VI. MONEY, CREDIT, AND DEBT

INTRODUCTION

280. This chapter covers key issues that countries confront in constructing money, credit, and debt aggregates and sets the stage for Chapter 7, which presents the statistical framework for the compilation of monetary statistics in accordance with the methodology of this manual. The first major section of this chapter describes broad money, the monetary base, and liquidity aggregates. The second major section deals with credit and debt aggregates.

281. The three basic dimensions of monetary aggregates are (1) the financial assets that are components of monetary aggregates, (2) the sectors that are money holders, and (3) the sectors that are money issuers. Similarly, credit and debt aggregates have the following three basic dimensions (1) the financial assets that are components of credit aggregates, (2) the sectors that are credit holders, and (3) the sectors that are debtors.

282. This manual follows the concepts and principles of the *1993 SNA* with respect to sectorization and the classification of financial assets in describing the aggregates covered in this chapter. The *1993 SNA* provides no specific concept or measure of broad money.

283. This manual does not contain prescriptions for national definitions of money, credit, and debt, which are left to the discretion of the national authorities. However, regardless of the national definition of broad money that is chosen, that definition is fundamental to the application of the methodology of this manual, because it, in effect, determines which units in the financial corporations sector are classified as depository corporations.

284. Depository corporations are the only money issuers in some countries; in other countries, the monetary aggregates may include liabilities issued by institutional units outside the financial corporations sector—in particular, by the central government or public nonfinancial corporations. When national monetary aggregates include liabilities issued by other sectors, these liabilities are combined with those included in the *DCS* which, as described in Chapter 7, covers the broad-money liabilities issued by financial corporations.

BROAD MONEY

INTRODUCTION

285. The sectorization principles in the *1993 SNA* are the basis for the sectoral classifications of broad-money holders and broad-money issuers, and the financial asset classification in the *1993 SNA* is the basis for all components of monetary aggregates. Despite differences in national definitions across countries, it is possible to construct broad-money aggregates for a given country from a uniform set of "building blocks." Each component of a broad-money aggregate, regardless of the national context, has the following three basic dimensions (1) the type of financial asset, (2) the type of money holder, and (3) the type of money issuer. Each of these dimensions is summarized in Box 6.1 and described below.

TYPES OF FINANCIAL ASSETS

286. Money has four basic functions, serving as a

- *medium of exchange*—the means for acquiring goods, services, and financial and nonfinancial assets without resorting to barter;

Box 6.1. Broad Money and Its Holders and Issuers: Representative Sectors and Liabilities1/

Broad-money holders

- Central government (inclusion usually pertains only to national currency holdings)
- Other financial corporations
- State and local government
- Public nonfinancial corporations
- Other nonfinancial corporations
- Other resident sectors
- Nonresidents (inclusion usually pertains only to national currency holdings)

Broad-money liabilities

- **Issued by depository corporations**
  - National currency
  - Transferable deposits 2/
    - Demand deposits (transferable by check, giro order, or similar means)
    - Bank checks (if used as a medium of exchange)
    - Traveler's checks (if used for transactions with residents)
    - Deposits otherwise commonly used to make payments 3/
  - Other deposits 4/
    - Nontransferable savings deposits
    - Term deposits (i.e., time, or fixed, deposits)
    - Other 5/
  - Securities other than shares
    - Certificates of deposit
    - Commercial paper
    - Other
  - Other 6/
- **Issued by other sectors**
  - National currency issued by central government
  - Foreign currency (applies to countries in which foreign currency circulates as a medium of exchange)
  - Transferable deposits
    - Transferable deposits accepted by central government or the postal system
    - Traveler's checks issued by units other than depository corporations
    - Other 7/
  - Other deposits accepted by central government or the postal system
  - Other

1/ National currency, transferable deposits, and other deposits shown under "issued by depository corporations" are included in broad money in most countries. Securities other than shares and "other" liabilities issued by depository corporations (or specific subcategories therein) are included in broad money in a smaller group of countries. The currency, deposit, and "other" categories shown under "issued by other sectors" are applicable to the broad-money definitions in an even smaller group of countries.
2/ May include deposits denominated in foreign currency.
3/ May include some or all transferable deposits denominated in foreign currency.
4/ Includes shares or similar evidence of transferable deposit issued by savings and loan associations, building societies, credit unions, etc.; savings accounts that provide automatic transfer service (ATS) through which savings account balances are transferred to transferable deposit accounts that would otherwise be overdrawn; electronic money issued by card or otherwise transferable; and other types not classified elsewhere.
5/ Includes shares or similar evidence of nontransferable deposit issued by savings and loan associations, building societies, credit unions, etc.; repurchase agreements included in broad money; sight deposits that are immediately redeemable, but not transferable; and other types.
6/ Includes any loans, financial derivatives, and shares or other equities included in broad money.
7/ Includes electronic money issued by units other than depository corporations.

- *store of value*—a means of holding wealth;

- *unit of account*—a standard for denominating the prices of goods and services and the values of financial and nonfinancial assets, thereby providing a means for comparisons of values and for preparation of financial accounts; and

- *standard of deferred payment*—a means of relating current and future values in financial contracts.

287. Money, which takes the form of various types of financial assets, is held for its usability as a medium of exchange, store of value, or both. In constructing broad-money aggregates, it is necessary to evaluate the degree of *moneyness* of a wide array of financial assets, focusing on the extent to which each type of financial asset provides *liquidity* and a store of value. Liquidity refers to the extent to which financial assets can be sold at, or close to, full market value on short notice. The most liquid financial assets are currency and transferable deposits, since they can be used as media of exchange—that is, they are immediately exchangeable at full nominal value to acquire goods, services, and financial or nonfinancial assets. Financial assets other than currency and transferable deposits must possess at least some liquidity if they are to be included in broad-money aggregates.

288. The selection of financial assets to be included in broad-money aggregates reflects trade-offs between their liquidity and their usefulness as stores of value in real terms. By definition, all financial assets have value and, therefore, to varying degrees, are stores of value. However, financial assets differ widely in the extent to which their *real* values are maintained or fluctuate in response to changes in prices and interest rates in the economy. The extent to which a financial asset serves as a store of value depends on more than simply preservation of *nominal* value. Financial assets that grow in nominal value and/or earn interest, dividends, or other yields are held because of the capacity for such assets to provide stores of real value.

289. Currency and transferable deposits comprise the most liquid financial assets, and all countries include them in their broad-money aggregates.[38] The liquidity of currency and transferable deposits and, therefore, their usefulness as media of exchange arises from the following underlying characteristics:

- *Legal tender or general acceptability.* Currency must be accepted for domestic transactions because of its status as legal tender, whereas transferable deposits are generally accepted for transactions because of the recipients' confidence in their acceptability as a medium of exchange.

- *Fixed nominal (face) value.* The nominal values of currency and non-interest-bearing transferable deposits are fixed, even though their real values change with movements in the price level.

- *Transferability.* Currency and transferable deposits can be used to make direct third-party payments.

- *Transaction costs.* Payment by currency has no fees or other transaction costs, and the use of transferable deposits usually has no fees or relatively small fees attached.

- *Divisibility.* Currency and transferable deposits are the most divisible financial assets, available in denominations for making extremely small transactions.

- *Maturity.* The zero maturity of currency and transferable deposits follows from their availability for direct third-party transactions.

- *Yield*. Currency and transferable deposits earn no or low interest because their usefulness as direct media of exchange compensates the holder for the loss of interest that could have been received by holding other types of financial assets.

290. Currency is the most liquid financial asset and consists of those notes and coins that

[38] In many countries, currency and transferable deposits comprise what is often termed *narrow money.*

are used as a direct medium of exchange.

291. When foreign currency is widely accepted as a medium of exchange within a country, holdings of resident units other than depository corporations should, in principle, be included in the currency component of broad money. Estimation of the amount of foreign currency in circulation, for possible inclusion in broad money, is particularly important for countries in which a foreign currency is the main (or only) type of currency in use.

292. Difficulties arise in estimating the currency in circulation in the individual member countries of a currency union. Currency issued by the regional central bank headquarters and/or the national central banks within a currency union circulates as legal tender throughout the union, making it difficult to estimate the amount of the currency that is in use in each member country.

293. *Transferable deposits* comprise all deposits that are (1) exchangeable, without penalty or restriction, on demand at face value, and (2) directly usable for making third-party payments by check, draft, giro order, or other direct payment facility. Transferable deposits of these types, if held by sectors that are designated as money holders, are included in broad money.

294. Savings deposits sometimes have automatic transfer service (ATS) features through which deposit balances are automatically transferred to a holder's transferable deposit account to cover overdrafts—that is, in the event that the transferable deposit account is overdrawn. Savings account balances become transferable, albeit indirectly, as a result of the automatic transfer feature. ATS accounts are normally included in transferable deposits.

295. Foreign-currency-denominated deposits that can be directly used as a medium of exchange fall under the category of transferable deposits.

296. Traveler's checks issued by financial or nonfinancial corporations have medium-of-exchange properties that are similar to currency. If traveler's checks are expected to be used primarily for domestic transactions and are issued by financial corporations, they are generally included in broad money. Traveler's checks issued by nonfinancial corporations also may be included in broad money as nationally defined. Traveler's checks that are expected to be used abroad would, in principle, be excluded from broad money.

297. Cashier's checks and similar liabilities issued by depository corporations are usually classified as transferable deposits but may be classified as currency if they circulate as a widely accepted medium of exchange. In any event, they would normally be included in broad money.

298. In some countries, shares in money-market funds can be transferred by check or other means of direct third-party payment, while in others there may be restrictions on the transferability features—for example, on the maximum number of checks written per period or on the minimum amount per check. Whatever their features, money market fund shares are usually included in broad money.

299. When one moves from currency and transferable deposits to an examination of other components of broad money, liquidity becomes a relative concept, and store of value becomes a more prominent property. Some broad-money components are relatively liquid, being convertible into currency or transferable deposits without incurring significant costs or delay, while others are less liquid but generate substantial returns in the form of interest or noninterest returns.

300. Transactions costs, divisibility, maturity, and yield are basic characteristics that are fundamental in deciding if a particular type of financial asset should be included in broad money and, if so, where it fits within the money hierarchy when there are several monetary aggregates.

- *Transactions costs.* Many categories of deposits and some types of securities can be converted into currency or transferable deposits without incurring explicit costs in the form of fees or other charges or the implicit costs arising from delays in the conversion process. In contrast, conversion of some types of financial assets involves substantial transaction costs or time delays.

- *Divisibility*. In some cases, broad-money definitions contain only small-denomination financial assets of a particular type. Differentiation by large and small denomination occurs most frequently in countries that compile several monetary aggregates.

- *Maturity*. Maturity is a major determinant of the components of broad money. In some cases, the hierarchy of a set of broad-money aggregates proceeds from only short-term components to the inclusion of somewhat longer-term deposits or securities in higher-ordered aggregates.

- *Yield*. In general, the components added to form the progressively higher-ordered aggregates have higher yields than the interest-earning components of the lower-ordered aggregates.

301. Other *deposits* and *securities other than shares* account for the predominant portion of broad-money components other than currency and transferable deposits. Other deposits cover all types of nontransferable deposits: term deposits; savings deposits; foreign-currency-denominated deposits; sight deposits that cannot be directly used for third-party payments; shares or other evidence of deposit issued by savings and loan associations, building societies, credit unions, etc.; and other types of deposits.

302. Savings deposits and term deposits of very short maturity can be redeemed (converted into cash or transferable deposits) with little or no delay or withdrawal penalty, thus imparting a relatively high degree of moneyness. Foreign-currency-denominated deposits are viewed as somewhat less liquid, since their domestic currency values are subject to change in response to exchange rate movements. However, deposits denominated in foreign currency are usually included in broad-money aggregates. Redemption of long-term deposits usually involves delays and/or substantial penalties for early withdrawal, resulting in such deposits being less liquid and possibly being excluded from one or more broad-money aggregates.

303. Repurchase agreements are classified under other deposits if they are considered part of nationally defined broad money. Other repurchase agreements should be classified under loans.

304. Explicit deposit restrictions are sometimes imposed, either as commercial practice or as an element of national economic policy. Withdrawals from some restricted deposit accounts may be restricted only for short periods, and such deposits may still possess sufficient moneyness to be included in the national definition of broad money. However, restricted deposits for which withdrawals are restricted for protracted periods are usually excluded from broad money.

305. Import deposits are deposits that importers are required to place in special accounts as a prerequisite to opening import letters of credit. Import deposits and similar types of deposits related to international trade are usually included in national definitions of broad money if the restrictions on the use of the deposits are viewed as short term.

306. Checks or other types of transferable items are posted directly to depositors' accounts, but these are unavailable for use until after the transferable items have been cleared through the central bank or other type of clearing organization. Such unavailable deposits should be recorded under *items in the process of collection* within deposits excluded from broad money. Exclusion of such deposits from transferable deposits avoids their being double counted in the monetary aggregates, given that these deposits continue to be included in the transferable deposits of the depository corporations on which the items were drawn until the items are collected from these depository corporations.

307. Restricted deposits in the form of compulsory savings deposits are often excluded from the monetary aggregates. However, inclusion may be considered if relatively liberal withdrawal privileges for such deposits are provided in the national context. Foreign exchange deposits for which withdrawals are not allowed for protracted periods are usually excluded from the monetary aggregates.

308. A special form of deposit restriction arises when a depository corporation is unable to meet depositors' withdrawal demands for substantial periods, because the depository corporation has insufficient funds or because its operations have been suspended. In such cases, it is often unclear how long depositors will need to wait to access their deposits, or even whether they will eventually be able to redeem all or part of their deposit balances. In the meantime, the deposits are totally illiquid. Nevertheless, as long as the depository corporation continues to exist, its liabilities to all depositors and other creditors also exist. This manual recommends exclusion of all deposit liabilities of nonoperating depository corporations from the monetary aggregates. These deposits should continue to be classified as restricted deposits as long as the nonoperating units continue to exist as legal entities. Reorganization, sale, or merger of the affected depository corporations may result in all or part of the deposits eventually becoming available to depositors.

309. Some types of short-term *securities other than shares* issued by depository corporations are convertible into cash or transferable deposits with reasonably short delays and at close to full value if traded before maturity, and therefore are often included in broad-money aggregates.

310. Negotiable certificates of deposit and commercial paper issued by depository corporations often trade in efficient secondary markets, making them strong candidates for inclusion in monetary aggregates. Bankers' acceptances issued by depository corporations may also be traded in efficient secondary markets and therefore may be included in broad measures of money. However, it is more common for bankers' acceptances to be transacted in specialized markets or have other limitations imposed on their liquidity, a situation that would warrant their exclusion from broad money.

311. Some medium-term securities (e.g., those with maturities of two years or less) may be included in broad money. Long-term securities are much less liquid, even if traded in secondary markets, because of their fluctuations in value when interest rates change. Therefore, long-term securities are usually excluded from broad-money aggregates.

312. The other categories of financial assets—*loans, shares and other equity, financial derivatives*, *insurance technical reserves*, and *other accounts payable/receivable*—are usually excluded from broad money. The direct and specific nature of the financial contract between lenders and borrowers makes many types of *loans* quite illiquid. Securities repurchase agreements that do not involve an effective change in ownership are classified as collateralized loans, unless they are repurchase agreements that are included in the national broad-money definition, in which case they are classified as deposits.

313. *Shares and other equity* serve as a store of value and may be converted to cash or transferable deposits through their sale in organized securities exchanges or over-the-counter markets. However, they have limited liquidity because of time delays and transaction costs associated with their conversion and the potential variability of their market prices, leading to exclusion from the monetary aggregates. Shares in equity mutual funds and bond mutual funds may experience substantial price variability, and the sale of such shares may involve significant transaction costs and time delays, resulting in their exclusion from the monetary aggregates.

314. Shares in money market funds are an exception. Such funds invest only or primarily in short-term money market securities such as treasury bills, certificates of deposit, and commercial paper. Shares in some money market funds are transferable and, in such cases, would qualify for inclusion in broad money. Nontransferable shares in money market funds may also be included in broad-money aggregates, since they have significantly more liquidity (i.e., less price variability and lower transaction costs) than ordinary corporate shares or shares in other types of mutual funds.

315. *Insurance technical reserves* related to life or nonlife insurance and pension funds are highly illiquid and are excluded from monetary aggregates. *Financial derivatives* may be tradable, but their high degree of price variability precludes the inclusion of most types of financial derivatives in broad money. *Other accounts receivable/payable* lack sufficient liquidity to be included in broad money.

MONEY HOLDERS

316. Broad-money aggregates usually include the designated financial assets of only a specified subset of the sectors in an economy. Although some differences in holding sectors are observed, the principal money holding sectors are the same in almost all countries. Money holders are usually defined to include all resident sectors except depository corporations and the central government. That is, the money holders usually comprise (1) public and other nonfinancial corporations, (2) units of government other than the central government, (3) households and nonprofit institutions serving households, and (4) all institutional units in the financial corporations sector other than the depository corporations subsector—i.e., other than the central bank and other depository corporations.

317. Even though domestic currency holdings of the central government and nonresidents could, in principle, be excluded from broad money, efforts to estimate such holdings may not be justified if the amounts are relatively small. However, estimation of nonresident holdings of the national currency, and adjustment of the broad-money aggregates to exclude such holdings, may be warranted if a substantial amount of national currency circulates outside the domestic economy and is used as legal tender in one or more other countries.[39]

318. In principle, nonresidents' deposit holdings are excluded from broad-money aggregates because their deposits are used primarily for international, rather than domestic, transactions. However, the deposits that emigrant workers hold in depository corporations in their home countries might be freely usable by authorized family members or other designated parties in settling transactions in the home country. In such situations, it would be appropriate to include such deposits in broad money rather than to classify them as liabilities to nonresidents. Similarly, cross-border workers—residents of bordering countries who work in the domestic economy—may hold deposits in the countries in which they work. If such deposits are used in the country where they work, rather than in the country where they reside, it would be appropriate to include them in the monetary aggregates of the country where they work rather than in liabilities to nonresidents.

319. Deposit holdings of central government are usually excluded from the monetary aggregates. The justification for such exclusion is often empirically based. It is argued, at least for some countries, that central government deposit holdings do not respond to macroeconomic influences (i.e., changes in economic activity, interest rates, exchange rates, etc.) in the same way, or to the same degree, as deposits of the money holding sectors because of the unique nature of the central government's financing constraints, spending decisions, and cash management techniques.

320. Exclusion of central government deposits from the monetary aggregates may also be

[39] For most countries, the major cross-border currency flows arise from the currency transport of tourists, business travelers, cross-border workers, emigrant workers returning to their home countries, and those engaged in smuggling or other illegal activities. For those countries that use foreign currency as a major form of legal tender, official shipments of foreign currency may be used to augment the currency stock. The records for such shipments can be used in estimating the currency stocks in both countries—i.e., the "importing" and "exporting" countries.

justified on the basis of the analytical approach to monetary and fiscal policy formulation. A major element of such formulations focuses on the amount of central government financing that depository corporations provide, represented by their net claims on the central government—that is, total claims on the central government *less* the central government's deposits. The *DCS*, described in Chapter 7, shows net claims on the central government on the asset side, in lieu of including central government deposits as a component of broad money or as a separate liability category. (The link between broad money and the other accounts of the depository corporations, including net claims on central government, is described in "Overview of the Framework" in Chapter 7.)

MONEY ISSUERS

321. The framework for monetary statistics set forth in this manual focuses on a measure of broad money that comprises those liabilities of financial corporations included in the national definition of broad money. The framework classifies all financial corporations that issue such liabilities as depository corporations and recommends the compilation of a *DCS* showing, in a balance sheet format, broad-money liabilities of the depository corporations and the asset counterparts to those liabilities.

322. Depository corporations may be the only money issuers in some countries. The broad-money aggregates in other countries may include liabilities issued by institutional units outside the financial corporations sector, in particular, by the central government or public nonfinancial corporations. For example, in many countries, the central bank is the sole issuer of currency. In some countries, however, the national treasury issues coins and/or paper currency. In such cases, this government currency issue would not be included in the depository corporations survey described in Chapter 7, but would normally be included in broad money as nationally defined. Similarly, transferable deposits, and perhaps other types of liabilities, accepted by the central government or public nonfinancial corporations, such as post office checking and savings units,[40] are usually included in national broad-money aggregates but would fall outside the scope of the *DCS*. Also, in situations where a foreign currency co-circulates with the national currency, the country issuing the foreign currency should, in principle, be considered a nonresident money issuer in the domestic economy.

323. When national broad-money aggregates include liabilities issued by institutional units other than depository corporations, it is necessary to combine these liabilities with those included in the *DCS*. Box 6.1 provides a framework for such a presentation.

324. Many countries compile data for two or more monetary aggregates that are progressively higher ordered. In such cases, the money-issuing sectors may differ across these money aggregates, but a single broad-money aggregate must be specified in constructing the *DCS* described in Chapter 7. In general, it is expected that this aggregate will be the highest-ordered, or broadest, measure of the broad-money liabilities of depository corporations.

THE MONETARY BASE

325. The monetary base comprises central bank liabilities that support the expansion of broad money and credit. The monetary base is sometimes called *high-powered money*, because changes in the monetary base usually lead to increases in money and credit that are larger than the changes in the monetary base.

326. The monetary base is not a monetary aggregate, because it is a measure of the

[40]If the post office constitutes a separate institutional unit with a predominantly financial character, it should be classified as an other depository corporation and thus be included in the *ODCS* described in Chapter 7.

funding base that underlies the monetary aggregates, rather than a monetary aggregate itself. The monetary base includes central-bank-issued currency that is included in the monetary aggregates, but it also includes at least two components that are excluded from the monetary aggregates—namely, other depository corporations' deposit holdings at the central bank and their holdings of national currency. The monetary base sometimes contains additional components, depending on the types of liabilities issued by the central bank and the analytical use for which the monetary base is formulated.

327. Countries have different definitions of the monetary base, and, even within a country, more than one definition may be employed depending on the analytical use. A broad definition of the monetary base would include all central bank liabilities to the financial corporations and other sectors (excluding central government holdings of central bank liabilities other than currency). Narrower definitions of the monetary base would exclude some categories of central bank liabilities to other depository corporations, other financial corporations, and/or other sectors. Deposits that are restricted for significant periods of time are typically excluded from the monetary base.

328. Central bank deposits that other depository corporations use to satisfy reserve requirements and for clearing purposes are always included in the monetary base. However, other depository corporations' holdings of central bank liabilities that (1) do not qualify for satisfying reserve requirements and (2) are restricted from use for other purposes are often excluded from the monetary base.

329. Central bank liabilities to other financial corporations, nonfinancial corporations, and other resident sectors (i.e., households and nonprofit institutions serving households) are usually included in the monetary base, particularly if these liabilities are included in the national definition of broad money.

330. Box 6.2 shows major types of central bank liabilities that are representative of those included in the monetary base in many countries. Components of the monetary base appear in a somewhat different format in the *CBS* described in Chapter 7. Some of the liability categories shown in Box 6.2 are not applicable for all countries. Many central banks do not issue securities. In many countries, the central bank does not accept deposits from nonfinancial corporations and other resident sectors. In some countries, other depository corporations are the only financial corporations subsector from which the central bank accepts deposits.

Box 6.2. The Monetary Base: Representative Components 1/

Currency in circulation 2/
Central bank liabilities to other depository corporations
- Transferable deposits (required reserves and clearing balances)
- Other deposits
- Securities issued by the central bank 3/

Central bank liabilities included in broad money
- Transferable deposits
- Other deposits

Central bank securities included in broad money

1/ Broader or narrower definitions of the monetary base may be used in the national context.
2/ Normally comprises currency holdings of all subsectors other than the central bank. In particular, the holdings of the central government, all financial corporations other than the central bank, and nonresidents are usually included along with the holdings of the other sectors. The currency component of the monetary base in the *CBS*, described in Chapter 7, includes only the national currency issued by the central bank. The currency component of the monetary base in a monetary authorities account, described in Chapter 7, would also include any currency issued by the central government.
3/ If holdings of these securities can be used in satisfying reserve requirements, they are included in the monetary base. Otherwise, such holdings are included or excluded, depending on the specific formulation and analytical use of the monetary base.

LIQUIDITY AGGREGATES

331. Liquidity aggregates are broader than broad money with respect to both the types of liabilities included and the issuing sectors covered. Liquidity aggregates include, in addition to broad-money liabilities, other liabilities that are viewed as somewhat liquid, but not sufficiently liquid to be included in broad money as nationally defined. Box 6.3 illustrates the types of liabilities and holding and issuing sectors that would be considered in constructing a liquidity aggregate.

Box 6.3. Liquidity Aggregates: Representative Sectors and Liabilities

Liquidity holders
- Central government (inclusion possibly pertains only to national currency holdings)
- Other financial corporations
- State and local government
- Public nonfinancial corporations
- Other nonfinancial corporations
- Other resident sectors
- Nonresidents (inclusion possibly pertains only to national currency holdings)

Broad-money liabilities ¾ see Box 6.1

Plus

Liabilities issued by the following: 1/

Depository corporations
- Long-term deposits
- Securities other than shares
- Commercial paper
- Bankers acceptances
- Long-term securities

Other financial corporations
- Commercial paper
- Other securities
- Shares and other equity (in particular, mutual fund shares)

Central government
- Long-term deposits accepted by the national Treasury, etc. 2/
- Short-term securities (for example, treasury bills)
- Savings bonds
- Other securities

State and local government
- Municipal securities
- Other securities

Public nonfinancial corporations
- Long-term deposits accepted by the postal system 2/
- Commercial paper
- Other securities

Other nonfinancial corporations
- Commercial paper
- Other securities

Other 3/

1/ National definitions of liquidity aggregates may differ considerably across countries.
2/ Short-term deposits accepted by these units typically are included in the broad-money component of the liquidity aggregate.
3/ Liabilities not classified elsewhere.

CREDIT AND DEBT

INTRODUCTION

332. Credit creation involves the provision of resources by one institutional unit (the creditor or lender) to another unit (the debtor or borrower). The creditor unit acquires a financial claim, and the debtor incurs a liability to repay. Credit is viewed from the asset side, and debt from the liability side. Nevertheless, data on debt, particularly that incurred by the household sector, may need to be collected from creditor sources on the asset side.

333. As is the case with monetary aggregates, there are no unique definitions of credit and debt, and the *1993 SNA* does not define such measures. A credit measure may cover only a subset of all types of credit that creditor units provide to debtor units. This manual uses the term *claims on* to refer to the financial assets held by one unit that are liabilities of another unit, and recommends the measurement of such claims within the framework of the surveys, as presented in Chapter 7, and the stock and flow data for the entire economy, as presented in Chapter 8. This manual does not recommend specific measures of credit or debt, and compilers are encouraged to develop measures that are analytically useful in their specific institutional settings. The following sections describe the considerations that should be taken into account in developing credit and debt measures and provides examples of credit and debt measures that are commonly compiled.

CREDIT

Introduction

334. Measures of credit have the same three dimensions as monetary aggregates. Defining credit measures involves specifying (1) the financial assets included, (2) the issuing sectors (lenders), and (3) the holding sectors (borrowers). Measures of credit may encompass the total economy or may be limited to specific issuing sectors (e.g., credit issued by depository corporations). Credit measures may also focus on specific lender/borrower relationships (e.g., central bank credit to central government). The composition and coverage of credit measures should be reviewed periodically to ensure that they reflect the changing use of credit instruments and new credit channels, such as greater reliance on securities markets at the expense of financial intermediation, and changes in the types of financial assets used in the provision of credit.

335. Credit is a major link in the money transmission process. Credit to nonfinancial sectors finances production, consumption, and capital formation. A credit multiplier exists in the same sense as a money multiplier and, except in cases where money expansion arises from external factors, credit expansion is usually accompanied by an expansion of the money stock. Broad credit aggregates may be related to overall economic activity, whereas data on specific types of credit (e.g., mortgage lending, consumer credit, or construction lending) may be related to the economic activity of specific sectors or industries.

336. Credit measures cover financial assets only and therefore exclude contingent positions such as lines of credit, loan commitments, and guarantees, but the compilation of supplementary information on such contingent positions may be of value in projecting credit expansion and assessing credit policy. There are several circumstances in which it may be difficult to establish whether a contingent or an actual position exists. For example, government units (and central banks) may obtain financing from abroad for specific domestic uses. The government may incur a direct liability to the nonresident source of funds or may act as an agent or guarantor between the nonresident and the final recipient of the credit. When the government incurs a direct liability and on-lends the funds, these transactions should be recorded as foreign liabilities of the government and as credit provided by the government to the final recipient. When the government acts only as an agent or guarantor between the nonresident and the final recipient, the nonresident should be shown as providing the credit directly to the final recipient. A similar situation may arise when government units (or central banks) provide funds to financial corporations to finance specific types of credit (e.g., credit to agriculture or to other specific industries). If the financial corporation incurs a direct liability to the government and acquires a claim on the final recipient, the credit should be recorded as credit provided by the government to the financial corporation and as credit extended by the financial corporation to the final recipient. When the financial corporation acts only as an agent for the government, credit should be shown as being provided by the government directly to the final recipient.

Assets

337. Credit measures may cover all or only a subset of financial assets that constitute forms of credit. Narrow credit measures cover claims in the form of loans, securities other than shares, and trade credit and advances. Such measures exclude deposits, shares and other equity, financial derivatives, claims on life insurance corporations and pension funds in the form of insurance technical reserves, and other accounts receivable that are not part of trade credit. Even though the placing of deposits is not considered a typical method of providing credit, there are circumstances in which such deposits are viewed as credit extensions—for example, when governmental units maintain deposits in financial corporations for the express purpose of funding specific activities of these corporations. In such cases, the financial assets have the legal form of a deposit but have the economic nature of a loan.

338. Broad credit aggregates encompass most or all types of financial claims of one unit on another and thus include holdings of shares and other equity. Acquisition of shares and other equity provides financial resources in a manner similar to other credit extensions, but it differs substantially from other credit flows because of the residual nature of liabilities in the form of shares and other equity. Institutional patterns in various countries may affect preferences to use either debt or equity instruments as primary means of investing in corporations, and these patterns should be reflected in the choice of financial assets to be included in credit measures.

339. Credit aggregates often separately identify credits denominated in foreign currencies. Breakdowns by maturity are also common. They may also be disaggregated by type of credit instrument and by sector of the lender and borrower.

Lenders

340. The lending sectors may be defined narrowly or broadly. Narrow credit aggregates may be defined to include only depository corporations' claims on other sectors. The *DCS* presented in Chapter 7 provides the statistical framework for developing credit measures for depository corporations' claims. Broader measures may cover all financial corporations' claims, as included in the *FCS* described in Chapter 7. Comprehensive measures of credit may include credit extended by all domestic sectors and nonresidents.

341. Suppliers of credit within the financial corporations sector may be a broader group than the issuers of broad-money liabilities. Other financial corporations may provide credit using the same or similar credit instruments as depository corporations, thereby differing from these corporations only with respect to the manner in which their funding is acquired and the types of noncredit services provided. These other credit suppliers obtain funds by incurring liabilities that are not included in broad money, such as through the issuance of securities other than shares, borrowing from depository corporations, or issuance of shares and other equity.

342. Some important types of credit are provided primarily by nonfinancial sectors. Trade credit supplied by nonfinancial corporations is an example. Nonfinancial units often acquire financial assets for liquidity purposes and, as a result, are significant suppliers of credit to other units. Many nonfinancial corporations provide credit to affiliated companies, and governments may be major suppliers of credit.

Borrowers

343. Under broad definitions of credit, the borrowing sectors are usually defined to include all nonfinancial sectors. Specific credit measures may focus on credit provided to individual sectors or subsectors or groupings of sectors. Common examples include credit to central government, credit to the total or nonfinancial public sector, credit to business, and credit to the private sector. Data on credit to nonresidents are needed to account for total credit provided, but analysis often focuses on claims on (i.e., credit to) residents, because of the direct impact of residents' borrowing on domestic economic activity. Credit flows between financial corporations are often excluded from broad credit measures.

Specific Credit Measures

344. The surveys of the financial corporations sector that are presented in Chapter 7 provide data on credit extended by financial corporations to other domestic sectors. The surveys provide aggregate measures of credit, covering claims on the central government, state and local government, public nonfinancial corporations, other nonfinancial corporations, and other resident sectors. The sectoral balance sheets used to compile these surveys contain data that can be used to compile credit measures broken down by both sector and type of financial asset (i.e., credit instrument).

345. Credit measures that are important for the formulation and implementation of monetary and other macroeconomic policy include the following:

- *Central bank credit.* Extension of credit by the central bank to other depository corporations (and sometimes to other financial corporations) is important for implementing monetary policy. Such credit may be extended to (1) provide liquidity to fund ongoing operations of other depository corporations, (2) enable other depository corporations to respond to seasonal credit demand, (3) influence national financial conditions and the amount of broad money, or (4) provide emergency assistance. The central bank can either place deposits in, or grant loans to, financial corporations. Either method provides other depository corporations with funds to support expansion of credit, leading to growth of broad money. Central banks regulate the cost at which financial corporations acquire such funds and attach other terms and conditions to the access to such credit, thereby influencing credit and monetary conditions in the economy.

- *Central government credit.* Central governments supply credit to financial corporations by extending loans or by providing deposits that are intended to be used for credit expansion by the financial corporations. Governments also often provide credit to nonfinancial sectors to foster public policy goals such as development of specific industries or regions or to provide emergency aid. Credit from governmental units is often granted at subsidized (i.e., below-market) interest rates. Comprehensive measures of government credit include lending by the central government and other levels of government.

346. Among the most frequently monitored measures of credit are those pertaining to the provision of credit to central government and other units of the public sector, particularly credit provided by depository corporations. Standard measures of credit provided by depository corporations include credit to the central government, state and local government, and public nonfinancial corporations, respectively. Separate data are compiled for the credit extended by the central bank and other depository corporations to each of the subsectors within the public sector. The *CBS* and *ODCS*, presented in Chapter 7, provide a comprehensive framework for developing these credit measures. The *FCS*, also presented in Chapter 7, provides the appropriate framework for expanding the coverage of measures of credit to the public sector to encompass the credit provided by other financial corporations, as well as by depository corporations.

347. The flow of funds and the corresponding formulation for stock data, as described in Chapter 8, provide the appropriate framework for compiling measures of intersectoral credit, identifying both the lending and borrowing sectors.

DEBT

Introduction

348. Debt gives rise to future payment obligations. As a consequence, debt liabilities have the potential to create circumstances that render an institutional unit, a sector, and even the whole economy vulnerable to liquidity and sustainability problems. For these reasons, there is analytical interest in debt measures.

349. Among financial instruments, deposits, loans, securities other than shares, and other accounts payable are all debt instruments, because they require future payments of principal and/or interest. For the remaining financial instruments, there are differing views as to what is and what is not debt. The surveys presented in Chapter 7 provide a comprehensive framework for compiling measures of debt owed to the financial corporations sector. Debt of the total economy may be presented as an aggregation of the debt of all domestic units, or on a consolidated basis that eliminates all debts that are assets of residents, thereby leaving only liabilities to nonresidents. The latter is referred to as external debt.

350. A key element in debt analysis is maturity structure, although features such as callability reduce, to some extent, the importance of the maturity of some debt. For maturity analysis, debt data should be disaggregated, at a minimum, into short- and long-term categories, and more detailed maturity breakdowns are often useful. Data can be compiled on either an original or remaining maturity basis.

351. Countries compile a wide range of debt measures, covering specific sectors and subsectors or an entire economy. In many cases, there are credit measures that correspond to the debt measures (e.g., consumer credit and consumer debt). Some of the more common debt measures are described below.

Household Debt

352. Household debt is incurred for a variety of purposes. Often debt is incurred to finance the purchase of specific assets that are pledged as collateral for loans. For example, the assets being purchased usually collateralize mortgage loans and auto loans. But units in the household sector also incur debt for current consumption in the home, for financing education or medical expenses, for obtaining working capital or longer-term funds for proprietorships, and for funding the purchase of equity or other financial assets. Interest rates, the amount of monthly payments for installment loans, wealth, and expectations regarding future income all affect households' decisions to borrow.

353. Debt of the household sector is often disaggregated into *mortgage debt* and *consumer debt,* the latter term referring to many other types of household debt including the following:

- Loans that other depository corporations and other financial intermediaries (e.g., finance companies) provide directly to consumers.
- Loans provided by the sellers of goods and services.
- Credit card debt.
- Loans that are provided by insurance corporations and are collateralized by the borrowers' equity in such entities.
- Financial leases that permit consumers to acquire durables through such arrangements in lieu of conventional loan contracts.

354. Because of the difficulty of obtaining data directly from households, data on consumer debt are usually derived from creditor sources.

Business Debt

355. Corporations and other business entities incur short-term debt to finance current production, acquire inventories, and meet recurring expenses such as tax and interest payments. They also acquire long-term debt to finance capital formation. Corporations may finance these activities by obtaining trade credit, by borrowing from financial corporations, and by issuing securities.

Public Sector Debt

356. Debt data may be compiled for the entire public sector or for the nonfinancial public sector. Such data are needed, in particular, when public sector debt is a policy target. Data on government debt may be compiled for the central government or for the entire general government sector. Data on government debt are often disaggregated by debt to residents and to nonresidents. Supplementary data on debt that is incurred by other sectors, but is guaranteed by the government, should be compiled if the amounts of such guarantees are substantial.

357. The *Government Finance Statistics Manual*, forthcoming from the IMF, provides guidelines for the construction of measures of government debt. This manual will contain the international guidelines for this area of statistics.

External Debt

358. External debt refers to debt liabilities of a country, sector, or unit to nonresidents that require payment of interest and/or principal by the debtor at some point in the future. External debt statistics, including debt service payments data, are used in the analysis of vulnerability to solvency and/or liquidity problems. They are useful for general macroeconomic analysis, for negotiations of debt rescheduling, and for preparation of estimates of international flows of property income.

359. The International Investment Position (IIP) statement described in the *BPM5* covers an economy's stock of external financial assets and liabilities and provides a comprehensive framework for the measurement of external debt. The components of the IIP can be reconciled with the financial asset categories of the *1993 SNA*.

360. Analysis of the vulnerability of an economy's external debt position requires data beyond that provided by the IIP framework.

These other data series include information on the amount actually owed; the nominal value of debt, as opposed to the market value of external debt; information on the future payment schedule; the debt service schedule; information on the domestic and foreign currency composition of debt, needed to ascertain the possible balance-sheet effects arising from exchange-rate changes; and, increasingly, information on the extent to which financial derivatives are used to hedge, or even increase, exposure to risk.

361. The Inter-Agency Task Force on Finance Statistics (comprising representatives of certain international organizations, including the IMF) is expected in 2001 to publish *External Debt Statistics: Guide for Compilers and Users*, which will provide international methodological standards for the measurement of external debt, as well as guidance on the analytical use of the data and on the sources and methods for their compilation. The guide will update *External Debt: Definition, Statistical Coverage, and Methodology*, 1988.