

Classifications of Financial Assets and Liabilities

5.1 This chapter discusses the classifications of financial assets and liabilities used in the international accounts. These classifications are applied to positions, the associated income and financial account transactions, and other changes involving financial assets and liabilities. Classifications are used to group similar components and to separate components with different characteristics. The international accounts functional categories and their relationship to the instruments classification are discussed in Chapter 6.

A. Definitions of Economic Assets and Liabilities

References:

2008 SNA, Chapter 11, The Financial Account, and Chapter 13, The Balance Sheet.

IMF, *MFSM 2000*, Chapter 4, Classification of Financial Assets.

IMF, *Monetary and Financial Statistics Compilation Guide*, 2008.

IMF, *Financial Soundness Indicators: Compilation Guide*, 2006, Appendix IV, Reconciliation Between the Guide's Methodology and National and Commercial Accounting.

BIS, ECB, and IMF, *Handbook on Securities Statistics* (forthcoming).

I. Economic assets in general

5.2 *Economic assets are resources over which ownership rights are enforced and from which future economic benefits may flow to the owner.* They include fixed assets, such as equipment and research and development, that are used repeatedly or continuously in production over more than one year. They also include inventories, valuables, nonproduced assets, and financial assets.

5.3 Every economic asset has an owner. *The economic owner of the asset is the party who has the risks*

and rewards of ownership. Rewards of ownership usually include the right to use, rent out, or otherwise generate income, or to sell the asset. The risks include the potential losses caused by damage, theft, and holding losses; that management, transfer, or maintenance costs are greater than anticipated; and, in the case of financial assets, default of the counterparty. Ownership may be subject to costs such as maintenance and taxes. Usually, the economic owner is the same as the legal owner, but they may differ in cases such as financial leases. Under some legal arrangements, elements of the risks and rewards are split between different parties, so it is necessary to identify which party has the bulk of risks and rewards to identify the economic ownership. Every economic asset has demonstrable value, functioning as a store of value that reflects the amounts of the economic benefits that its owner can derive by holding it, using it, or providing it temporarily to another entity. It may be tangible or intangible. Different kinds of economic benefits that may be derived from an asset include:

- (a) the ability to use assets, such as buildings or machinery, in production;
- (b) the generation of services, for example, renting out produced assets to another entity;
- (c) the generation of property income (e.g., interest and dividends received by the owners of financial assets); and
- (d) the potential to sell and thus realize holding gains.

In the special case of a short position, a negative asset is identified, as discussed in paragraph 7.28.

5.4 The classification system of economic assets recognized in macroeconomic data sets is shown in Table 5.1. In the international accounts, produced assets are covered in the goods and services account, nonproduced nonfinancial assets in the capital account, and financial assets and liabilities in the financial account

Table 5.1. Economic Asset Classification*(Includes 2008 SNA codes)*

Asset classes	Examples
AN Nonfinancial assets	
ANI Produced assets	
ANI1 Fixed assets	Tangible assets: dwellings; other buildings and structures; machinery and equipment; weapons systems; cultivated biological resources. Intangible assets: research and development; mineral exploration; computer software and databases; entertainment, literary, and artistic originals.
ANI2 Inventories	Materials and supplies, work-in-progress, finished goods, goods for resale.
ANI3 Valuables	Precious metals and stones, antiques, and other art objects.
AN2 Nonproduced assets	
AN21 Natural resources	Land and subsoil assets, noncultivated biological resources, water resources, radio spectra.
AN22 Contracts, leases, and licenses	Marketable operating leases, permissions to use natural resources, permissions to undertake specific activities, entitlement to future goods and services on an exclusive basis.
AN23 Goodwill and marketing assets	Brand names, mastheads, trademarks.
AF Financial assets	See Table 5.3.

and IIP. This chapter deals with the classification of financial assets and liabilities.

2. Financial instruments

5.5 *Financial instruments consist of the full range of financial contracts made between institutional units.* Financial instruments may give rise to financial claims (as discussed in paragraph 5.6) or not (as discussed in paragraphs 5.10–5.13).

3. Claims

5.6 *A claim is a financial instrument that gives rise to an economic asset that has a counterpart liability.* Claims arise from contractual relationships entered into when one institutional unit promises to provide funds or other resources to another in the future. (Usually, funds or resources are supplied at the beginning of the relationship, but not in the case of futures contracts.) The only financial instrument that does not give rise to a claim is gold bullion that is included in monetary gold. (The term claim is used in a different sense in the context of insurance; see paragraph 5.64(b).)

5.7 Each claim is a financial asset that has a corresponding liability. The existence of two parties to a claim means that it can arise in a cross-border situation.

Equity is regarded as a claim as it represents a claim of the owner on the residual value of the entity.

5.8 Nonfinancial assets do not have a corresponding liability. For example, emission rights and commodities may be traded on organized markets similar to those of traded financial assets, but do not have a corresponding liability. In contrast, a financial derivative relating to a commodity price does have a counterpart liability and is a financial asset.

4. Financial assets

5.9 *Financial assets consist of claims and the gold bullion component of monetary gold.* Financial assets consist of equity and investment fund shares, debt instruments, financial derivatives and employee stock options, and monetary gold. Financial assets can be delineated from financial instruments in that:

- (a) some instruments do not give rise to financial assets, as discussed in paragraphs 5.10–5.14. Examples of instruments not recognized as assets are one-off guarantees not yet activated and unrealized commitments such as lines of credit, loan commitments, and letters of credit; and
- (b) when held as monetary gold, gold bullion is a financial asset that is not created by an instru-

ment and that does not represent a claim on another entity. It is considered to be a financial asset because of its role as a means of international payments and store of value for use in reserve assets. (The unallocated gold account component of monetary gold does have a counterpart claim; it is discussed in paragraph 5.74.)

5. Other financial instruments not recognized as financial assets

5.10 *Contingent assets and liabilities are contractual financial arrangements between institutional units that do not give rise to unconditional requirements either to make payments or to provide other objects of value.* They are not recognized as financial assets or liabilities prior to the condition(s) being fulfilled. However, by conferring certain rights or obligations that may affect future decisions, they can produce an economic impact on the parties involved. As a result, supplementary information may be provided on significant contingent assets or liabilities. A contingent claim sold to another party is classified under contracts, leases, and licenses; is not included in the IIP; and has no counterpart liability.

5.11 Although the value of future payments arising from equity, financial derivatives, index-linked instruments, insurance reserves, and provisions for standardized guarantees is uncertain, they are recognized as financial assets rather than as contingent assets. In these cases, the liability exists, but the amounts payable depend on subsequent events.

5.12 One-off guarantees of payment by third parties are contingent because payment is required only if the principal debtor defaults. However, provisions for calls under standardized guarantees are not considered to be contingent because of the more predictable expectation of payment under standardized guarantees. (Definitions of standardized and one-off guarantees are given in paragraph 5.68.)

5.13 Lines of credit, letters of credit, and loan commitments assure that funds will be made available, but no financial asset (i.e., loan) is created until funds are actually advanced. Letters of credit are promises to make payment only when certain documents specified by contract are presented. Note issuance facilities assure that parties will be able to sell short-term securities that they issue and that the financial corporations providing the facility will purchase any notes not sold in the market. Only if the financial corporation providing the facility makes funds available will it acquire

an actual asset, to be recorded in its balance sheet. Uncalled share capital is contingent unless there is an obligation to pay the amount.

5.14 Sums set aside in business accounting to provide for future liabilities or for future expenditures are not recognized as liabilities. Only actual current liabilities to another party or parties are explicitly included in financial assets and liabilities. When the anticipated liability becomes actual, it is recognized. A future stream of revenue, such as future tax collections or royalties receipts, is not recognized as a financial asset.

6. Other issues

5.15 *Securities are debt and equity instruments that have the characteristic feature of negotiability.* That is, their legal ownership is readily capable of being transferred from one unit to another unit by delivery or endorsement. While any financial instrument can potentially be traded, securities are designed to be traded, usually on organized exchanges or “over the counter.” (The over-the-counter market involves parties negotiating directly with one another, rather than on a public exchange.) Negotiability is a matter of the legal form of the instrument. Some securities may be legally negotiable, but there is not, in fact, a liquid market where they can be readily bought or sold. Listed financial derivatives, such as warrants, are sometimes considered to be securities.

5.16 A discussion of Islamic banking instruments and how they can be treated in terms of the classification of financial assets and liabilities can be found in Appendix 2 of *MFSM 2000*.

B. Classification of Financial Assets and Liabilities by Type of Instrument

I. Introduction to classification of particular financial assets and liabilities

5.17 This *Manual* uses three broad categories of financial assets and liabilities: (1) equity and investment fund shares, (2) debt instruments, and (3) other financial assets and liabilities. The *2008 SNA* and this *Manual* use an additional, more detailed classification of financial assets and liabilities. The classification is based primarily on the legal characteristics that describe the form of the underlying relationship between the parties to an instrument, which are also related to their liquidity and economic purpose. Although financial innovation leads to the emergence of new types of instruments, the clas-

Table 5.2. Returns on Financial Assets and Liabilities: Financial Instruments and Their Corresponding Type of Income*(Includes 2008 SNA codes)*

Financial Instrument	Type of Income Receivable/Payable on Instrument
Equity and investment fund shares	
AF51 Equity	D42 Distributed income of corporations D43 Reinvested earnings ¹ D41 Interest ²
AF511+AF512 Listed and unlisted shares	D421 Dividends D43 Reinvested earnings ¹ D41 Interest ²
AF519 Other equity	D422 Withdrawals from income of quasicorporations D43 Reinvested earnings ¹ D41 Interest ²
AF52 Investment fund shares/units	D443 Investment income attributable to investment fund shareholders (dividends and reinvested earnings)
Debt instruments	
AF12 Special drawing rights	D41 Interest
AF2 Currency and deposits	D41 Interest
AF3 Debt securities	D41 Interest
AF4 Loans	D41 Interest
AF6 Insurance, pension, and standardized guarantee schemes	D44 Other investment income
AF81 Trade credit and advances	D41 Interest
AF89 Other accounts receivable/payable	D41 Interest
Other financial assets and liabilities	
AF11 Monetary gold ³	D41 Interest ²
AF7 Financial derivatives and employee stock options	None

¹Reinvested earnings—direct investment equity only.²By convention, lending fees on equity securities, gold loans, and gold swaps are classified as interest (see paragraph 11.67).³Monetary gold consists of gold bullion and unallocated gold accounts. Gold bullion has no counterpart liability. However, the counterpart liability of unallocated gold accounts is in deposits.

sification is intended to provide broad categories that allow for international comparability and the inclusion of new instruments within the existing categories.

5.18 Table 5.2 shows the *SNA* instruments classification and the corresponding type of income they generate. The linking of income with the corresponding assets and liabilities facilitates calculation of rates of return, which are useful for both analysis and data verification. Table 5.3 shows the *2008 SNA* classification and the corresponding broad categories.

2. Equity and investment fund shares

5.19 Equity and investment fund shares have the distinguishing feature that the holders own a residual claim on the assets of the institutional unit that issued the instrument. Equity represents the owners' funds in the institutional unit. In contrast to debt, equity does not generally provide the owner with a right to a predetermined amount or an amount determined according to a fixed formula.

5.20 Investment fund shares have a specialized role in financial intermediation as a kind of collective investment in other assets, so they are identified separately. Additionally, the treatment of portfolio investment income differs, in that reinvested earnings are imputed for investment fund shares (as shown in paragraphs 11.37–11.39).

a. Equity

5.21 *Equity consists of all instruments and records that acknowledge 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 (a corporation or other unit).

5.22 Ownership of equity in legal entities is usually evidenced by shares, stocks, participations, depository receipts, 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

Table 5.3. 2008 SNA Financial Instruments Classification (with Corresponding BPM6 Broad Categories)*(Includes 2008 SNA codes)*

2008 SNA Financial Assets and Liabilities Classification	Broad international accounts category (BPM6)
AF11 Monetary gold	
Gold bullion	}Other financial assets
Unallocated gold accounts	} and liabilities
AF12 Special drawing rights	Debt instruments
AF2 Currency and deposits	}Debt instruments
AF21 Currency	}
AF221 Interbank positions	}
AF229 Other transferable deposits	}
AF29 Other deposits	}
AF3 Debt securities	Debt instruments
AF4 Loans	Debt instruments
AF5 Equity and investment fund shares	}Equity
AF51 Equity	}
AF511 Listed shares	}
AF512 Unlisted shares	}
AF519 Other equity	}
AF52 Investment fund shares/units	}
AF521 Money market fund shares/units	}
AF522 Other investment fund shares/units	}
AF6 Insurance, pension, and standardized guarantee schemes	}Debt instruments
AF61 Nonlife insurance technical reserves	}
AF62 Life insurance and annuity entitlements	}
AF63 Pension entitlements	}
AF64 Claims of pension funds on pension managers	}
AF65 Entitlements to nonpension benefits	}
AF66 Provisions for calls under standardized guarantees	}
AF7 Financial derivatives and employee stock options	}Other financial assets
AF71 Financial derivatives	} and liabilities
AF711 Forward-type contracts	}
AF712 Options	}
AF72 Employee stock options	}
AF8 Other accounts receivable/payable	}Debt instruments
AF81 Trade credit and advances	}
AF89 Other accounts receivable/payable	}

shares are also equity securities, whether or not the income is fixed or determined according to a formula. (For nonparticipating preferred shares, see paragraph 5.46.) In addition to the purchase of shares, the value of equity can be affected by a range of factors, such as share premiums, accumulated reinvested or retained earnings, or revaluations. In addition, a direct investor may increase its equity in an affiliate by providing goods and services (see paragraph 8.17) or assuming debt (see paragraph 8.45(c)).

5.23 *Depository receipts are securities that represent ownership of securities listed in other economies.*

Depository receipts listed on one exchange represent ownership of securities listed on another exchange, and ownership of the depository receipts is treated as if it represents direct ownership of the underlying securities. Depository receipts facilitate transactions in securities in economies other than their home listing. The underlying securities may be equity or debt securities.

5.24 Equity may be split on a supplementary basis into:

- (a) listed shares,
- (b) unlisted shares, and
- (c) other equity.

Both listed and unlisted shares are equity securities (securities are defined in paragraph 5.15). *Listed shares are those listed on an exchange* and may sometimes be referred to as quoted shares. Unlisted shares may sometimes be referred to as private equity¹ (venture capital often takes this form).

5.25 The existence of quoted prices of shares listed on an exchange means that current market prices are usually readily available. In addition to the valuation aspects, listed and unlisted shares tend to be issued by different types of corporations (subsidiaries and smaller businesses) and typically have different regulatory requirements.

5.26 *Other equity is equity that is not in the form of securities.* It can include equity in quasi-corporations, such as branches, trusts, limited liability and other partnerships, unincorporated funds, and notional units for ownership of real estate and other natural resources. The ownership of many international organizations is not in the form of shares and so is classified as other equity (although equity in the BIS is in the form of unlisted shares). Ownership of currency union central banks is included in other equity (see paragraph A3.44).

5.27 The general principles of valuation given in paragraphs 3.84–3.91 apply to equity. However, because prices may not be observable for unlisted shares and other equity positions, other methods are noted in paragraphs 7.15–7.18.

b. Investment fund shares or units

5.28 *Investment funds are collective investment undertakings through which investors pool funds for investment in financial or nonfinancial assets or both.* These funds issue shares (if a corporate structure is used) or units (if a trust structure is used). Investment funds include money market funds (MMF) and non-MMF investment funds, discussed further in paragraphs 4.73–4.74. Investment fund shares or units refer to the shares issued by mutual funds and unit trusts, rather than the shares they may hold.

5.29 *MMFs are investment funds that invest only or primarily in short-term money market securities such as treasury bills, certificates of deposit, and commercial paper.* MMF shares and units sometimes are functionally close to transferable deposits, for example,

¹Private equity refers to the source of equity funds being on private markets; however, private equity may be used to invest in listed shares, including to take over publicly listed companies, and delist them.

accounts with unrestricted check-writing privileges. If MMF shares are included in broad money in the reporting economy, they should be recorded as a separate item to allow reconciliation with monetary statistics. (See also paragraph 4.73 on MMFs as a subsector.)

5.30 Investment funds invest in a range of assets, such as debt securities, equity, commodity-linked investments, real estate, shares in other investment funds, and structured assets. Data on the composition of their assets could be useful in economies in which investment funds are significant.

3. Debt instruments

Reference:

IMF and others, *External Debt Statistics: Guide for Compilers and Users*, paragraphs 2.3–2.11.

5.31 *Debt instruments are those instruments that require the payment of principal and/or interest at some point(s) in the future.*² Debt instruments consist of SDRs, currency and deposits, debt securities, loans, insurance technical reserves, pension and related entitlements, provision for calls under standardized guarantees, and other accounts receivable/payable. The term debt instrument is applicable to both the liability and the corresponding claim. Some instruments, such as currency and some deposits, pay no interest. With insurance and pension schemes, the income flow is called investment income attributable to policyholders, rather than interest.

5.32 Debt instruments can be contrasted with equity and investment shares in the nature of the liability and risk. Whereas equity gives a residual claim on the assets of the entity, a debt instrument involves an obligation to pay an amount of principal and/or interest usually according to a predefined formula, which usually means that the creditor has a more limited risk exposure. Provided that the debtor is solvent, debt obligations are largely fixed or linked by a formula to some other variable, such as a market interest rate or the price of a selected item. In contrast, the return on equity is largely dependent on the economic performance of the issuer. Because of the different nature of risk, debt is an important grouping for analysis. Financial derivatives,

²Interest payments are periodic payments of interest costs. All other payments on debt instruments are principal payments. Further information is available in *External Debt Statistics: Guide for Compilers and Users*, Chapter 2, The Measurement of External Debt: Definition and Core Accounting Principles, and Appendix III, Glossary of External Debt Terms.

both forwards and options, are distinguished from debt instruments because no principal amount is advanced that is required to be repaid, and no interest accrues on any financial derivative instrument. That is, unlike financial derivatives, debt instruments have a principal amount, usually associated with the supply of financial or other resources.

5.33 Because debt instruments involve an obligation to repay principal, short- or long-term classification (according to either original or remaining maturity) is of analytical significance. The maturity splits are explained in paragraphs 5.103–5.105.

a. Special drawing rights

5.34 *SDRs are international reserve assets created by the IMF and allocated to members to supplement existing official reserves.* SDRs are held only by the monetary authorities of IMF members and a limited number of international financial institutions that are authorized holders. SDR holdings represent unconditional rights to obtain foreign exchange or other reserve assets from other IMF members. (For more information, see paragraph 7.83.)

5.35 Holdings of SDRs by an IMF member are recorded as an asset, while the allocation of SDRs is recorded as the incurrence of a liability of the member receiving them (because of a requirement to repay the allocation in certain circumstances, and also because interest accrues). The holdings and allocations should be shown gross, rather than netted.

b. Currency and deposits

Currency

5.36 *Currency consists of notes and coins that are of fixed nominal values and are issued or authorized by central banks or governments.*

5.37 Some countries issue gold coins, which are held for intrinsic value, or commemorative coins, which are held for numismatic value. If not in active circulation, such coins are not classified as financial assets but as goods (except for gold coins that are classified as monetary gold; see paragraph 6.78). Similarly, central bank or central government holdings of unissued or demonetized currency are not financial assets. (Acquisition of unissued currency by a monetary authority from a printer or coin manufacturer is included in goods; see paragraph 10.17(a).)

5.38 Foreign currency in circulation, including as legal tender, is shown as a currency asset of the resident

holder and as a liability of the issuer. Transactions that take place between residents settled in foreign currency in circulation are domestic transactions. Currency as an instrument, as discussed in this section, can be contrasted with the classification of all kinds of instruments as being either domestic currency or foreign currency (as discussed further in paragraphs 3.98–3.103).

Deposits

5.39 *Deposits include all claims that are (a) on the central bank, deposit-taking corporations other than the central bank, and, in some cases, other institutional units; and (b) represented by evidence of deposit.* A deposit is usually a standard contract, open to the public at large, that allows the placement of a variable amount of money. The nominal value of deposits is usually fixed in terms of the currency in which the deposits are denominated. In some cases, deposits may have their value expressed in terms of an index or linked to a commodity price, for example, gold, oil, or share prices. Unallocated accounts for precious metals are also deposits, except for unallocated gold accounts held by monetary authorities for reserves purposes, for which the asset holding is included in monetary gold (with the counterpart liability being recorded as a deposit—see paragraph 5.77).

5.40 Deposits are distinguished from loans on the basis of the representation in the documents that evidence them. There may be cases in which the distinction is unclear, because the parties are uncertain or take different views. When one party is a deposit-taking corporation and the other is not, a possible convention is that an asset position of a deposit-taking corporation is classified as a loan by both parties. Similarly, a liability of a deposit-taking corporation to another type of entity is classified as a deposit by both parties. Classification of interbank positions as deposits is discussed in paragraph 5.42.

Transferable deposits

5.41 *Transferable deposits consist of all deposits that are (a) exchangeable for banknotes and coins on demand at par and without penalty or restriction and (b) directly usable for making payments by check, draft, giro order, direct debit or credit, or other direct payment facility.* Some types of deposit accounts 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 or on the minimum size of the individual third-party payments. An overdraft arising from the overdraft facility of a transferable deposit account is classified as a loan.

Interbank positions

5.42 Interbank positions can be shown as a separate component of deposits. In some cases, the instrument classification of interbank positions may be unclear, for example, because the parties are uncertain or one party considers it as a loan and the other a deposit. Therefore, as a convention to ensure symmetry, all interbank positions other than securities and accounts receivable/payable are classified under deposits.

Other deposits

5.43 *Other deposits consist of all claims, other than transferable deposits, that are represented by evidence of deposit.* Other deposits include savings and fixed-term deposits, and nonnegotiable certificates of deposit. (Negotiable certificates are classified as debt securities.) Restricted deposits, defined as those for which withdrawals are restricted on the basis of legal, regulatory, or commercial requirements, are included in other deposits, as well as shares or similar evidence of deposit issued by savings and loan associations, building societies, credit unions, and the like. Liabilities under securities repurchase agreements that are included in national measures of broad money are also other deposits (while liabilities under other repurchase agreements are included in loans). Reserve position in the IMF (see paragraph 6.85) is included in other deposits.

c. Debt securities

5.44 *Debt securities are negotiable instruments serving as evidence of a debt.* They include bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, money market instruments, and similar instruments normally traded in the financial markets. Bills are defined as securities that give the holders the unconditional rights to receive stated fixed sums on a specified date. Bills are generally issued at discounts to face value that depend on the rate of interest and the time to maturity and are usually traded in organized markets. Examples of short-term securities are treasury bills, negotiable certificates of deposit, bankers' acceptances, promissory notes, and commercial paper. Debt securities give the holders the unconditional right to fixed or contractually determined variable payments (i.e., earning of interest is not dependent on earnings of the debtors). Depository receipts whose underlying securities are debt securities are debt securities (see paragraph 5.23).

Possible reclassification of traded loans as securities

5.45 Loans that have become negotiable from one holder to another are to be reclassified from loans to debt securities under certain circumstances. For such reclassification, there needs to be evidence of secondary market trading, including the existence of market makers, and frequent quotations of the instrument, such as provided by bid-offer spreads.

Nonparticipating preferred stocks and convertible bonds

5.46 Nonparticipating preferred stocks or shares are those that pay a fixed income but do not provide for participation in the distribution of the residual value of an incorporated enterprise on dissolution. These shares are classified as debt securities. (See also paragraph 5.22 concerning participating preferred shares.) Bonds that are convertible into equity should be classified as debt securities prior to the time that they are converted.

Asset-backed securities

5.47 Asset-backed securities, collateralized debt obligations, and collateralized mortgage obligations are arrangements under which payments of interest and principal are backed by payments on specified assets or income streams. They are backed by mortgages, home equity loans, student loans, and other debts as well as pools of leased property. Securitization of these assets provides liquidity in assets that are otherwise not so liquid.³ Asset-backed securities may be issued by a specific holding unit or vehicle, which issues securities that are sold to raise funds to pay the originator for the underlying assets. Asset-backed securities are classified as debt securities because the security issuers have a requirement to make payments, while the holders do not have a residual claim on the underlying assets; if they did, the instrument would be equity or investment funds shares. Asset-backed securities are backed by various types of financial assets (e.g., mortgages and credit card loans), nonfinancial assets, or future income streams—such as the earnings of a musician or a government's future revenue—that are not recognized as economic assets in macroeconomic statistics.

³Another term used is "structured finance." This refers to the repackaging of existing financial assets—securities, loans, or other assets—into new instruments that are structured to meet the liquidity, creditworthiness, and return preferences of particular investors. These arrangements may incorporate financial derivatives.

Bankers' acceptances

5.48 *Bankers' acceptances involve the acceptance by a financial corporation, 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.* Much international trade is financed this way. Bankers' acceptances are classified under the category of debt securities. Bankers' acceptances represent unconditional claims on the part of the holder and an unconditional liability on the part of the accepting financial corporation; the financial corporation's counterpart asset is a claim on its customer. Bankers' acceptances are treated as financial assets from the time of acceptance, even though funds may not be exchanged until a later stage.

Index-linked securities

5.49 *Index-linked securities are those for which the principal or coupons or both are linked to another item, such as a price index or the price of a commodity.* These securities are classified as variable-rate instruments (see paragraph 5.113). Issues for the measurement of revaluations and interest are discussed in paragraphs 9.34 and 11.59–11.65, respectively.

Stripped securities

5.50 *Stripped securities are securities that have been transformed from a principal amount with coupon payments into a series of zero-coupon bonds, with a range of 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 that are different from the mix of cash flows of the original security. Stripped securities may have a different issuer from the original issuer—in which case new liabilities are created. Following are the two cases of stripped securities:

- When a third party acquires the original securities and uses them to back the issue of the stripped securities. Then new funds have been raised and a new financial instrument is created.
- When no new funds are raised and 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.

(Paragraph 11.58 discusses how interest on stripped securities is calculated on an accrual basis.)

d. Loans

5.51 *Loans are financial assets that (a) are created when a creditor lends funds directly to a debtor, and (b) are evidenced by documents that are not negotiable.*⁴ This category includes all loans, including those under overdraft facilities, except accounts receivable/payable, which are treated as a separate category of financial assets. Loans that have become debt securities (as noted in paragraph 5.45) are also excluded from loans. This category includes installment loans, hire-purchase credit, and loans to finance trade credit. Claims on or liabilities to the IMF (including use of IMF credit) that are in the form of loans are also included in this category (see also paragraph 6.85 on the treatment of loans provided to the IMF General Resources Account; and Annex 7.1 on loans and credit from the IMF). An overdraft arising from the overdraft facility of a transferable deposit account is classified as a loan. However, undrawn lines of credit are not recognized as a liability. The distinction between loans and deposits is discussed under deposits in paragraph 5.40.

Securities repurchase agreements and gold swaps

Reference:

BIS, *Securities Lending Transactions: Market Development and Implications*, CPSS Publications No. 32, July 1999.

5.52 *A securities repurchase agreement is an arrangement involving the provision of securities in exchange for cash with a commitment to repurchase the same or similar securities at a fixed price.* The commitment to repurchase may be either on a specified future date (often one or a few days hence, but also further in the future) or an "open" maturity. Repos, securities lending with cash collateral, and sale-buybacks are different terms for arrangements with the same economic effect as a securities repurchase agreement—all involve the provision of securities as collateral for a loan or deposit. A repo is used as a term from the perspective of the security provider, while a reverse repo is used from the perspective of the security taker. Securities repurchase agreements are a subset of reverse transactions (as discussed in paragraphs 7.58–7.61).

5.53 The supply and receipt of funds under a securities repurchase agreement is treated as a loan or deposit. It is generally a loan, but it is classified as a deposit if it

⁴Negotiability is defined in paragraph 5.15. Loans may be traded, but their legal form is not designed for negotiability in the same way as debt securities.

involves liabilities of a deposit-taking corporation and is included in national measures of broad money. If a securities repurchase agreement does not involve the supply of cash (i.e., there is an exchange of one security for another, or one party supplies a security without collateral), there is no loan or deposit. Margin calls in cash under a repo are also classified as loans.

5.54 The securities provided as collateral under securities lending, including a securities repurchase agreement, are treated as not having changed economic ownership, as discussed in paragraph 7.58. This treatment is adopted because the cash receiver is still subject to the risks or rewards of any change in the price of the security. (The same treatment is adopted for repurchase agreements without cash collateral, in which case there is no transaction in the securities and no loan.)

5.55 *A gold swap involves an exchange of gold for foreign exchange deposits with an agreement that the transaction be reversed at an agreed future date at an agreed gold price.* The gold taker (cash provider) usually will not record the gold on its balance sheet, while the gold provider (cash taker) usually will not remove the gold from its balance sheet. In this manner, the transaction is analogous to a repurchase agreement and should be recorded as a collateralized loan or deposit. Gold swaps are similar to securities repurchase agreements except that the collateral is gold.⁵

Financial leases

References:

2008 SNA, Chapter 17, Cross-Cutting and Other Special Issues, Part 5, Contracts, leases and licences.

International Accounting Standards Board, *International Financial Reporting Standards*, International Accounting Standard 17, Leases.

5.56 *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.* In other words, the lessee becomes the economic owner of the asset. Under a financial lease, the lessor is shown as making a loan to the lessee with which the lessee acquires 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.

⁵Gold swaps should not be confused with a swap giving rise to a financial derivative. The two types of arrangements have different risk transfer implications; under a gold swap, the economic ownership of the gold does not change hands (see paragraph 5.91).

5.57 Examples of situations that would normally lead to a lease being classified as a financial lease include that:

- (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.

These examples may not be conclusive 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. Financial leases are also called finance leases or capital leases, highlighting that the motivation is to finance acquisition of the asset. Accounting practices generally recognize financial leases in the same manner as this definition. In addition to financial leases recognized in business accounts, a treatment akin to financial leases is adopted for some public-private partnerships⁶ (see 2008 SNA, Chapter 22, The General Government and Public Sectors).

5.58 The treatment of financial leases is designed to move away from the legal arrangements to capture the economic reality of such arrangements, by treating assets under a financial lease as if they were purchased and owned by the user. For example, if a bank leases an aircraft to an aviation company, at the time the company is deemed to take economic ownership of the aircraft, it is shown as an asset in the balance sheet of

⁶For example, a build, own, operate, transfer scheme could be found to assign the risks and rewards of ownership to the government, so the private partner would be treated as a provider of a financial lease.

the aviation company, while the loan is recorded as a liability. That is, the IIP will show a loan between the aviation company and the bank.

5.59 The debt liability at the inception of the lease is defined as the value of the asset and is financed by a loan of the same value, a liability of the lessee. The loan is repaid through payments during the contract (which consist of interest, principal, and, if a financial intermediary is involved, FISIM (financial intermediation services indirectly measured) elements) and any residual payment at the end of the contract (or alternatively, by the return of the good to the lessor). Appendix 6b provides references to where financial leases are discussed in various parts of this *Manual*.

5.60 Financial leases may be distinguished from other kinds of leases identified in macroeconomic statistics because substantially all the risks and rewards of ownership are transferred from the legal owner of the good (the lessor) to the user of the good (the lessee). Other kinds of leases are as follows:

- (a) Operating leases. An operating lease is one in which the legal owner of a produced asset is also the economic owner and has the operating risks and rewards from ownership of the asset. One indicator of an operating lease is that it is the responsibility of the legal owner to provide any necessary repair and maintenance of the asset. Under an operating lease, the asset remains on the balance sheet of the lessor. Operating leases give rise to services, as discussed in more detail in paragraphs 10.153–10.157.
- (b) Resource leases. A resource lease is an agreement whereby the legal owner of a natural resource that has an infinite life makes it available to a lessee in return for a regular payment, which is recorded as rent. The resource continues to be recorded on the balance sheet of the lessor even though it is used by the lessee. Other arrangements involving natural resources may amount to an outright sale of a natural resource to the lessee (such as spectrum licenses for a long period; see paragraph 13.9). Some leases of natural resources, such as mining licenses held by nonresidents lead to the imputation of a notional resident unit (see paragraphs 4.34–4.40), so that the lease is between residents, and the international transactions associated with the lease are recorded as being for direct investment equity in the notional unit.

- (c) Contracts, leases, and licenses. A transferable lease other than a financial lease that meets the definition of an economic asset is shown in the capital account as a nonproduced nonfinancial asset, as discussed in paragraphs 13.11–13.15.

Financial or finite risk reinsurance

5.61 *Financial or finite risk reinsurance is defined as a kind of insurance policy that involves no or very limited transfer of risk.* Depending on how much risk is transferred, it could be classified as a loan or an insurance policy. For example, an insurance company may have a finite risk reinsurance policy that allows it to borrow funds in the event of incurring large values of claims. Because those amounts are repayable, however, the policy has a financing function and amounts drawn under the policy are classified as a loan. In contrast, if the amounts under the policy are not repayable, then risk is transferred to the reinsurer, so it has a risk pooling function and is a part of insurance.

e. Insurance, pension, and standardized guarantee schemes

5.62 *Insurance, pension, and standardized guarantee schemes consist of the following:*

- (a) *nonlife insurance technical reserves;*
- (b) *life insurance and annuity entitlements;*
- (c) *pension entitlements, claims of pension funds on pension managers, and entitlements to nonpension funds; and*
- (d) *provisions for calls under standardized guarantees.*

5.63 These reserves, entitlements, and provisions represent liabilities of the insurer, pension fund, or issuer of standardized guarantees, and a corresponding asset of the policyholders or beneficiaries. The aggregate values of liabilities can be estimated actuarially because the company or fund has a pool of liabilities, but the value is less clear for the asset holders. The insurers, pension funds, and guarantors usually hold a range of assets to allow them to meet their obligations; however, these are not necessarily equal to the provision and entitlement liabilities.

Nonlife insurance technical reserves

5.64 Nonlife insurance technical reserves consist of the following:

- (a) Reserves for unearned insurance premiums, which are prepayment of premiums. Premiums are usually paid at the beginning of the period covered by the policy. On an accrual basis, the premiums are earned through the policy period, so that the initial payment involves a prepayment or advance. It also includes reserves for unexpired risks.
- (b) Reserves against outstanding insurance claims, which are amounts identified by insurance corporations to cover what they expect to pay out arising from events that have occurred but for which the claims are not yet settled. Other reserves, such as equalization reserves, may be identified by insurers. However, 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 to cover irregularly occurring catastrophes, and thus do not represent any existing corresponding claims for policyholders.

Both nonlife direct insurance and reinsurance are included in this item. Insurance and its terminology are explained in more detail in Appendix 6c.

Life insurance and annuity entitlements

Reference:

2008 SNA, Chapter 17, Cross-Cutting and Other Special Issues, Part 1, The treatment of insurance.

5.65 This category consists of reserves of life insurance companies and annuity providers for prepaid premiums and accrued liabilities to life insurance policyholders and beneficiaries of annuities. Life insurance and annuity entitlements are used to provide benefits to policyholders upon the expiry of the policy, or to compensate beneficiaries upon the death of policyholders, and thus are kept separate from shareholders' funds. These entitlements are regarded as liabilities of the insurance companies and assets of the policyholders and beneficiaries. Annuities entitlements are the actuarial calculation of the present value of the obligations to pay future income until the death of the beneficiaries.

Pension entitlements

Reference:

2008 SNA, Chapter 17, Cross-Cutting and Other Special Issues, Part 2, Social insurance schemes.

5.66 Pension entitlements show the extent of financial claims both existing and future pensioners hold against either their employer or a fund designated by the employer to pay pensions earned as part of a compensation agreement between the employer and employee. The economy of residence of pension schemes may differ from that of some of their beneficiaries, in particular, for border workers, guest workers who return home, people who retire to a different economy, staff of international organizations, and employees of transnational enterprise groups that have a single pension fund for the whole group. In addition to liabilities of pension funds, liabilities of unfunded pension schemes are included in this category. There are assumptions and different methods in the measurement of pension fund entitlements, so the nature of coverage and estimation should be stated in metadata. As well as pensions, some schemes may have other related liabilities, such as for health benefits, which are included under entitlements to nonpension benefits. In addition to its pension entitlement liabilities to its beneficiaries, a pension fund may sometimes have a claim on the employer, other sponsor, or some other party such as an administrator of the scheme. On the other hand, the sponsor or some other party may have a claim on a surplus of the fund. Such claims are shown under claims of pension funds on pension managers.

5.67 Potential payments by social security schemes may not be recognized as financial assets or liabilities. However, if a social security fund also acts as a pension scheme (as is sometimes the case for benefits for present and former government employees), those pension obligations are included under this category, but not the pension fund's social security obligations.

Provisions for calls under standardized guarantees

Reference:

2008 SNA, Chapter 17, Cross-Cutting and Other Special Issues, Part 3, The treatment of loan guarantees in the SNA.

5.68 *Standardized guarantees are defined as those that are not provided by means of a financial derivative (such as credit default swaps), but for which the probability of default can be well established.* These guarantees cover similar types of credit risk for a large number of cases. Examples include guarantees issued by governments on export credit or student loans. Generally it is not possible to estimate precisely the risk of any one loan being in default, but it is possible to make a reliable estimate of how many out of a large number

of such loans will default. It is therefore possible for a guarantor to determine suitable fees to charge for a guarantee working on the same sort of principle as an insurance corporation for which the fees received in respect of many policies cover the losses by a few. Standardized guarantees can be contrasted with two other types of guarantees:

- (a) Guarantees that are financial derivatives (as defined in paragraph 5.80). Guarantees that meet the definition of financial derivatives protect, on a guarantee-by-guarantee basis, the lender against certain types of risk arising from a credit relationship by paying the guarantor a fee for a specified period. The guarantees covered are such that experience in the market allows the guarantor to apply standard master legal agreements or to make a reasonable estimate of the likelihood of the borrower defaulting and to calculate suitable terms for the financial derivative. Credit default swaps are included in financial derivatives as options.
- (b) One-off guarantees. *One-off guarantees occur in situations in which the conditions of the loan or of the security that is guaranteed are so particular that it is not possible for the degree of risk associated with it to be calculated with any degree of precision.* These guarantees are not recognized as economic assets until their activation, that is, when the event occurs that makes the guarantor responsible for the liability. These are contingent assets until activated (see paragraph 5.12). (See paragraphs 8.42–8.45 on flows associated with their activation.) However, one-off guarantees granted by governments to corporations in financial distress and that have a very high likelihood of being called are treated as if they were activated at inception (see paragraph 13.34).

f. Other accounts receivable/payable

5.69 *Other accounts receivable/payable consist of (a) trade credit and advances and (b) other.*

Trade credit and advances

5.70 *Trade credit and advances consist of (a) credit extended directly by the suppliers of goods and services to their customers⁷ and (b) advances for work that is in*

⁷Trade credit is sometimes described as supplier credit or supplier's credit.

progress (or is yet to be undertaken) and prepayment by customers for goods and services not yet provided.

5.71 Trade credit and advances arise when payment for goods or services (other than FISIM and prepayment of insurance services)⁸ is not made at the same time as the change in ownership of a good or provision of a service. If a payment is made before the change of ownership, there is an advance. For example, down payments or holding deposits (where ownership of the funds changes hands) are included in trade advances. Changes of ownership for high-value capital goods may give rise to trade credit and advances, only if there is a difference in timing between the change of ownership and progress payments (see paragraphs 3.44 and 10.28). If goods or services under barter arrangements do not change ownership at the same time as the corresponding goods or services, an entry is made for trade credit and advances.

5.72 Trade credit and advances do not include loans to finance trade made by an institutional unit other than the supplier of the good or service, as they are included under loans.⁹ Trade bills drawn on an importer and provided to an exporter, which are subsequently discounted by the exporter with a financial institution, might be regarded by the importer as the direct extension of credit by the exporter, but once they are discounted they become a claim by a third party on the importer. In cases in which an instrument is provided to the exporter with such characteristics that it is a negotiable instrument, it should be classified as a security. A supplier may also sell trade claims other than trade bills to a factoring company, in which the claim is reclassified from trade credit to accounts receivable/payable.

Other accounts receivable/payable—other

5.73 The other category of other accounts receivable/payable includes accounts receivable or payable other than those included in trade credit and advances or other instruments. It includes liabilities for taxes, purchase and sale of securities, securities lending fees, gold loan fees, wages and salaries, dividends, and social contributions that have accrued but not yet paid. It also

⁸FISIM accrued but not yet paid is included with the relevant debt instrument, like interest (see paragraph 7.41). Prepayment of insurance premiums is included in insurance technical reserves (see paragraph 5.64).

⁹Trade-related credit is identified as a concept in *External Debt Statistics: Guide for Compilers and Users*, Chapter 6, Further External Debt Accounting Principles. It consists of trade credit as well as trade bills and credit provided by third parties to finance trade. It should be compiled as a supplementary item, where significant.

includes prepayments of those items. Interest accrued should be recorded with the financial asset or liability on which it accrues, not as other accounts receivable/payable. However, for securities lending and gold loan fees, which are treated as interest by convention (see paragraphs 11.67–11.68), the corresponding entries are included under other accounts receivable/payable, rather than with the instrument to which they relate.

4. Other financial assets and liabilities

a. Monetary gold

5.74 *Monetary gold is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title and is held as reserve assets. Gold includes gold bullion and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. Gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts.*

5.75 All monetary gold is included in reserve assets or is held by international financial organizations. Monetary authorities and reserve assets are discussed further in Chapter 6, Functional Categories, Section F. Gold bullion included in monetary gold is a financial asset for which there is no corresponding liability. Gold bullion not held as reserve assets is not a financial asset and is included in nonmonetary gold, within the goods and services account, see paragraphs 10.50–10.54. In some cases, a central bank may own gold bullion that is not held as reserves (such as sometimes occurs when it acts as a monopoly reseller of mined gold).

Gold accounts

Allocated gold accounts

5.76 *Allocated gold accounts provide ownership of a specific piece of gold. The ownership of the gold remains with the entity placing it for safe custody. These accounts typically offer the purchasing, storing, and selling of investment-grade bars and coin to order. Accounts of this type constitute full outright ownership of the gold. When held as reserve assets, allocated gold accounts are classified as monetary gold. When not held as reserve assets, allocated gold accounts are treated as representing ownership of a good.*

Unallocated gold accounts

5.77 In contrast, *unallocated gold accounts represent a claim against the account operator to deliver*

gold. For these accounts, the account provider holds title to a reserve base of physical (allocated) gold and issues claims to account holders denominated in gold. When held as reserve assets, unallocated gold accounts are classified as monetary gold. Unallocated gold account assets not held as reserve assets, and all unallocated gold account liabilities, are classified as deposits. Gold accounts can be distinguished from accounts that are linked (indexed) to gold but do not give title to claims for the delivery of gold; such accounts are not part of monetary gold. They are classified according to their nature as a financial instrument, usually as deposits.

Relationship to nonmonetary gold

5.78 In contrast to monetary gold, which is a financial asset, nonmonetary physical gold is a good. (Paragraphs 10.50–10.54 deal with nonmonetary gold in the goods and services account.) Similarly, other precious metals are goods, not financial assets. Monetary gold is treated differently because of its role as a means of international payments and store of value for use in reserve assets. Changes in the classification between monetary and nonmonetary gold are shown in the other changes in assets and liabilities account, as discussed in paragraphs 9.18–9.20.

b. Financial derivatives and employee stock options

5.79 Financial derivatives and employee stock options are financial assets and liabilities that have similar features, such as a strike price and some of the same risk elements. However, although both transfer risk, employee stock options are also designed to be a form of remuneration.

Financial derivatives

5.80 *A financial derivative contract is a financial instrument that is linked to another specific financial instrument or indicator or commodity and through which specific financial risks (such as interest rate risk, foreign exchange risk, equity and commodity price risks, credit risk, and so on) can be traded in their own right in financial markets. Transactions and positions in financial derivatives are treated separately from the values of any underlying items to which they are linked.*

5.81 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.

5.82 In many cases, derivatives contracts are settled by payments of net amounts in cash, rather than by the delivery 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.

5.83 The following types of financial arrangements 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. For example, an option to purchase an aircraft from the manufacturer is not classified as a financial derivative; if the option to purchase is transferable, and is in fact transferred, the transaction is recorded under contracts, leases, and licenses, discussed in paragraphs 13.11–13.12.
- (b) Insurance and standardized guarantees are not financial derivatives. Insurance involves the collection of funds from policyholders to meet future claims arising from the occurrence of events specified in insurance policies. That is, insurance and standardized guarantees are used to manage event risk primarily by the pooling, not the trading, of risk. However, some guarantees other than standardized guarantees meet the definition of financial derivatives (as covered in paragraph 5.68).
- (c) Contingent assets and liabilities, such as one-off guarantees and letters of credit, are not financial assets (as discussed in paragraphs 5.10–5.13).

- (d) Instruments with embedded derivatives are not financial derivatives. *An embedded derivative arises when a derivative feature is inserted in a standard financial instrument and is inseparable from the instrument.* If a primary instrument, such as a security or loan, contains an embedded derivative, the instrument is valued and classified according to its primary characteristics—even though the value of that security or loan may well differ from the values of comparable securities and loans because of the embedded derivative.¹⁰ Examples are bonds that are convertible into shares, and securities with options for repayment of principal in currencies that differ from those in which the securities were issued. However, detachable warrants are treated as separate financial derivatives, because they can be detached and sold in financial markets.
- (e) Timing delays that arise in the normal course of business and may entail exposure to price movements do not give rise to financial derivatives. Timing delays include normal settlement periods for spot transactions in financial markets.

5.84 There are two broad types of financial derivatives—options and forward-type contracts.

Options

5.85 *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. In return, the buyer acquires the right but not the obligation to buy (call option) or sell (put option) a specified underlying item (real or financial) at an agreed-on contract price (the strike price) on or before a specified date. (On a derivatives exchange, the exchange itself may act as the counterparty to each contract.)

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

- (a) at inception, there is usually no up-front payment for a forward-type contract and the derivative contract begins with zero value, whereas there is

¹⁰If the owner of the primary instrument subsequently creates a new but reverse financial derivative contract to offset the risk of the embedded derivative, the creation of this new financial derivative contract is recorded as a separate transaction, and it does not affect the recording of transactions and positions in the primary instrument.

usually a premium paid for an option representing a nonzero value for the contract;

- (b) during the life of the contract, for a forward-type contract, either party can be creditor or debtor, and it may change, whereas for an option, the buyer is always the creditor and the writer is always the debtor; and
- (c) at maturity, redemption is unconditional for a forward-type contract, whereas for an option it is determined by the buyer of the option.

5.87 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 equities and 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.

Forward-type contracts

5.88 A forward-type contract (*forward*) is an unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed-on contract price (the *strike price*) on a specified date. Forward-type contracts include futures and swaps (other than as discussed in paragraph 5.91). Forward-type contract is used as a term because the term “forward” is often used more narrowly in financial markets (often excluding swaps).

5.89 Futures are forward-type contracts traded on organized exchanges. The exchange facilitates trading by determining the standardized terms and conditions of the contract, acting as the counterparty to all trades, and requiring margin to be deposited and paid to mitigate against risk. Forward rate agreements and forward foreign exchange contracts are common types of forward-type contracts.

5.90 At the inception of a forward-type contract, risk exposures of equal market value are exchanged, so a contract typically has zero value at that time. 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.

Other issues associated with financial derivatives

Swap contracts

5.91 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, and cross-currency interest rate 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. Other types of arrangements also called swaps but not meeting the definition above include gold swaps (see paragraphs 5.55 and 7.58 for a discussion of their treatment), central bank swap arrangements (see paragraphs 6.102–6.104), and credit default swaps (see paragraph 5.93).

5.92 For foreign currency financial derivative swap contracts, such as currency swaps, it is necessary to distinguish between a transaction in a financial derivative contract and transactions in the underlying currencies. At inception, the parties exchange the underlying financial instruments (usually classified under other investment). At the time of settlement, the difference in the values, as measured in the unit of account at the prevailing exchange rate, of the currencies swapped are allocated to a transaction in a financial derivative, with the values swapped recorded in the relevant other item (usually other investment).

Credit derivatives

5.93 Credit derivatives are financial derivatives whose primary purpose is to trade credit risk. They are designed for trading in loan and security default risk. In contrast, the financial derivatives described in the previous paragraphs are mainly related to market risk, which pertains to changes in the market prices of securities, commodities, interest, and exchange rates. Credit derivatives take the form of both forward-type (total return swaps) and option-type contracts (credit default swaps). Under a credit default swap, premiums are paid in return for a cash payment in the event of a default by the debtor of the underlying instrument. Like other financial derivatives, credit derivatives are frequently drawn up under standard master legal agree-

ments and involve collateral and margining procedures, which allow for a means to make a market valuation.

Margins

5.94 *Margins are payments of cash or deposits of collateral that cover actual or potential obligations incurred.* The required provision of margin reflects market concern over counterparty risk and is standard in financial derivative markets, especially futures and exchange-traded options. The classification of margins depends on whether they are repayable or nonrepayable:

- (a) 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. Repayable margin payments in cash are classified as deposits (if the debtor's liabilities are included in broad money) or in other accounts receivable/payable. When a repayable margin deposit is made in a noncash asset (such as securities), no transaction is recorded because no change in economic ownership has occurred.
- (b) Nonrepayable margin payments reduce the financial liability created through a derivative. In organized exchanges, nonrepayable margin (sometimes known as variation margin) is paid daily to meet liabilities recorded as a consequence of the daily marking of derivatives to market value. The entity that pays nonrepayable margin no longer retains ownership of the margin or has the right to the risks and rewards of ownership. Nonrepayable margin payments are classified as transactions in financial derivatives.

These principles for the classification of margins also apply more generally to margin calls relating to positions in other financial assets.

Supplementary detail

5.95 Possible additional supplementary breakdowns on financial derivatives are by type:

- (a) options; and
- (b) forward-type contracts.

These types of derivatives are defined in paragraphs 5.85 and 5.88, respectively. Additional supplementary breakdowns on financial derivatives also are by market risk categories:

- (a) foreign exchange;
- (b) single-currency interest rate;

- (c) equity;
- (d) commodity;
- (e) credit; and
- (f) other.

In practice, however, individual derivatives may straddle more than one risk category. In such cases, derivatives that are simple combinations of exposures should be reported separately in terms of their individual components. Derivatives that cannot be readily broken down into separable risk components should be reported in only one risk category. The allocation of such products with multiple exposures should be determined by the underlying risk component that is most significant. However, if there is doubt about the correct classification of multiexposure derivatives, the allocation by risk component should be made according to the order of precedence adopted by the BIS: commodities, equities, foreign exchange, and single-currency interest rate.

Employee stock options

5.96 *Employee stock options are options to buy the equity of a company, offered to employees of the company as a form of remuneration.* In a few cases, the company that issues the option is a resident of a different economy from the employee (e.g., where the employer is a branch or subsidiary of the company to which the option relates). Employee stock options have similar pricing behavior to financial derivatives, but they have a different nature—including arrangements for the granting and vesting dates—and purpose (i.e., to motivate employees to contribute to increasing the value of the company, rather than to trade risk). If a stock option granted to employees can be traded on financial markets without restriction, it is classified as a financial derivative.

5.97 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 employee stock options because their nature and motivation is similar. (Whereas the corresponding entry for stock options granted to employees is compensation of employees as discussed in paragraph 11.20, the corresponding entry for stock options granted to suppliers is the goods and services supplied.)

5.98 For transactions associated with the issue of employee stock options, see paragraph 8.41.

C. Arrears

5.99 An additional subclassification can be made for instruments in arrears. *Arrears are defined as amounts that are both unpaid and past the due date for payment.* Only the amounts past due are classified as arrears—for example, in the case of overdue installments, only the overdue part is in arrears.

5.100 Arrears related to exceptional financing are shown as memorandum items in all cases. (Exceptional financing is defined and discussed in Appendix 1.)

5.101 Arrears not related to exceptional financing may be recorded as a supplementary category in total and under the specific financial asset or liability class affected. Separate data on arrears may be of analytical interest when there is evidence of a high or rapidly rising value of arrears. Measures of other aspects of impairment of loans and other financial claims are discussed in paragraphs 7.45–7.54.

5.102 Arrears may be associated with either (a) reclassification of an existing instrument when a change in terms is triggered by the provisions of the original contract, or a change of the nature of the claim when the settlement of a financial derivative becomes overdue (see paragraph 5.82); or (b) the creation of a new instrument as a result of renegotiated terms (also discussed in paragraph 8.58). In either case, amounts not paid when due should be included in arrears. A liability ceases to be in arrears if all overdue payments are met. The accrual treatment of arrears is discussed in paragraphs 3.56–3.57.

D. Classification by Maturity

5.103 The maturity of a debt instrument is classified as either short-term or long-term:

- (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).*

This classification provides information on the liquidity dimensions of debt. Currency is included in short-term maturity. Because of the nature of the relationship between the parties, in the case in which the maturity is unknown, all intercompany lending (which is defined in

paragraph 6.26) may be classified as long-term maturity by convention. Insurance reserves, pension entitlements, and standardized guarantee provisions can potentially be classified by the maturity; however, if data are not available, a convention that they are all long-term can be adopted. When securities contain an embedded option with a date on which or after which the debt can be put (sold) back to the debtor by the creditor, the maturity is determined without reference to these embedded put options. If significant in presenting remaining maturity data (see paragraph 5.105), supplementary data could be provided on long-term securities whose maturity is within one year or less assuming early repayment at the option date. Financial derivatives could also potentially be classified according to maturity.

5.104 Maturity may relate to:

- (a) original maturity (i.e., the period from issue until the final contractually scheduled payment); or
- (b) remaining maturity (i.e., the period from the reference date until the final contractually scheduled payment). This is also called residual maturity.

In this *Manual*, original maturity is used in the standard components, while remaining maturity is used in Table A9-IV of Appendix 9 and is encouraged for some position data.

5.105 Data on both original and remaining maturity bases are accommodated by using the following split:

- (a) short-term on an original maturity basis;
- (b) long-term due for payment within one year or less; and
- (c) long-term due for payment in more than one year.

Item (b) can be combined with item (a) to derive liabilities due within a year, that is, short-term debt on a remaining maturity basis. Alternatively, item (b) can be combined with (c) to derive long-term debt on an original maturity basis. The remaining maturity breakdown is recommended in this *Manual* for outstanding debt liabilities to nonresidents by sector and instrument (see Table A9-IV of Appendix 9).

E. Classification by Currency

5.106 A financial asset or liability may be classified as domestic currency or foreign currency, according to its unit of account, denomination, or settlement. These terms are discussed in paragraphs 3.95–3.97.

5.107 Table A9-I of Appendix 9 provides a format for presenting the currency composition of outstanding debt claims and liabilities using the currency of denomination. This table includes a currency breakdown of reserve assets into currencies held that are in the SDR basket and those that are not. In recognition that for some sectors, such as nonfinancial corporations and households, there may be difficulties in obtaining comprehensive data from reporters, the table includes an “unallocated” row.

5.108 In Table A9-I of Appendix 9, by convention, SDR holdings, reserve position in the IMF, and monetary gold are to be classified as reserve assets in the SDR basket. It also includes financial derivatives with nonresidents to receive and to pay foreign currency. A financial derivatives contract to purchase foreign currency with domestic currency is classified as a financial derivative to receive foreign currency. If instead the contract is to purchase domestic currency with foreign currency at a future date, this is a financial derivative to pay foreign currency. Similarly, an option to buy foreign currency (sell domestic currency) is classified as a financial derivative to receive foreign currency, and vice versa.¹¹ The decisive factor in determining whether the financial derivative is to be classified as to receive or to pay foreign currency is the exposure to currency movements. Thus, if payment of a financial derivatives contract is linked to a foreign currency, even though payment is required in domestic currency, the financial derivative is to be classified as a contract to pay foreign currency, and vice versa. If a single financial derivatives contract both pays and receives foreign currency, the notional amount should be included under both categories (i.e., to pay and to receive foreign currency).¹²

F. Classification by Type of Interest Rate

5.109 *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, while fixed-rate securities are more subject to changes in prices. The split may be considered as possible supplementary information, as in *External Debt Statistics: Guide for Compilers and Users*.

¹¹There may be analytical interest in distinguishing the financial derivatives data in Table A9-I between positions in options and positions in forwards, as in Table A9-III in Appendix 9.

¹²Paragraph 5.95 provides further detail on the classification of financial derivatives contracts by risk categories when there is doubt about the correct classification of multiexposure derivatives.

5.110 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 normally 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 that is adjusted each one year or less is considered to be variable.

5.111 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, whereas 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 primarily market determined.

5.112 The classification of a financial asset or liability can change over time, for example, if it switches from fixed- to variable-rate interest. In the period when a fixed rate is applied, the financial asset or liability is to be classified as fixed-rate debt. After the rate switches to variable, it is classified as variable-rate debt.

5.113 Index-linked instruments are classified as being 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 index-linked instruments have variable aspects, an instrument is classified as variable-rate if the indexation applies to the principal or coupons, or both (notwithstanding the treatment of interest discussed in paragraphs 11.59–11.65). However, a foreign-currency-linked instrument (as discussed in paragraph 11.50(b)) is treated as being denominated in the foreign currency, rather than indexed to it.

5.114 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. But 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.