuities.* This category consists of reserves of life insurance corporations 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 expiration of the policy, or to compensate beneficiaries upon the death of policyholders, and, thus, are kept separate from shareholders' funds. Annuity entitlements are the actuarial calculation of the present value of the obligations to pay future income until the death of the beneficiaries. These entitlements show the extent of financial claims that policyholders have against an institution offering life insurance or providing annuities and are therefore regarded as liabilities of the life insurance corporations and annuity providers, and assets of the policyholders and beneficiaries.

**4.147** For life insurance, the income earned by insurance corporations from their holdings of assets to meet their liabilities (which equal the present value of expected claims from existing policyholders) is attributed to the policyholders as investment income on their claims on life insurance corporations, and then treated as being paid back to the insurance company as premium supplements.

#### Pension entitlements [F63] and nonpension entitlements [F65]

**4.148** Pension entitlements are used to provide retirement benefits for specific groups of employees. *Pension entitlements show the extent of financial claims that 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.* In addition to funded liabilities of pension funds, this category includes liabilities of unfunded employment-related pension schemes. As well as pensions, some schemes may have other related liabilities, such as for health benefits, which are included under entitlements to nonpension benefits. For practical reasons, liabilities for nonpension entitlements may be included with those for pension entitlements.

**4.149** Net implicit obligations for future social security benefits (other than employment-related retirement benefits) are not recognized as financial assets or liabilities, because there is no direct link between the contributions made and the benefits eventually payable, and those benefits may be varied to achieve policy objectives that have no direct connection with the concept of social protection schemes. However, if a social security fund also acts as an employment-related pension scheme (as is sometimes the case for benefits for present and former government employees), those pension obligations (but not implicit social security obligations) are included under this category.

#### Claims of pension funds on the pension manager [F64]

**4.150** An employer may contract with a third party to administer the pension funds for its employees. If the employer continues to determine the terms of the pension schemes and to retain the responsibility for funding any deficit, as well as the right to retain any

excess funding, the employer is described as the *pension manager* and the unit working under the direction of the pension manager is described as the *pension administrator*. If the agreement between the employer and the third party is such that the employer passes the risks and responsibilities for any deficit in funding to the third party in return for the right of the third party to retain any excess, the third party becomes the pension manager as well as the administrator.

**4.151** When the pension manager is a unit different from the administrator, with the consequences that responsibility for any deficit or claims on any excess rests with the pension manager, the claim of the defined benefit pension fund on the pension manager is shown under this category.

Provisions for calls under standardized guarantees [F66]

**4.152** *Provisions for calls under standardized guarantees consist of prepayments of net fees and provisions to meet outstanding calls under standardized guarantees.*

**4.153** Standardized guarantees are issued in large numbers, usually for fairly small amounts, along identical lines. Standardized guarantees are not provided by means of a financial derivative (i.e., credit default swaps [CDSs]) nor in the form of a one-off guarantee, 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. 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 loans will default. It is, therefore, possible for a guarantor to determine suitable fees to charge for a guarantee working on the same principle as an insurance corporation for which the fees received in respect of many policies cover the losses by a few. The transactions and stocks for provisions for calls under standardized guarantee schemes recorded are similar to reserves for nonlife insurance; they include unearned fees and calls not yet settled.

**4.154** Standardized guarantees can be contrasted with two other types of guarantees:

- a. Guarantees that meet the definition of financial derivatives (as defined in paragraph 4.156)

protect the lender, on a guarantee-by-guarantee basis, 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. CDSs are included in financial derivatives as options (see paragraphs 4.180 and 4.182).

- b. 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 liabilities on the balance sheet of the guarantor until their activation, that is, when the event occurs that makes the guarantor responsible for the liability. These are off-balance-sheet contingent assets until activated.<sup>50</sup>

## **G. Financial Derivatives and Employee Stock Options [F7]**

**4.155** Financial derivatives and employee stock options (ESOs) are financial assets and liabilities that have similar features, such as a strike price and some of the same risk elements. Although both transfer risk, ESOs are designed to be a form of remuneration.

Financial derivatives [F71]

**4.156** *A financial derivatives contract is a financial instrument that is linked to another specific financial instrument, indicator, or commodity, and through which specific financial risks (e.g., interest rate risk, foreign exchange risk, equity and commodity price risk, credit risk) can be traded in their own right in financial markets.*

**4.157** The value of a financial derivative derives from the price of an underlying item: the reference price. The reference price may relate to a commodity, a financial asset, an interest rate, an exchange rate, another derivative, or a spread between two prices.

<sup>50</sup> One-off guarantees granted by governments to corporations in financial distress and that have a very high likelihood of being called are, however, treated as if they were activated at inception.

The derivative contract may also refer to an index or a basket of prices. No principal amount is advanced that has 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. Valuation of financial derivatives is covered in Chapter 5.

**4.158** The risk embodied in a financial derivative contract can be traded either by trading the contract itself, as is possible with options, or by creating a new contract embodying risk characteristics that match, in a countervailing manner, those of the existing contract. The latter practice, which is termed *offsetability*, occurs in forward markets. Offsetability means that it is often possible to eliminate the risk associated with a derivative by creating a new but “reverse” contract having characteristics that countervail the risk underlying the first derivative. Buying the new derivative is the functional equivalent of selling the first derivative, because the result is the elimination of the underlying financial risk. The ability to countervail the underlying risk in the market is therefore considered the equivalent of tradability in demonstrating value. The outlay that would be required to replace the existing derivative contract represents its value; actual offsetting is not required.

**4.159** Financial derivative contracts are usually settled by net payments of cash rather than by the delivery of the underlying items. Exchange-traded contracts, such as commodity futures, are often settled before maturity. Cash settlement is a logical consequence of the use of financial derivatives to trade risks independently of the ownership of underlying items. Some financial derivative contracts, particularly those involving foreign currency, are, however, settled by deliveries of the underlying items. Once a financial derivative reaches its settlement date, any unpaid overdue amount is reclassified as accounts receivable/payable, as its value is fixed, and, thus, the nature of the claim becomes debt.

**4.160** There are two broad types of financial derivatives—options and forward-type contracts. A major difference between option and forward contracts is that, whereas either party to a forward contract is a potential debtor, the buyer of an option contract acquires an asset and the option writer incurs a liability. Option contracts can expire without worth;

options are exercised only if settling a contract is advantageous for the option holder.

**4.161** In the financial markets there are a large assortment of financial derivatives in the broad categories of forward-type contracts and options contracts. A number of standard types of forward-type contracts and options contracts are shown in Tables 4.2 and 4.3, respectively. Examples of *exotic options*—those with relatively atypical contract terms—are described in Box 4.3.

#### *Forward-type contracts*

**4.162** A *forward-type contract (forward)* is an *unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item (financial or real) at an agreed-upon contract price (the strike price) on a specified date*. Forward-type contracts include forwards, futures, and swaps.<sup>51</sup> Forward-type contract is used as a term because the *forward* is often used more narrowly in financial markets (often excluding swaps).

**4.163** At the inception of a forward-type contract, risk exposures of equal market value are exchanged, so a contract typically has zero value at inception. As the price of the underlying item changes, the market value will change, although it may be restored to zero by periodic settlement during the life of the forward. The classification of a forward-type contract may change between asset and liability positions.

**4.164** Futures are forward-type contracts traded on organized exchanges, while forward contracts are bought and sold in OTC trading conducted through computer-linked networks of dealers, or by telephone between FCs or between an FC and a nonfinancial corporate client. Forward contracts are not standardized, whereas futures contracts have standard terms as specified by the futures exchanges. The exchanges facilitate trading by determining the standardized terms and conditions of the contract, acting as the counterparty to all trades, and requiring margins to be deposited and paid to mitigate against risk.

**4.165** Significant differences between forward and futures contracts include: (1) buyer and seller negotiating

<sup>51</sup> Other types of arrangements also called swaps, but not meeting the definition of a financial derivative, include gold swaps, central bank swap arrangements, and other similar arrangements.

Table 4.2 Standard Types of Forward and Futures Contracts

Definitions	Underlying instrument (Main price-settlement variable)
<p><b>Forward contract.</b> An over the counter (OTC) agreement to buy or sell an asset for a predetermined delivery price at a specified future time.</p> <p><b>Futures contract.</b> An exchange-traded agreement to buy or sell an asset for a predetermined delivery price at a specified future time.</p>	<p>For future and/or forward contracts:</p> <ul style="list-style-type: none"> <li>• Currency (exchange rate)</li> <li>• Equity shares in a corporation(s) (individual share price or stock price index)</li> <li>• Debt securities (interest rate)</li> <li>• Gold (gold price)</li> <li>• Other commodity or commodity basket (individual commodity price or commodity price index)</li> <li>• Swap contract (interest rate). A forward agreement to enter into a swap contract at a future time—called a deferred swap or forward swap.</li> </ul>
<p><b>Swap contract.</b> An OTC agreement between two parties to exchange future cash flows.</p> <ul style="list-style-type: none"> <li>• <b>Interest-rate swap.</b> Fixed-rate payments swapped for floating-rate payments.</li> <li>• <b>Currency swap.</b> Payments in one currency swapped for payments in another currency.</li> <li>• <b>Cross-currency interest-rate swaps.</b> Fixed-rate payments in one currency swapped for floating-rate payments in another currency.</li> <li>• <b>Equity swap.</b> One party's swapped payments are based on the performance of a stock price or stock index. The other party's swapped payments can be based on a fixed or floating rate, another stock price, or a stock index.</li> <li>• <b>Forward rate agreement (FRA).</b> An over-the-counter obligation that applies a predetermined interest rate to a notional principal amount over a specified future time period.</li> </ul>	<ul style="list-style-type: none"> <li>• Notional principal (interest rate)</li> <li>• Notional principal (exchange rate)</li> <li>• Notional principal (interest rate and exchange rate)</li> <li>• Notional principal (stock prices, stock price and interest rate, etc.)</li> <li>• Notional principal (interest rate)</li> </ul>

directly in a forward contract, whereas futures contracts are handled through a clearing house; (2) a forward contract usually contains an exact delivery date, whereas a futures contract usually specifies an entire month or several days within a month; (3) forward contracts are usually settled by delivery of the underlying asset or by cash settlements at maturity, whereas futures contracts are usually closed out prior to maturity; and (4) both forward and futures contracts have zero value at inception, but in a forward contract daily gains or losses are allowed to accrue, whereas for a futures contract the clearing house requires daily marking to market and daily settlement of any gain or loss on the contract.

**4.166** The remainder of this subsection discusses different types of forward-type contracts.

**4.167** A **forward rate agreement (FRA)** is an arrangement in which two parties, in order to protect themselves against interest rate changes, agree on an interest rate to be paid, at a specified settlement date, on a notional amount of principal that is never exchanged. FRAs are settled by net cash payments. The only payment that takes place is related to the difference between the agreed forward rate and the prevailing market rate at the time of settlement times the notional principal underlying the contract. The buyer of the FRA receives payment from the seller if

the prevailing rate exceeds the agreed rate; the seller receives payment if the prevailing rate is lower than the agreed rate. An FRA is equivalent to a swap agreement in which a pre-determined fixed-rate payment is swapped for a floating-rate payment.

**4.168** A foreign currency forward contract involves two counterparties who agree to transact in foreign currencies at an agreed exchange rate in a specified amount at some agreed future date.

**4.169** A swap contract involves the counterparties exchanging, in accordance with prearranged terms, cash flows based on the reference prices of the underlying items. Swap contracts classified as forward-type contracts include currency swaps, interest rate swaps, cross-currency interest rate swaps, and equity swaps. Under a swap contract, the obligations of each party may arise at different times, for example, an interest rate swap for which payments are quarterly for one party and annual for the other. In such cases, the quarterly amounts payable by one party prior to payment of the annual amount payable by the other party are recorded as transactions in the financial derivative contract.

**4.170** An interest rate swap contract involves an exchange of cash flows related to interest payments, or receipts, on a notional amount of principal, which is never exchanged, in one currency over a period of time. One party pays an interest rate based on variable rates and the other based on fixed rates. Settlements are often made through net cash payments by one counterparty to the other.

**4.171** A foreign currency swap is a spot sale/purchase of currencies and a simultaneous forward purchase/sale of the same currencies. For foreign currency swaps, it is necessary to distinguish between the transactions in the underlying currencies and the transaction in a financial derivative contract.

**4.172** A cross-currency interest rate swap, sometimes known as a currency swap, involves an exchange of cash flows related to interest payments and an exchange of principal amounts at an agreed exchange rate at the end of the contract.

**4.173** An equity swap involves an exchange of cash flows based on the performance of a stock price or stock index for one party, and based on a fixed or

floating rate, another stock price, or a stock index for the other party.

**4.174** An off-market swap has a non-zero value at inception as a result of having reference rates priced differently from current market values (i.e., “off-the-market”). The economic nature of an off-market swap is equivalent to a combination of a loan and an on-market financial derivative.<sup>52</sup> Therefore, off-market swaps should be recorded as two stock positions in the sectoral balance sheets—a loan and an on-market financial derivative.

**4.175** In those cases where a swap does not have the characteristics of a financial derivative, such as a central bank swap arrangement or other similar arrangement, it should be treated as an exchange of deposits.

### Options

**4.176** *In an option contract (option), the purchaser acquires from the seller a right to buy or sell, depending on whether the option is a call (buy) or a put (sell), a specified underlying item at a strike price on or before a specified date. The purchaser of an option pays a premium to the writer of the option.* (On a derivatives exchange, the exchange may act as the counterparty to each contract.)

**4.177** Options can be contrasted with forward-type contracts in that:

- a. At inception, a premium is paid for an option representing a nonzero value for the contract, unlike a forward-type contract where there is usually no up-front payment and the derivative contract begins with a zero value.
- b. During the life of the contract, for an option the buyer is always the creditor and the writer is always the debtor; whereas for a forward-type contract, either party can be creditor or debtor, and it may change during the life of the contract.
- c. At maturity, redemption is determined by the buyer of the option, whereas it is unconditional for a forward-type contract.

<sup>52</sup> See also the *Public Sector Debt Statistics: Guide for Compilers and Users* (2013), paragraphs 3.44 and 4.128–4.131.

Table 4.3 Standard Types of Option Contracts

Definitions	Option contract
<p><u>Call and put options:</u></p> <ul style="list-style-type: none"> <li>• <u>Call option.</u> A contract giving the holder the right to buy an asset at a stated price (i.e., the strike price) on or before a certain date.</li> <li>• <u>Put option.</u> A contract giving the holder the right to sell an asset at a stated price (i.e., the strike price) on or before a certain date.</li> </ul> <p><u>American, European, and Bermuda options:</u></p> <ul style="list-style-type: none"> <li>• American option: Right to exercise at any time during the life of the option.</li> <li>• European option: Right to exercise only at expiration.</li> <li>• Bermuda option: a combination of American and European options. Exercisable at the date of expiration and on certain specified dates that occur between the purchase date and the date of expiration.</li> </ul> <p><u>In-the-money and out-of-the-money options:</u></p> <ul style="list-style-type: none"> <li>• In-the-money call (put) option. Strike price below (above) the market price of the underlying asset.</li> <li>• Out-of-the-money call (put) option. Strike price above (below) the market price of the underlying asset.</li> </ul>	<p>Option contract (strike price variable):</p> <ul style="list-style-type: none"> <li>• <u>Stock option</u><sup>1</sup> (market price of a corporation's equity shares)</li> <li>• <u>Index option</u> (level of a stock price index)</li> <li>• <u>Bond option</u> (market price of corporate or government debt securities)</li> <li>• <u>Foreign-currency option</u> (market exchange rate)</li> <li>• <u>Option on a futures contract, called a futures option</u> (market price of futures contract)</li> <li>• <u>Option on an interest-rate swap contract</u>—also called a swap option, or swaption (fixed interest rate in the swap contract)</li> </ul>

<sup>1</sup> Includes long-term equity anticipation securities, which are long-term call options.

**4.178** Warrants are a form of financial derivative option giving the owner the right but not the obligation to purchase from the issuer of the warrant a fixed amount of an underlying asset, such as shares or bonds, at an agreed contract price for a specified period of time or on a specified date. Although similar to other 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.

**4.179** Warrants also include covered warrants, which can have a wider variety of underlying financial instruments and are issued by FCs. Covered warrants allow a holder to buy financial instruments issued by other institutional units and not only those instruments issued by the issuer of the warrant.

#### *Credit derivatives*

**4.180** *Credit derivatives are financial derivatives whose primary purpose is to trade credit risk.* They are designed for trading mainly in loan and security credit default risk. In contrast, the financial derivatives described in the previous paragraphs are related mainly to risk of changes in the market prices of securities, commodities, interest rates, and exchange rates. Credit derivatives take the form of both forward-type (total return swaps) and option-type contracts (CDSs).

**4.181** A total return swap transfers both the credit and market risk of an underlying asset, such as a loan or a bond. Under a total return swap agreement, one party makes payments based on a set rate (fee), either fixed or variable, while the other party makes payments based on the return of an underlying asset, which includes both the income it generates and any capital

**Box 4.3 “Exotic” Option Contracts: Examples<sup>1</sup>****Definitions****Nonstandard American options<sup>2</sup>**

- Early exercise restricted to specific dates, or to only part of the life of the option.<sup>3</sup>
- The strike price varies over the life of the option.

**Forward start option:** an option that starts at some future date.<sup>3</sup>

**Compound option:** an option on an option (i.e., a call option on a call option, a put option on a call option, a call option on a put option, or a put option on a put option).

**Chooser option** (also called an as you like it option): an option that, after a specified time, the holder can designate as either a call or a put option.

**Barrier option:** if the underlying asset price reaches a specified level, the option (1) ceases to exist (knock-out option), or (2) comes into existence (knock-in option).

**Binary option:** an option with a discontinuous payoff (e.g., an in-the-money call option that pays a fixed amount, regardless of the differential between the current price and strike price of the asset).

**Lookback option:** an option for which the payoff depends on the maximum or minimum price of the asset during the life of the option.

**Asian option:** an option for which the payoff depends on the average price of the asset during a predetermined averaging period within the life of the asset.

<sup>1</sup> Characteristics of these and other exotic options, along with valuation methods, are covered in Hull (2015).

<sup>2</sup> Some warrants issued by corporations on their own stock have these features.

<sup>3</sup> Executive stock options often have this feature; right of exercise starts when the options are vested.

gains. In this way, total return swaps allow the party receiving the total return to gain exposure and benefit from an underlying asset without actually having to own it, and allow the other party (which retains the underlying asset on its balance sheet) to buy protection against loss in its value (see also paragraph 5.218).

**4.182** In a CDS, the buyer of the swap pays a periodic fee to the seller of the swap in return for a cash payment by the seller in the event of a default by the debtor of the underlying instrument. A CDS is also referred to as a credit derivative contract and is considered insurance against non-payment. A buyer of a CDS might be speculating on the possibility that the third party will indeed default.

**4.183** Similar to other financial derivatives, credit derivatives are frequently drawn up under standard master legal agreements and involve collateral and margining procedures that allow for a means to make a market valuation.

Employee stock options [F72]

**4.184** *ESOs are options to buy the equity of a company, offered to employees of the company as a form of remuneration.* An ESO is an agreement made on a given date (the “grant” date) under which an employee may purchase a given number of the employer’s shares at a stated price (the “strike” price), either at a stated date (the “vesting” date) or within a period of time (the “exercise” period) immediately following the vesting date. The exercise date is the time at which the option is exercised. It cannot be earlier than the vesting date or later than the end of the exercise period.

**4.185** ESOs are issued as a form of employee compensation and as incentives for corporate employees to perform their duties in the best interests of the corporation’s shareholders. Transactions in ESOs are recorded in the financial account as the counterpart to the element of compensation of employees represented by the value of the stock option. For many corporations, ESOs are called executive stock options, because they are provided only to senior managers of the corporation. In some cases, stock options may be provided to suppliers of goods and services to the enterprise. Although these are not employees of the enterprise, for convenience they are also recorded under ESOs because their nature and motivation is similar in supporting the successful performance of the enterprise. Whereas the corresponding entry for stock options granted to employees is compensation of employees, the corresponding entry for stock options granted to suppliers is the goods and services supplied.

**4.186** In some respects, executive stock options are similar to warrants that corporations issue on their

own shares. Exercise of the stock options may result in an increase in the number of corporate shares outstanding, depending on whether the exercise of the options is honored by a corporation through: (1) issuing new shares; (2) drawing on own shareholdings (i.e., treasury stock); or (3) purchasing its own shares in the stock market for delivery to the option holder.

**4.187** Consistent with the 2008 SNA subcategories of financial derivatives, this *Manual* recommends the compilation of separate data on ESOs in sectoral balance sheets. The data on ESOs should be available to compilers of monetary and financial statistics, either on request or as a memorandum item in the source data.

#### Financial instruments not classified as financial derivatives

**4.188** For monetary and financial statistics purposes, the following types of financial instruments are not financial derivatives:

- a. A fixed-price contract for goods and services is not a financial derivative unless the contract is standardized so that the market risk therein can be traded in financial markets in its own right.
- b. Insurance and standardized guarantees are not financial derivatives. Insurance contracts provide individual institutional units with financial protection against the consequences of the occurrence of specified events. (In many instances, the value of this financial protection cannot be expressed in terms of market prices.) Insurance is a form of financial intermediation through which funds are collected from policyholders and invested in financial or other assets. These assets are held as technical reserves to meet future claims arising from the occurrence of events specified in insurance policies (i.e., insurance is used to manage event risk, primarily by the pooling, not the trading, of risk).
- c. Contingencies, such as one-off guarantees and letters of credit, are not financial derivatives. The principal characteristic of a contingency is that one or more conditions must be fulfilled before a financial transaction takes place. Contingencies are not instruments that facilitate the trading of specific financial risks.
- d. An embedded derivative (a derivative feature that is inserted in a standard financial instru-

ment and is inseparable from the instrument) is not considered a financial derivative (see also paragraph 4.64). 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, securities with options for repayment of principal in currencies that differ from those in which the securities were issued, or loans that can be prepaid without penalty.

- e. Gold swaps, central bank swap arrangements, and other similar arrangements that do not meet the definition of financial derivatives. (See the sixth edition of the *Balance of Payments and International Investment Position Manual* (BPM6), paragraphs 5.91 and 6.102–6.104.)

**4.189** The classification of margins required for financial derivatives depends on whether they are repayable or nonrepayable. The classification principles are discussed in paragraphs 4.47–4.51.

#### **H. Other Accounts Receivable/Payable [F8]**

**4.190** Other accounts receivable/payable include: (1) trade credit and advances, and (2) other.

Trade credit and advances [F81]

**4.191** *Trade credit and advances consist of (1) credit extended directly by the suppliers of goods and services to their customers;<sup>53</sup> 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.* For FCs, trade-credit receivables are usually associated with their sale of financial services, given that FCs seldom are vendors of goods and nonfinancial services. Trade-credit payables of FCs arise from their acquisition of goods and services provided by other institutional units, as well as from their purchases of financial services from other FCs.

**4.192** Excluded from the category of trade credit and advances are:

<sup>53</sup> Trade credit is sometimes described as supplier credit.

- a. Claims or obligations arising from transactions in financial assets. A transaction is recorded at the time of change of economic ownership, which may precede settlement (payment) for the financial asset by several days or longer. For the recipient of the future payment, the claim is recorded in *Other accounts receivable–other*. The provider of the future payment records the obligation in *Other accounts payable [MS]–other*.
- b. Prepayment of insurance premiums. The *advances* subcategory within trade credit and advances applies to advance payments for work in progress and prepayments for goods and services, except for the prepayment of policy premiums for insurance services. The classification of these prepayments under the category of IPSGS facilitates the data compilation for the insurance corporation subsector.

**4.193** Trade credits do not include loans to finance trade credit. Macroeconomic statistics distinguish between trade credits and loans by specifying that trade credits are a direct extension of credit by the suppliers of goods and services to their customers, whereas financing provided by third parties to finance trade are classified as loans. In general, trade credits are not interest-bearing. They may have payment terms whereby cash discounts are provided for prompt payment. The discount is viewed as an implicit interest that is avoided by early payment (see paragraph 5.227).

Other accounts receivable/payable–other [F89]

**4.194** This category includes accounts receivable and payable, other than those described previously. It includes amounts related to taxes, dividends, purchases or sales of financial assets, rent, wages, and salaries. The other category also includes items such as deferred income and provisions for financial asset losses.

**4.195** Other accounts receivable–other should be disaggregated into resident and nonresident categories and should cover the following items (not identified separately, unless noted otherwise):

- a. Dividends receivable on corporations' shares, arising from the recording of dividends when the shares go ex-dividend (the date dividends are excluded from the market price of shares),

rather than when the dividends are paid. When notified that a share has gone ex-dividend, the shareholder records the amount of the dividend receivable. For shares that are not traded publicly, the shareholder records the amount of the dividend receivable when the dividends are payable.

- b. Settlement accounts that are used to account for differences in the time of recording of: (1) purchases or sales of financial assets on the *trade dates* when changes of ownership occur, and (2) the subsequent payments for the financial assets on the settlement dates.
- c. Items in the process of collection are created when a DC receives a check or other transferable item from a customer. The usual procedure is to record the item in the customer's deposit account, along with a contra-entry in *Other accounts receivable–other*. The entry is reversed after the item has been presented through the clearing system and has been paid by the DC (resident or nonresident) on which it was drawn. The posting *Other accounts receivable–other* is needed unless the item is settled on the same day as deposited,<sup>54</sup> or has been recorded on an off-balance-sheet basis.<sup>55</sup>

A special category of *items in the process of collection* arises if a central bank provides advance availability of funds to ODCs that have sent checks or other items to the central bank for collection, known as *central bank float*. In the absence of data adjustment, broad money would be overstated by the amount of the central bank float because the funds would appear in the accounts of the customers of both banks (i.e., the amount provided to DCs by the central bank in advance of the central bank's collection of funds from the DC on which the items were written). Central bank float need not be shown as a separate category within *Other accounts receivable–other* in the sectoral balance sheet of the central bank. Central

<sup>54</sup> For example, the item may have been written on the DC that received it, because the payee and payer are customers of the same DC. The propensity for same-day settlement increases as countries adopt electronic clearing of collectible items.

<sup>55</sup> Recording *items in the process of collection* off balance sheet may be a general practice in a few countries.

bank float is reported as a memorandum item to accompany the sectoral balance sheet of the central bank. Adjustment for central bank float can be made as part of the compilation of the Depository Corporations Survey, as described in Chapter 7 of this *Manual*. (See paragraphs 7.34 and 7.57d.)

- d. **IMF quota subscription** is recorded as an asset on the balance sheet of the central bank of the member country if the central bank has been designated as a depository or as both depository and fiscal agency for the country's financial relationship with the IMF and records the *IMF quota subscription*, *IMF No. 1 Account* and *IMF Debt Securities Account* on a gross basis<sup>56</sup> (see Annex 4.2). Quota is determined upon admission to IMF membership and can be adjusted under the IMF's General Quota Reviews or on an ad hoc basis. Separate data on the IMF quota subscription should be shown under the non-resident category of *Other accounts receivable–other* in the sectoral balance sheet of the central bank.
- e. **Miscellaneous asset items** are all accounts not elsewhere classified in the FCs' balance sheets and include suspense accounts (used for temporary recording of claims for which proper classification has not yet been determined; claims for which verifications, notifications, instructions, or other documentations are required for completing the transactions; and claims that are under litigation or otherwise in dispute), amounts related to taxes, and prepayments of import duties, rent, wages, or other operating expenses.

**4.196** In exceptional circumstances, a relatively large transaction may be recorded in *Other accounts receivable–other*. If so, the FC should provide supplementary information to the compilers on the nature and amount of the transaction, as well as identification of the sector of the transactor (nonresident or, if

resident, identified by economic sector), for ensuring appropriate recording in the sectoral balance sheet.

**4.197** *Other accounts payable [MS]–other* should be disaggregated into resident and nonresident categories, and provisions for losses on assets. Resident and nonresident categories should cover the following items (not identified separately):

- a. **Dividends payable** that arise from the recording of dividends on the FC's shares at the time when the shares go ex-dividend or are payable (see paragraph 5.168b), rather than when paid.
- b. **Settlements accounts** that record an FC's obligations for payments (on future settlement dates) for financial assets that were purchased (on trade dates).
- c. Miscellaneous liability items, which include suspense accounts (the same as for assets discussed in paragraph 4.195e), amounts related to taxes, and accrued wages, rent, or other operating expenses.

**4.198** **Provisions for losses on assets**<sup>57</sup> are presented as if these items are liabilities and are classified as a separate component in *Other accounts payable [MS]–other*; although they are “internal accounts” rather than liabilities to creditors. This accounting treatment contrasts with the *2008 SNA*, where such provisions are not recorded in the balance sheet. To be used in financial statistics, the data from the monetary statistics need to be adjusted to exclude provisions from *Other accounts payable [MS]–other*, in accordance with the methodology of the *2008 SNA*.

**4.199** The balance sheet presentation in accounting standards shows the estimated recoverable amounts of impaired financial assets that are obtained by direct write-down in the amount of the estimated impairment loss or through deduction of provisions for losses on assets. For monetary statistics, provisions for losses on assets are classified as *Other accounts payable [MS]–other*. Treatment of provisions for assets as liabilities facilitates the presentation of financial assets on a gross basis. It preserves a full set of balance sheet accounts without a deduction of provisions from the asset accounts on the balance sheet but differs from the *2008 SNA*, which does not regard such internal accounts as liabilities.

<sup>56</sup> Alternatively, if net recording is exercised, the resulting *Reserve tranche position in the IMF* is recorded under other deposits in foreign currency with nonresidents in the sectoral balance sheet of the central bank. (The *2008 SNA* and *BPM6* also recommend reporting of the *Reserve tranche position in the IMF* as *Other deposits*.)

<sup>57</sup> *Provisions for loan losses* is the main category of this item.

## IV. Cross-Classification of Financial Assets and Liabilities by Sector and Currency

**4.200** In addition to the classification of financial assets and liabilities by type of instrument as discussed in the previous section of this chapter, the framework for compiling monetary and financial statistics calls for further cross-classification, at a minimum, by residency of the counterparts and institutional sector of resident counterparts, and by currency of denomination. For the central bank sectoral balance sheet, there is a need to identify separately those foreign assets that meet the definition of reserve assets as defined in *BPM6* (paragraph 6.63) and included in the *reserve assets* subcategory.

### A. Cross-Classification by Institutional Sector of Counterparts

**4.201** Monetary statistics focus on flows and stocks of financial assets and liabilities of the FCs sector vis-à-vis the other resident institutional sectors and the rest of the world. Chapter 3 deals with institutional units in their role as holders or issuers of financial assets, and focuses consequently on the classification and sectoring of their accounts in the financial system. The residency of institutional units involved determines the foreign/domestic breakdown of assets and liabilities of the FCs sector. Similarly, the grouping of resident institutional units into institutional sectors and subsectors allows presenting the FCs' claims on and liabilities to the different sectors of the domestic economy. The recommended analytical framework for compiling monetary statistics and financial statistics (Chapters 7 and 8, respectively) requires, for each asset category, a breakdown by institutional sector and subsector of counterparts, where applicable, in accordance with the sectoring principles discussed in Chapter 3.

**4.202** For countries where the FCs sector has significant exposure to nonresidents, it is useful to identify broad institutional sectors of nonresident counterparts. For example, FCs and nonfinancial sectors may be further divided into general government sector and nongovernment sectors. A breakdown of nonresident counterparts into financial and nonfinancial corporations for selected financial instruments is included as a memorandum item in the sectoral balance sheets/SRFs (see Appendix II).<sup>58</sup>

<sup>58</sup> Interbank positions with nonresident affiliates are included in memorandum items in the sectoral balance sheets.

### B. Cross-Classification by Currency of Denomination

**4.203** The breakdown of assets and liabilities in the sectoral balance sheets of FCs between those denominated in foreign currency and those in domestic currency is relevant for understanding the growth in money and credit aggregates as well as vulnerabilities to movements in exchange rates. Therefore, for all financial assets and liabilities it is recommended to provide a cross-classification into domestic currency denomination and foreign currency denomination.

**4.204** For some analysis, it may also be useful to identify main financial assets and liabilities denominated in foreign currency by major foreign currencies. For example, in *BPM6*, reserve assets are recommended to be further identified as held in currencies in the SDR basket and those not in the SDR basket, which is the minimum breakdown.

**4.205** The currency composition of financial assets and liabilities is determined by characteristics of their currency of denomination. Foreign currency instruments are those denominated in a currency other than the domestic currency. Foreign-currency-linked instruments are those payable in domestic currency but with the amounts payable linked to a foreign currency and, therefore, are considered to be denominated in foreign currency. Domestic currency instruments are those denominated in the domestic currency and not linked to a foreign currency. Domestic-currency-linked instruments are those payable in a foreign currency but with the amounts payable linked to a domestic currency. For monetary statistics purposes, domestic-currency-linked instruments are classified, by convention, as denominated in foreign currency, not domestic currency. This treatment reflects the recognition that domestic-currency-linked instruments have exposure to the availability of foreign exchange for making the payment in foreign currency. For debt instruments with interest payable in a foreign currency, but principal payable in a domestic currency, or vice versa, only the present value of the amounts payable in a foreign currency should be classified as a foreign currency instrument.

**4.206** A special case arises when an economy does not issue domestic currency and uses as legal tender a currency issued by a monetary authority of another

economy (e.g., the U.S. dollar) or of a common currency area to which the economy does not belong (e.g., the euro). While according to the definition in paragraph 4.26 this currency is classified as foreign currency, it has some of the attributes of a domestic currency, because domestic transactions are settled in this currency. For these dollarized economies (discussed also in Chapter 6), in monetary statistics the unit of the foreign currency used as legal tender in the economy is classified as the domestic currency unit of account for compiling sectoral balance sheets. In the sectoral balance sheets of FCs subsectors in these countries, the distinction is made for all financial assets and liabilities with resident counterparts (where applicable) between those in domestic currency unit (i.e., the foreign currency used as legal tender in the economy) and foreign currencies other than the foreign currency used as legal tender. Thus, in this *Manual*, foreign currency that is a legal tender in an economy is included under domestic currency category for all domestic positions.<sup>59</sup>

### C. Cross-Classification of Monetary Liabilities

4.207 Deposits (both transferable and other) and debt securities on the liability side of the sectoral balance sheets of the central bank and ODCs are also cross-classified by their inclusion in or exclusion from monetary base<sup>60</sup> (only for the central bank sectoral balance sheet/SRF) and broad money.<sup>61</sup> These cross-classifications are necessary to support the compilation of the monetary base and broad money in the respective analytical surveys, as discussed in Chapters 6 and 7.

## V. Supplementary Classification of Financial Assets and Liabilities

4.208 Even though the cross-classification of financial assets and liabilities by type, counterparty, and currency of denomination in the sectoral balance

sheets provides the complete set of data necessary for the compilation of surveys and financial accounts, in some countries more disaggregated categories of the DCs' liabilities may be needed to provide data for money aggregates that are more narrowly defined than in this *Manual*. Additional breakdowns of data are also needed for macroeconomic and financial stability analysis. This section discusses examples of supplementary classifications of financial assets and liabilities by maturity, type of interest rates, and other.

### A. Classification by Maturity

4.209 Maturity is relevant for financial vulnerability analysis; both from a liquidity viewpoint (e.g., in estimating the value of liabilities falling due in the short term) and from an asset/liability mismatch perspective (e.g., in estimating the effect of changes in interest rates on profitability). For the supplementary classification by maturity, debt financial assets and liabilities<sup>62</sup> are classified as short-term or long-term in this *Manual* as follows:

- a. *Short-term* is defined as payable on demand or with a maturity of one year or less. (Payable on demand refers to a decision by the creditor; an instrument where the debtor can repay at any time may be short- or long-term.)
- b. *Long-term* is defined as having a maturity of more than one year or with no stated maturity (other than on demand, which is included in short-term).

4.210 Maturity may relate to:

- a. Original maturity, that is, the period from issue until the final contractually scheduled payment.
- b. Remaining maturity, that is, the period from the reference date (balance sheet date) until the final contractually scheduled payment.<sup>63</sup> This is also called residual maturity.

4.211 Currency is included in short-term maturity. Because of the nature of the relationship between the parties, when the maturity is unknown, all intercompany lending (as defined in *BPM6*, paragraph 6.26)

<sup>59</sup> This approach is reconcilable with *BPM6* and the *External Debt Statistics: Guide for Compilers and Users* (2013); both classify the "legal tender foreign currency" as a foreign currency and recommend separate identification of the "legal tender foreign currency" from other foreign currencies in presenting data.

<sup>60</sup> Monetary base is defined in paragraph 6.92 and is relevant to the central bank sectoral balance sheet only.

<sup>61</sup> Broad money is defined in paragraph 6.11 and is relevant to both the central bank and ODCs sectoral balance sheets.

<sup>62</sup> This is in addition to identifying separate categories for debt securities and loans with an original maturity of one year or less in the memorandum items to the sectoral balance sheets/SRFs.

<sup>63</sup> For debt instruments repaid in installments, until the contractual dates of payments of individual installments.

may be classified as of long-term maturity, by convention. Insurance reserves, pension entitlements, and standardized guarantee provisions can potentially be classified by maturity; if data are not available, a convention can be adopted that they are all long-term. When debt 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, the maturity is determined without reference to these embedded put options. Although not debt instruments, financial derivatives could also be classified according to maturity.

### **B. Classification by Type of Interest Rate**

**4.212** For supplementary classification of financial assets and liabilities by type of interest rate, debt instruments may be classified as either *variable-rate* or *fixed-rate*. This breakdown may be useful for some analysis, in that variable-rate instruments are subject to fluctuation in income flows in response to changes in market conditions; fixed-rate securities are more subject to changes in prices.

**4.213** Variable-rate debt instruments are those for which interest is linked to a reference index—for example, LIBOR (London interbank offered rate), or the price of a specific commodity, or the price of a specific financial instrument that usually changes over time in a continuous manner in response to market conditions. All other debt instruments should be classified as fixed-rate. An interest rate that is adjusted, but only at intervals of more than a year, is considered to be fixed. Interest rates that are adjusted each year, or at less frequent intervals, are considered to be variable.

**4.214** Interest on 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 conditions. Interest on debt that is linked to a reference price index should be classified as variable-rate, provided that the prices that are the basis for the reference index are market-determined.

**4.215** The classification by interest rate can change over time, for example, if the financial instrument switches from fixed- to variable-rate interest. In the period when a fixed rate is applied, the financial instrument is to be classified as fixed-rate debt. After the rate switches to variable, the financial instrument is classified as variable-rate debt.

**4.216** Indexed instruments are classified as variable rate. For these instruments, the principal or coupons or both are indexed to some variable, for example, to a general or specific price index. Because indexed instruments have variable aspects, an instrument is classified as variable-rate if the indexation applies to the principal or coupons, or both. A foreign-currency-linked instrument is treated as denominated in the foreign currency, rather than indexed.

**4.217** If interest is linked to a reference index, 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. 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, the instrument becomes fixed-rate debt when that ceiling or floor is reached. If the income stream of a variable-rate instrument is swapped with the income stream of a fixed-rate instrument, the swap is recorded as giving rise to a financial derivative, while the classification of the original debt instruments is unchanged.

**4.218** IPSGS are usually expected to be classified as variable rate instruments. This is based on the fact that the rates that apply to these debt instruments are not fixed in advance between the parties: insurance reserves and defined contribution pension liabilities are based on the return on funds invested, while defined-benefit pension liabilities and provisions for calls under standardized guarantee schemes are based on the discount rate used to calculate promised benefits or expected calls.

### **C. Other Classifications**

**4.219** For some analysis, additional cross-classifications of financial assets and liabilities may be useful. Such classifications may include: (1) loans broken down by economic activity (according to standard industry classification); (2) loans to households by purpose (such as for mortgage, or education, or vehicle, or other durable goods); (3) loans to nonresidents by jurisdiction (including individual country or region); (4) debt and equity securities distinguished between listed ones and unlisted ones; (5) investment fund shares distinguished between listed and unlisted; and (6) asset composition of investment funds

(including debt securities, equity, commodity-linked investments, real estate, shares in other investment funds, and structured assets).

## VI. Contingencies

**4.220** Many types of contractual financial arrangements between institutional units do not give rise to unconditional requirements either to make payments or to provide other economic assets. These arrangements, which are often referred to as *contingencies* (or off-balance-sheet exposures) are not defined as financial assets or liabilities and should not be recorded in the balance sheets of FCs. For example, guarantees of payment by third parties are contingencies, because payment is only required if the principal debtor defaults. Lines of credit provide guarantees that funds will be made available, but no financial asset (i.e., loan) is created until funds are actually advanced. Letters of credit are promises to make payment only

when certain documents specified by contract are presented. Note issuance facilities provide guarantees that parties will be able to sell short-term securities (notes) that they issue and that the FC providing the facility will purchase any notes not sold in the market. Only if the FC providing the facility makes funds available will it acquire an actual asset, to be recorded in its balance sheet.

**4.221** Even though excluded from monetary and financial statistics, it is encouraged that data on contingent liabilities be reported to the compilers of monetary and financial statistics because they can have a potential impact on the exposure of the entity. Standards for measuring contingent liabilities are still evolving because these liabilities are complex arrangements and no single measurement approach can fit all situations.<sup>64</sup> Nonetheless, monitoring and measurement of contingent liabilities are encouraged, with a view to enhancing transparency.

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<sup>64</sup> The *Public Sector Debt Statistics: Guide for Compilers and Users* (2013), paragraphs 4.23–4.26, and the *External Debt Statistics: Guide for Compilers and Users* (2013), paragraphs 9.20–9.46, discuss some techniques for measuring contingent liabilities and recommend reporting or disclosure of selected measures.



## ANNEX

# 4.1

## Examples of Debt Securities Issued through Securitization

**4.222** Asset-backed securities (ABSs) and collateralized debt obligations (CDOs) are arrangements under which payments of interest and principal are backed by payments on specified assets or income streams. ABSs may be issued by a holding unit or vehicle to raise funds to pay the originator for the underlying assets. 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.<sup>65</sup> ABSs and CDOs are classified as debt securities because the security issuers have an obligation to make payments, while the holders do not have a claim on the residual value of the underlying assets.

**4.223** Pass-through securities are backed by a package of assets. A pass-through security derives its name from the fact that the payments arising from the underlying assets are passed straight through to the holders of the debt security. Pass-through securities that are backed by fixed-rate mortgage loans are a prominent type of ABSs. An FC that originates residential mortgage loans may pool some of these assets and sell portions of the mortgage loan pool to investors. The assets acquired by the investors are the mortgage-backed securities. The interest and principal payments made by the mortgage borrowers within the pool are directly passed through to the investors.

**4.224** Collateralized mortgage obligations (CMOs) are a type of mortgage-backed security designed to attract investors who have differing preferences for prepayment risk. The distinguishing feature is that the securities issued as a CMO are divided into different classes—for example, Class A, Class B, and Class C—which provide progressively less protection against

prepayment risk. All prepayment from the CMO mortgage loan pool are channeled to the Class C securities until those in Class C are fully repaid. Subsequent prepayments are passed through to the Class B securities investors. Prepayments are passed through to the Class A securities holders only after all Class B securities have been retired. The bonds pay guaranteed or fixed coupon rates that vary across classes. The Class A coupon rate is lower than the Class B rate, which is lower than Class C rate—thereby rewarding Class C securities holders for the highest risk of prepayments and, to a lesser extent, rewarding the Class B securities holders for assuming a prepayment risk that is greater than for Class A securities.<sup>66</sup>

**4.225** CDOs. Although both CMOs and CDOs are designed with tranches for investors with different preferences for risk, CDO is a structured financial product that pools cash-flow generating assets and repackages the asset pool into discrete tranches for sale to investors. Distinct from CMOs prepayment risk, the investors in each CDO tranche contract for a portion of the credit risk, which is allocated to CDO tranches in the same manner that prepayment risk is allocated to CMO classes.

**4.226** A mortgage-backed bond (MBB) is an asset-backed instrument that differs from pass-through securities and CMOs with respect both to the treatment of cash flows and to the institutional arrangements. MBBs are backed by mortgage loans that provide collateral, but no direct linkage exists between the cash flows from the mortgage loans and the principal and interest payments on the MBBs. The mortgage loans remain on the MBB-issuing FC's balance

<sup>65</sup> See the *External Debt Statistics: Guide for Compilers and Users* (2013), page 187.

<sup>66</sup> CMOs sometimes have Z or R Classes. For Z-Class bondholders, all cash flows—coupon and principal payments plus accrued interest—are received as lump sums after all other classes are retired. Investors in RClass (i.e., residual-class) CMOs receive whatever principal and reinvestment income remains in a CMO trust, after all other classes have been retired.

sheet, but in a segregated portfolio that is monitored by a trustee, who assures that the market value exceeds the principal amount of the MBBs. In contrast, pass-throughs and CMOs are often originated by selling a mortgage loan portfolio to a trust or other type of vehicle company<sup>67</sup> that issues the ABSs.

**4.227** Credit-linked notes (CLN) are debt securities backed by reference assets, such as loans and bonds, with an embedded CDS allowing credit risk to be transferred from the issuer to investors. Repayment of principal and interest on the notes is conditional on the performance of the reference 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. The CDS is regarded as an integral part of the bond and is not separately classified and valued.

**4.228** A covered bond is a debt security with a claim on the issuer and, if the issuer defaults, on a cover pool of high-quality collateral (which the issuer is required to maintain). Covered bonds are issued under specific legislation (or contracts that emulate this). The recourse to the pool of collateral and consequent reduction in credit risk transfer distinguishes covered bonds from ABSs.

**4.229** As a general rule, securitized debt instruments (e.g., loans or debt securities) should be included in the liabilities on the balance sheet of the ABSs issuer (i.e., the debt-instrument originator or a vehicle company to which the debt instruments were sold) irrespective of whether the holders of ABSs have a direct or indirect claim on the cash flows from the securitized assets. The financial assets (e.g., the mortgage loans or debt securities) that back the securities continue to be shown on the asset side of the balance sheet either of the original owner of the backing assets or of the vehicle company, depending on the type of securitization scheme. An exception may apply to stripped securities discussed in the next paragraph.

**4.230** Stripped securities are securities that have been transformed from a principal amount with coupon payments into a series of zero-coupon bonds with

maturities matching the coupon payment date(s) and the redemption date of the principal amount(s). They are also called *strips*. The function of stripping is that investor preferences for particular cash flows can be met in ways different from the mix of cash flows of the original security. Stripped securities may have an issuer different from the original issuer. There are two cases of stripped securities:

- a. The payments on the original securities are stripped and separately marketed by the issuer or through agents (such as strip dealers) acting with the issuer's consent with no new funds raised.
- b. When a third party acquires the original securities and uses them to back the issue of the stripped securities. New funds have been raised and a new financial instrument is created.

**4.231** In the example of (b), FCs purchase bonds or similar instruments, strip the coupon payments, and sell the future cash flows to separate investors (i.e., the principal-only claim is sold separately from the coupon-only claims). The principal-only- and coupon-only-strip investors receive the cash flows from the bonds on a pass-through basis. The FC that is the issuer of the strip records liabilities (classified under debt securities) for the cash flows that were stripped and sold. FCs are purchasers, as well as originators, of principal-only and coupon-only strips.

**4.232** Principal-only and interest-only strips are also created through securitization of mortgage-loan pools in a special form of a CMO. The interest-only-strip investors receive cash flows from the periodic interest payments received from the mortgage loan pool, and the principal-only-strip investors receive the principal portions of the periodic payments. The cash flows and yields for the principal-only and interest-only strips, similar to those for other pass-through securities backed by mortgage loans, reflect the pattern of the loan payments.

**4.233** When the issuer of the original security creates principal-only and coupon-only strips, the original security issuer retires the original securities or leaves them in a repository (e.g., a settlement or clearing facility) on a “dormant basis” until such time when the securities are reissued or redeemed. The strip-like securities replace the original securities to avoid double counting of the issuer's liabilities.

<sup>67</sup> Trusts and other types of vehicle companies—often called special purpose vehicles—are described in Chapter 3 (see paragraphs 3.31–3.38 and 3.183–3.185).

## Accounts with the IMF

### Introduction

**4.234** This annex describes the recommended treatment of accounts with the IMF (the Fund) in monetary and financial statistics. This subject warrants particular attention because of the special characteristics of member countries' financial relations with the Fund and the special accounting treatment used by member countries for recording their financial positions with the Fund in the context of domestic legal arrangements or financial reporting standards.

**4.235** The IMF is an international financial institution with nearly universal membership. It plays a central role within the international financial architecture. Its policies and activities are guided by its charter, known as the Articles of Agreement of the IMF (the Articles). The key activities of the IMF can be classified under three areas—lending, surveillance, and the provision of capacity-building services.<sup>68</sup>

**4.236** The Fund maintains a large pool of resources from which it can draw funds to help finance temporary imbalances in the balance of payments of its members. These resources are of a revolving character and are derived from quota payments made by member countries at the time they join the Fund or when their quota subscriptions are increased subsequently. The Fund can supplement these resources temporarily by borrowing from its members and their institutions, including through issuance of debt instruments (such as IMF notes).

**4.237** The use of Fund resources under non-concessional terms often takes place within the framework of a Stand-By Arrangement (SBA) or an Extended Fund Facility (EFF) between the member and the Fund.<sup>69</sup>

In such cases, a member acquires Fund resources by using its currency to purchase SDRs or currency of another member from the Fund.<sup>70</sup> To repay its obligations to the Fund, a member repurchases its currency from the Fund using SDRs or currency of another member. All accounts and transactions of the Fund are denominated in SDRs.

**4.238** More recently (in 2009 and 2011, respectively), in response to the global financial crisis, the IMF introduced new arrangements in the form of credit lines, such as the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PLL). FCL arrangements are for countries with very strong fundamentals, policies, and track records of policy implementation, and are approved for countries meeting pre-set qualification criteria at the member country's request. PLL arrangements are for countries with sound fundamentals and policies that face moderate vulnerabilities and may not meet the FCL qualification standards. The Rapid Financing Instrument was introduced to replace and broaden the scope of the earlier emergency assistance policies.

**4.239** The Fund also maintains a range of concessional financial arrangements, including the Poverty Reduction and Growth Trust (PRGT), formerly called the Enhanced Structural Adjustment Facility (ESAF), in which it technically acts as trustee. New concessional facilities for low-income countries (LICs) became effective in 2010 under the PRGT as part of a broader reform to make the Fund's financial support more flexible and better tailored to the diverse needs of LICs. These new facilities include the Extended Credit Facility (ECF) that succeeds the Poverty

<sup>68</sup> For a detailed discussion of the Fund's financial organization and operations, see *IMF Financial Operations*.

<sup>69</sup> The full list of IMF lending instruments and their descriptions can be found at [www.imf.org/external/np/exr/facts/howlend.htm](http://www.imf.org/external/np/exr/facts/howlend.htm).

<sup>70</sup> In practice, members have always purchased a freely usable currency. For the definition of freely usable currency see *IMF Financial Operations*, footnote 19.

Reduction and Growth Facility (PRGF), the Standby Credit Facility, and the Rapid Credit Facility.

**4.240** On three occasions (1970–72, 1979–81, 2009), the Fund has acted as a source of additional international liquidity through the creation and allocation to its members of SDRs, which are reserve assets that can be transferred among Fund members and other authorized holders including the Fund.<sup>71</sup>

**4.241** The financial transactions and operations of the IMF are conducted through the General Department, the SDR Department, the Administered Accounts, and the IMF Managed trust accounts. The bulk of transactions between member countries and the IMF take place through the General Resources Account (GRA), which is part of the General Department. This account handles the receipt of quota subscriptions, purchases and repurchases, receipt and refunding of charges, payment of interest on members' loan claims and of remuneration on creditor positions in the Fund, and receipt of borrowed resources from and principal repayment to the Fund's lenders. The assets held in the GRA comprise currencies of Fund member countries and the Fund's own holdings of SDRs and gold. The SDR Department records all transactions and operations involving SDRs. The Administered Accounts and IMF Managed Trust Accounts are legally and financially separate from all other accounts of the Fund. They represent resources that have been contributed by members, the Fund, or third parties and held by the Fund for purposes that are consistent with the Articles, such as financial and technical assistance.

### Recording of IMF Accounts<sup>72</sup>

**4.242** The principles relating to sectoring, classification of financial instruments, and valuation that this *Manual* recommends apply equally to the treatment of IMF accounts. Thus, the central bank's SDR-denominated positions with the IMF should be

<sup>71</sup> A special one-time allocation of SDR 21.5 billion took effect in September 2009, bringing the total cumulative allocation to about SDR 204 billion.

<sup>72</sup> Stock and flow data for *SDR holdings/allocation* and the *IMF No. 1 and No. 2 Accounts* (and securities substituted for *No. 1 Account*) are provided to member countries by the IMF's Finance Department and, upon request, by the IMF's Statistics Department, as well as are posted monthly on the Internet (see [www.imf.org/external/np/fin/tad/exfin1.aspx](http://www.imf.org/external/np/fin/tad/exfin1.aspx)). These data should be reconciled with the accounting records of the country authorities.

valued (in domestic currency) at market exchange rates, and assets and liabilities should be recorded on a gross basis, except for netting the quota subscription and Fund holdings of member's currency for the net presentation of the reserve tranche position (see footnote 13 in this chapter). All transactions with the IMF are classified as transactions with nonresidents denominated in foreign currency, because principal and interest are indexed to the SDR.

**4.243** The following section describes the procedures in the monetary statistics when all IMF accounts are recorded in the central bank balance sheet. This is followed by a discussion of the statistical treatment of Fund accounts for countries in which positions and transactions with the Fund are shared between the central bank and the government.

### ***Case 1: The Central Bank's Balance Sheet Includes All Fund Accounts***

**4.244** In the majority of member countries, the central bank has been designated as a depository and fiscal agency for the country's financial relationship with the Fund,<sup>73</sup> and so is the sole institution that transacts with the Fund. In such cases, the central bank records all of the member's transactions with the Fund and the member's balances in the various Fund accounts, except when the Fund provides resources to the central government for budget support and they are recorded as a liability of the central government.

Basic presentation in the central bank balance sheet

**4.245** The balance sheet of the central bank will then usually include the following:

On the assets side:

- a. SDR holdings, which can be acquired through allocations by the Fund or through transactions with the Fund or other holders.
- b. Claims on the IMF arising from: (1) the country's payment of its total quota subscription in both reserve assets and domestic currency; (2) loans to the Fund; and (3) holdings of IMF Notes (see paragraph 4.246e).

<sup>73</sup> Each member designates a fiscal agency (ministry of finance, central bank, or similar entity) to conduct financial transactions with the IMF and a depository (central bank or similar agency) to maintain the accounts of the IMF.

- c. Claims on the IMF managed trusts arising from the loans made by the member to the IMF managed trusts.

On the liabilities side:

- a. Deposits of the IMF at the country's central bank are maintained in the *IMF No. 1* and *No. 2 Accounts*<sup>74</sup> and, in some cases, in the *IMF Securities Account*,<sup>75</sup> which are accounts in domestic currency but fully indexed to the SDR. Balances in *IMF No. 1* and *IMF Securities Accounts* are created by (1) the payment of the domestic currency component of the quota subscription, and (2) purchases of the Fund's resources (usually in the form of SDRs or convertible foreign currency) in exchange for domestic currency. Such purchases are conducted through the GRA. They can include the use of the country's reserve tranche (discussed below) and use of Fund credit under various Fund facilities, principally SBA and EFF.
- b. Loans received from the IMF provided through accounts administered by the Fund; loans through the PRGT are the principal example.
- c. SDR allocations provided by the Fund to member countries that are participating in the SDR Department.
- d. Revaluations, recorded in the *Valuation adjustment* account under *Equity liability [MS]*, reflect the counterparts to changes, positive or negative, in all of the preceding positions with the Fund that are due to changes in the market exchange rate between the member's currency and the SDR.

Analytical presentation in the central bank survey

**4.246** A country's financial position with the Fund can also be presented in an analytic format that focuses on the components of IMF-related assets that

are considered to be reserve assets and IMF-related liabilities that arise from the use of Fund credit (UFC) and loans. Positions with the Fund in the analytic format are used in the compilation of the central bank survey recommended in this *Manual* (see Central Bank Survey in Appendix III). These positions, shown in Table 4A.2, identify the following IMF-related positions:

- a. SDR holdings. This item can be directly identified in the balance sheet of the central bank.
- b. Reserve tranche position in the IMF (RTP). The RTP in the Fund is an international reserve asset that represents a member's automatic (unconditional) drawing right on the Fund upon representation of a balance of payments need, created by the payment of the foreign exchange component of the quota subscription and capable of being expanded by the Fund's use of the member's currency in its transactions with other member countries.<sup>76</sup>

*Reserve tranche position in the IMF* can be calculated by using the relationship between a country's claims on and liabilities to the IMF. *RTP* is equal to the *IMF Quota* minus the Fund's holdings of the member's currency (the balances in the *IMF No. 1*, *No. 2*, and *Securities Accounts*) that are **not subject to exclusion**.<sup>77</sup> A member's RTP cannot be constructed directly from information in the sectoral balance sheet of the central bank; detailed accounting records of the country's transactions with the Fund are required to identify separately the components of IMF holdings of the member's currency that are needed for the calculation. In particular, data on the *UFC* are required for the computation of the *RTP*.

<sup>74</sup> The *IMF No. 2 Account* is used for the IMF's administrative expenses and receipts (such as from sales of IMF publications) in the member's currency and within its territory.

<sup>75</sup> A member may establish an *IMF Securities Account* in order to substitute parts of holdings in the *IMF No. 1 Account* with nonnegotiable, non-interest-bearing notes, or similar instruments payable to the IMF on demand when the currency is needed for the IMF's transactions.

<sup>76</sup> A member's RTP increases when the IMF uses its currency to lend to other members, and decreases when borrowing members use the currency to make repayments.

<sup>77</sup> *IMF No. 1 Account* and *IMF Securities Account* balances **not subject to exclusion** are liabilities to the Fund used to cover the country's IMF quota subscription. Balances subject to exclusion are liabilities that are the contra-entries to a country's use of IMF resources (that is, purchase of SDRs or other foreign exchange) through the IMF's GRA. Balances in the *IMF No. 2 Account* that are less than 1/10 of 1 percent of the member's quota are also subject to exclusion.

Table 4A.1 IMF-Related Assets and Liabilities—Analytical Presentation

Assets	Liabilities
Claims on Nonresidents	Liabilities to Nonresidents
Official Reserve Assets	(i) Use of Fund credit
(i) SDR holdings	(ii) Loans from the IMF
(ii) Reserve tranche position in the IMF	(iii) SDR allocations
(iii) Loans to the IMF (Official reserve assets)	
(iv) Debt securities, IMF (Official reserve assets)	
(v) Loans to IMF managed trusts (Official reserve asset)	
Other Foreign Assets	
(i) Loans to IMF (Other)	
(ii) Debt securities, IMF (Other)	
(iii) Loans to IMF managed trusts (Other)	

Note: SDR = Special Drawing Rights.

- c. Loans to the IMF. The central bank's loans to the IMF in the GRA can be identified directly in the balance sheet of the central bank. These loans give rise to a claim on the IMF. If the claim is readily encashable to meet the balance of payments financing need, the loan should be classified in *Loans, IMF (Official reserve assets)*. All other loans should be classified in *Loans, IMF (Other)*.<sup>78</sup>
- d. Loans to the IMF managed trusts (MTs). The central bank loans to the IMF MTs can be directly identified in the balance sheet of the central bank. The loans that give rise to a claim that is readily encashable to meet the balance of payments financing needs should be classified in *Loans, IMF-MTs (Official reserve assets)*. All other loans should be classified in *Loans, IMF-MTs (Other)*.
- e. Holdings of IMF notes. IMF notes are issued by the IMF as means of supplementing its resources for providing financial assistance to its members. The central bank's holdings of the IMF notes can be directly identified in the bal-

ance sheet of the central bank. These notes give rise to a claim on the IMF. If the claim is readily encashable to meet balance of payments financing needs, the note should be classified in *Debt securities, IMF (Official reserve assets)*. All other notes should be classified in *Debt securities, IMF (Other)*.

Classification of *Loans to the IMF*, *Loans to the IMF MTs*, and the *IMF notes* in accordance with their encashability to meet the balance of payments financing needs is important. It is essential for the compilation of the analytical accounts shown in Tables 4A.1 and 4A.2. It also promotes consistency of monetary data with the data for *International Reserves and Foreign Currency Liquidity* (2013). For this purpose, Table 4A.3 provides guidance on classifying *Loans to the IMF*, *Loans to the IMF MTs*, and the holdings of *IMF notes* in the central bank sectoral balance sheet/SRF-1SR consistent with the treatment recommended in the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013).

- f. Use of Fund credit (UFC). This item measures the member's outstanding purchases of Fund resources through the GRA, the counterparts of which are increases in the member's domestic currency liabilities to the Fund. Outstanding purchases of Fund

<sup>78</sup> Classification of loans to the IMF and holdings of notes issued by the IMF in the official reserve assets is discussed in the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013), Appendix VIII.

**Table 4A.2 IMF Accounts: Balance Sheet and Analytical Presentation for a Central Bank Designated as Fiscal and Depository Agency**

Balance sheet presentation (in domestic currency)					
Assets		142.0	Liabilities		207.1
Quota subscription in the IMF		120.0	IMF No. 1 Account		60.0
SDR holdings		7.0	IMF No. 2 Account		0.1
Loans to the IMF		5.0	IMF Securities Account		100.0
Loans to the IMF (Official reserve assets)		3.0	Loans from the IMF (for example, PRGT)		15.0
Loans to the IMF (Other)		2.0	SDR allocations		32.0
IMF Notes		6.0			
IMF Notes (Official reserve assets)		6.0			
IMF Notes (Other)		0.0			
Loans to IMF managed trusts		4.0			
Loans to IMF managed trusts (Official reserve assets)		0.0			
Loans to IMF managed Trusts (Other)		4.0			

**Calculation of Reserve Tranche Position in the IMF:**

RTP = Quota subscription in the IMF – Fund's holdings of the member's currency that are not subject to exclusions

Fund's holdings of the member's currency that are not subject to exclusions = Total holdings – Exclusions

Fund's holdings of the member's currency (total) = IMF No. 1 Account + IMF No. 2 Account + IMF Securities Account = 60.0 + 0.1 + 100.0 = 160.1

Fund's holdings of the member's currency that are subject to exclusions = Holdings arising from UFC + IMF Account No. 2 if less than 1/10 of 1 percent of the Quota in the IMF

Given the data on UFC = 50, obtained from the IMF (also available from the IMF website at [www.imf.org/external/np/fin/tad/exfin1.aspx](http://www.imf.org/external/np/fin/tad/exfin1.aspx)) or the detailed records at the central bank, if available:

Fund's holdings of the member's currency that are subject to exclusions = 50.0 + 0.1 = 50.1

Therefore, Fund's holdings of the member's currency that are not subject to exclusions = 160.1 – 50.1 = 110.0

Then, RTP = 120.0 – 110.0 = 10.0

Analytical presentation (in domestic currency)			
Assets		Liabilities	
<b>Claims on Nonresidents</b>	<b>32.0</b>	<b>Liabilities to Nonresidents</b>	<b>97.1</b>
<i>Official reserve assets</i>	26.0	Use of Fund credit and Loans outstanding	65.0
Reserve position in the Fund	19.0	Use of Fund credit	50.0
Reserve tranche position in the IMF	10.0	Loans from the IMF	15.0
Loans to the IMF (Official reserve assets)	3.0	SDR allocations	32.0
IMF notes (Official reserve assets)	6.0	IMF No. 2 Account	0.1
SDR holdings	7.0		
Loans to IMF managed trusts (Official reserve assets)	0.0		
<i>Other foreign assets</i>	6.0		
Loans to the IMF (Other)	2.0		
IMF notes (Other)	0.0		
Loans to IMF managed trusts (Other)	4.0		

Note: SDR = Special Drawing Rights; PRGT = Poverty Reduction and Growth Trust; RTP = Reserve tranche position in the IMF; UFC = Use of Fund credit.

resources through the GRA are equal to all purchases minus repurchases, excluding transactions within the reserve tranche. Detailed records of the member's transactions with the IMF are required to identify the components of the Fund's holdings of the member's currency that arise from the UFC.

- g. **Loans from the IMF.** This item measures loans from the IMF managed trusts (e.g., a PRGT loan) and can be directly identified in the balance sheet of the central bank.

**4.247** Table 4A.2 shows the balance sheet records at the central bank for the IMF accounts and their transition to the analytical presentation.

**4.248** Table 4A.3 provides guidance on classifying *Loans to the IMF*, *Loans to the IMF MTs*, and the holdings of *IMF notes* in the central bank sectoral balance sheet/SRF-1SR consistent with the treatment recommended in the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013), Table A8.1.

### **Case 2: Fund Accounts Are Included in the Balance Sheets of the Central Bank and the Ministry of Finance**

**4.249** In a number of countries, not all transactions with the Fund are undertaken by the central bank. In most of these countries, the Ministry of Finance has been designated as the fiscal agency for the country's financial relationship with the Fund and undertakes transactions with the IMF without direct central bank involvement, which typically is designated as the depository agency. The central bank's balance sheet may record only partial balances in the *IMF Quota* subscription, *IMF No. 1*, *No. 2* and *Securities Accounts*, while all other positions with the Fund are financial assets and liabilities of the government. A typical example of such a situation would have the quota subscription, SDR holdings and allocations, and balances in the *IMF Securities Account* outside the balance sheet of the central bank.

**4.250** In such situations, consideration could be given to compile monetary authorities accounts<sup>79</sup> in order to present a member's financial relationship with the Fund. It should be noted that, while the central bank's accounting presentation for this case differs from

that in the previous section, the analytical format (as shown in Table 4A.4) for the monetary authorities accounts would be the same.

**4.251** The inclusion of IMF account positions of the government in the monetary authorities accounts expands the gross foreign assets and liabilities recorded in those accounts and enables them to be linked directly to the changes in Fund-related international reserve assets and reserve-related liabilities that are recorded in the external sector statistics. It also creates a need for contra-entries in the monetary authorities accounts to ensure the integrity of the double-entry accounting system. For example, when a country's quota position in the IMF and the associated balances in the *IMF No. 1* and *Securities Accounts* are moved from the balance sheet of the Ministry of Finance to the monetary authorities accounts, the monetary authorities acquire a foreign asset (the *RTP*) and a corresponding liability to the government. Similarly, when the monetary authorities acquire from the government liabilities to the Fund arising from the UFC or the IMF loans, they acquire a liability to nonresidents and a corresponding claim on the government.

**4.252** One way of recording the contra-entries arising from the inclusion of the government's positions into the monetary authorities accounts is to record the contra-entries on a net basis in a separate government account ("Fund consolidation account") on the asset side, either as a component of net credit to government or as a separate asset category.

**4.253** In compiling monetary authorities accounts that include government positions with the Fund, care should be taken to avoid the introduction of valuation and other adjustments that could distort, among other things, the measurement of net claims on government. (For a more complete description on how the monetary authorities accounts are compiled, refer to paragraphs 7.65–7.69 and Table A3.6 in Appendix III.)

**4.254** Even when the central bank has been designated as a depository and fiscal agency, the Fund may provide resources to the central government for budget support, which are liabilities of the central government. In such situations, consideration should also be given to compile monetary authorities accounts.

<sup>79</sup> See paragraph 7.65.

Table 4A.3 IMF Accounts: Loans and Notes

Claim or commitment to lend	For information: statistical treatment in the <i>International Reserves and Foreign Currency Liquidity Data Template</i>	Statistical treatment in the central bank sectoral balance sheet/SRF-1SR
Bilateral Loan Agreements (BLAs; undrawn amounts) for loans that would be readily available to meet balance of payments (BOP) financing needs	Do not report in the Reserves Data Template. (They should not be reported as contingent drains in Section III.4.)	Excluded
Loans (readily available to meet a BOP financing need) drawn by the IMF under BLAs	Increase in reserve position in the Fund (RPF) in Section I.A.	<i>Loans, IMF (Official reserve assets)</i>
BLAs (undrawn amounts) for loans that would not be readily available to meet BOP financing needs	Do not report in the Reserves Data Template	<i>Excluded</i>
Loans (not readily available to meet a BOP financing need) drawn by the IMF under BLAs	Do not report in the Reserves Data Template	<i>Loans, IMF (Other)</i>
Note Purchase Agreements for Series A notes (readily available to meet BOP financing needs)	Do not report in the Reserves Data Template. (They should not be reported as contingent drains in Section III.4.)	Excluded
Holdings of Series A notes (available to meet BOP financing needs)	Increase in RPF in Section I.A.	<i>Debt securities, IMF (Official reserve assets)</i>
Note Purchase Agreements for Series B notes (not readily available to meet balance of payments financing needs)	Do not report in the Reserves Data Template	<i>Excluded</i>
Holdings of Series B Notes	Do not report in the Reserves Data Template, because the notes do not qualify as reserve assets	<i>Debt securities, IMF (Other)</i>
Lending to IMF managed trust accounts (readily available to meet balance of payments financing needs)	Include in other reserve assets (item I.A.(5))	<i>Loans, IMF managed trusts (Official reserve assets)</i>
Lending to IMF managed trusts (not readily available to meet balance of payments financing needs)	Do not report in the Reserves Data Template, because these loans do not qualify as reserve assets	<i>Loans, IMF managed trusts (Other)</i>
Commitments under the General Arrangements to Borrow (GAB) and New Arrangements to Borrow (NAB)	Do not report in the Reserves Data Template	Excluded
Drawings under the GAB and NAB	Increase in RPF in Section I.A.2.	<i>Loans, IMF (Official reserve assets)</i>
Special Drawing Right (SDR) holdings	Report in Section I.A.3, SDRs	<i>SDR holdings</i>
SDR allocations	Do not report in the Reserves Data Template	<i>SDR allocations</i>
SDR accrued interest	The preferred reporting treatment is to omit accrued interest on holdings from Section I.A.3, and to report the net amount of interest receivable or payable in future periods either as a pre-determined outflow (if negative) or inflow (if positive) in Section II.1. Alternatively, it is acceptable to include accrued interest on holdings in Section I.A.3, and to report the gross amount of interest that will be payable in future periods on allocations in Section II.1, as an outflow of interest.	Accrued interest should be incorporated in <i>SDR holdings</i> and, for statistical purposes only, accrued charges (interest) should be incorporated in <i>SDR allocations</i> .

Table 4A.4 IMF Accounts and Related Entries: Monetary Authorities Accounts (in domestic currency)

Assets		Liabilities	
<b>Claims on Nonresidents</b>	<b>32.0</b>	<b>Liabilities to Nonresidents</b>	<b>137.1</b>
<i>Official Reserve Assets</i>	26.0	Use of Fund Credit and loans outstanding	105.0
Reserve Position in the Fund	19.0	Use of Fund Credit	50.0
Reserve tranche position in the IMF	10.0	Loans from the IMF	55.0
Loans to the IMF (Official reserve assets)	3.0	of which: for budget support	40.0
IMF Notes (Official reserve assets)	6.0		
SDR holdings	7.0	SDR allocations	32.0
Loans to IMF Managed Trusts (Official reserve assets)	0.0		
<i>Other Foreign Assets</i>	6.0		
Loans to the IMF (Other)	2.0		
IMF notes (Other)	0.0		
Loans to IMF managed trusts (Other)	4.0		
<b>Claims on Central Government</b>	<b>40.0</b>	<b>Liabilities to Central Government</b>	<b>40.0</b>
Contra-entry to liabilities to IMF of central government	40.0	Central government deposits (proceeds from budget support loan from the IMF)	40.0

Note: SDR = Special Drawing Rights.

4.255 Table 4A.4 illustrates an example of monetary authorities accounts, combining the central bank's (as presented in Table 4A.2) and the central government's positions vis-à-vis the IMF on the transaction date. In this example, the central bank is the fiscal and depository agency, and the central

government has received a loan for budget support from the IMF equivalent to 40 domestic currency units, and deposited them at the central bank (with the corresponding increase in the central bank's claims on nonresidents, which is not shown in the table).

## Islamic Financial Institutions and Instruments

**4.256** This annex describes how Islamic financial institutions (IFIs) operate under the Islamic principles (*Shariah*) and how instruments they use differ from conventional financial instruments.<sup>80</sup> For the purpose of compiling monetary statistics, various types of Islamic financial instruments are discussed in comparison with those of conventional financial institutions.

### Islamic Financial Institutions

**4.257** The Islamic financial system refers to a financial system or financial activity that follows the principles of *Shariah*. *Shariah*, which denotes the Islamic law that governs the entire framework of activities in Islam, includes law regulating economic and financial activities in order to ensure fair transactions as well as social economic justice. Even though *Shariah* principles have existed throughout Islamic history, the application of *Shariah* principles in the modern Islamic financial system began with the establishment of Egypt's Mitt Ghamar Savings Bank in 1963, followed by the formation of the Islamic Development Bank (IDB) in 1973 and the Dubai Islamic Bank in 1975.

**4.258** The Islamic financial standard setting bodies, such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI)<sup>81</sup> and the Islamic Financial Services Board (IFSB), have made

<sup>80</sup> This annex draws on Iqbal and Mirakhor (1987); Hanif (2014); and Accounting Standards of the Accounting and Auditing Organization for Islamic Financial Institutions.

<sup>81</sup> The AAOIFI is a standard-setting body for Islamic finance, which develops accounting, auditing, and *Shariah* standards. It was established in 1991 and is based in Manama, Bahrain. The IFSB, which is based in Kuala Lumpur, Malaysia, is a global standard-setting body for Islamic finance, which prepares prudential standards and guidelines for the regulation of Islamic banking, Islamic insurance (*Takaful*), and Islamic capital markets. It was officially inaugurated in November 2002, and started operations in March 2003.

efforts to develop standards for IFIs, which include standards on accounting, audit, ethics, governance, *Shariah*, regulatory framework, capital adequacy, and risk management framework. These efforts are aimed at ensuring a safe and sound Islamic financial system (*Shariah* compliant) and to effectively integrate and harmonize the Islamic financial system and practices within the international financial system.

**4.259** Although both IFIs and conventional financial institutions are for-profit entities, their philosophy and operations are different, in that for IFIs *Shariah* prohibits financial transactions associated with: (1) interest (*Riba*) for lending and borrowing; (2) excessive uncertainty (*Al-Gharar*)—no contracts or contingents on the occurrence or non-occurrence of an uncertain future event; (3) speculation or gambling (*Al-Maisir*)—conversely, trading or transactions entailing a chance of gain or risk of loss are allowed. Commercial trade and investment for profit are acceptable and encouraged. IFIs use either trading models or profit and loss sharing models in financing customer's needs, participate in investments that meet *Shariah* principles, and earn fees for services rendered. For example, IFIs offer investors/depositors participation in risk-bearing, open-ended, mutual fund-type packages or profit and loss sharing investment accounts, rather than fixed interest on deposits. In addition, *Shariah* prohibits financial transactions associated with businesses that produce goods and services considered contrary to its principles, like tobacco, alcohol, gambling, vulgar entertainment, etc.

**4.260** Several special types of deposits accounts and other financial instruments permit IFIs to engage in most of commercial banking activities although in a manner different from conventional financial corporations. Generally, any risk-bearing instrument reflecting a real asset and earning a rate of return tied

to the performance of the asset is considered to be consistent with *Shariah*. Use of financial instruments with returns specified before investment is not permitted, but sharing of the returns by a pre-determined formula after the fact is acceptable. Some financial activities may have an established rate of return that could be created, for example, by the purchase and resale of goods at trade margins (cost plus profits) with deferred payments as a way of financing acquisition (called *Murabaha*). Generally, *Murabaha* is a dominant model of short-term financing in the portfolios of IFIs due to its easiness and low risk as compared with profit and loss sharing models of financing, even though other modes of financing such as leasing (*Ijarah*) and *Diminishing Musharaka* are also gaining more prominence.

**4.261** The functions of IFIs can be divided into the safeguarding of deposits and the partnership of financial institutions with shareholders and depositors (called investment account holders) in profit-making ventures. Demand deposit facilities (called *Qard*, *Wadiah*, or *Amanah* deposits) are similar to the safekeeping and transferable deposit functions performed in standard commercial banking. The *Qard*, *Wadiah*, or *Amanah* deposits pay no returns, and the IFI is obligated to preserve or guarantee the nominal value of the deposit. For purposes of compiling monetary statistics, Islamic deposit facilities should be treated in the same way as standard deposits in depository corporations (DCs).

**4.262** On the asset side, the activities of IFIs range from sale-based contracts to leasing and limited partnerships. The IFIs also make investments in equities, mutual funds, and medium- to long-term projects. To a large extent, IFIs act similarly to conventional intermediaries by issuing deposit-like instruments (such as profit and loss sharing deposits, unrestricted investment accounts, and profit sharing investment accounts [PSIA]) to the public in order to raise funds to finance commercial activity. The financing and investment activities of the IFIs are designed to expose both the investment account holders (IAH) and the IFIs to real economic activities on the ventures (profits or losses). Thus, the investments—of which many are negotiable and known by names such as “participation term certificates,” “profit and loss sharing (PLS) certificates,” and “investment deposit certificates”—have properties similar to those of shares in a company or a mutual fund.

**4.263** An IFI serving as an intermediary may act as a partner or as a provider of services in profit-making ventures and thus has some characteristics in common with mutual funds, financial leasing companies, or brokers. The restricted investment accounts offered by IFIs are quite similar to mutual funds. Because of the joint participation between an IFI, shareholders, and IAHs in real economic activities, the IFI per se is not exposed to similar risks as is a conventional financial intermediary. In addition, the structure of the balance sheet of an IFI may differ from that of a standard conventional financial institution. For example, the equity capital base of an IFI may be larger than that of a conventional financial institution as it would also include the equity portion of IAHs in a separate component of equity; an IFI’s financing portfolio may be concentrated in short-term trade instruments; and the nature of banking strategies and risks may differ.

**4.264** The prevailing statistical practice is to classify IFIs that have liabilities in the form of deposits or financial instruments that are close substitutes for deposits in the ODCs subsector. The implication of this practice is that most PSIA are treated in the same way as regular deposits for statistical reporting purposes. The participation of many IFIs in bank clearing systems and a concentration of financing activity in traditional, short- to medium-term commercial and trade financing are practices that tend to reinforce this classification.

**4.265** IFIs that are not primarily involved in deposit-taking activities are classified as OFCs. IFIs investing mainly as long-term partners in business ventures are akin to non-money market investment funds and are therefore classified within OFCs. IFIs mainly engaged in *Takaful* schemes, which is Islamic insurance, are classified as insurance corporations.

## Sources of Funds

**4.266** As financial intermediaries, IFIs—like conventional ODCs—issue deposits (current, savings, and fixed-term deposits) or deposit-like instruments as their sources of funds. The following list details sources of funds for IFIs.

- a. *Qard*, *Wadiah*, and *Amanah* deposits can be withdrawn on demand, at par, without penalty or restriction, and are generally usable for making payments by check, draft, giro order, or other direct payment facilities. These types of deposits

are not linked to any profit-making ventures and are not part of the profit and loss sharing schemes, hence IFIs have the flexibility to use the funds but are required to guarantee the nominal value of the deposits. With the foregoing characteristics, these deposits usually offer no (or very small) returns to the depositors on the basis of gift (*hibah*). In the context of compiling monetary statistics, *Qard*, *Wadiah*, and *Amanah* deposits are classified as *Transferable deposits* if such deposits are directly usable for making payments by check, draft, giro order, direct debit, or direct payment facility. Otherwise, these deposits are classified as *Other deposits*.

b. A Mudaraba, also known as PSIA, is a contract between investors and an IFI that, as a silent partner, invests the deposits in a commercial venture. Profit sharing of the venture is pre-determined on the basis of risk and return, and the IFI and investors share any profit generated from the venture. A *Mudaraba* can be entered into for a single investment or on a continuing basis with the IFI acting as a fiduciary. There are two types of *Mudaraba* investment accounts according to the AAOIFI FAS No. 27 (*Investment Accounts*), namely *Unrestricted Mudaraba* and *Restricted Mudaraba*. *Unrestricted Mudaraba* is where the investor fully authorizes an IFI to invest the funds without restrictions as to where, how, and for what purpose the funds should be invested as long as it is deemed appropriate. Mixing of funds from other sources (including shareholders' funds) is permitted and separate disclosure in the financial statement is therefore required. *Restricted Mudaraba* is where the investor restricts the manner as to where, how, and for what purpose the funds are invested. No mixing of funds is allowed from other sources to ensure proper management and accountability of the funds. A separate disclosure (off balance sheet) in the form of *Statement of Restricted Mudaraba* is required to be kept by the IFIs. Similar to the case of deposits at conventional financial institutions, *Unrestricted Mudaraba* can be divided into the following types:

- *Mudaraba* accepted without a time frame (not fixed). The investors are free to withdraw their money at any time, and hence this type

of *Unrestricted Mudaraba* is similar to those of savings deposits at conventional financial institutions and is classified as *Other deposits*.

- *Mudaraba* accepted for a fixed period that provides opportunity for IFIs to invest in more profitable long-term projects. This type of *Unrestricted Mudaraba* is similar to time deposits at conventional financial institutions and usually generates higher profits in comparison to the former type. For compiling monetary statistics, this type of *Unrestricted Mudaraba* is classified as *Other deposits*.
  - *Mudaraba* accepted for fixed terms and arranged through negotiable instruments (called investment deposit certificates or *Mudaraba* certificates). This type of *Unrestricted Mudaraba* has characteristics similar to those of debt securities and is classified as a *Debt security* unless it provides a claim on the residual value of the issuing entity, in which case it is classified as *Equity*.
- c. Qard-hasan deposits are return-free deposits voluntarily placed by depositors, to participate in the financing for needy individuals or for social purposes. This type of deposit is classified as *Other deposits* in the compilation of monetary statistics.
- d. Zakah funds, according to the AAOIFI FAS No. 9 (*Zakah*), are special funds that are maintained by IFIs, used for social purposes, and financed by contributions from depositors and IAHs. *Zakah* funds are not part of the financial institution's sources of funds for financial intermediation, and are usually recorded as off-balance-sheet items by IFIs. If *Zakah* funds are collected and organized as separate nonprofit institutions (NPIs), for example "Zakah houses," these institutions will record *Zakah* funds on their balance sheets, and should be classified as nonprofit institutions serving households (NPISHs), if they are not controlled by government. By their nature, "Zakah houses" are nonmarket NPIs because they do not charge for their services. If controlled by government, these *Zakah* funds should be classified as government units.
- e. Participation term certificates are long-term investment instruments that entitle the holder

to a share of a corporation's profit. These certificates should be classified as *Other deposits* if the certificates are treated as debt liabilities of an IFI, and as *Equity* if part of the capital base.

- f. Profit and loss sharing certificates and investment deposit certificates, such as *Mudaraba* certificates, are investors' deposits that somewhat resemble shares in a company but do not provide a claim on the residual value of the IFI and participation in its governance. These instruments should be classified as *Other deposits*. If *Mudaraba* certificates are negotiable, they should be classified as *Debt securities*.
- g. Sukūk, also known as Islamic bonds and considered as alternative to conventional bonds, are investment certificates issued by IFIs as a way to obtain funding. According to the *IFSB-15 (Revised Capital Adequacy Standard for Institutions Offering Islamic Financial Services)*, *Sukūk* (plural of *sakk*) are certificates, with each *sakk* representing a proportional undivided ownership right in tangible and intangible assets, monetary assets, usufruct, services, debts or a pool of predominantly tangible assets, or a business venture (such as *Mudaraba* or *Musharaka*). These assets, which must be clearly identifiable, may be related to a specific project or investment activity in accordance with *Shariah* rules and principles. Issuance of *Sukūk*, including the utilization of funds raised through such issuance, should not involve any elements of interest (*Riba*), excessive uncertainty (*Gharar*), or activities prohibited by *Shariah*. The following three types of *Sukūk* contracts are the most prominent: (1) *Sukūk Ijarah*, (2) *Sukūk Musharaka*, and (3) *Sukūk Murabaha*, which are all negotiable instruments, except that *Sukūk Murabaha* becomes negotiable only when certain conditions are met. In recent years, *Sukūk* have become very popular as an alternative means of raising funds for government through sovereign issues. A distinguishing feature of *Sukūk* is that the holders are entitled to share revenues generated by the *Sukūk* assets and are entitled to a share in the proceeds of the realization of *Sukūk* assets. Hence *Sukūk* holders claim an undivided beneficial ownership in the underlying assets. Governments, central banks, financial

or nonfinancial corporations, and supranational organizations can issue *Sukūk*. For the purpose of compiling monetary statistics, *Sukūk* should be classified as *Debt securities*, unless the owner of the security has a claim on the residual value of the issuing entity. For further details on the classification of *Sukūk* by type of underlying contract, see Annex 3 in the *Handbook on Securities Statistics*.

## Uses of Funds

4.267 On the assets side, IFIs invest money collected from investors in some commercial ventures by using either trading models or profit and loss sharing models. The following list covers the primary types of financing provided by IFIs:

- a. Qard-hasan is a return-free financing that is made to needy individuals or for some social purpose. *Qard-hasan* financing is usually extended on a goodwill basis, and the debtor is required to repay only the principal amount of the financing. The debtor may, however, at his or her discretion, pay an extra amount beyond the principal of the financing (without promising it) as a token of appreciation to the creditor. *Qard-hasan* financing is classified as *Loans*.
- b. Murabaha financing, according to the *AAOIFI FAS No. 2 (Murabaha and Murabaha to the Purchase Orderer)*, is defined as a sale of goods at cost plus an agreed profit margin. A *Murabaha* sale in the preceding context means the selling of a product owned by the seller at the time of entering into a contract. In a *Murabaha* contract, an IFI purchases goods upon the request of a client, who makes deferred payments that cover costs and an agreed-upon profit margin for the IFI. The IFI handles payments to the supplier including direct expenses incurred (delivery, insurance, storage, fees for letter of credit, etc.). Operating expenses of the IFI are not included. Under *Murabaha* contracts, disclosure of cost of the underlying goods is necessary. *Murabaha* contracts resemble collateralized loans of the conventional financial institutions, in which the underlying goods, such as properties or automobiles, are registered under the customer's name and are used as collateral. In compiling mon-

- etary statistics, *Murabaha* should be classified as *Loans*.
- c. A *Bai Muajjal* is a type of financing provided by an IFI to its client by supplying desired commodities or services with deferred payments. In compiling monetary statistics, a *Bai Muajjal* is classified as *Loans* given that the supplied commodities or services are from third parties.
  - d. A *Bai Salam* financing, according to the AAOIFI FAS No. 7 (*Salam and Parallel Salam*), is a short-term agreement in which an IFI makes full prepayments (spot payment) for future (deferred) delivery of a specified quantity of goods on a specified date. In practice, farmers usually need money to purchase seeds and fertilizers. An IFI and farmers in this case may engage in a *Bai Salam* contract, in which farmers agree to sell their crops to the IFI prior to harvesting. Generally, the agreed spot price is less than the future price of the commodities, in order for the IFI to make profits. A *Bai Salam* should be classified as *Loans*, given that the produced crops are not for the IFI's own use.
  - e. An *Istisna'a* financing, according to the AAOIFI FAS No. 10 (*Istisna'a and Parallel Istisna'a*), is a partnership between an IFI and an enterprise, usually manufacturer or construction company, in which the IFI places an order and provides financing to the enterprise to manufacture/construct and or supply certain goods or buildings. Upon or before the delivery of the order, IFIs usually engage into a contract with another party (the ultimate purchaser) at a price higher than the original contract of the *Istisna'a*, thus generating profits for the IFI. As a matter of practice, an *Istisna'a* is classified as *Loans*, given that the produced goods or constructed buildings are not for the IFI's own use, but for the ultimate purchaser. If the goods or buildings are for the IFI's own use, an *Istisna'a* is classified as *Trade credit and advances* within *Other accounts receivables*.
  - f. An *Ijarah* is a lease-purchase contract in which an IFI purchases capital equipment or property and leases it to an enterprise. The IFI may either rent the equipment or receive a share of the profits earned through its use. According to the AAOIFI FAS No. 8 (*Ijarah and Ijarah Muntahia Bittamleek*), there are two types of *Ijarah*, namely *Operating Ijarah* and *Financing Ijarah* (*Ijarah Muntahia Bittamleek* or *Ijarah Wa Iktina*). Under *Operating Ijarah*, the title for the underlying asset is not transferred to the client (lessee), and ownership risks of the assets are borne by the IFI; expenses related to the use of the assets are the responsibility of the client. A *Financing Ijarah* involves two contracts (i.e., a lease over the lease period and transfer of ownership at the end of the contract). For compiling monetary statistics, an *Operating Ijarah* should be treated in the same way as a conventional operating lease. *Financing Ijarah*, which resembles a conventional financial lease, should be classified as *Loans*.
  - g. A *Musharaka* financing, according to the AAOIFI FAS No. 4 (*Musharaka Financing*), is a partnership between an IFI and an enterprise in which both parties contribute to the capital (*rab al maal*) of partnership. In a *Musharaka* partnership, the IFI and client agree to share any profits generated from the venture according to the pre-agreed ratio; a loss is shared according to the ratio of contribution. In the context of compiling monetary statistics, a *Musharaka* financing is classified as *Loans*, provided the IFI does not acquire a claim on the residual value of the enterprise.<sup>82</sup>
  - h. A *Mudaraba* financing, according to the AAOIFI FAS No. 3 (*Mudaraba Financing*), is a partnership between an IFI and a client in which the IFI provides capital (*rab al maal*) and the client provides skillful labor. *Mudaraba* financing is a type of partnership whereby skill and money are brought together to conduct business. Profits generated from the business are shared according to the agreement, while losses are borne fully by the IFI as the capital provider, except when losses were due to misconduct, negligence or violation of the agreed conditions by the client. In the context of compiling monetary statistics, a *Mudaraba* financing is classified as *Loans*. Although

<sup>82</sup> *Musharaka* financing can be structured in two possible ways according to Islamic scholars: (1) *Musharaka* financing offered as a loan where the IFI provides financing in the form of working capital to an entity but does not have a claim on the residual value of the debtor entity; and (2) *Musharaka* financing offered as equity participation.

*Mudaraba* financing has features of equity, it has a fixed-term nature and therefore represents a fixed-term claim on the client rather than a claim on any residual value.

### Takaful as a Form of Insurance

**4.268** A Takaful is Islamic insurance that has emerged to complement IFIs, as an alternative form of conventional insurance. *Takaful* was invented as an Islamic way of mutual assistance to deal with uncertainties (*Al-Gharar*). As in the case of conventional insurance, *Takaful* deals with both life and nonlife (general) insurance.

**4.269** *Takaful* undertakings and Islamic societies in different parts of the world are now practicing *Takaful* schemes based on the concept of pooling risks, which does not contradict the *Shariah* principles. *Takaful*

helps participating members in sharing financial responsibilities to assist each other. The compensation to the unfortunate member and group responsibility are not only accepted, but also encouraged in Islam. The growth of *Takaful* companies not only would serve as the vehicle of risk pooling, but also as alternative means of investment.

**4.270** In the context of compiling monetary statistics, if a *Takaful* company meets the definition of insurance corporations as described in paragraph 3.190, it should be classified as an *insurance corporation*. Its claims and liabilities related to *Takaful* (i.e., participants' contributions, or *Tabarru*), *Re-Takaful* contributions, and claims or compensations related to the *Takaful* policies, should be classified as insurance (included in the financial instrument *Insurance, pension, and standardized guarantee schemes*).