HANDBOOK ON SECURITIES STATISTICS

Part 3: Equity Securities

November 2012

BANK FOR INTERNATIONAL SETTLEMENTS

EUROPEAN CENTRAL BANK
EUROSYSTEM

INTERNATIONAL MONETARY FUND

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PART 3 EQUITY SECURITIES

Preface

The production of the *Handbook on Securities Statistics* (the Handbook) is a joint undertaking by the Bank for International Settlements (BIS), the European Central Bank (ECB) and the International Monetary Fund (IMF), which have specific interests and expertise in the area of securities statistics and are the core members of the Working Group on Securities Databases (WGSD).[1] The institutions sponsoring the Handbook are responding to demand from various international groups for the development of methodological standards for securities statistics. In November 2009 the report "The Financial Crisis and Information Gaps", which was prepared by the Financial Stability Board Secretariat and IMF staff at the request of the G20 finance ministers and central bank governors, endorsed the development of the Handbook, as well as the gradual implementation of improved statistics on issuance and holdings of securities at the national and international level. The BIS's compilation of data on debt securities plays an important role as regards the latter.[2]

Part 1 of the Handbook was published in May 2009, and Part 2 was published in September 2010. These deal with statistics on debt securities issuance and debt securities holdings, respectively. Both provide a conceptual framework for position and flow statistics on debt securities. Part 3 of the Handbook concerns statistics on equity securities and the methodology described is based on the *System of National Accounts 2008* (2008 SNA) and the sixth edition of the *Balance of Payments and International Investment Position Manual* (BPM6). It also goes slightly beyond the confines of these standards by addressing additional issues such as the main features of equity securities, special and borderline cases, and breakdowns of issuance and holdings of equity securities by counterparty. Special attention is also paid to specific operations such as mergers and acquisitions, restructuring, privatisation and nationalisation, and transactions between general government and public corporations.

As in Parts 1 and 2 of the Handbook, the conceptual framework is complemented by tables presenting data at both aggregated and disaggregated levels. This should allow sufficient flexibility in the presentation of data on issuance and holdings of equity securities, in line with developments in equity securities markets and investor behaviour.

The following officials in the sponsoring organisations are the most heavily involved in the activities of the WGSD and have played a key role in the preparation of Part 3 of the *Handbook on Securities Statistics*:

BIS Mr Christian Dembiermont
Mr Branimir Gruić
Mr Paul Van den Bergh

[1]The IMF originally established the Working Group on Securities Databases in 1999. It was reconvened in 2007 in response to various international initiatives and recommendations in order to improve information on securities markets. The IMF chairs the Working Group. See www.imf.org/external/np/sta/wgsd/index.htm for more information.

[2]See www.bis.org/statistics/securities for more information.

ECB Mr Werner Bier
Mr Reimund Mink (coordinator)

IMF Mr José Cartas
Mr Alfredo Leone (Chair of the WGSD)
Ms Armida San José

The sponsoring institutions are grateful for the contributions of various experts from the following central banks, national statistical agencies and international organisations (national agencies are listed alphabetically by country):

Austrian National Bank
National Bank of Belgium
Bank of Canada
Statistics Canada
Central Bank of Chile
The People's Bank of China
Croatian National Bank
Czech National Bank
National Bank of Denmark
National Bank of the Republic of Macedonia
Bank of France
Deutsche Bundesbank
Bank of Greece
Hong Kong Monetary Authority
Central Bank of Iceland
Reserve Bank of India
Central Bank of Ireland
Bank of Italy
Bank of Japan
Bank of Latvia
Bank of Lithuania
Central Bank of Luxembourg
Central Bank of Malaysia
Bank of Mexico
Netherlands Bank
Central Bank of Norway
Statistics Norway
Central Reserve Bank of Peru
Central Bank of the Philippines
National Bank of Poland
Bank of Portugal
Central Bank of the Russian Federation
Saudi Arabian Monetary Authority
National Bank of Slovakia
Bank of Slovenia
South African Reserve Bank
Bank of Spain
Swiss National Bank
Bank of Thailand
Central Bank of the Republic of Turkey
Bank of England
Board of Governors of the Federal Reserve System
Central Bank of Venezuela
Commonwealth Secretariat
United Nations Conference on Trade and Development

The feedback provided by experts in these institutions has made a significant contribution to the preparation of Part 3 of the Handbook. The WGSD envisages continuing to solicit input from users and compilers of securities statistics when providing guidance on security-by-security (SBS) databases and metadata structure definitions that facilitate the compilation and dissemination of securities statistics.

The WGSD recommends that national and international agencies make use of Part 3 of the Handbook in order to seek to improve statistics on equity securities—for example, in the context of the IMF's Coordinated Portfolio Investment Survey (CPIS) and Coordinated Direct Investment Survey (CDIS). The ongoing financial and economic crisis in global financial markets, which has entered a phase involving issuers and holders of securities, continues to confirm the importance of timely, relevant, coherent and internationally comparable securities data. The institutions involved will maintain their support for the WGSD in its efforts to improve the transparency of global securities markets (e.g. through the further development and implementation of the Handbook).

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Acronyms

ADRs	American depository receipts
AF	Codes for stocks of financial assets and liabilities in the 2008 SNA
BIS	Bank for International Settlements
BPM6	*Balance of Payments and International Investment Position Manual*, sixth edition
CCDs	Development capital certificates (also “Certificados de Capital de Desarrollo”)
CDIS	Coordinated Direct Investment Survey (IMF)
CPIS	Coordinated Portfolio Investment Survey (IMF)
D	Codes for distributive transactions in the 2008 SNA
DAX	Deutscher Aktienindex (index of 30 German stocks traded on the stock exchange in Frankfurt am Main)
DIPs	Direct investment plans
DRIPs	Dividend reinvestment plans/programmes
EDRs	European depository receipts
ELIs	Equity-linked instruments
ELNs	Equity-linked notes
ESA 2010	European System of Accounts (2010) (draft)
ETFs	Exchange-traded funds
EU	European Union
EURO STOXX 50	Share index for euro area shares (50 corporations)
F	Codes for financial transactions in the 2008 SNA
FDI	Foreign direct investment
FTSE 100	Share index maintained by the FTSE Group, a corporation jointly owned by the Financial Times and the London Stock Exchange, comprising the 100 most highly capitalised listed corporations in the United Kingdom
GAAPs	Generally accepted accounting principles
GDRs	Global depository receipts
IDRs	International depository receipts
IFRSs	International Financial Reporting Standards
IPO	Initial public offering
ISIN	International Security Identification Number
MMF	Money market fund
MNEs	Multinational enterprises
MSCI World	Global index provided by Morgan Stanley Capital International covering listed shares in 23 countries
NIKKEI 225	Stock market index for the Tokyo Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OTC	Over-the-counter

RTSI	Index of 50 Russian stocks traded on the MICEX-RTS Stock Exchange in Moscow
S	Codes for institutional sectors or sub-sectors in the 2008 SNA
SBS	Security-by-security
SDRs	Special drawing rights
SEC	US Securities and Exchange Commission
SEFER	Survey of Securities Held as Foreign Exchange Reserves
2008 SNA	*System of National Accounts 2008*
S&P Global 100	Stock market index comprising the world's 100 largest multinationals compiled by Standard & Poor's
S&P 500	Stock market index comprising the 500 largest listed corporations in the United States compiled by Standard & Poor's
SPACs	Special-purpose acquisition companies
SSIO	Survey of Securities Held by International Organisations
STA	IMF's Statistics Department

Section 1 Introduction

Scope of Part 3 of the Handbook

1.1 Part 3 of the Handbook deals with positions, flows and income for equity securities.

1.2 Equity securities are negotiable financial instruments. They entitle holders to a share of both distributed profits and the residual value of the corporation's assets in the event of its liquidation. Holders of these financial assets are the collective owners of a corporation.[3]

1.3 Equity securities are part of the financial asset and liability (financial instrument) category "equity and investment fund shares or units" (F5) in the 2008 SNA and belong to the sub-category "equity" (F51).[4] Equity securities comprise listed shares (F511) and unlisted shares (F512; see Table 1.1). They are the focus of Part 3 of the Handbook.

1.4 Investment fund shares or units (F52) are a kind of collective investment undertaking through which investors pool funds in order to acquire financial or non-financial assets. Open-ended investment fund shares or units are not usually negotiable (being either redeemed or repurchased by the issuer following a request by the holder) and are not, therefore, classified as equity securities.[5,6] Closed-ended investment fund shares or units are typically negotiable, although there may not always be a liquid market where they can readily be bought or sold. Because of their unique features, investment fund shares or units are not covered in Part 3 of the Handbook.[7]

1.5 Statistics on equity securities are dealt with both from the issuer's side (i.e. issuance statistics) and from the holder's side (i.e. statistics on holdings). A "from-whom-to-whom" approach is also presented, reflecting the links between issuance and holdings.

1.6 From an asset point of view, equity securities are forms of financial investment. The following types of financial investment can be distinguished on the basis of the types of investor involved: (a) portfolio investment, involving widely held equity securities (most of which are listed); (b) inter-company equity securities, which relate to ownership links and are associated with (domestic and foreign) direct investment, involving a mixture of listed and unlisted shares; and (c) equity securities relating to privately owned corporations. Privately owned corporations are owned by a single shareholder or a small group of shareholders—typically from the

[3]Participation in quasi-corporations is "other equity" (F519) and is not included in equity securities (2008 SNA, para. 11.88).

[4]Annex 1 of the 2008 SNA describes its classification hierarchies and lists the associated codes. F codes refer to financial transactions, while AF codes relate to stocks of financial assets and liabilities. F codes are used throughout the Handbook.

[5]See 2008 SNA, para. 11.33.

[6]Open-ended investment fund shares or units are sometimes traded on organised markets.

[7]See Section 4, paragraphs 1 and 2, of this part of the Handbook.

Table 1.1

Equity and equity securities

Equity (F51)		
Listed shares (F511)	Unlisted shares (F512)	Other equity (F519)
Equity securities		

household sector—and are generally not listed.[8]

1.7 From a liability point of view, equity securities are a form of "external" corporate finance. Raising equity capital through the issuance of shares is an alternative to borrowing. By contrast with debt securities (see Parts 1 and 2 of the Handbook), equity securities do not generally give their owner the right to a predetermined amount or an amount determined in accordance with a fixed formula (2008 SNA, para. 11.81). Moreover, equity securities are a measure of the value of a corporation—the market value of outstanding shares being related to perceptions of future earnings—and a measure of net worth.

1.8 Issuance and holdings of equity securities are presented in an unconsolidated manner, which is recommended for monetary policy analysis (and is the approach adopted by the 2008 SNA). This means that all gross positions, transactions, revaluations and other changes in the volume of assets and liabilities in equity securities of institutional units are summed up. The transactions and positions of institutional units belonging to a particular sector or sub-sector are shown vis-à-vis all institutional units in all sectors of an economy and in other economies, including those in the same sector or sub-sector.[9]

Use of equity securities for policy analysis

1.9 Data on issuance and holdings of equity securities are required for the analysis of monetary policy and financial stability.

1.10 For monetary policy purposes, information on equity securities held by resident sectors (such as corporations, households and general government) and non-residents helps to enhance analysis of investment in financial assets, while information on equity securities issued by residents and held by non-residents, or holdings by residents of securities issued by non-residents, improves analysis of cross-border corporate finance.

1.11 There is also considerable interest in monitoring changes in wealth conditions and asset prices related to equity securities.

1.12 For financial stability purposes, a more detailed breakdown is required, with issuance and holdings of equity securities being broken down by individual issuer (or consolidated for each corporate group) and by type of equity security (e.g. listed and unlisted shares). In addition, a breakdown by type of investor may be useful, particularly for equity securities held by sub-sectors of the financial corporation sector (i.e. money-issuing corporations, insurance corporations, pension funds and non-money market investment funds), but also for non-financial

[8]These three different types of financial investment in equity securities are not reflected in the presentation tables in Section 6 of Part 3 of the Handbook.

[9]The "corporate group approach" is briefly described in Part 3 of the Handbook (see Annex 3). It is applied in the context of financial stability analysis and consolidates institutional units in a corporate group on the basis of ownership or control, rather than on the basis of the principal functions, behaviour or objectives of those units.

sectors such as households and non-financial corporations.

The conceptual framework

1.13 This conceptual framework for the presentation of statistics on equity securities is based on the 2008 SNA and BPM6, but goes beyond these standards by addressing additional issues such as borderline cases, specific cases and operations related to these financial instruments. Specifically, Part 3 of the Handbook gives guidance on various types of breakdown for statistics on issuance and holdings of equity securities—e.g. breakdowns by issuer and holder, by type of equity security, by counterparty sector and country, and by currency of denomination for holdings.

1.14 As equity securities markets differ considerably across countries, existing statistical presentations vary. While it is not always easy to compare the various presentations, it is possible to develop a standard conceptual framework.

The structure of Part 3 of the Handbook

1.15 Part 3 of the Handbook is structured as follows. Following this introductory section (Section 1), Section 2 considers the main features of equity securities as financial instruments. Section 3 describes the various instruments classified as equity securities, and Section 4 lists equity and other financial instruments not classified as equity securities. Section 5 looks at institutional units and sectors as issuers and holders of equity securities, while Section 6 deals with positions, flows and accounting rules for these financial instruments. Section 7 looks at specific operations relating to equity securities. Section 8 describes issuance and holdings of equity securities in a "from-whom-to-whom" framework, while Section 9 contains a set of detailed presentation tables based on the concepts and guidelines outlined in Sections 2 to 8.

1.16 Part 3 has four annexes: Annex 1 describes the IMF's CPIS and CDIS surveys. Both surveys make major contributions to the presentation of equity securities in a "from-whom-to-whom" framework for sectors and sub-sectors. Annex 2 explains how to link security-by-security databases with statistics on holdings of equity securities. Annex 3 is concerned with the 2008 SNA and the concept of groups of corporations as holders of equity securities, as well as looking at ownership structures. Annex 4 describes valuation concepts for unlisted shares.

Presentation tables

1.17 Three tables are presented in Part 3 of the Handbook: stylised presentation tables A, B and C.

Table A: "Residency of issuer" approach

1.18 Stylised presentation table A (see Table 1.2) shows equity securities issuance. As a summary table, it aggregates the resident institutional units issuing equity securities, providing data for the main institutional sectors. Depending on the purpose of such a table, resident institutional sectors may be broken down further into sub-sectors.

1.19 Table 1.2 may be designed in such a way that it shows, for a given period, the initial positions at the beginning of the period, transactions and other flows (i.e. revaluations and other changes in the volume of assets and liabilities) during the period, and the closing positions at the end of the period for equity securities issued by resident and non-resident institutional units.

1.20 Resident institutional units issuing equity securities are grouped into resident

Table 1.2

Presentation table A ("residency of issuer" approach; unconsolidated)

Issuers / Holders		Residents				Non-residents	All issuers	
		Non-financial corporations	Financial corporations	General government	All residents			
		1	2	3	4	5	6	
Residents	1							Residency of holder
Non-residents	2							
All holders	3							
		Residency of issuer						

sectors (non-financial corporations, financial corporations and general government).[10]

1.21 Table 1.2 includes a breakdown of holders by place of residence, as equity securities held by residents and non-residents need to be identified separately. This is indicated by the fact that the cells in row 3 from column 1 to column 4 are shaded grey. Equity securities issued by non-residents and held by residents are shown in row 1, column 5, which is shaded grey.

1.22 Equity securities issued by non-residents and held by non-residents are not covered, as these are not relevant from a national economy's perspective.

Table B: "Residency of holder" approach

1.23 Stylised presentation table B (see Table 1.3) shows equity securities holdings. As a summary table, it aggregates the resident institutional units holding these financial instruments, providing data for the main institutional sectors. Depending on the purpose of such a table, resident institutional sectors may be broken down further into sub-sectors.

1.24 Table 1.3 may be designed in such a way that it shows, for a given period, the initial positions at the beginning of the period, transactions and other flows (i.e. revaluations and other changes in the volume of assets and liabilities) during the period, and the closing positions at the end of the period for equity securities held by resident and non-resident institutional units.

1.25 Resident institutional units holding equity securities are grouped into five sectors: non-financial corporations (S11); financial corporations (S12); general government (S13); households (S14); and non-profit institutions serving households (S15).

1.26 Table 1.3 includes a breakdown of issuers by residency, as equity securities issued by residents and non-residents need to be identified separately. This is indicated by the fact that the cells in row 3 from column 1 to column 5 are shaded grey. Equity securities held by non-residents and issued by residents are shown in row 1, column 6, which is shaded grey.

1.27 Equity securities held by non-residents and issued by non-residents are not covered,

[10]General government is not expected to issue equity securities. However, there are exceptional cases in which public corporations are classified as part of general government.

Table 1.3

Presentation table B ("residency of holder" approach; unconsolidated)

Holders / Issuers		Residents: Non-financial corporations	Residents: Financial corporations	Residents: General government	Residents: Households and non-profit institutions serving households	Residents: All residents	Non-residents	All holders
		1	2	3	4	5	6	7
Residents	1							
Non-residents	2							
All issuers	3							

Residency of issuer

Residency of holder

as these holdings are not relevant from a national economy's perspective.

Table C: "From-whom-to-whom" approach

1.28 Stylised presentation table C (see Table 1.4) shows issuance and holdings of equity securities on the basis of the "from-whom-to-whom" approach. As a summary table, it aggregates the resident institutional units issuing and holding equity securities, providing data for the main institutional sectors. Table 1.4 presents the relationships between residents and non-residents as holders and issuers of these financial instruments.

1.29 Resident institutional units are grouped into five sectors (non-financial corporations, financial corporations, general government, households and non-profit institutions serving households). Depending on the purpose of such a table, resident institutional sectors issuing and holding securities may be broken down further into sub-sectors.

1.30 Table 1.4 may be designed in such a way that it shows, for a given period, the initial positions at the beginning of the period, transactions and other flows (i.e. revaluations and other changes in the volume of assets and liabilities) during the period, and the closing positions at the end of the period for equity securities issued and held by resident and non-resident institutional units.

1.31 For residents, the presentation of unconsolidated data on equity securities holdings is recommended. This means that intra-sectoral positions, transactions, revaluations and other changes in the volume of assets and liabilities (i.e. cells shaded grey with diagonal lines) should be reported.

1.32 Equity securities held by non-residents (vis-à-vis resident sectors as issuers) are shown as positions in the rest of the world balance sheet (i.e. the international investment position), as financial transactions in the rest of the world financial account (part of the balance of payments) and as revaluations or other changes in the volume of assets in the rest of the world accumulation account (i.e. the cross-hatched cells in the non-resident column in Table 1.4). Equity securities issued by non-residents (vis-à-vis resident sectors as holders) are reflected in the row with cross-hatched cells.

1.33 As also indicated in presentation table C, equity securities held by non-residents and issued by non-residents are not covered (see black cell). These are not relevant from a national economy's perspective. In general, households and non-profit institutions serving households do not issue such financial instruments. However, general government may exceptionally issue equity securities, as some public corporations may belong to this sector.

Table 1.4

Presentation table C ("from-whom-to-whom" approach; unconsolidated)

Holders / Issuers		Residents				Non-residents	All holders	
		Non-financial corporations	**Financial corporations**	**General government**	**Households and non-profit institutions serving households**			
Residents	Non-financial corporations							Residency of issuer
	Financial corporations							
	General government							
Non-residents								
All issuers								
		Residency of holder						

Section 2 Main features of equity securities

2.1 The main features of equity securities are: (i) they are claims by shareholders on the net worth of the relevant corporation; (ii) they are either listed on a stock exchange or unlisted; (iii) they are issued on a specific issue date with a specific issue price; (iv) they do not usually have a stated maturity; and (v) they are usually issued in the national currency.

2.2 Equity securities generate income in the form of dividends.

Residual claim

2.3 The main feature of equity securities is that holders have a residual claim on the assets of the institutional unit that issued them.

Marketplace, listing and delisting

2.4 Listed equity securities are listed (or "quoted") on a stock exchange. A corporation is said to be "listed" or "quoted" or "have a listing" if its shares can be traded in a marketplace or a stock exchange. Normally, the issuing corporation applies to be listed, but in some countries a stock exchange can itself decide to list a corporation (e.g. because its stocks are already actively being traded via informal channels).

2.5 Inclusion in the official share register is a prerequisite for trading on a stock exchange. Initial listing requirements usually include:

(a) a few years of financial statements;

(b) a sufficient amount of stocks being placed among the general public, both in absolute terms and as a percentage of total outstanding stocks;

(c) an approved prospectus (something that usually takes account of the views of independent assessors).

2.6 Corporations may be listed in more than one marketplace through secondary listing or the more complex dual-listing procedure.

2.7 It is common for one such listing to be a primary listing and the others secondary listings. Having multiple listings (i.e. being entered in multiple share registers) gives an issuer access to a wider pool of investors. Although there are mechanisms that allow multiple primary listings, these are more complex and expensive. Moreover, a corporation entered on one single share register can still access multiple trading platforms in order to widen the marketplace for its equity security. Secondary listings may be direct listings of the equity securities concerned, or they may be listings of depository receipts (see paras. 3.23 to 3.28).

2.8 A dual listing is a way for a corporation to have two equal listings in different marketplaces. This is usually done by creating an ownership structure comprising two holding companies, each of which is listed in a different marketplace. Each of these then owns a percentage of the corporation. Dual listing may be the result of a merger of two corporations listed in different countries, or it may stem from a new listing aimed at gaining access to capital in a larger market. Trading restrictions (e.g. capital or currency controls) can also create a need for dual listing.

2.9 Dual-listed corporations have specific corporate governance requirements. There needs to be a guarantee of equal rights for the shareholders of the two listed corporations in terms of voting rights and dividends, and this needs to be supported by an appropriate management structure.

2.10 "Dark pools" are platforms for market participants who want to carry out major transactions not visible to other market participants. Such transactions are conducted outside of the stock exchange.

2.11 "Delisting" refers to the practice of removing a corporation's shares from a stock exchange. This occurs when a corporation goes out of business, declares bankruptcy, no longer satisfies the listing requirements of a stock exchange or becomes a quasi-corporation or unincorporated business, often as a result of a merger or acquisition. Delisting may also involve a corporation being taken into private hands (e.g. by a private equity fund). It then remains incorporated.

Issue date

2.12 The issue date is the date on which a corporation issues equity securities to the public. The issuance of equity securities is usually recorded at the point when payment is made.

2.13 If this is the first such offering, it is called an "initial public offering" (IPO), also referred to simply as an "offering" or "flotation"; otherwise, it is called a "follow-on offering".

2.14 Where unlisted shares are issued, the issue date corresponds to the date when the corresponding capital is paid up.

2.15 In an IPO, the issuer may obtain the assistance of an underwriting entity, which helps to decide what type of equity security to issue, what the best offering price is, and when to bring it to market, as well as helping to place the offering with individual and institutional investors.

2.16 An IPO is often facilitated by the issuance of allotment certificates representing the corporation's shares, which are traded on the stock exchange.[11] These certificates expire and are converted into shares on a one-to-one basis without any additional payment when the underlying share issue is registered.

2.17 The widely used "greenshoe option" (or "over-allotment option") allows an issuer to sell additional shares if demand for newly issued equity securities exceeds the original offering. This practice is often important in order to provide liquidity and stabilise the share price after the IPO.

Issue price

2.18 An equity security's issue price is the price at which it is taken to market at the time of issue. It may also be called the "public offering price".

2.19 When an equity security goes public in an IPO, the underwriter sets a price per share, known as the "offering price". Subsequent share offerings are also introduced at a specific price.

2.20 The issue price is based on the amount of capital to be raised and the number of shares to be issued. The issue price is set close to the expected market price. When the equity security begins to trade, its market price may be higher or lower than the issue price.

No stated maturity

2.21 Equity securities do not usually have specific maturity dates.[12] Corporations (and therefore equity securities) have no set

[11] Allotment certificates may be issued in the event of secondary listings.

[12] A "Genußschein", a type of participation certificate issued mainly in European countries such as Germany, Austria and Switzerland, sometimes has a stated maturity.

Box 2.1

Classification of financial instruments on the basis of negotiability

Financial instruments can be differentiated on the basis of negotiability. A financial instrument is negotiable if its legal ownership can easily be transferred from one unit to another by means of delivery or endorsement (or be offset in the case of financial derivatives). While any financial instrument can potentially be traded, negotiable instruments are designed to be traded on an organised exchange or "over the counter" (albeit actual trading is not a necessary condition for negotiability).

Necessary conditions for negotiability are:

a) the ability to be transferred (or offset in the case of financial derivatives);

b) standardisation (often evidenced by fungibility) and an eligible International Security Identification Number (ISIN);

c) no right of recourse against previous holders of the relevant asset.

Securities, financial derivatives, monetary gold and special drawing rights (SDRs) are all negotiable financial instruments. Securities include debt securities, equity securities and closed-ended investment fund shares or units. Financial derivatives are not classified as securities, despite being negotiable financial instruments.[14]

Currency and deposits, loans, money market fund shares or units, open-ended investment fund shares or units, other equity and other accounts receivable or payable are not typically negotiable, and neither are insurance, pension or standardised guarantee schemes.

lifespan, but can be dissolved by means of a statutory operation, an order of court or a voluntary action on the part of shareholders. Insolvency may result in a form of a "corporate death", where creditors force the liquidation and dissolution of the corporation under a court order.

Currency of denomination

2.22 As equity securities are traded on national stock exchanges, their prices are usually expressed in the domestic currency, the currency of issue.[13]

2.23 There may be cases in which corporations choose to be listed in a country other than their own for strategic or tax reasons, but continue to be listed on their own national stock exchange, with prices expressed in their domestic currency. Alternatively, a corporation may choose, as a resident entity, to be listed on the national stock exchange of another country, but with shares in that corporation traded via depository receipts on the stock exchange of its country of origin.

[13]Corporations do issue equity securities on foreign stock exchanges (e.g. American depository shares), but these are fully indexed to the domestic currency of the country of residence of the issuing corporation, so it is not "foreign currency" (BPM6, para. 11.50). There are also a few cases where shares are issued in a currency other than the domestic currency (e.g. in Croatia).

[14]Listed financial derivatives (such as warrants) are sometimes regarded as securities (BPM6, para. 5.15).

2.24 Financial investors may hold share portfolios denominated in both their domestic currency and foreign currencies.

Property income

2.25 Equity securities generate property income in the form of dividends and reinvested earnings (2008 SNA, para. 7.136). Owners of shares are entitled to dividends as a result of having placed funds at the disposal of corporations (2008 SNA, para. 7.128).

Negotiability

2.26 The characteristic feature of equity securities—like debt securities—is their negotiability (see Box 2.1). Negotiability relates to the legal form of the financial instrument. Negotiability can be contrasted with marketability (assets being "marketable" where there are willing sellers and buyers). For instance, some securities may be legally negotiable, but there is not, in fact, a liquid market where they can readily be bought or sold (BPM6, para. 5.15).

Section 3 Different types of equity security

Shares

3.1 Shares (or "stocks"; the meaning is identical) are claims on the residual value of a corporation after the claims of all creditors have been satisfied. Shares may be listed shares (F511) or unlisted shares (F512) and may be ordinary shares or preferred shares.

Listed and unlisted shares

Listed shares

3.2 Listed shares are listed (or registered) on a stock exchange, which can be a recognised stock exchange or any other form of organised secondary market. Listed shares are also referred to as "quoted shares". The existence of quoted prices for shares listed on an exchange usually means that current market prices are readily available.

3.3 A share may be listed, but traded only very infrequently, or not at all (e.g. in the case of closely held corporations). Stock exchanges are often divided into market segments (e.g. an official market, a second regulated market and a third market), with shares in some of these segments (usually third markets) traded less frequently. Consequently, prices may not be available on a daily basis, being provided only at specific points in time, when transactions take place or positions are valued (which may occur at specific intervals—e.g. at the end of each month).[15]

3.4 In addition to paying regular listing fees, a corporation has to fulfil certain requirements, such as having a minimum asset base and publishing specific financial information, both at the time of listing and periodically thereafter.

Unlisted shares

3.5 Unlisted shares are not listed (or registered) on a stock exchange. They are also referred to as "unquoted shares". Unlisted shares may be called "private equity". Venture capital also usually takes this form. Because prices may not be observable for unlisted shares, other valuation methods may have to be applied (see Annex 4).

3.6 Holders of unlisted shares may not enjoy the protection that a holder of a listed share enjoys from the stock exchange. Trading these shares can also be difficult.

3.7 Unlisted shares are issued by limited liability companies as follows:

(a) Capital shares give holders the status of joint owners and entitle them to a share in the total distributed profits and a share in the net assets of the corporation in the event of liquidation.

(b) Redeemed shares are shares whose capital has been repaid, but are retained by holders, who continue to be joint owners

[15]There are other types of trading platform, such as over-the-counter (OTC) exchanges. Large numbers of (potentially significant) shares are traded on these exchanges, but they may not be liquid enough to be officially listed.

and remain entitled to a share in the profits left after dividends have been paid on the remaining registered capital, as well as a share in any surplus which may be left following liquidation (i.e. net assets minus the remaining registered capital).

(c) Dividend shares (sometimes also called "founders' shares" or "profit shares") are not part of the registered capital and do not give holders the status of joint owners. Consequently, holders do not have the right to a share in the repayment of registered capital, do not have the right to a return on this capital, do not have the right to vote at shareholders' meetings, and so on. Nevertheless, holders are entitled to a share of any profits remaining after dividends have been paid on the registered capital and a share of any surplus remaining in the event of liquidation.

(d) Participating preference shares or stocks entitle holders to participate in the distribution of the residual value of a corporation on dissolution. Holders also have the right to participate in, or receive, additional dividends over and above the fixed percentage dividend (see para. 3.19 (b) below). Additional dividends are usually paid in proportion to any ordinary dividends declared. In the event of liquidation, participating preference shareholders have the right to a share of any remaining proceeds that ordinary shareholders receive, as well as receiving back whatever they paid for their shares.

Ordinary and preferred shares

Ordinary shares

3.8 The difference between ordinary shares and preferred shares can be seen in the rights of holders and the terms and conditions under which they are issued. Holders of preferred shares have priority over holders of ordinary shares when it comes to laying claim to a corporation's assets. However, while preferred shares may have priority over ordinary shares in the payment of dividends and in the event of liquidation, they are subordinated to debt securities.

3.9 Ordinary shares (or "common shares") usually give holders the right to the following.

(a) Holders are generally entitled to participate in the corporation's general policy-making. They generally have the right to attend, speak and vote (in the case of voting shares) at general meetings. Holders of ordinary shares are able to vote on corporate objectives and matters of policy, on stock splits, and in order to elect the corporation's board of directors.

(b) Holders are usually entitled to a preferential subscription in the event of a stock increase. Some holders of ordinary shares also receive pre-emptive rights (a rights issue), which enables them to retain their proportional share in the ownership of a corporation should it issue more stock.

(c) Holders generally have the right to a share in the corporation's profits. There is no fixed dividend paid out to ordinary shareholders, so their returns are uncertain, dependent on earnings, corporate reinvestment and the market's ability to value and sell stock efficiently.

3.10 Ordinary shares (and their certificates)[16] may be "bearer shares". Holders of bearer shares remain anonymous. This means that the issuer does not usually know the shareholders. Holders of other registered shares are recorded in the corporation's share register.

3.11 Priority shares are registered shares that give the holder specific powers, such as the power to nominate candidates for the board of directors. They often also give the holder

[16]Ordinary share certificates often entail limited voting rights.

special rights as regards amending the corporation's statute.

3.12 Occasionally, non-voting shares are issued. These have a marginally higher dividend, but may be less liquid.

3.13 Deferred shares have fewer or no voting rights and, in the event of bankruptcy, holders are not entitled to a share in the corporation's assets until all ordinary and preferred shareholders have been paid in full as per the nominal (par) value of their shares. Deferred shareholders then receive a share of any surplus remaining.

3.14 In the event of bankruptcy, holders of ordinary shares receive their funds after preferred shareholders, bondholders, creditors, etc.

Preferred shares

3.15 Preferred shares (or "preference shares", "preferred stocks" or "participating preferred shares") typically rank higher than ordinary shares. They may carry superior voting rights relative to ordinary shares (sometimes up to two votes per share) or no voting rights at all.

3.16 Where they do not carry voting rights, shareholders do not have the right to vote at shareholders' meetings. Non-voting shares are usually offset by higher dividends or a larger share in the distribution of the residual value of a corporation on dissolution.

3.17 Preferred shares may entitle their holders to a preferential dividend, which may, at times, be higher than the dividends paid to ordinary shareholders. They may also be convertible into ordinary shares, or they may entail preferential rights in the event of liquidation. Preferred shares may entail a specific dividend, which is paid before any dividends are paid to holders of ordinary shares and which takes precedence over ordinary shares in the event of liquidation.

3.18 Like ordinary shares, preferred shares represent partial ownership of a corporation and often pay a fixed dividend (although the corporation does not have to pay this dividend if it lacks the financial ability to do so).

3.19 Table 3.1 provides an overview of various types of preferred share. In general, preferred shares comprise the following:

(a) cumulative or non-cumulative preferred shares, depending on whether payable dividends are accumulated or not;

(b) participating or non-participating preferred shares, depending on whether they entail a share in the residual value of the corporation on dissolution (with participating preferred shares regarded as equity securities, regardless of whether income is fixed or determined according to a formula, while non-participating preferred shares are classified as debt securities);

(c) convertible or exchangeable preferred shares, depending on whether they can be converted into a specified amount of ordinary shares or bonds;

(d) redeemable or retractable preferred shares, which are redeemed or retracted at a fixed price on a specified date or during a specified period of time at the request of either the corporation or the holder;

(e) straight perpetual preferred shares, rate reset preferred shares, fixed floating rate preferred shares, and floating rate preferred shares, all of which have different dividend payment patterns;

(f) split and structured preferred shares, which are based on an underlying portfolio of ordinary shares or other financial instruments.

Other financial instruments included in equity securities

Equity certificates

3.20 Equity certificates (or "primary capital certificates") are shares issued by savings

Table 3.1

Types of preferred shares

Type	Description	Classification
Cumulative preferred shares	Holders are entitled to receive a fixed dividend ahead of ordinary shares and retain the right to any accumulated preferred dividends that may have been built up.	Equity securities
Non-cumulative preferred shares	Holders are not entitled to accumulated preferred dividends.	Equity securities
Participating preferred shares	Holders are entitled to participate in the profits of a corporation over and above fixed dividends, by means of an additional fluctuating dividend, if the corporation is successful. They also participate in the distribution of the residual value of a corporation on dissolution.	Equity securities (regardless of whether income is fixed or determined according to a formula)
Participating convertible preferred shares	Holders are entitled to receive dividends that holders of preferred shares are eligible to receive. Holders are also allowed to convert preferred shares into common shares in order to claim excess earnings.	Equity securities
Non-participating preferred shares	Holders are entitled to receive a fixed dividend, but do not participate in the distribution of the residual value of a corporation on dissolution.	Debt securities (with income from non-participating preferred shares treated as interest income, rather than dividends)
Redeemable preferred shares	These can be redeemed at the request of either the corporation or the shareholder (at a fixed price on a specified date or during a specified period of time). Strict conditions apply to the issuance of redeemable shares and their redemption. Instead of cancelling shares on redemption, a corporation may hold such shares as treasury shares, but no voting rights may be exercised and no dividends are payable.	Equity securities
Retractable preferred shares	These include features that allow holders to force the corporation to redeem the share on a specific date.	Equity securities
Straight perpetual preferred shares	These have no maturity date and pay fixed dividends for as long as they remain outstanding.	Equity securities
Rate reset or fixed floating rate pre-ferred shares	These pay fixed dividends until the reset date, which is typically also the call date.	Equity securities
Floating rate preferred shares	These pay dividends on a quarterly (or in some cases monthly) basis. Dividends fluctuate in relation to a reference rate, usually a prime rate, although some may have a “floor” or minimum dividend.	Equity securities
Structured preferred shares	These are synthetic preferred shares based on an underlying portfolio of ordinary shares or a portfolio created from diverse or complex financial instruments, including financial derivatives.	Equity securities or financial derivatives

banks and other financial institutions that are not limited liability companies or public limited companies. These can be either listed (mainly equity certificates issued by savings banks) or unlisted.

Depository receipts

3.21 Depository receipts are securities that facilitate the ownership of securities listed in other markets. These are listed on one exchange, but represent ownership of securities listed on another exchange. Depository receipts are widely used in order to allow the trading of shares in jurisdictions other than the one where the original shares were issued.

3.22 Depository receipts represent ownership of securities issued in other economies, with ownership of those depository receipts treated as direct ownership of the underlying financial instrument backing them (i.e. the relevant debt security or equity security). The depository issues receipts listed on one exchange represent ownership of securities listed on another exchange. Depository receipts facilitate transactions in securities in economies other than the one in which the securities are listed. Where possible, depository receipts should be recorded in such a way that the depository issuing the receipts should be "looked through"—i.e. the holder of the receipts should be considered to have a claim on the issuer of the underlying securities.

3.23 These receipts should be allocated to the country of residence of the issuer of the original (or underlying) security, not the country of residence of the financial institution that issues the receipts. For instance, American depository receipts (ADRs) are liabilities of the non-US institutional unit whose securities underlie the ADRs, not the US financial institution that issues the ADRs.

3.24 Depository receipts have spread to other countries in the form of global depository receipts (GDRs), European depository receipts (EDRs) and international depository receipts (IDRs).

3.25 GDRs are securities available in one or more markets outside the corporation's home country. The primary advantage of GDRs, compared with ADRs, is that they allow the issuer to raise capital on two or more markets simultaneously, which increases its shareholder base. These have also gained in popularity owing to the flexibility of their structure. A GDR represents one or more shares (or a fraction of a share) in a corporation. The depository bank in the home country holds the shares. A GDR investor has the same rights as holders of ordinary shares, but does not typically have voting rights. Sometimes the depository bank can vote on behalf of GDR holders. GDRs are commonly listed on European stock exchanges (e.g. the London Stock Exchange). Both ADRs and GDRs are usually denominated in US dollars, but they can also be denominated in other currencies, such as the euro.

3.26 To avoid double-counting of securities and associated depository receipts, financial intermediaries should not report holdings of securities issued by non-residents against which depository receipts have been issued and sold. If a depository receipt has been issued before the financial corporation arranging the issue has acquired the original (or underlying) securities, that financial corporation should report negative holdings of the original (or underlying) securities.

3.27 Corporations have a choice of four types of depository receipt: unsponsored depository receipts and three levels of sponsored depository receipts.

(a) Some depositories issue unsponsored depository receipts in response to market demand, but without a formal agreement with the corporation in question. Unsponsored depository receipts are considered obsolete and do not now tend to be issued owing to the corporation's lack of control and hidden costs.

(b) Alternatively, a depository (appointed by the relevant corporation under a deposit agreement or service contract) may issue sponsored depository receipts. Sponsored depository receipts offer the corporation control over the facility, the flexibility to list on other exchanges and the ability to raise capital.

(i) A sponsored level I depository receipt programme is the simplest way for corporations to access capital markets. Level I depository receipts are traded in the US OTC market and on some exchanges outside the United States. The company does not have to comply with US generally accepted accounting principles (GAAPs) or full US Securities and Exchange Commission (SEC) disclosure. Essentially, a sponsored level I depository receipt programme allows a corporation to enjoy the benefits of a publicly traded security without changing its reporting process.

(ii) Corporations that wish to either list their securities on an exchange in the United States or raise capital use sponsored level II or III depository receipts respectively. These types of depository receipt can also be listed on some exchanges outside the United States. There are different SEC registration and reporting requirements for each level, in addition to adherence to US GAAPs. The corporations must also meet the listing requirements of the US exchanges that they choose. Generally, the higher the level of the depository receipt programme, the greater the visibility and attractiveness of the depository receipt.

3.28 In addition to the three levels of publicly traded sponsored depository receipt programmes, a corporation can also access US and other markets through the private placement of sponsored depository receipts. This allows a corporation to raise capital by placing depository receipts with large institutional investors in the United States, avoiding SEC registration.

Dividend reinvestment plans/ programmes

3.29 Dividend reinvestment plans/ programmes (DRIPs) and direct investment plans (DIPs) are ways for shareholders to reinvest variable amounts in a corporation. These are plans offered by corporations that allow investors to reinvest their dividends by purchasing additional shares or fractions of shares from the corporation on the dividend payment date.

Borderline cases

Participation certificates

3.30 Participation certificates give their holders participation rights. Participation rights may take various forms, both for equity securities and for debt securities. In many countries, almost no legal restrictions are placed on this type of financial instrument.

3.31 Depending on their specific features, participation certificates are regarded as either equity securities or debt securities. They are considered to be equity securities if the following criteria are met:

(a) the claims of holders of participation certificates are subordinated;

(b) the remuneration of holders of participation certificates is performance-related;

(c) capital is provided for an unlimited period, or at least on a long-term basis.

Given these criteria, most of these instruments are considered to be equity securities.

3.32 “Genußscheine” (or “Genußrechte”) are a type of participation certificate. These are issued mainly in European countries such as Germany, Austria and Switzerland. "Genußscheine" sometimes have a stated maturity.

Private equity

3.33 Private equity is corporate equity that is not traded publicly on a stock exchange (such as venture capital). It is classified as either unlisted shares (F512) or other equity (F519).

Development capital certificates

3.34 Development capital certificates ("Certificados de Capital de Desarrollo" or "CCDs") are securities issued by trusts in order to channel investment resources to equity securities relating to sectors and activities with the potential for long-term growth. The yield for these instruments depends on the results of each project. Neither interest nor the repayment of principal is guaranteed.

3.35 CCDs have a defined settlement period. Once the deadline has been reached, the issuing trust administrator must liquidate all assets and distribute the proceeds among investors.

3.36 A CCD gives its holder the right to collect dividends and participate in capital reductions and the redemption of shares, as well as the right to sell or dispose of shares.

3.37 CCDs are similar to financial instruments issued by special-purpose acquisition companies (SPACs) in the United States, income trusts in Canada, and infrastructure funds in Australia.

Shares in cooperative entities and credit unions

3.38 Members' shares in cooperative entities have some characteristics that resemble equity securities. They also entitle the holder to request that the shares be redeemed for cash, although that right may be subject to certain limitations.

3.39 Shares in cooperative entities where members have the right to request redemption without restrictions should usually be classified as debt securities. In the case of credit unions, these shares may also be classified as deposits.

3.40 However, they should be classified as "other equity" if:

(a) the entity has an unconditional right to refuse redemption; or

(b) local legislation or regulations or the entity's governing charter limitations redemption.

3.41 Shares in cooperative entities, including shares in cooperative banks and credit unions, are usually non-negotiable financial instruments and should be classified as "other equity". However, there may also be situations where credit unions issue equity certificates, which are classified as listed or unlisted shares.

3.42 Credit unions are cooperative financial institutions owned and operated by their customer-owners (with shareholders constituting both customers and owners). Each customer-owner has one vote at the annual general meeting. A voluntary board of directors is nominated and elected by shareholders.

3.43 Ownership is usually open to any resident organisation or corporation and is based on a common share account. Shares are refundable on cancellation of ownership. They are also subject to dividends, which may be based on the credit union's earnings and are determined by the board of directors.

3.44 Members of a credit union can hold their savings in a variety of accounts. These must be either deposit accounts or share accounts. Accordingly, shares in credit unions may be treated as deposits or "other equity".

Section 4 Equity and other financial instruments not classified as equity securities

Investment fund shares or units

4.1 Investment fund shares or units (F52) are collective investment undertakings through which investors pool funds in order to acquire financial or non-financial assets. These may be categorised, depending on the variability of their capital base, as open-ended investment fund shares or units or closed-ended investment fund shares or units.

(a) Open-ended investment funds can issue and redeem shares on a continuous basis or at certain predefined (short-term) intervals. The most popular types of open-ended investment fund are exchange-traded funds (ETFs)[17] and money market funds (MMFs). An open-ended investment fund is divided equally into shares or units, which vary in price in direct proportion to variation in the fund's net asset value (NAV).[18]

(b) Closed-ended investment funds issue a limited number of shares or units. These sometimes have a specified maturity—e.g. five to seven years. New shares or units are rarely issued once the fund has been launched, and shares or units are not normally redeemable until the fund is liquidated.

4.2 Open-ended investment fund shares or units are not usually negotiable and are not, therefore, equity securities. However, closed-ended investment fund shares or units are typically negotiable, and thus constitute equity securities. Investment fund shares or units are not covered in Part 3 of the Handbook.

Other equity

4.3 Other equity (F519) is equity that is not in the form of securities (see Table 1.1).[19] This includes equity in quasi-corporations (such as branches, trusts and partnerships), as well as notional units representing ownership of real estate.

4.4 Participation in international organisations usually takes the form of shares. However, the ownership of some international organisations does not take the form of shares and is classified as other equity.

[17]ETFs are open-ended funds, but with the tradability of a closed-ended fund.

[18]The Classification of Financial Instruments (CFI) standard defines open-ended funds as those that "permanently sell new units to the public and redeem outstanding units on demand, resulting in an increase or decrease of outstanding capital".

[19]With security-by-security databases, it may be that financial instruments are reported using the ISIN code for other equity (F519). These should be classified as unlisted shares (F512).

4.5 The financial instruments below are also typically regarded as other equity:

(a) all equity in corporations which is not in the form of shares;

  (i) equity in incorporated partnerships which is subscribed by unlimited partners;

  (ii) equity in limited liability companies whose owners are partners and not shareholders;

  (iii) capital invested in ordinary or limited partnerships recognised as independent legal entities;

  (iv) capital invested in cooperative societies recognised as independent legal entities;

(b) investment by general government in the capital of public corporations whose capital is not divided into shares and which are recognised as independent legal entities by virtue of special legislation;

(c) investment by general government and non-government units in the capital of the central bank;[20]

(d) investment by general government and central banks in the capital of international and supranational organisations (with the exception of the IMF), even if these are legally constituted financial resources of a currency union central bank (e.g. the European Central Bank) contributed by national central banks;

(e) capital invested in financial and non-financial quasi-corporations (with such investment corresponding to new investment (whether in cash or in kind) minus any capital withdrawals);

(f) any financial claims that non-resident units have against notional resident units, and vice versa.

[20]Central banks may, from a legal perspective, resemble corporations issuing shares, but their equity is treated as other equity (F519) by convention.

Convertible bonds

4.6 Convertible bonds issued by corporations are debt securities convertible into equity securities (although some are included in capital under the Basel III definition). From the time they are converted, they are classified as equity securities.

4.7 When the option to convert the bonds into shares is exercised, two entries are shown, namely the redemption of the bonds and the issuance/acquisition of the shares.

Shares offered for sale

4.8 Equity securities offered for sale but not taken up on issue are not recorded.

Loan stocks

4.9 Loan stocks are classified as loans. These are loans secured using ordinary or preferred shares as collateral. The loan will earn a fixed interest rate, much like a standard loan.

4.10 Secured loan stocks are called “convertible loan stocks” if the loan stocks can be converted directly into shares, subject to specific conditions being met, with a predetermined conversion rate, as with irredeemable convertible unsecured loan stocks.

Equity of partners with unlimited liability

4.11 Equity of partners with unlimited liability in incorporated partnerships is classified as other equity.

Equity-linked notes

4.12 Equity-linked notes (ELNs)—a type of equity-linked instrument (ELI)—are debt securities that differ from fixed interest rate debt securities in that their coupons or redemption values are based on the return for a single share, a basket of shares (whether listed or unlisted) or an equity index (the "underlying equity"). This means that they are generally designed to return the principal of the original investment at maturity, but differ from fixed interest rate debt securities in that their coupons are determined by changes in the value of the underlying equity. They also differ from structured warrants in that with ELNs, the principal is usually protected.

4.13 An ELN can be constructed by packaging together a call option and a zero coupon bond. The call option provides the note buyer with exposure to the underlying equity. The zero coupon bond provides the note buyer with principal protection. A zero coupon bond allows for principal protection, since it moves from its discount value to its par value over a specified period of time without the periodic payment of interest. The discount from the par value of the zero coupon bond can be used to purchase the call option on the underlying equity.

Warrants

4.14 Warrants are options and should be classified as financial derivatives.[21] They are tradable financial instruments giving the holder the right to buy or sell, subject to specific conditions and for a specified period of time, a certain number of shares or debt securities from or to the issuer of the warrant (usually a corporation; 2008 SNA, para. 11.119). These include the following instruments:

(a) Call or put warrants are issued on the basis of an underlying financial instrument (a share or ETF) or an index.

(b) Basket warrants are issued as call or put warrants based on a basket of two or more underlying shares.

(c) Bull equity-linked instruments give investors the right to buy the underlying shares at a discounted rate vis-à-vis the underlying share price at the time of issuance. If the underlying share price exceeds the exercise price, investors are entitled to a cash settlement on expiry of the warrant (i.e. the par value of the instrument plus interest). If the underlying share price falls below the exercise price, investors may receive the number of underlying shares or an equivalent cash amount.

(d) Bear equity-linked instruments essentially function in the opposite way to bull instruments. If the prevailing price of the underlying share (the closing price) is below the exercise price, investors receive the par value plus interest as a cash settlement. If the prevailing underlying share price is equal to or above the exercise price, the investor receives the par value of the warrant reduced by the difference between this closing price and the exercise price multiplied by the number of underlying shares.

(e) Range equity-linked securities see the investor receive the par value plus interest where the prevailing price of the underlying share is within a range demarcated by two exercise prices. If the price is below this range, the investor will receive the number of underlying shares or an equivalent cash amount. If the price is within or above this range, the investor will receive the par value of the instrument reduced by the difference between the closing price and the higher of the two exercise prices multiplied by the number of underlying shares.

(f) Callable bull or bear certificates (CBBCs) track the performance of an underlying stock without requiring investors to pay the full price required in order to actually own the stock. They are issued as either bull or bear certificates, with a fixed expiry date, allowing investors to take bullish or bearish positions on the underlying stock,

[21]Listed financial derivatives, such as warrants, are sometimes considered to be securities (BPM6, para. 5.15).

with the possibility of early termination prior to the expiry date where the underlying stock does not move in the direction that the investor expects.

Stock options

4.15 Stock options (or "share options") are financial derivatives and are not, therefore, classified as securities. A stock option represents a contract sold by one party to another that entitles (but does not oblige) the buyer to buy (i.e. call) or sell (i.e. put) a stock at an agreed price within a certain period or on a specific date.

4.16 Employee stock options are agreements under which an employee has the right to purchase a given number of shares in his/her employer at a stated price either on a specified date (the "vesting date") or within a specific period of time immediately following the vesting date.

Section 5 Institutional units and sectors as issuers and holders of equity securities

Classification schemes

Institutional units and sectors and their residency

5.1 Institutional units are economic entities capable of owning goods and assets, incurring liabilities and engaging in economic activities and transactions with other units in their own right. There are two main types of unit that may qualify as institutional units, namely persons or groups of persons in the forms of households, and legal or social entities.

5.2 Institutional units are grouped together in five mutually exclusive institutional sectors on the basis of their principal functions, behaviour and objectives (see Table 5.1):

(a) non-financial corporations;

(b) financial corporations;

(c) general government;

(d) households;

(e) non-profit institutions serving households.

5.3 Together, the five sectors make up the total (national) economy.

5.4 The rest of the world sector covers transactions, other flows and positions between resident sectors and non-resident institutional units.

5.5 The residency of each institutional unit is the economic territory with which it has the strongest connection. This is expressed as the "centre of predominant economic interest". As a general principle, an enterprise is resident in an economic territory when that enterprise engages in the production of a significant amount of goods and/or services from a location in that territory. In the absence of any significant physical dimension to an enterprise, its residency is determined by the economic territory under whose laws the enterprise is incorporated or registered (2008 SNA, paras. 4.10 to 4.15).

Countries and groups of countries

5.6 The role played by the rest of the world sector in the accounting structure is similar to that of an institutional sector comprising all non-resident institutional units. Flows and positions between institutional units in the rest of the world are not presented.

5.7 To show positions and flows between non-residents and residents, the rest of the world sector may be broken down by country or into groups of countries (although the countries chosen for analysis and the composition of such groups of countries may change over time, depending on their relative importance for the national economy).

5.8 Non-residents may also be broken down by institutional sector or (in the case of

Table 5.1

Institutional sectors and sub-sectors according to the 2008 SNA

<table>
<tr><th colspan="3" rowspan="2">Sectors and sub-sectors</th><th colspan="4">2008 SNA codes</th></tr>
<tr><th></th><th>Public</th><th>National private</th><th>Foreign-controlled</th></tr>
<tr><td colspan="3">Non-financial corporations</td><td>S11</td><td>S11001</td><td>S11002</td><td>S11003</td></tr>
<tr><td colspan="3">Financial corporations</td><td>S12</td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Money-issuing corporations</td><td colspan="2">Central bank</td><td>S121</td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Other money-issuing corporations</td><td>Deposit-taking corporations except the central bank</td><td>S122</td><td>S12201</td><td>S12202</td><td>S12203</td></tr>
<tr><td>Money market funds (MMFs)[1]</td><td>S123</td><td>S12301</td><td>S12302</td><td>S12303</td></tr>
<tr><td rowspan="4">Financial corporations other than money-issuing corporations, insurance corporations and pension funds</td><td colspan="2">Non-MMF investment funds</td><td>S124</td><td>S12401</td><td>S12402</td><td>S12403</td></tr>
<tr><td colspan="2">Other financial intermediaries, except insurance corporations and pension funds</td><td>S125</td><td>S12501</td><td>S12502</td><td>S12503</td></tr>
<tr><td colspan="2">Financial auxiliaries</td><td>S126</td><td>S12601</td><td>S12602</td><td>S12603</td></tr>
<tr><td colspan="2">Captive financial institutions and money lenders</td><td>S127</td><td>S12701</td><td>S12702</td><td>S12703</td></tr>
<tr><td rowspan="2">Insurance corporations and pension funds</td><td colspan="2">Insurance corporations</td><td>S128</td><td>S12801</td><td>S12802</td><td>S12803</td></tr>
<tr><td colspan="2">Pension funds</td><td>S129</td><td>S12901</td><td>S12902</td><td>S12903</td></tr>
<tr><td colspan="3">General government</td><td>S13</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Central government (excluding social security funds)</td><td>S1311</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">State government (excluding social security funds)</td><td>S1312</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Local government (excluding social security funds)</td><td>S1313</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Social security funds</td><td>S1314</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Households</td><td>S14</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Non-profit institutions serving households</td><td>S15</td><td></td><td></td><td></td></tr>
<tr><td colspan="3">Rest of the world</td><td>S2</td><td></td><td></td><td></td></tr>
</table>

[1] MMFs may or may not be classified as money-issuing corporations, depending on the definition of broad money in a given country or economic area.

financial corporations) sub-sector. If analytically useful, specific countries or groups of countries can be broken down further by sector or sub-sector.

Issuance and holdings of equity securities by sector and sub-sector

5.9 It is important from the perspective of monetary and economic policy to analyse issuance and holdings of equity securities by sector and sub-sector, as well as holdings by non-residents. This may also be of interest for the purposes of financial stability analysis.

5.10 Equity securities are issued by resident and non-resident corporations and can usually be held by any resident institutional sector or sub-sector or by non-residents as part of their portfolio of financial assets. Non-financial corporations, financial corporations (in their capacity as institutional investors), households and general government all hold equity securities. Specific attention is paid to non-residents who hold equity securities issued by residents.

Issuers of equity securities

5.11 Issuers of equity securities are:

(a) resident financial and non-financial corporations;

(b) non-resident financial and non-financial corporations;

(c) general government (in exceptional cases where public corporations are classified as part of general government).

5.12 Public corporations are corporations that operate under the control of general government. An assessment of their activities and resources is necessary in order to decide on the appropriate classification—i.e. whether they belong to the corporation sectors or the general government sector.[22]

5.13 The following types of financial corporation issue shares:

- the central bank;[23]
- deposit-taking corporations, except the central bank;
- insurance corporations;
- pension funds;[24]
- other financial corporations.[25]

Holders of equity securities

5.14 It is important, from an economic and monetary policy perspective, to analyse holdings of equity securities and—in the case of equity securities issued by residents—to know the relative sizes of the holdings of residents and non-residents (with breakdowns by sector and sub-sector).

5.15 Equity securities can usually be held by any resident institutional sector or sub-sector, or by non-residents, as part of their portfolio of financial assets. Of specific interest are the equity securities holdings of financial corporations (in their capacity as institutional investors), non-financial corporations, households and, to a lesser extent, general government. Specific attention is paid to non-residents who hold equity securities issued by residents.

5.16 Having too few holders of equity securities in certain categories or countries may raise confidentiality issues.

Corporations as holders of equity securities

5.17 Both financial and non-financial corporations may hold equity securities.

[22]In order to decide whether these are market entities charging economically significant prices, various criteria are to be considered, such as whether they are dedicated providers of ancillary services or simply suppliers of goods and services to government. It is also important to look at whether the corporation has an incentive to adjust supply in order to undertake a viable profit-making activity, operate in market conditions and meet its financial obligations. The ability to undertake market activities will be checked, in particular, by means of the standard quantitative criterion: the ratio of sales to production costs. To be a market producer, it is expected that a public entity cover at least 50% of its costs by means of its sales over a sustained multi-year period (2008 SNA, para. 22.29). Otherwise, it should be classified as part of general government.

[23]Some central banks issue equity securities.

[24]Only a few countries allow pension funds to issue shares.

[25]These comprise financial auxiliaries, captive financial corporations, money lenders, financial intermediaries such as securitisation corporations, securities and derivatives dealers, financial corporations engaged in lending activities, central clearing counterparties and specialized financial corporations, as outlined in the 2008 SNA, para. 4.110. Financial auxiliaries include head offices (of financial corporations) and captive financial institutions, and money lenders include holding corporations. It may be necessary to show these separately.

5.18 Control or influence may be achieved either directly, by holding equity that entails voting rights in the relevant company, or indirectly, by having voting rights in another corporation that has voting rights in the first one.

5.19 The equity securities holdings of the financial corporation sector can be broken down into the holdings of:

- the central bank;
- other money-issuing corporations (comprising (i) deposit-taking corporations except the central bank and (ii) MMFs);
- non-MMF investment funds;
- insurance corporations;
- pension funds;
- other financial corporations.[26]

5.20 From the perspective of monetary policy and financial stability analysis, it may also be useful to provide data on institutional investors, who are important holders of equity securities. Institutional investors are generally understood to comprise a specific sub-set of financial corporations, namely:

- non-MMF investment funds;
- insurance corporations;
- pension funds.[27]

Households as holders of equity securities

5.21 Households are important holders of the various types of equity security (as well as investment fund shares or units).

[26]See also the proposed breakdown for debt securities issued by financial corporations (Part 1 of the Handbook, para. 6.7).
[27]See the OECD's Institutional Investors' Assets database.

Non-profit institutions serving households as holders of equity securities

5.22 Non-profit institutions serving households hold fairly small amounts of equity securities.

5.23 In some countries, trusts or foundations classified as non-profit institutions serving households are organised in a way that allows households to transfer, for tax reasons, a large percentage of their equity securities to those institutions. Households often receive the proceeds of these trusts or foundations (depending on their statutes), but do not own them and cease to have a claim on the "donated" assets once they have been transferred.

General government as a holder of equity securities

5.24 Equity securities held by general government may include equity injections in public corporations or portfolio investment, as well as the proceeds of privatisation or super-dividends (see Box 6.2).

5.25 Portfolio investment, mainly in the form of listed shares purchased on the market, is conducted by government units such as social security funds. Many countries have created sovereign wealth funds for the purpose of saving and investing excess revenues, often from primary product exports. These employ a range of investment strategies, including investment in foreign financial assets (e.g. portfolio investment in equity securities).

5.26 Public corporations' distribution to their owners of surpluses in excess of operational profits (excluding holding gains or losses) is recorded as financial transactions. This represents the withdrawal of equity akin to a partial liquidation of the enterprise, rather than government revenues.

Non-residents as holders of equity securities

5.27 Non-residents, as holders of equity securities, may be broken down by institutional sector or (in the case of financial corporations) sub-sector. They can also be broken down by country or into groups of countries.

5.28 One major issue in this respect stems from the challenge of identifying non-resident holdings at the level of institutional sectors (see Annex 1a on the Coordinated Portfolio Investment Survey).

5.29 Data on holdings of equity securities could also be broken down by country and/or employ an area breakdown used for financial statistics by a number of international organisations.

Aggregation and consolidation

Aggregation

5.30 Aggregation is the summation of all gross positions, transactions, revaluations and other changes in the volume of assets and liabilities for institutional units belonging to a specific sector or sub-sector of an economy.

Consolidation

5.31 Consolidation involves the elimination of positions, transactions, revaluations and other changes in the volume of assets and liabilities between institutional units belonging to the same group.[28] Consolidation can be applied at various levels.

5.32 Institutional units can be grouped together or consolidated in two ways. They can be consolidated at sub-sector, sector or national level, or at the level of corporate groups. Consolidation at sub-sector, sector or national level eliminates issuance and holdings of equity securities within those various levels. Corporate groups may span sectors or sub-sectors and thus represent a different taxonomy of units, with entities generally clustered together on the basis of control relationships, rather than functional characteristics. Consolidation at group level eliminates equity securities held/issued by institutional units within the same group of financial or non-financial corporations as the issuer/holder.[29]

5.33 Consolidated presentations entail a reduction in statistical information. However, in some cases, it may be analytically useful to present data that have been consolidated at sub-sector, sector or national level—e.g. in the case of equity securities issued and held by money-issuing corporations.

5.34 Consolidation at the level of corporate groups is an example of consolidation on the basis of control relationships. If related institutional units are grouped together to form a single corporate group (for example, domestic and foreign subsidiaries of domestic banks are grouped together with their parent bank), all intra-group positions and flows are eliminated from the information reported—that is to say, all positions and flows among the various subsidiaries and between those subsidiaries and the parent corporation are eliminated. This approach is useful for financial stability analysis.

[28]Consolidation should be distinguished from netting (see Part 1 of the Handbook, paras. 5.13 to 5.16).

[29]See also Irving Fisher Committee, "Residency/Local and Nationality/Global Views of Financial Positions", *IFC Working Papers*, No 8, April 2012 (www.bis.org/list/ifcwpapers/index.htm).

Section 6 Positions, flows and accounting rules

Quadruple-entry accounting and time of recording

6.1 Following the principle of quadruple-entry accounting as applied in the System of National Accounts (Part 1 of the Handbook, paras. 5.6 to 5.9), the acquisition or disposal of an equity security should result in the recording of four entries—i.e. two for each institutional unit involved in the transaction. These are either: (i) the holder and the issuer of the financial instrument; or (ii) the two holders (i.e. the new holder receiving the equity securities and the old holder delivering them).

6.2 For example, an equity security is issued by a non-financial corporation (the issuer) and acquired by a household (the holder) in exchange for currency or transferable deposits. In the financial account of the non-financial corporation, an increase in liabilities (equity securities) and an increase in assets (currency or transferable deposits) are recorded. In the financial account of the household, an increase in one financial asset (equity securities) is offset by a decrease in another financial asset (currency or transferable deposits), with no change in liabilities recorded.

6.3 If an equity security held by a household is sold to a financial corporation, an increase in assets (currency or transferable deposits) and a decrease in assets (equity securities) are recorded in the financial account of the household. In the financial account of the financial corporation, an increase in one financial asset (equity securities) is offset by a decrease in another (currency or transferable deposits) or by an increase in liabilities (bank's account vis-à-vis the household).

6.4 The general principle is that these transactions between institutional units should be recorded when claims and obligations arise, are transformed or are cancelled—i.e. on an accrual basis (2008 SNA, para. 2.55).

Valuation principle

Positions

6.5 Issuance and holdings of equity securities should be recorded at market value, at the mid-point between the buying and selling price where they are quoted on markets with buy-sell spreads (BPM6, para. 3.90).[30] Positions are valued at the prices at which the financial instruments could be bought in the market at the time the balance sheet is drawn up. Values observed in markets or estimated on the basis of observed market values should be used. Positions, transactions and other flows of equity securities should be recorded using the same valuation principles for the accounts of all institutional units involved. Ensuring consistent valuation on both sides of the balance sheet and the financial account is a

[30]The provision of this spread is a service provided by dealers and paid for by buyers and sellers.

challenging issue. For listed shares in particular, the use of micro-data available in security-by-security databases helps to address these measurement issues.

6.6 The presentation of issuance and holdings of equity securities at market value may be based on balance sheet data, but usually requires the availability of reporting

Box 6.1

Share prices and share price indices

Share prices, bids, asks and spreads

Once a stock has been listed, its shares are bought and sold on organised stock markets. Such exchanges are organised trading systems, in which the prices of stocks are set by means of supply and demand in an auction context. Share prices fluctuate owing to supply and demand. Like all assets, the price of a share is sensitive to demand. However, there are many factors that influence demand for a particular share. Analysis of fundamentals and technical analysis seek to understand the market conditions that lead to price changes, or even to predict future price levels. Share prices are fundamentally driven by profit expectations, but market sentiment (e.g. bullish, bearish or herding behaviour) can also affect share prices.

The "current price" is the price of the most recent trade completed for the share. It is not necessarily the price to be paid or received for a share if an order has just been placed at that moment. During the market day, share quotes are typically delayed by 15 to 20 minutes, unless a real-time quote has specifically been requested. Share prices change frequently (and they change quickly, too), so the last price may no longer be very up to date. The day's high and low prices are usually displayed, too. These are the highest and lowest prices at which shares have been bought or sold on that day.

The price quoted may also include information on the bid and ask prices for the share. The bid price is the highest price that a brokerage firm (i.e. a market-maker) is willing to pay for a share at a particular time, as with an auction. The ask price is the lowest price that a brokerage firm is willing to sell a share at. The spread is the difference between the bid and ask prices for a traded share.

Share price indices

Share price indices may be classified in various ways. A "world" or "global" share price index (or stock market index) includes (typically large) corporations and corporate groups, regardless of where they are located or traded. Two examples are the MSCI World and S&P Global 100 indices. A "national" index indicates the performance of the stock market of a given country—and, by extension, reflects investor sentiment regarding the state of the national economy. The most regularly quoted share price indices are national indices composed of the stocks of large corporations listed on a country's largest stock exchange (e.g. the US S&P 500, the Japanese Nikkei 225, the German DAX, the Russian RTSI and the British FTSE 100). The concept can be extended far beyond an individual exchange by representing the stocks of nearly all publicly traded corporations in an economy. More specialised indices track the performance of specific sectors of the economy, corporations of a certain size or companies with a certain type of management.

Another point to note is the distinction between price return and total return indices (called simply "price" and "return" indices). Some are price indices (e.g. the FTSE), while others are return indices (e.g. the German DAX), and a third group have both features (e.g. the EURO STOXX 50). Some indices, such as the S&P 500, have a number of different versions. These can differ in terms of the manner in which index components are weighted and the way that dividends are accounted for. For example, there are three versions of the S&P index: (i) a price return version, which considers only the price of the components; (ii) a total return version, which accounts for the reinvestment of dividends; and (iii) a net total return version, which accounts for the reinvestment of dividends after the deduction of a withholding tax.

An index may also be classified on the basis of the method used to determine its value. In an equally weighted index, the price of each individual stock is the only consideration when determining the value of the index. Thus, a change in the price of a single security can heavily influence the value of the index, ignoring the relative size of the corporation in question. By contrast, a market value-weighted or capitalisation-weighted index takes into account the size of the corporation. Thus, a relatively small shift in the share price of a large corporation can strongly influence the value of the index. In a market share-weighted index, a share price is weighted on the basis of the number of shares, rather than their total value. A modified capitalisation-weighted index is a cross between capitalisation weighting and equal weighting. It is similar to capitalisation weighting, with one main difference: the largest stocks are capped at a percentage of the weight of the total share index and excess weight is redistributed equally among the stocks under that cap.

schemes based on an SBS database relating to holdings.[31]

Listed shares

6.7 Listed shares are valued at market values. The same value is adopted for both the asset side and the liability side, although shares (and other equity) are not, legally, a liability on the part of the issuer, but rather the right to a share in the value of a corporation on liquidation, where the liquidation value is not known in advance.

6.8 Listed shares are valued at a representative mid-market price observed on a stock exchange or other organised financial market (see Box 6.1). Large corporations may be listed on various stock exchanges, so what price would apply for the valuation of positions in the event of multiple listings? Two approaches could be envisaged: (i) the price on the stock exchange deemed to be most representative; or (ii) the average of the market prices available on the various stock exchanges.

Unlisted shares

6.9 Values for unlisted shares, which are not traded on organised markets, should be estimated with reference to market equivalents, using:

(a) values for quoted shares where appropriate;

(b) the value of own funds at book value (OFBV);[32]

(c) discounted forecast profits, applying an appropriate market price-to-earnings (P/E) ratio to smoothed recent earnings for the relevant institutional unit; or

(d) last known transaction prices (i.e. observed market prices).

6.10 These estimates may take into account the differences between listed and unlisted shares (notably as regards their liquidity) and consider the net worth accumulated over the life of a corporation, as well as its line of business. However, differences in estimates may also be

[31] Data that are based on the balance sheets of equity securities holders are affected by the accounting standards of the country where those holders reside and the implementation of those standards by those holders. This means that those positions do not usually reflect the securities' market values.

[32] Own funds are described in the 2008 SNA (paras. 13.88 et seq.).

the result of different valuation methods, with no conceptual interpretation possible.

6.11 The estimation method applied depends on the basic statistics available. It may, for example, take into account data on merger activities involving unlisted shares. If the value of an unlisted corporation's own funds moves—on average and relative to its nominal capital—in line with that of similar corporations with listed shares, the value of its balance sheet can be calculated using a ratio. This ratio compares unlisted corporations' own funds with those of listed corporations:

value of unlisted shares = market price of similar listed shares × own funds of unlisted corporations / own funds of similar listed corporations.

6.12 The ratio of the share price to own funds may vary depending on the issuer's business activities. It is preferable to calculate the current price of unlisted shares at the level of industrial sectors. There may be other differences between listed and unlisted corporations, which can have an effect on the estimation method.

6.13 Annex 4 contains a more detailed description of valuation methods for unlisted shares.

Transactions

6.14 Transactions in equity securities are valued using the actual price agreed between the institutional units involved in the transaction. Under normal circumstances, the market value is the price at which these financial instruments are issued, redeemed, acquired or disposed of in transactions between independent, willing parties, excluding commissions, fees and taxes.

6.15 New shares are recorded using their issue value, which is the nominal value plus/minus the issue premium/discount.

6.16 Transactions in shares in circulation are recorded using their transaction value. When the transaction value is not known, it is approximated using the stock exchange's quotation or market price for listed shares and using the equivalent market value for unlisted shares.

6.17 Scrip dividend shares are shares valued at the price implied by the issuer's dividend proposal and distributed in lieu of cash dividends.

6.18 Issuance of bonus shares is not recorded. However, where the issuance of bonus shares involves changes in the total market value of a corporation's shares, those changes in market value are recorded in the revaluation account.

6.19 Data on transactions may also be derived from the relevant position data. In this case, transaction prices will usually have to be estimated (e.g. by taking unweighted average prices at the beginning and end of the reporting period).

Relationship between positions and flows

6.20 "Positions" for issuance and holdings of equity securities are outstanding amounts at a specific point in time. "Flows" are the difference between the positions recorded at two specific points in time and consist of transactions between institutional units, revaluations and other changes in volume during the period in question (Part 1 of the Handbook, para. 5.2).

6.21 The relationship between positions and flows for issuance and holdings of equity securities is:

$$position_t - position_{t-1} = flows_t \qquad (6.1)$$

Position$_t$ is the issuer's or holder's position in terms of equity securities at the end of accounting period t and *position*$_{t-1}$ is its position in terms of equity securities at the end of accounting period $t - 1$.

6.22 *Flows*$_t$ indicates changes in outstanding positions between two specific points in time. It is the sum of all flows for equity securities, viewed as financial assets, during accounting period t. It comprises transactions, revaluations and other changes in volume:

$$flows_t = transactions_t + revaluations_t + other\ changes\ in\ volume_t \quad (6.2)$$

6.23 *Transactions*$_t$ refers to net issuance (i.e. issuance minus redemptions) or net acquisitions (i.e. gross acquisitions minus disposals) of equity securities during accounting period t.

$$transactions_t = net\ issuance_t = issuance_t - redemptions_t \text{ or } net\ acquisitions_t = gross\ acquisitions_t - disposals_t^{33} \quad (6.3)$$

6.24 *Revaluations*$_t$ refers to changes in outstanding positions owing to changes in the price of equity securities during accounting period t. The revaluation of assets or liabilities stems from changes in their prices and/or changes in exchange rates.[34] In BPM6, revaluations are broken down into those that are due to changes in exchange rates and those that are due to "other price changes" (BPM6, para. 3.20 b).

6.25 *Other changes in volume*$_t$ refers to all changes in positions between the end of accounting period $t - 1$ and the end of accounting period t that are due neither to transactions nor to revaluations.

[33] Disposals do not cover write-offs. Write-offs have to be treated as other changes in the volume of assets and liabilities, not as transactions.
[34] Changes in exchange rates apply only to holdings of equity securities denominated in foreign currencies. These are valued in the currency of the country in which the issuing corporation is resident.

Gross and net transactions

Issuance, redemptions and net issuance of equity securities

6.26 Gross recording of financial transactions in equity securities means that the incurrence and repayment of liabilities relating to equity securities are shown separately as gross issuance and gross redemptions (i.e. the buying-back of securities). Net recording means that issuance of equity securities is shown net of redemptions.

6.27 Issuance relates to a situation where an issuer sells newly created equity securities to holders. An equity security is considered to have been issued when the issuer transfers it to holders, usually in exchange for currency or transferable deposits.

6.28 Net issuance of equity securities is calculated as issuance minus redemptions. *Transactions*$_t$ indicates net issuance during accounting period t.

Gross acquisitions, disposals and net acquisitions of equity securities

6.29 Gross acquisitions and disposals of equity securities are financial transactions. These are used to analyse securities market activity and income generation.

6.30 Acquisitions are either: (i) purchases of newly issued equity securities from an issuer; or (ii) purchases of existing equity securities from another holder on the secondary market. A security is considered to have been acquired when claims and obligations arise, usually in exchange for currency or transferable deposits.

6.31 Disposals of equity securities are either: (i) the sale of securities to issuers; or (ii) the sale of securities to new holders on the secondary market. A security is considered to have been disposed of when an obligation ceases to exist owing to a redemption, or a claim is transferred by means of a sale on the secondary market, usually in exchange for currency or transferable deposits. Disposals of equity securities are financial transactions. Selling securities to the issuer decreases both the holder's assets in equity securities and the issuer's liabilities in equity securities, while selling equity securities to a new holder on the secondary market increases the new holder's assets in equity securities and decreases the old holder's assets in equity securities (with counterpart entries in currency or transferable deposits).[35]

6.32 Net acquisitions of equity securities are gross acquisitions minus disposals. $Transactions_t$ refers to net acquisitions during accounting period t.

Revaluations

6.33 Revaluations and holding gains or losses reflect changes in the price of equity securities. For the holder, price increases mean positive revaluations or holding gains, while price decreases mean negative revaluations or holding losses. Revaluations also include changes in the value of equity securities holdings denominated in foreign currency owing to exchange rate fluctuation.

6.34 A distinction is made, in this respect, between four different situations (2008 SNA, para. 12.81).

(a) Where an equity security is held throughout the accounting period, the revaluation accruing during the accounting period is equal to the closing balance sheet value minus the opening balance sheet value, minus other changes in volume during the accounting period. These are the estimated values for the securities as if they were to be acquired at the time the balance sheets were drawn up. The revaluation (holding gain or loss) is unrealised.

(b) Where an equity security held at the beginning of the period is sold during the period, the revaluation accruing is equal to the value at disposal minus the opening balance sheet value, minus other changes in volume during the accounting period (i.e. prior to the sale). The revaluation (holding gain or loss) is realised.

(c) Where an equity security acquired during the period is still held at the end of the period, the revaluation accruing is equal to the closing balance sheet value minus the value at acquisition, minus other changes in volume during the accounting period (i.e. following the acquisition). The revaluation (holding gain or loss) is unrealised.

(d) Where an equity security is acquired and disposed of during the accounting period, the revaluation accruing is equal to the value at disposal minus the value at acquisition, minus other changes in volume during the accounting period (i.e. between its acquisition and disposal). The revaluation (holding gain or loss) is realised.

6.35 The calculation of revaluations in case (d) requires the collection of actual transaction data. In addition, derived transaction data allow only the approximate calculation of revaluations in cases (b) and (c).

Other changes in the volume of assets and liabilities

6.36 Other changes in the volume of equity securities comprise changes in their quantity or physical characteristics, as well as changes in classification.

Changes in the quantity or physical characteristics of equity securities

6.37 Changes in the quantity or physical characteristics of equity securities may arise as a result of:

[35]It should be noted that there are two ways of dealing with a holder's own shareholdings, as described below in para. 7.18.

(a) accidental destruction owing to natural catastrophes or political events, or the destruction of evidence of ownership;

(b) losses caused by events (such as fire, damage or theft) that are not considered catastrophic;[36]

(c) uncompensated seizures, where governments or other institutional units take possession of the assets of other institutional units (including non-resident units) without full compensation, for reasons other than the payment of taxes, fines or similar levies.

Changes in sectoral classification and structure

6.38 Changes in terms of classification comprise changes to the sector in which an institutional unit is allocated, changes to the structure of institutional units and changes in the classification of assets.

(a) The legal status of an institutional unit may change (e.g. from a partnership to a corporation, and vice versa).

(b) Reclassifications involving the moving of institutional units from one sector to another or changes in the structure of institutional units give rise to the reallocation of assets. This may cause the appearance and disappearance of certain financial assets, which should be recorded as other changes in volume (Part 1 of the Handbook, para. 5.11).

(c) When a corporation ceases to be an independent legal entity because one or more other corporations absorb it, all of the corporation's positions vis-à-vis the corporations that absorbed it in terms of equity securities disappear. That corporation's positions vis-à-vis third parties remain unchanged and pass to the companies that absorbed it. Changes in prices due to the absorption are recorded as revaluations.

(d) Similarly, when a corporation is legally split up into two or more institutional units, any new financial assets that may arise in the form of equity securities are recorded as other changes in volume.

6.39 The conversion of equity securities into other financial instruments is recorded as other changes in the volume of assets and liabilities (as with the reclassification of other financial instruments), not as a transaction.

Income attributed to holders of equity securities

6.40 Income attributed to holders of equity securities is part of property income. Property income accrues when the owners of financial assets and natural resources place them at the disposal of other institutional units. Income achieved in return for the use of financial assets is called investment income.

6.41 Owners of equity securities receive a share of distributed earnings, the timing and level of which are decided by corporations. Equity securities income includes dividends (D421) as part of the distribution of corporations' income (D42).

6.42 The distribution of corporations' income in the form of withdrawals from the income of quasi-corporations (D422) is not part of the income attributed to holders of equity securities, as it is not based on shares.

Dividends as property income

6.43 Dividends are a form of property income to which owners of shares become entitled as a result of placing funds at the disposal of corporations. Dividends cover all distribution of profits by corporations to

[36]It is very rare for equity securities to be lost or accidentally destroyed, given that almost all securities are registered electronically.

their shareholders or owners. These are recorded gross of any withholding taxes. These taxes are deemed to be payable by recipients of such income.

6.44 Dividends also include:

(a) shares issued to shareholders as a dividend payment for the financial year (while bonus shares—which represent the capitalisation of own funds in the form of reserves and undistributed profits and give rise to new shares for shareholders in proportion to their existing holdings—are not included);

(b) income paid to general government by public enterprises that are recognised as independent legal entities and do not constitute corporate enterprises;

(c) income generated by activities and transferred to the owners of corporations participating in these activities for their own private use.

6.45 There are usually three different types of dividend payment:

(a) dividends paid in cash;

(b) interim dividends;

(c) scrip (or stock) dividends.

Dividends paid in cash

6.46 Dividends paid in cash are the most common form of dividend payment.

6.47 Pursuant to legislation on public limited companies and limited liability companies, a corporation may only distribute as dividends its annual profits (based on its adopted income statement for the last year and other equity), following certain deductions. These provisions prevent, among other things, the distribution of interim dividends based on income statements that have not yet been approved.

6.48 Pursuant to the same legislation, the distribution of dividends may include any transfer of value, which directly or indirectly benefits shareholders. This notwithstanding, it is assumed that most dividends are paid in cash.

Interim dividends

6.49 Interim dividends are usually paid to shareholders if the preliminary income statement indicates a profit.[37]

6.50 Interim dividends are recorded as property income to the extent that they are related to the accrued income of the corporation. In practice, two conditions must be fulfilled:

(a) the corporation making the payment must make short-period accounts available to the public and the payment must be based on at least two quarters;

(b) the interim payment should be: (i) the same proportion of profits as the dividends paid in previous years; (ii) consistent with the usual rate of return for shareholders; and (iii) in line with trend growth for the corporation.

6.51 If these conditions are not met, the interim payment is recorded as an advance payment until annual figures are available, given the need to compare interim dividends with entrepreneurial income for the year (see Box 6.2).

Scrip (or stock) dividends

6.52 A scrip (or stock) dividend is a pro rata dividend payment made to shareholders in the form of additional shares. It essentially represents the capitalisation of earnings and is an alternative to distributing cash dividends. It is therefore treated as income (in the primary

[37] Dividends are sometimes paid even if a loss is recorded, where it is expected to be temporary.

Box 6.2

Super dividends

Dividends do not include super dividends. Super dividends are dividends that are large relative to recent dividends and earnings. In order to assess whether dividends are large, the concept of distributable income is used. The distributable income of a corporation is equal to entrepreneurial income plus all current transfers receivable, minus all current transfers payable and minus the adjustment for the change in pension entitlements. The ratio of dividends to distributable income over the recent past is used to assess the plausibility of the current level of dividends. If the level of dividends declared is greatly in excess of that seen in the recent past, those dividends are treated as financial transactions and termed "super dividends". These super dividends are treated as the withdrawal of owners' equity. This applies to all corporations, whether incorporated or quasi-incorporated and whether under foreign or domestic private control.

In the case of public corporations, super dividends are large and irregular payments, or payments that exceed the entrepreneurial income for the relevant accounting period, which are funded using accumulated reserves or by means of the sale of assets. The super dividends of public corporations are to be recorded as the withdrawal of equity to the extent that they exceed entrepreneurial income for the relevant accounting period.

income account), which is then immediately reinvested (in the financial account).

6.53 Additional shares distributed to shareholders may be:

(a) newly issued shares financed using the corporation's own funds;

(b) treasury shares (i.e. reacquired stock bought back by the issuing corporation).

6.54 Shareholders who wish to reinvest will prefer a scrip dividend to a DRIP, as it avoids dealing costs and the number of shares received is known at the time of the decision to receive shares rather than cash. A DRIP is a means of allowing shareholders to reinvest their dividends cheaply in the purchase of more shares in a corporation.

6.55 From the point of view of a shareholder, a DRIP is similar to receiving a scrip dividend, but there are important differences:

(a) a DRIP does not keep cash within the corporation;

(b) there are (small) dealing costs;

(c) the number of shares that a shareholder receives depends on the price on the day that the DRIP operator purchases the shares.

6.56 As with any scrip issue, the shares issued in order to pay a scrip dividend need to come from the capitalisation of reserves.

6.57 Bonus shares do not count as dividends and need to be clearly distinguished from scrip/stock dividends.

Time of recording of dividends

6.58 Dividends are recorded at the point when the share price begins to be quoted on an ex-dividend basis, rather than at a price that includes the dividend (2008 SNA, para. 7.130). Although dividends represent part of the income generated over a given period, they are recorded after they have been declared, but before they are actually payable. This means that the dividend has still to be paid to the owner on the date that it is declared. Consequently, a share sold "ex-dividend" is worth less than one sold without this constraint.

Transactions not defined as dividends

6.59 Dividends do not include the following.

(a) Dividends do not include funds withdrawn by means of the sale or disposal of a quasi-corporation's assets (e.g. the sale of inventories, fixed assets, or land or other natural resources). Funds resulting from such disposal of assets are recorded as the withdrawal of equity from the quasi-corporation in the financial account.

(b) Neither do they include exceptional payments by corporations (including quasi-corporations, such as branches) that are made using accumulated reserves or stem from the sale of assets. Such exceptional payments are treated as the withdrawal of equity and are, therefore, recorded in the financial account. They are sometimes called "super dividends". Payments are normally considered to be exceptional in nature if they are not in line with recent trends.

(c) Bonus shares—i.e. new shares issued to all stockholders in proportion to their existing holdings—are not considered to be dividends. These arrangements are not treated as transactions either, because there has been no effective change in terms of the underlying instrument. Shareholders' claims on the relevant entity do not change as a result of the issuance of bonus shares (see Section 5).[38]

(d) Liquidating dividends, whether partial or total, arise mainly at the time of the termination of a company. These are treated as the withdrawal of investment and are, by convention, shown in the financial account, based on the assumption that liquidation dividends are more likely to involve previous equity finance than current income.

[38]Bonus shares stemming from the transformation of reserves into nominal (issued) capital may cause changes in the price of the corresponding shares.

Section 7 Specific operations relating to equity securities

Shareholders' rights and subscription rights

Shareholders' rights

7.1 Shareholders are granted rights depending on the class of shares. They have the right to:

(a) vote on matters such as elections to the board of directors;

(b) share in the distribution of the corporation's income;

(c) purchase new shares issued by the corporation (subscription rights);

(d) lay claim to the corporation's assets in the event of its liquidation.

7.2 However, shareholders' rights to a corporation's assets are subordinated to the rights of the corporation's creditors.

7.3 Some form of weighting may be applied to the voting rights of the various shareholders, but it is more common for voting rights to be proportionate to the number of ordinary shares held or their nominal value. Unless the company's statute provides otherwise, every member has one vote per ordinary share held.

7.4 Specific rights may be conferred on a particular shareholder (or class of shares) by the company's statute, by the terms of a share issue or by a shareholders' agreement. A company's capital may also be divided into separate classes, with specific rights attached to each class.

7.5 It is also possible to have non-voting shares. Provided that a corporation issues some voting shares, there is no limit to the percentage of capital, which may be represented by non-voting shares.

Subscription rights

7.6 Issuers of shares use subscription rights to provide existing shareholders with the opportunity to participate in new issues, so as not to have their interests diluted. To make the new shares even more attractive, these subscription rights may also allow existing shareholders to buy the shares at less than the market price. Subscription rights are a special kind of warrant (BPM6, para. 5.87) and are treated as financial derivatives.

7.7 When new shares in a corporation are issued, they may be offered to holders of (ordinary or preference) shares that have obtained a certain amount of subscription rights by a certain date. These rights may be traded separately on the exchange during a specific period of time. Only holders of subscription rights are allowed to purchase new shares. Such tradable rights in the form of temporary listed securities are also called "nil-paid letters". Shareholders that do not have subscription rights may be prevented from buying new shares.

7.8 Subscription rights that are traded separately are often given their own separate ISIN code.

Bonus shares

7.9 Bonus shares are new shares issued to all shareholders by converting a corporation's reserves into share capital (equity securities) in proportion to shareholders' existing holdings. This is simply the capitalisation of the corporation's reserves. Holders receive new shares and the number of shares increases, but the relative claims of the various shareholders do not change.

7.10 The issuance of bonus shares does not constitute a financial transaction between the shareholders and the corporation, as there is no change in the total amount of the underlying financial asset. The shareholders' claims on the corporation remain unchanged.

7.11 Bonus shares are designed to improve the liquidity of the shares on the market, so the total market value of shares issued may rise. Any such change is recorded as a holding gain. They are also a way for corporations to reward shareholders without triggering a tax event, which is generally the case when cash dividends are paid.

Stock splits and reverse splits

7.12 Stock splits are operations that split existing shares. These reduce the share price and increase the number of shares available in the market, with the aim of increasing the liquidity and affordability of the share. For example, in a two-for-one split, every shareholder with one stock is given an additional share, so if a corporation has 10 million outstanding shares with a value of 1 currency unit each before the split, it will have 20 million outstanding shares with a value of 0.5 currency unit each after the split.

7.13 So, a stock split reduces the price of a share, since the number of outstanding shares increases. As we have seen, in the case of a two-for-one split, the share price will be halved. Thus, although the number of outstanding shares and the stock price change, the market capitalisation remains constant.

7.14 A stock split is usually carried out by corporations that have seen their share prices increase to levels that are too high or exceed those of similar corporations. The primary motive is to make shares more affordable to small investors, and the underlying value of the company does not change.

7.15 Another type of stock split is the reverse split. This procedure is typically used by corporations with low share prices that would like to increase them in order to achieve greater respectability in the market or prevent the corporation from being delisted. (Many stock exchanges will delist stocks if they fall below a certain price per share.) For example, in a reverse five-for-one split, 10 million outstanding shares with a value of 0.5 currency unit each become two million outstanding shares with a value of 2.5 currency units each. In both cases, the company is worth 5 million currency units.

7.16 Stock splits and reverse splits do not constitute transactions.

Share buy-backs

7.17 Corporations may buy back their own equity in a share repurchase, also known as a "stock repurchase" or a "share buy-back".

7.18 There are two different ways of recording such operations.

(a) In *national accounts*, a share buy-back is recorded as the redemption of equity securities. These are recorded as financial transactions, with cash provided to existing shareholders in exchange for a share in the corporation's outstanding equity—i.e. cash is exchanged for a reduction in the number of outstanding shares. Because a corporation cannot have a claim on itself, the liability is deemed to have been extinguished, even if the shares are not cancelled. The corporation either retires the shares or keeps them as "treasury stocks", available for reissuance.

(b) In *securities statistics*, share buy-backs are not netted out, as listed corporations may purchase and sell their own shares continuously. Many listed corporations hold varying amounts of their own shares for various purposes (e.g. in order to achieve liquid markets). These are often subject to strict regulations and requirements regarding the reporting of holdings to financial market supervisors and/or stock exchanges. A reduction in outstanding amounts can only be recorded once the shares that have been bought back are formally extinguished or cancelled (e.g. by means of the reduction of the nominal or issued capital in the official balance sheet of the corporation and/or the official reduction of the firm's market capitalisation on the stock exchange). Moreover, differences between a corporation's outstanding shares and its (paid-up) registered capital might be difficult to distinguish.

7.19 It should be noted that the two different ways of recording these operations lead to discrepancies between securities statistics and national accounts.

Mergers and acquisitions

7.20 Mergers arise when two or more corporations agree to combine to form a single entity.

7.21 Acquisitions involve the purchase of one corporation or group of corporations by another (albeit the latter may not acquire all of the shares in the former).

7.22 Corporate restructuring in the form of mergers and acquisitions causes the appearance and disappearance of financial assets and liabilities. When a company ceases to be an independent legal entity because it is absorbed by one or more other corporations, all of its financial assets and liabilities (including shares and other equity) vis-à-vis the corporation(s) that absorbed it disappear from the national accounts. This is recorded as changes in sectoral classification and structure in "other changes in the volume of assets and liabilities".

7.23 However, the purchase of a corporation's shares and other equity as part of a merger is recorded as a financial transaction between the purchasing corporation and the previous owner.

7.24 The replacement of existing shares with shares in the new corporation is recorded as the redemption of shares accompanied by the issuance of new shares. The absorbed corporation's financial assets and liabilities vis-à-vis third parties remain unchanged and pass to the absorbing corporation(s). Where necessary (e.g. where the absorber and the absorbed corporation belong to different sectors), this passing on of assets and liabilities is also recorded as other changes in the volume of assets and liabilities.

7.25 In the context of mergers and acquisitions, "squeeze-outs" and other restructuring operations, temporary or intermediary shares are often created for technical reasons. These intermediary shares usually exist only for a few months (or less) and are used to manage the often complex exchanging and conversion of shares.

7.26 When a corporation is legally split up into two or more institutional units, new financial assets and liabilities are recorded as changes in sectoral classification and structure.

Privatisation and nationalisation

Privatisation

7.27 Privatisation generally constitutes the transfer to non-government owners, by a government unit, of the controlling equity of a public corporation or quasi-corporation. The proceeds of privatisation are not government revenues, but a financial transaction, with no impact on the government's deficit or surplus, as this event has no impact on net worth and simply represents a change in the composition of assets (F5 as opposed to F2) in the government's balance sheet. Thus, the proceeds of privatisation are to be recorded gross in the financial accounts.

Indirect privatisation

7.28 Privatisation may also occur by means of more complicated institutional arrangements. For instance, the assets of a public corporation may be sold by a public holding company or another government-controlled public corporation, with all or part of the proceeds passed on to the government.

7.29 In all cases, the payment to the government of the proceeds from such asset sales is to be recorded as a financial transaction, irrespective of the way it is presented in the accounts of the government or one of its subsidiaries, with a simultaneous decrease in shares and other equity corresponding to the partial liquidation of the assets of the holding company. Any proceeds of privatisation that are retained by the holding company represent government revenues ploughed back in by means of a capital injection.

7.30 It may also be that the public holding company (or another public corporation) acts as a "restructuring agency". In such a situation, it may be that the proceeds of the sale are not paid to the government and are instead kept by the restructuring agency in order to inject capital into other enterprises.

7.31 When the restructuring unit, whatever its legal status, acts as a direct agent of the government, its main function is to restructure and change the ownership status of public corporations and to channel funds from one unit to another. The unit will normally be classified as belonging to the general government sector.

7.32 However, when the restructuring unit is a holding company controlling a group of subsidiaries, but not performing a management function, and only a small percentage of its activities are dedicated to the above-mentioned channelling of funds for public policy purposes on behalf of the government, the public holding company is allocated to the financial corporation sector and treated as a captive financial institution, even if all of the subsidiary corporations are non-financial corporations.

Nationalisation

7.33 Nationalisation is generally the acquisition from non-government owners, by a government unit, of the controlling equity of a corporation or quasi-corporation. Nationalisation usually takes the form of the purchase of shares in exchange for currency or deposits or is financed by means of a debt instrument. The government buys all or part of the shares in the corporation at the market price—or at a price that is sufficiently close to that level, taking into account standard market practices with regard to the valuation of corporations in that area of activity.

7.34 The transaction is by mutual consent, although the initial owner may have limited scope for refusing the offer or negotiating the price. The purchase of shares is to be recorded in the financial account as a financial transaction.

7.35 Exceptionally, the government may acquire ownership of a corporation by means of its appropriation or confiscation. Here, the change in the ownership of assets is not the result of a transaction conducted by mutual consent. No payment is made to owners, or the payment does not fairly reflect the value of the assets. The difference between the market value of the assets acquired and any compensation provided is recorded as an uncompensated seizure in "other changes in the volume of assets".

Debt-for-equity swaps

7.36 Debt-for-equity swaps are exceptional financing transactions involving the exchange (usually at a discount) of debt instruments relating to an economy for (typically non-resident) investors' equity investment in the economy. Generally, such arrangements result in the extinguishing (debit item) of a fixed payment liability, debt security or loan (usually denominated in foreign currency), to be recorded under the appropriate instrument, and the creation (credit item) of an equity liability (denominated in domestic currency) vis-à-vis the investor in question, to be recorded under direct or portfolio investment as appropriate.

7.37 These swaps may see bank loans or corporate liabilities being exchanged for equity, or the central bank redeeming the outstanding debt at a discount in local currency (credit item), with the recipient (typically a non-resident) reinvesting the proceeds as equity in the enterprise in question.

7.38 Where debt is exchanged directly for equity investment in the debtor economy, credit entries should be made under direct investment/equity capital if the direct investor (equity holder) directly holds equity that entitles it to 10% or more of the voting rights in the enterprise. Otherwise, the equity claim should be recorded under portfolio investment/equity securities. These transactions should be recorded using the value of the equity acquired, with offsetting debit entries made under the appropriate debt instrument for the reduction in liabilities.

7.39 For indirect debt-for-equity swaps, whereby debt is exchanged for a local currency claim (deposit), which is, in turn, exchanged for equity liabilities on the part of the debtor, transactions are recorded for both the initial exchange (i.e. the swapping of debt for deposits, with the transaction recorded using the value of the deposits) and the exchanging of deposits for equity. Equity liabilities (either direct or portfolio) increase and debt liabilities decrease by the value of the instrument extinguished.

7.40 All transactions should be valued using the market price of the new claim received. If there is a difference in value between the old and new claims, this is recorded as a valuation adjustment in the revaluation account, rather than as a transaction—except where non-marketable debt owed to official creditors is involved, in which case any reduction in the value of the old debt is recorded as debt forgiveness (capital transfer).

Section 8 Issuance and holdings of equity securities in a "from-whom-to-whom" framework

Issuers and holders

8.1 A "from-whom-to-whom" framework allows a detailed presentation of financing and financial investment via equity securities, which has a number of benefits. From a broader perspective, it allows the analysis not only of relationships between institutional sectors and sub-sectors within an economy, but also of relationships between these sectors/sub-sectors and non-residents (which can, in turn, be broken down by country or sector). Such analysis sheds light on the sectoral composition of assets and liabilities, on potential strengths and vulnerabilities in portfolios, and on interconnectedness and potential spillovers.

8.2 This framework allows us to see who is financing whom, to what extent, with which type of equity security, and so on. It may also allow us to see, for example, the resident sectors that equity securities held by households or non-residents represent claims on. Or, from the perspective of issuers, it may allow us to see the significance of equity securities issued by non-financial corporations and held by households or financial corporations (and their sub-sectors), as well as the significance of equity securities issued by resident corporations and held by non-residents.

8.3 The presentation of equity securities holdings in a "from-whom-to-whom" framework or broken down by debtor/creditor[39] represents an extension of the presentation of unconsolidated equity securities issuance or holdings without any counterpart sector or residency information, as outlined in connection with Tables 1.2 and 1.3 in Section 1.

8.4 Table 1.4 in Section 1 shows a breakdown by issuing sector of positions (or, in the case of transactions, net issuance) in respect of equity securities (i.e. showing the sectors on which these represent claims) and a breakdown by holding sector of positions or transactions in respect of equity securities (i.e. showing the sectors acquiring equity securities). This presentation provides information on relationships between issuers and holders and is, therefore, consistent with a "from-whom-to-whom" framework.

8.5 For each type of equity security (whether in terms of positions or flows), a "from-whom-to-whom" framework has two dimensions:

(a) the residency, sector or sub-sector of the issuer;

(b) the residency, sector or sub-sector of the holder.

[39]The 2008 SNA uses the term "flow of funds" (see Chapter 27 of the 2008 SNA).

Table 8.1

"From-whom-to-whom" financial transactions in equity securities (unconsolidated)

Issuers \ Holders		Residents: Non-financial corporations	Residents: Financial corporations	Residents: General government	Residents: Households and non-profit institutions serving households	Residents: All residents	Non-residents	All holders
Residents	Non-financial corporations	30	23	5	65	123	24	147
	Financial corporations	11	22	2	43	78	28	106
	General government	–	–	–	–	–	–	–
	All residents	41	45	7	108	201	52	253
Non-residents		34	12	2	43	91		
All issuers		75	57	9	151	292		

8.6 A "from-whom-to-whom" framework requires three-dimensional tables providing breakdowns for the equity security, the issuer and the holder.[40] Such tables show positions, transactions, revaluations and other changes in the volume of assets, broken down by the sector of the issuer and the sector of the holder.

8.7 Table 8.1 is a "from-whom-to-whom" presentation for transactions in equity securities. It is the same type of table as Table 1.4 in Section 1 and shows, for instance, in its fourth column that households and non-profit institutions serving households acquired (net of disposals) 151 units of equity securities. This acquisition reflects increases in their claims on non-financial corporations (65 units), financial corporations (43 units) and the rest of the world (43 units). Net acquisitions are the acquisition of newly issued securities (net of redemptions) plus acquisitions (net of disposals) on secondary markets.

8.8 Table 8.1 also indicates, for example, that transactions in the reference period resulted in non-financial corporations issuing (net of redemptions) 147 units of equity securities, as reflected in the first row. Their liabilities to other non-financial corporations increased by 30 units, while liabilities to financial corporations increased by 23 units, liabilities to general government increased by 5 units, liabilities to households and non-profit institutions serving households increased by 65 units and liabilities to the rest of the world increased by 24 units. Conversely, households or non-profit institutions serving households issued no equity securities.

8.9 Table 8.1 also presents intra-sectoral transactions in equity securities holdings for resident sectors (see diagonal cells). For

[40] The time series aspect of the "from-whom-to-whom" framework may be seen as the fourth dimension.

instance, non-financial corporations issued 30 units of equity securities that were held by other institutional units in the same sector. These transactions are not included when intra-sectoral transactions are consolidated. If transactions were consolidated for each resident sector, the table would show only transactions between the various resident sectors and between those sectors and the rest of the world, but not transactions within a given resident sector.

8.10 Transactions in equity securities held by residents and issued by non-residents are reflected in the "non-residents" row. These transactions total 91 units. Transactions in equity securities held by non-residents and issued by residents are shown in the "non-residents" column. These total 52 units. Transactions in equity securities held by non-residents and issued by non-residents are not covered (see black cell).

8.11 Table 8.1 also shows that, by definition, the sum of transactions in equity securities held by residents (and issued by residents and non-residents; 292 units) and transactions in securities held by non-residents (and issued by residents; 52 units) is equal to the sum of transactions in equity securities issued by residents (and held by residents and non-residents; 253 units) and transactions in securities issued by non-residents (and held by residents; 91 units). In both cases, the total amount is 344 units. Table 8.2 presents Table 8.1 in a time series format.

8.12 Similar tables can be compiled for positions, revaluations and other changes in the volume of assets.

8.13 The complexity of "from-whom-to-whom" tables for equity securities is determined by the breakdowns chosen for the financial instruments (i.e. whether they are broken down by category, position or sub-position) and for issuers and holders (i.e. whether they are broken down by residency, sector or sub-sector).

8.14 Combining these breakdowns leads to a fairly large number of "from-whom-to-whom" relationships, especially as the data may need to be shown as both positions and flows. It is therefore essential to select a specific category, position or sub-position as regards the equity securities.

The transactor principle versus the issuer/holder principle

8.15 A distinction can be drawn between two types of transaction in equity securities. The first type, the issuance and redemption of equity securities, involvs only the issuer and one holder. The second type, transactions on secondary markets, involves three institutional units: the two holders exchanging the equity security (i.e. the "old" holder and the "new" holder) and the institutional unit that issued it.

8.16 The fact that three parties are involved needs to be reflected in the recording of secondary market transactions in a "from-whom-to-whom" approach, because the position between the issuer and the seller (the "old" holder) and the position between the issuer and the buyer (the "new" holder) change.

8.17 A financial transaction between two institutional units involving ownership of an equity security—e.g. the transfer of ownership of an equity security from institutional unit A (the "old" holder) to institutional unit B (the "new" holder), where B is in a different sector/sub-sector from A—may therefore be recorded in two different ways.

(a) It could be recorded by means of a reclassification entry in the issuer's "other changes in the volume of assets" account, reflecting the fact that the holder is now in a different sector. With this approach, the secondary market transaction is recorded in the accounts as a single transaction, accompanied by a reclassification adjustment.

Table 8.2

“From-whom-to-whom” transactions in equity securities in a time series format

Transaction	t	t + 1	…	t + n
Net acquisition of equity securities by				
Non-financial corporations				
Issued by				
Non-financial corporations	30			
Financial corporations	11			
General government	–			
All residents	41			
Non-residents	34			
All issuers	75			
Financial corporations				
Issued by				
Non-financial corporations	23			
Financial corporations	22			
General government	–			
All residents	45			
Non-residents	12			
All issuers	57			
General government				
Issued by				
Non-financial corporations	5			
Financial corporations	2			
General government	–			
All residents	7			
Non-residents	2			
All issuers	9			
Households and non-profit institutions serving households				
Issued by				
Non-financial corporations	65			
Financial corporations	43			
General government	–			
All residents	108			
Non-residents	43			
All issuers	151			
All residents				
Issued by				
Non-financial corporations	123			
Financial corporations	78			
General government	–			
All residents	201			

(Continued)

Table 8.2 (Continued)

Non-residents	91			
All issuers	292			
Non-residents				
Issued by				
Non-financial corporations	24			
Financial corporations	28			
General government	–			
All residents (= all issuers)	52			
All holders				
Issued by				
Non-financial corporations	147			
Financial corporations	106			
General government	–			
All residents	253			

(b) However, it could also be recorded as the extinguishing of holder A's claim against the issuer and the creation of holder B's claim against the issuer. With this approach, the secondary market transaction is recorded as two transactions.

8.18 The first approach gives prominence to the contract between the holders (the "transactor principle"), while the second approach emphasises the contract between the issuer and the holder (the "issuer/holder principle").

The transactor principle

8.19 The transactor principle captures the change in the ownership of the financial asset in the accounts of the transactors involved, but not in the account of the issuer.

8.20 Thus, under the transactor principle, a change in the ownership of an equity security is recorded without taking into consideration the involvement of the issuer. For example, when a household buys from a financial corporation a share issued by a non-financial corporation, the transactor principle results in a single transaction being recorded, as shown in Table 8.3 (i.e. a transaction between a financial corporation and a household), without the change of ownership being reflected in the account of the non-financial corporation that issued the share.

8.21 To reflect the change in the holder's counterpart sector in the account of the issuing non-financial corporation, the reclassification of the holder is recorded in the issuer's "other changes in the volume of assets" account. The numerous secondary market transactions in shares would necessitate many such reclassifications.

8.22 Applying the transactor principle requires data on individual transactions, including information on:

(a) the transactors (i.e. holders A and B);

(b) the type and value of the equity security concerned;

(c) the issuer.

8.23 The collection of data on individual transactions leads to a large amount of detailed statistical information being collated,

Table 8.3

Recording a household's acquisition of shares from a financial corporation in accordance with the transactor principle

Financial assets	Liabilities	Financial assets	Liabilities
Households		**Non-financial corporations**	
− Currency			+ Other changes in liabil-ities vis-à-vis households
+ Shares			
Financial corporations			
+ Currency			− Other changes in liabil-ities vis-à-vis financial corporations
− Shares			

Table 8.4

Recording a household's acquisition of shares from a financial corporation in accordance with the issuer/holder principle

Financial assets	Liabilities	Financial assets	Liabilities
Households		**Non-financial corporations**	
– Currency		+ Currency	
+ Shares vis-à-vis non-financial corporations			+ Shares vis-à-vis households
Financial corporations			
+ Currency		– Currency	
– Shares vis-à-vis non-financial corporations			– Shares vis-à-vis financial corporations

bearing in mind the fairly frequent trading of equity securities on any given day. Information on both transactors is available to custodians or stock exchanges.[41] If no transaction data are available, only the positions of holders of equity securities can be identified. Accordingly, statistical collection systems do not usually provide detailed information on transactions, instead relying on position data.[42]

The issuer/holder principle

8.24 The issuer/holder principle captures a transaction between two institutional units in the accounts of the two transactors, as well as allowing the change of holder to be recorded in the financial account of the issuer.

8.25 Thus, when the ownership of a share changes, the issuer/holder principle records the two stages of the process as financial transactions. When a financial corporation sells a share issued by a non-financial corporation to a household, the financial account of the non-financial corporation records the issuance of a share to a household and a corresponding repayment to a financial corporation. Financial transactions involving three institutional units are recorded as shown in Table 8.4.

[41] However, in many cases, the transactor approach results in data on transactions with brokers and other intermediaries, not transactions with the "ultimate" owners of the securities.

[42] Some economies do capture transaction data directly, usually on a net asset or liability basis, as requested in BPM6 for portfolio transactions. Capturing these data presents a challenge from a practical perspective.

8.26 The sale of an equity security issued by a resident or non-resident institutional unit (the issuer) to another resident or non-resident institutional unit (the two holders) clearly conforms to the SNA's definition of a transaction (i.e. the exchange of economic value between willing participants). This cannot be construed as a reclassification, from either the buyer's or the seller's point of view.

8.27 Symmetry of treatment between holders of assets and issuers of liabilities would require that the issuer treat the event as a transaction (i.e. a redemption and, simultaneously, the issuance of a new share, netting to zero net issuance).

8.28 This approach is further justified by implicit or explicit conditions accepted by the issuer when creating an equity security. Where issuance requires the issuer to record the owners of securities in the issuer's liability register, the two holders will inform the issuer of the change in ownership, and by recording the event, the issuer acknowledges the secondary market transaction.

Section 9 Detailed presentation tables

9.1 This section refers to the following stylised detailed presentation tables:

- presentation table A (Table 1.2 in Section 1), which follows the "residency of issuer" approach;
- presentation table B (Table 1.3 in Section 1), which follows the "residency of holder" approach;
- presentation table C (Table 1.4 in Section 1), which follows the "from-whom-to-whom" approach;
- presentation tables with global aggregates for equity securities.

Presentation tables based on the "residency of issuer" approach

9.2 Presentation table A (Table 1.2 in Section 1) is based on the "residency of issuer" approach. Each institutional unit that issues equity securities is allocated to an economic sector. The equity securities issued are part of the balance sheet of this sector, whereas transactions in such equity securities form part of the economic sector's financial account. Under the "residency of issuer" approach, statistics on equity securities issuance are presented as an integral part of the national accounts, and portfolio and direct investment is presented in the balance of payments and the international investment position. Equity securities issuance by resident sectors is shown without any breakdown on the basis of holders' residence or economic sector, and equity securities issued by residents and held by non-residents are also shown.

9.3 This sub-section outlines three possible ways of presenting statistics on equity securities issuance when following the "residency of issuer" approach: broken down by type of financial instrument; broken down by issuing sector and sub-sector; and broken down on the basis of positions and flows. Table 9.1 shows the two types of equity security: listed and unlisted shares.

9.4 Table 9.2 below breaks issuers down by resident sector, resident financial corporation sub-sector and residency. It also distinguishes ordinary shares from other listed shares.

9.5 The breakdown by financial corporation sub-sector allows shares issued by money-issuing corporations, insurance corporations, pension funds and other financial corporations to be shown.

9.6 Table 9.3 shows positions, transactions, revaluations and other changes in the volume of assets and liabilities for: equity securities issued by resident sectors and (in the case of financial corporations) sub-sectors; equity securities issued by non-residents; and equity securities held by residents and non-residents.

9.7 Expressed in terms of market values, these statistics cover: positions in equity securities at the end of the previous period; net issuance, revaluations and other changes in the volume of assets and liabilities during

Table 9.1

Equity securities broken down by issuer and type of equity security

Holders \ Issuers		Residents: Non-financial corporations	Residents: Financial corporations	Residents: General government	Residents: Residents	Non-residents	All issuers
Residents	Listed shares						
	Unlisted shares						
Non-residents	Listed shares						
	Unlisted shares						
All holders	Listed shares						
	Unlisted shares						

Table 9.2

Equity securities broken down by issuer and type of share

Holders \ Issuers		Residents: Non-financial corporations	Residents: Financial corporations: Money-issuing corporations	Residents: Financial corporations: Insurance corporations	Residents: Financial corporations: Pension funds	Residents: Financial corporations: Other financial corporations	Residents: General government	Residents: Residents	Non-residents	All issuers
Residents	Shares									
	Listed shares									
	Of which: Ordinary shares									
	Unlisted shares									
Non-residents	Shares									
	Listed shares									
	Of which: Ordinary shares									
	Unlisted shares									
All holders	Shares									
	Listed shares									
	Of which: Ordinary shares									
	Unlisted shares									

Table 9.3

Equity securities broken down by residency, sector and financial sub-sector of the issuer and the place of residence of the holder
(*Positions, transactions, revaluations and other changes in the volume of assets and liabilities*)

Holders \ Issuers		Residents: Non-financial corporations	Residents: Financial corporations: Money-issuing corporations	Residents: Financial corporations: Insurance corporations	Residents: Financial corporations: Pension funds	Residents: Financial corporations: Other financial corporations	Residents: General government	Non-residents	All issuers
Residents	Position at end of previous period								
	Net issuance during most recent period								
	Revaluations during most recent period								
	Other changes in the volume of assets in most recent period								
	Position at end of most recent period								
Non-residents	Position at end of previous period								
	Net issuance during most recent period								
	Revaluations during most recent period								
	Other changes in the volume of assets in most recent period								
	Position at end of most recent period								
All holders	Position at end of previous period								
	Net issuance during most recent period								
	Revaluations during most recent period								
	Other changes in the volume of assets in most recent period								
	Position at end of most recent period								

the most recent period; and positions in equity securities at the end of the most recent period.

9.8 Transactions are presented on a net basis (i.e. issuance minus redemptions). They may also be presented on a gross basis (i.e. with details of both issuance and redemptions).

Presentation tables based on the "residency of holder" approach

9.9 Presentation table B (Table 1.3 in Section 1) is based on the "residency of holder" approach. Each institutional unit that holds equity securities is allocated to an economic sector. Those equity securities holdings are part of the balance sheet (asset portfolio) of that sector, whereas transactions in equity securities form part of the economic sector's financial account.

9.10 Under the "residency of holder" approach, statistics on equity securities holdings are presented as an integral part of the national accounts, and portfolio and direct investment is presented in the balance of payments and the international investment position. Equity securities holdings of resident sectors are shown without any breakdown on the basis of issuers' residency or economic sector, and equity securities issued by residents and held by non-residents are also shown.

9.11 This sub-section outlines various ways of presenting statistics on equity securities holdings when following the "residency of holder" approach, breaking them down by holder and by type of equity security. Table 9.4 reflects this approach and shows the relevant categories.

Table 9.4

Equity securities broken down by holder and type of equity security

Holders / Issuers		Residents					Non-residents	All holders
		Non-financial corporations	Financial corporations	General government	Households and non-profit institutions serving households	Residents		
Residents	Listed shares							
	Unlisted shares							
Non-residents	Listed shares							
	Unlisted shares							
All issuers	Listed shares							
	Unlisted shares							

9.12 Several tables are presented below, breaking down the equity securities holdings of resident sectors, resident financial corporation sub-sectors and non-residents by type of equity security.

9.13 The breakdown by sub-sector for financial corporations allows the equity securities holdings of money-issuing corporations and institutional investors such as non-MMF investment funds, insurance corporations and pension funds to be shown.

9.14 Table 9.5 shows the equity securities holdings of resident sectors, resident financial corporation sub-sectors and non-residents broken down on the basis of the issuer's residency.

9.15 It is recommended that holdings of equity securities be broken down further into those denominated in domestic currency and those denominated in foreign currencies.

9.16 Table 9.6 shows the equity securities holdings of resident sectors, resident financial corporation sub-sectors and non-residents broken down on the basis of the issuer's residency and the type of share.

Table 9.5

Equity securities broken down by residency, resident sector and resident financial sub-sector of the holder, the place of residence of the issuer and the currency of denomination[43]

Holders / Issuers		Residents										Non-residents	All holders
			Financial corporations										
		Non-financial corporations	Central bank	Deposit-taking corporations except the central bank	Non-MMF investment funds	Insurance corporations	Pension funds	Other financial corporations	General government	Households and non-profit institutions serving households	Memo item: Public sector		
Residents	Domestic currency												
Non-residents	Domestic currency												
	Foreign currencies												
	All currencies												
All issuers	Domestic currency												
	Foreign currencies												
	All currencies												

[43] Some equity securities are issued by resident corporations in currencies other than the domestic currency.

Table 9.6

Equity securities broken down by residency, resident sector and resident financial sub-sector of the holder, residency of the issuer and the type of share

	Holders	Residents										Non-residents	All holders
			Financial corporations										
Issuers		Non-financial corporations	Central bank	Deposit-taking corporations except the central bank	Non-MMF investment funds	Insurance corporations	Pension funds	Other financial corporations	General government	Households and non-profit institutions serving households	Memo item: Public sector		
Residents	Listed shares												
	Of which: Ordinary shares												
	Unlisted shares												
Non-residents	Listed shares												
	Of which: Ordinary shares												
	Unlisted shares												
All issuers	Listed shares												
	Of which: Ordinary shares												
	Unlisted shares												

9.17 Table 9.7 shows positions, transactions, revaluations and other changes in the volume of assets for equity securities held by resident sectors, resident financial corporation sub-sectors and non-residents and issued by residents and non-residents.

9.18 Expressed in terms of market values, these statistics cover: positions in equity securities at the end of the previous period; net acquisitions, revaluations and other changes in the volume of assets during the most recent period; and positions in equity securities at the end of the most recent period. Transactions are presented on a net basis (i.e. acquisitions minus disposals). They may also be presented on a gross basis (i.e. with details of both acquisitions and disposals).

Presentation tables based on the "from-whom-to-whom" approach

9.19 Stylised presentation table C (Table 1.4 in Section 1) is based on the "from-whom-to-whom" approach. Table 9.8, which is

Table 9.7

Equity securities broken down by residency, resident sector and resident financial sub-sector of the holder and residency of the issuer
(Positions, transactions, revaluations and other changes in the volume of assets and liabilities)

Holders		Residents											
			Financial corporations										
Issuers		Non-financial corporations	Central bank	Deposit-taking corporations except the central bank	Non-MMF investment funds	Insurance corporations	Pension funds	Other financial corporations	General government	Households and non-profit institutions serving households	Memo item: Public sector	Non-residents	All holders
Residents	Position at end of previous period												
	Net acquisitions during most recent period												
	Revaluations during most recent period												
	Other changes in the volume of assets in most recent period												
	Position at end of most recent period												
Non-residents	Position at end of previous period												
	Net acquisitions during most recent period												
	Revaluations during most recent period												
	Other changes in the volume of assets in most recent period												
	Position at end of most recent period												
All issuers	Position at end of previous period												
	Net acquisitions during most recent period												
	Revaluations during most recent period												
	Other changes in the volume of assets in most recent period												
	Position at end of most recent period												

based on that table, shows positions, transactions, revaluations and other changes in the volume of assets for equity securities held by residents and non-residents, with a breakdown by institutional sector for resident issuers (light grey cells). It also shows non-residents' holdings of equity securities issued by residents (penultimate column), as well as equity securities issued by non-residents and held by resident sectors (penultimate row). However, non-residents' holdings of equity securities issued by non-residents are not covered (black cells).

9.20 For residents, the presentation of unconsolidated data on equity securities holdings and issuance—i.e. including intra-sectoral positions and flows (diagonal dark grey cells in Table 9.8)—is recommended.

9.21 Three-dimensional tables in a "from-whom-to-whom" framework include, in addition to the two standard dimensions, a breakdown (or combination of breakdowns) of equity securities by sub-category.

9.22 Table 9.9 shows equity securities held by resident sectors and non-residents, broken down on the basis of the residency and resident sector of the issuer. It also provides a currency breakdown for equity securities held by resident sectors and non-residents, breaking them down into securities denominated in domestic currency and securities denominated in foreign currencies.

9.23 Table 9.10 shows positions and flows for equity securities held by resident sectors and non-residents and equity securities issued

Table 9.8

Equity securities holdings in a "from-whom-to-whom" framework, broken down by residency and resident sector of the holder, the type of financial instrument and residency and resident sector of the issuer

Holders / Issuers			Residents: Non-financial corporations	Residents: Financial corporations and sub-sectors	Residents: General government	Residents: Households and non-profit institutions serving households	Non-residents	All holders
Residents	Non-financial corporations	Listed shares						
		Unlisted shares						
	Financial corporations and sub-sectors	Listed shares						
		Unlisted shares						
	General government	Listed shares						
		Unlisted shares						
Non-residents		Listed shares						
		Unlisted shares						
All issuers		Listed shares						
		Unlisted shares						

Table 9.9

Equity securities in a "from-whom-to-whom" framework, broken down by residency, resident sector and currency of denomination[44]

Holders / Issuers			Residents				Non-residents	All holders
			Non-financial corporations	Financial corporations and sub-sectors	General government	Households and non-profit institutions serving households		
Residents	Non-financial corporations	Domestic currency						
	Financial corporations and sub-sectors	Domestic currency						
	General government	Domestic currency						
Non-residents		Domestic currency						
		Foreign currencies						
		All currencies						
All issuers		Domestic currency						
		Foreign currencies						
		All currencies						

by resident sectors and non-residents. Expressed in terms of market values, these statistics cover: positions at the end of the previous period; transactions, revaluations and other changes in the volume of assets during the most recent period; and positions at the end of the most recent period. Transactions are presented on a net basis (i.e. acquisitions minus disposals).

9.24 Like positions and transactions, revaluations (holding gains or losses) and other changes in volume can be presented in a three-dimensional table with breakdowns by place of residence and resident institutional sector for the holder and the issuer. Such detailed statistical information could, in the future, be provided by security-by-security databases.

9.25 Presentations using three-dimensional tables can be designed for specific sub-sectors or groups of financial corporations (e.g. money-issuing corporations or

[44]Some equity securities are issued by resident corporations in currencies other than the domestic currency.

Table 9.10

Equity securities holdings in a "from-whom-to-whom" framework
(*Positions and flows*)

Issuers		Holders	Residents: Non-financial corporations	Residents: Financial corporations and sub-sectors	Residents: General government	Residents: Households and non-profit institutions serving households	Non-residents	All holders
Residents	Non-financial corporations	Position at end of previous period						
		Net acquisitions during most recent period						
		Revaluations during most recent period						
		Other changes in the volume of assets in most recent period						
		Position at end of most recent period						
	Financial corporations	Position at end of previous period						
		Net acquisitions during most recent period						
		Revaluations during most recent period						
		Other changes in the volume of assets in most recent period						
		Position at end of most recent period						
	General government	Position at end of previous period						
		Net acquisitions during most recent period						
		Revaluations during most recent period						
		Other changes in the volume of assets in most recent period						
		Position at end of most recent period						
Non-residents		Position at end of previous period						
		Net acquisitions during most recent period						
		Revaluations during most recent period						
		Other changes in the volume of assets in most recent period						
		Position at end of most recent period						
All issuers		Position at end of previous period						
		Net acquisitions during most recent period						
		Revaluations during most recent period						
		Other changes in the volume of assets in most recent period						
		Position at end of most recent period						

institutional investors) to show the role played by financial intermediaries in providing financial resources to other sectors through maturity or asset transformation.

9.26 The positions and flows of money-issuing institutions, insurance corporations, pension funds and other financial corporations are likely to be of great interest. Such expanded presentations may also reveal a growing (or shrinking) role for other types of financial intermediary and financial institution, shedding light on the nature of their business in terms of the counterparties with whom they transact and the types of equity security that they hold or trade.

9.27 Table 9.11 presents a breakdown of holders of equity securities by sector and sub-sector in a "from-whom-to-whom" framework, allowing detailed analysis of the relationship between issuers and holders. It shows the equity securities holdings of the five main components of the financial corporation sector. For each category, holdings are broken down on the basis of the issuer's place of residence and resident sector. Depending on the availability of data, different degrees of detail could be shown, such as further breakdowns by currency.

9.28 For financial stability purposes, a more detailed breakdown of equity securities holdings is required, with data for individual issuers. As a first step, it may be useful to establish a breakdown of investors in equity securities issued by individual financial corporations. Thereafter, issuer-by-issuer data may be required for systemically relevant investors such as large and complex financial and non-financial groups, with consolidation at group level.

Table 9.11

Equity securities holdings of resident financial corporation sub-sectors in a "from-whom-to-whom" framework, broken down by the issuer's residency and resident sector

Holders / Issuers	Central bank	Deposit-taking corporations except the central bank	Non-MMF investment funds	Insurance corporations and pension funds	Other financial corporations
Residents					
Non-financial corporations					
Of which: Listed shares					
Financial corporations					
Of which: Listed shares					
General government					
Non-residents					
Of which: Listed shares					

Table 9.12

Equity securities broken down by the holder's residency and resident sector and the issuer's country of residence

Holders / Issuers	Residents								Non-residents		All holders	
	Non-financial corporations		Financial corporations		General government		Households and non-profit institutions serving households					
	Listed shares	Unlisted shares	Listed shares	Unlisted shares	Listed shares	Unlisted shares	Listed shares	Unlisted shares	Listed shares	Unlisted shares	Listed shares	Unlisted shares
Country A												
Country B												
Country C												
…												
Country Z												
All issuers (world)												

Table 9.13

Equity securities holdings and issuance by country of residence

Holders / Issuers	Country A	Country B	Country C	…	Country Z	All holders (world)
Country A						
Country B						
Country C						
…						
Country Z						
All issuers (world)						

Presentation tables with global and area aggregates for equity securities

9.29 Global aggregates for equity securities are necessary in order to interpret the manner in which imbalances in equity markets could spread through economies and other financial markets.

9.30 This sub-section deals with the presentation of equity securities aggregates for the world as a whole and for different areas and countries.

9.31 Table 9.12 shows equity securities holdings broken down by: (i) country (or country group); (ii) place of residence; (iii) resident sector; (iv) currency; and (v) type of equity security.

9.32 The resident sectors in question are non-financial corporations, financial corporations, general government, and households and non-profit institutions serving households. These are broken down further by type of equity security.

9.33 Table 9.13 is a "from-whom-to-whom" table for equity securities holdings and issuance, breaking holders and issuers down into countries and aggregated groups of countries.

9.34 A table such as this involving global aggregates requires national "from-whom-to-whom" data, which must be aggregated and reconciled. More detailed tables might show further breakdowns by sector or by type of financial instrument.[45]

9.35 Other breakdowns could show equity securities held by the financial corporation sector as a whole or by deposit-taking corporations that represent claims on specific groups of countries (e.g. emerging market and developing economies).

[45]For bearer securities (which account for the majority of equity securities, especially listed shares), it is usually impossible to compile a breakdown by country and sector for non-residents. Although the exchange of data in the context of the CPIS survey allows the compilation of some low-frequency position data with breakdowns by counterpart country, even these mirror data do not usually offer full coverage (let alone consistency).

Annex 1a The coordinated portfolio investment survey

A1.1 The CPIS survey is conducted on an annual basis under the auspices of the IMF's Statistics Department (STA). Participation in the survey is voluntary, and 73 economies currently participate.[46] Annual data are available from 2001 (see Part 2 of the Handbook).

A1.2 The CPIS survey provides information on individual economies' year-end holdings of portfolio investment securities (equity securities and debt securities) valued at market prices, broken down by the economy in which the issuer is resident (Table A1.1). Participants use the definitions and classifications set out in the fifth (1993) or sixth (2009) editions of the *Balance of Payments Manual* and the second edition of the *Coordinated Portfolio Investment Survey Guide*.

A1.3 Holdings of securities recorded as direct investment are not included in the results of the CPIS survey.[47] STA collects details of holdings of reserve assets from economies participating in the CPIS survey through a companion survey: the Survey of Securities Held as Foreign Exchange Reserves (SEFER). In addition, information on the securities holdings of major international organisations is reported to STA in a companion survey: the Survey of Securities Held by International Organizations (SSIO). Neither data on reserve assets nor those on holdings by international organisations are disclosed in a way that allows individual holders to be identified, as this information is confidential.

A1.4 Together, the three surveys (i.e. the CPIS, SEFER and SSIO surveys) provide a database on cross-border holdings of securities, broken down on the basis of the economy in which the issuer is resident and the type of security.

A1.5 In addition to "core" data on the counterpart economy where the issuer is resident, participants are encouraged to provide supplementary information on the currency in which the underlying instruments are denominated and the sector to which the resident holder belongs. No data are currently reported on the issuer's economic sector. Participants are also encouraged to collect supplementary information on the stock of securities issued by the reporting economy (liabilities), broken down on the basis of the economy in which the non-resident holder resides and the type of security.

A1.6 The core elements of the CPIS survey allow a time series analysis of results from two perspectives. First, they allow analysis of reporting economies' holdings of portfolio

[46] The number of participants has increased over the years. In 1997, when the survey was first conducted, there were 29 participants.

[47] These holdings are covered in the CDIS survey, also conducted under the auspices of the IMF's STA. The CDIS survey is conducted annually, providing data as at year-end. The first CDIS survey provided data as at end-2009.

Table A1.1

Main structure of the Coordinated Portfolio Investment Survey

Breakdown by (i) currency of denomination or (ii) country of residence of holder and issuer	Equities	Debt securities	Of which		Total	All holders (world)
			Long-term debt securities	Short-term debt securities		

Investment in (bilateral data)	Holding sector											
	Total assets	Monetary authorities	Banks	Other financial institutions	Of which:			General govern-ment	Non-financial sector	Of which:		
					Insurance corporations	Non-MMF investment funds	Other			Non-financial corporations	Households	Other

investment securities, which highlight changes in the geographical distribution of their investment. Second, the CPIS survey allows the derivation, from creditor information, of time series data on the portfolio investment liabilities of the economies that issued the securities. This time series can be regarded as a lower bound, as not all economies participate in the CPIS survey (and of those that do, some do not cover all residents' holdings).

A1.7 The overall structure of the CPIS survey: (i) provides, at an aggregate level, details of both assets and liabilities (the latter being derived from creditor data), with a breakdown by financial instrument, which is in turn broken down by holding and issuing economy; and (ii) breaks financial instruments down on the basis of the currency of denomination and/or breaks the holding sector down on the basis of the issuing economy.

A1.8 In line with the recommendations made in the November 2009 report "The Financial Crisis and Information Gaps", the IMF is increasing the frequency and timeliness of CPIS data, making them at least semi-annual (instead of annual) and reducing the dissemination lag to less than nine months. It is also encouraging the reporting of data on both the institutional sector of the foreign debtor and short/negative positions. These improvements in the frequency, timeliness and scope of the CPIS survey may be implemented in time for the reporting of 2013 data.

Annex 1b The coordinated direct investment survey

A1.9 The CDIS survey is a global data collection initiative led by the IMF. The purpose of the CDIS survey is to improve the overall quality of statistics on direct investment positions in the international investment position (IIP) and the breakdown by immediate counterpart economy. Consequently, the CDIS survey supports the objective of developing "from-whom-to-whom" cross-border data, complementing the CPIS survey and international banking statistics provided by the Bank for International Settlements, as well as contributing to a better understanding of financial interconnectedness.

A1.10 The CDIS survey is conducted on an annual basis and first reported data for end-2009.[48] Preliminary data are requested nine months after the end of the reference period and released in December. Revised and more comprehensive data are then released in the middle of the following year (i.e. with a total lag of 18 months).

A1.11 The survey's concepts, coverage, valuation methods and classification criteria are all consistent with BPM6 and the fourth edition of the OECD's "Benchmark Definition of Foreign Direct Investment". Accordingly, foreign direct investment (FDI) arises when a unit resident in one economy makes an investment that gives it a significant degree of influence over the management of an enterprise resident in another economy. This concept is operationalised where a direct investor owns equity (usually ordinary shares) that entitles it to 10% or more of the voting rights for the enterprise in question. Once that threshold has been reached, the entities involved are said to be in a "direct investment relationship", and the equity and debt positions between the direct investor and the relevant enterprise (and between all enterprises that are in a direct investment relationship with that investor, with the exception of debt positions between selected financial intermediaries) are included in direct investment. This includes entities that have a common direct investor, but do not hold 10% or more of each other's equity. These entities are known as "fellow enterprises".

A1.12 The CDIS survey collects comprehensive and harmonised data on FDI positions for each economy as at year-end based on the location of the immediate counterpart to a direct investment position, with equity reported separately from debt investment. For inward direct investment, participating countries compile the value of outstanding year-end positions, broken down by immediate (first) direct investor

[48] At its meeting in November 2009 in Shanghai, China, the IMF's Committee on Balance of Payments Statistics agreed that the CDIS survey should be undertaken on an annual basis. For a guide to the CDIS survey, as well as data and metadata, see: www.imf.org/external/np/sta/cdis/index.htm

Table A1.2

Main structure of the Coordinated Direct Investment Survey (inward)

Country of residence of foreign direct investor or fellow enter-prise	Total inward direct invest-ment							Of which: Total inward direct invest-ment with fellow enterprises abroad		
		Equity (Inward-Net)	Debt instruments							
			Inward-Net	Net debt		Gross debt instruments		Net - Inward	Equity plus debt with fel-low enterprises abroad	
				Resident financial intermedi-aries (lia-bilities minus assets)	All other resident enterprises (liabilities minus assets)	Total debt instrument liabilities	Total debt instrument assets		Total equity and debt instrument liabilities	Total equity and debt instrument assets

and by counterpart economy, for both equity and debt (Table A1.2). For outward direct investment, participating countries provide information on the value of outstanding year-end positions, broken down by immediate (first) counterpart economy, for both equity and debt. For inward and outward investment, gross debt liabilities and gross debt assets should be identified separately. However, it is recognised that, owing to the need to preserve the confidentiality of data, some economies may be able to provide data only on total debt positions (which net out claims and liabilities). Further breakdowns separating positions between fellow enterprises from positions between direct investors and direct investment enterprises and showing the positions of resident financial intermediaries separately from other direct investment positions are encouraged. Countries provide metadata as part of their overall reporting to the IMF.

A1.13 The CDIS data release shows mirror data—i.e. data on inward FDI positions reported by an economy are shown alongside data on outward FDI positions reported by each counterpart economy. Similarly, data on outward FDI positions reported by an economy are shown alongside data on inward FDI positions reported by each counterpart economy. This means that the data reported can easily be compared and inconsistencies can be identified.

A1.14 In terms of equity, the CDIS survey covers all of the financial instruments set out in Section 2, such as shares (both listed and unlisted), stocks, participation certificates and depository receipts, as well as equity that is not in the form of securities. The values on the books of the direct investment enterprise should be used for both inward and outward direct investment.

A1.15 A large number of economies participate in the CDIS database. In autumn 2010, for example, 72 economies provided preliminary 2009 data for inward investment broken down by counterpart economy (i.e. the economy from which the inward direct investment comes), and 52 also reported outward data broken down by counterpart economy (i.e. the economy to which outward direct investment is sent). In June 2011, when revised data for 2009 were obtained, participation levels for inward and outward investment increased to 84 and 59 economies respectively. Of these, 76 economies responded to the metadata questionnaire for inward investment and 58 completed the questionnaire for outward investment.

Annex 2 Security-by-security databases and collection of security-by-security information on holdings

A2.1 SBS databases can, in conjunction with statistics on equity securities holdings, significantly improve the quality of monetary, financial, balance of payments and international investment position statistics, as well as financial accounts and financial balance sheets. Such databases are also useful for the purposes of estimating revaluations and other changes in the volume of assets and liabilities by type of financial instrument. They can be used to construct detailed "from-whom-to-whom" tables providing important information on linkages within the economy and may also be required when collecting and compiling datasets for systemically relevant investors (e.g. large and complex financial groups). Confidentiality issues may have to be addressed where issuance and holdings of equity securities are presented with fairly detailed breakdowns (e.g. with details of securities held by central banks).

A2.2 SBS databases for equity securities are somewhat different from SBS databases for debt securities (see Parts 1 and 2 of the Handbook). Equity securities do not usually have a maturity date and do not oblige the issuer to pay a predetermined amount to the holder.

A2.3 However, maintaining an SBS database for equity securities may be challenging for various reasons. These relate predominantly to:

(a) the compilation of market prices for listed shares, particularly multiple listings, and the procurement of up-to-date market prices from various (typically inconsistent) data sources, which has a considerable impact in terms of resources (with high data frequencies and resource-intensive inputting and quality management);

(b) the establishment of hierarchical links between individual equity securities and the relevant depository receipts, as well as secondary/dual listings;

(c) the handling of deviating price formats (percentage prices) when valuing share positions (e.g. in the case of "Genußscheine");

(d) the effective and timely integration of corporate events (e.g. capital increases/reductions, liquidations and stock splits) into a micro-level database;

(e) the handling of unlisted shares in an SBS database, typically with limited information on outstanding shares and comparable prices from the various data sources.

A2.4 As outlined in Annex 4 to Part 1 of the Handbook, a security-by-security database is a micro-level database that stores information at the level of individual equity securities. Statistics stored in SBS databases have to enable the identification of each individual security and provide sufficient information to allow the compilation of securities statistics (the ISIN code, the name and sector of the issuer, the type of security, the issue date, etc.). Moreover, information on certain parameters (e.g. the date of the IPO/listing, details of previous issuance of bonus shares or stock splits, or historical information on dividends payable) may also be of some importance for the purposes of monetary and financial stability analysis.

A2.5 Aggregated time series (i.e. equity securities issued by a given sector) can only be derived from an SBS database if time series for each security can be derived from such a database (see Diagram A4.1 in Part 1 of the Handbook).

A2.6 SBS databases can be linked to statistics on securities held by resident sectors and sub-sectors, as well as non-resident holders. For that purpose, information provided by respondents is linked at the level of individual securities to the data stored in the SBS database. That link is often made by means of the ISIN, but reference is also made to information on holders and holdings of equity securities: (i) the holder's place of residence and institutional sector/sub-sector (or large and complex financial or non-financial group); and (ii) the amount of securities held (be it the nominal or market value of the individual securities held, or just the number of securities held for each ISIN at a certain point in time).

A.2.7 A distinction should be made between the various levels of access. There are at least two access levels: (i) access to raw data for statisticians; and (ii) access to more aggregated data for users (e.g. for the purposes of compiling flow-of-funds and sectoral financial balance sheets).

A.2.8 Currently, reporting schemes for equity securities holdings are based mainly on two groups of agents with access to information on securities holdings: (i) custodians (as well as central securities depositories); and (ii) direct reporters (i.e. end investors such as banks and investment banks). In most cases, data are collected from the former on an SBS basis. This also involves the collection from non-resident custodians of data on residents' equity securities holdings in order to allow the estimation of the breakdown of holdings based on the issuer's place of residence.

A.2.9 Direct reporters provide SBS data on their holdings with various breakdowns (based, for example, on the type of instrument or the place of residence of the issuer). There may also be a legal obligation in some countries for residents to report securities held in custody abroad. However, there is usually limited coverage as regards data collected directly from specific sectors or sub-sectors (e.g. households and non-profit institutions serving households).

A.2.10 When deciding whether to construct an SBS database linked to statistics on securities holdings, the full range of benefits and costs needs to be considered.

Annex 3 The 2008 SNA and the corporate group approach

The 2008 SNA

A3.1 The 2008 SNA defines institutional units on the basis of their place of residence and principal economic activity, with institutional units aggregated in sectors and sub-sectors. The aggregated data are not consolidated. However, consolidated presentations are occasionally applied for specific sectors or sub-sectors (e.g. general government or money-issuing corporations) for analytical or policy purposes.

A3.2 The first column of Chart A3.1 illustrates the approach followed by the 2008 SNA.

The corporate group approach

A3.3 Instead of classifying institutional units in sectors, a second approach—also described in the 2008 SNA, but not recommended for national accounts, where strict geographical and sectoral boundaries must be observed—is to arrange institutional units in corporate groups on the basis of ownership and control (i.e. rather than grouping them together on the basis of their principal functions, behaviour and objectives).[49]

A3.4 The concept of the institutional unit is also the starting point for explaining the corporate group approach. On the basis of the concept of control, controlling and controlled units are aggregated. These are then consolidated by eliminating intra-group positions and flows, resulting in the establishment of corporate groups.

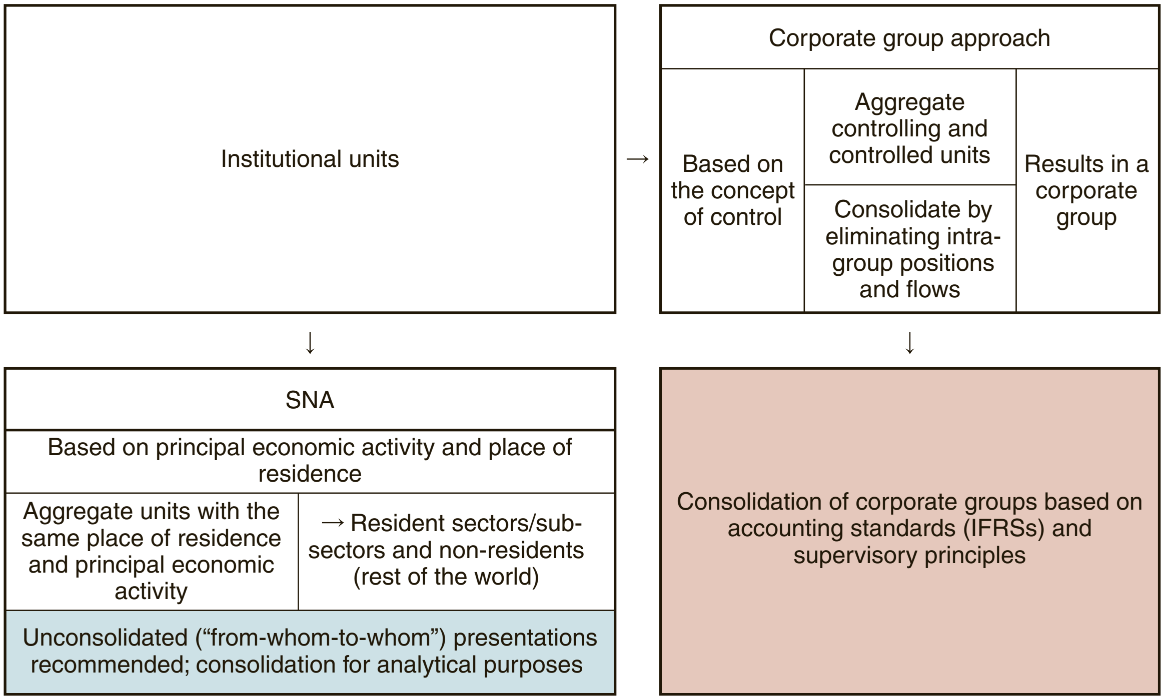
A3.5 The controlling and controlled units forming a corporate group usually belong (in terms of the 2008 SNA) to different economies and different sectors/sub-sectors.[50] It is therefore impossible to reconcile aggregated data compiled on the basis of the 2008 SNA with the data underlying the corporate group approach. One option, however, is to divide a corporate group into various sub-groups comprising units that reside in different places and belong to different resident sectors.

A3.6 Other modifications stem from the application of different consolidation

[49]Corporate groups may be financial or non-financial. Financial corporate groups comprise mainly financial corporations, but also some non-financial corporations, and include both resident and non-resident units. Non-financial corporate groups consist predominantly of non-financial corporations (2008 SNA, paras. 4.51 et seq.). Large and complex corporate groups are also known as "multinational enterprises" (MNEs), operating in a number of different countries in order to maximise the efficiency of production and minimise their global tax burden.

[50]For supervisory purposes, corporate groups may potentially be consolidated only at domestic level (i.e. only domestic subsidiaries are consolidated).

Chart A3.1
The 2008 SNA and the corporate group approach



concepts based on International Financial Reporting Standards (IFRSs) and supervisory principles.[51]

A3.7 Corporate groups may be large where a parent corporation controls several subsidiaries and some of those control subsidiaries of their own. However, each individual corporation in such a group remains a separate institutional unit. Even wholly owned subsidiaries are separate legal entities required by law and tax regulations to produce full sets of accounts (including balance sheets).

A3.8 For financial stability purposes, it is necessary to have information at the level of corporate groups (particularly for financial groups), so data used for this purpose are usually consolidated at group level.

A3.9 When assessing risks and their potential spread across institutions and markets, it is essential to know which unit is bearing the risk in question, regardless of where the relevant assets are held within the group. Where an institution or a whole group fails, it is also important to be able to see which other groups are exposed to that group (whether directly on-balance sheet or indirectly through contingencies such as guarantees) and are therefore liable to incur losses.[52]

A3.10 It may be that publicly available information is provided only for the corporate group as a whole, with relationships between the constituent corporations in the various countries having been consolidated. In this case, national accountants would need to consult other

[51]Discussions are ongoing on this issue as part of the Financial Stability Board’s G20 strategy with a view to closing information gaps.

[52]This approach is the one chosen by the Bank for International Settlements for its consolidated international banking statistics.

sources in order to obtain the necessary unconsolidated data.

A3.11 Statistical data used for supervisory and financial stability purposes focus on the activities of the supervised institution as a whole. For financial groups, these data are, accordingly, consolidated across national boundaries in order to include the activities of foreign bank branches, and they may also be consolidated across sectoral boundaries in order to include the activities of financial subsidiaries which are not banks (or money-issuing corporations). The content of this information is also somewhat different. Although supervisors use the sectoral distinctions and the detailed financial instruments reported for statistical purposes, they are primarily interested in measuring risks (such as counterparty, credit and market risks).

Corporate groups and ownership structures

A3.12 Groups of financial or non-financial corporations or conglomerates (corporate groups) can be large where a parent corporation controls several subsidiaries, some of which control subsidiaries of their own, and so on. The shareholdings of a corporate group are presented in a consolidated form, consolidated at group level.

A3.13 Ownership structures concern the type and composition of shareholders in a given corporation. Ownership structures are determined using observable measures of ownership concentration or the extent of direct/indirect ownership.

A3.14 Ownership structures for corporate groups can involve pyramid, ring and web structures, as well as cross-shareholdings.

A3.15 One example of a legally recognised corporate group with a complex structure is Germany's "Konzerne". Similarly, "Keiretzu" and "Chaebol" are corporate groups in Japan and South Korea respectively which consist of complex interlocking business relationships and shareholdings. Cross-shareholding arrangements are an essential feature of the Keiretzu and Chaebol groups. The way in which corporations engage with shareholders and other stakeholders can vary substantially, depending on the ownership structure in place.

Family ownership

A3.16 In many economies, family interests dominate ownership structures. It is sometimes suggested that corporations controlled by family interests are subject to better oversight than corporations controlled by institutional investors.

Institutional investors

A3.17 Markets have become increasingly institutionalised: investors often take the form of institutions investing the pooled funds of their intended beneficiaries. These institutional investors include insurance corporations, pension funds and investment funds (as well as deposit-taking corporations). Thus, the majority of investment is now described as "institutional investment", even though the vast majority of those funds are for the benefit of individual investors.

A3.18 The largest pools of investment funds are designed to maximise the benefits of diversified financial assets by investing sufficient amounts in a very large number of different corporations. The idea is that this strategy will largely eliminate financial and other risks at the level of individual firms. One consequence of this approach is that these investors have relatively little interest in the governance of individual corporations.

Corporate shareholder networks

A3.19 The analysis of corporate shareholder networks is an important task in corporate governance. In all economies, cross-corporation and cross-border shareholding relationships exist, forming complex networks and dependencies linking corporations at national and international level.

A3.20 These networks of shareholders give rise, in turn, to complex investment and control structures linking the entities concerned. Control enhancing mechanisms (CEMs) are fairly common for listed corporations. For instance, nearly half of all European corporations have one or more CEMs, the main ones being pyramid structures and cross-ownership arrangements. Pyramid structures resemble a tree, with the shareholder at the top of the pyramid usually having control. Cross-ownership structures comprise horizontal links established by means of cross-holdings of shares, reinforcing and entrenching the power of central shareholders.

A3.21 The analysis of corporate shareholder networks involves various tasks:

(a) determining the degree of ownership concentration by identifying the largest shareholders (typically the controlling shareholders), as well as pyramid and cross-ownership structures;

(b) exploring the corporate control system and identifying the controlling shareholders;

(c) identifying the ultimate controlling shareholders.

Measures of shareholder structures

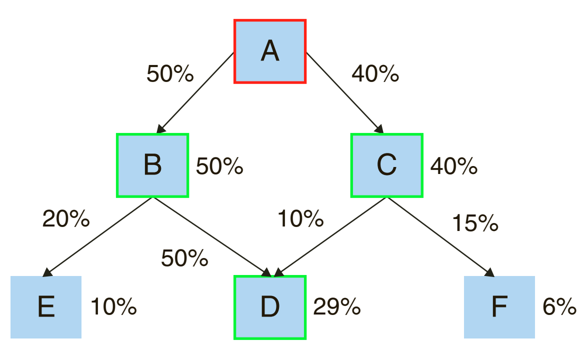
A3.22 In order to see who a corporation's shareholders are and how many shares they own, a corporation's direct and indirect shareholdings need to be calculated.

A3.23 Corporation networks are usually displayed as organigrams or ownership matrices. Corporations are presented as dots or squares, and shareholdings are shown as arrows. Colours can be used to distinguish between financial and non-financial corporations.

A3.24 Chart A3.2 shows corporation A's ownership and control vis-à-vis corporations B, C and D in a pyramid structure. In this example, corporation A owns 50% of corporation B and 40% of corporation C, but only (indirectly) 29% of corporation D. It controls this corporation through its control of corporation B. Corporation A is the ultimate shareholder, as it is not owned by any other shareholder. Corporations B, C and D are not under the influence of other dominating shareholders.

Chart A3.2

Indirect control, direct control, and indirect, direct and ultimate ownership by shareholders in a pyramid structure



Squares represent corporations, and arrows represent shareholdings (i.e. ownership). Numbers next to arrows indicate direct share ownership as a percentage of total shares. Numbers next to squares E, D and F indicate indirect ownership as a percentage of total shares.

The Euro Groups Register

A3.25 The Euro Groups Register (EGR) is a business register detailing all major corporate groups in Europe and the legal entities that make up those groups (as well as listing their respective countries of residence). In order to support the EGR project, statisticians in the European Union are devoting considerable effort to analysing the legal, operational and accounting structure of corporate groups at national and international level.

A3.26 The purpose of the EGR is to create a business register detailing all the major corporate groups (i.e. multinational enterprises) in Europe (including any members of the European Free Trade Association that wish to participate), as well as listing the legal entities that make up those groups (and their respective countries of residence).

A3.27 The current fragmented picture has increasingly led to harmonisation problems as regards statistics, including data on direct investment. The EGR is intended to act as a single point of reference and the primary tool for the improvement of statistics. The EGR's first production cycle produced results for 6,350 corporate groups in early 2010. Its full implementation is expected in 2013.

Annex 4 Valuation of unlisted shares

A4.1 If financial instruments are not traded in a market or are traded only infrequently, a value equivalent to the market value should be estimated instead. This value is also referred to as a "fair value" and is defined in the following way: "Fair value is a market-equivalent value. It is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction" (BPM6, para. 3.88).

Valuation methods as recommended in international statistical standards

A4.2 For unlisted shares (i.e. equity securities not listed on a stock exchange), three different valuation methods are proposed:[53] (i) valuation based on recent transactions; (ii) valuation based on accounting data for the corporation; (iii) valuation based on the value of a comparable corporation or a group of comparable corporations.

A4.3 The 2008 SNA and BPM6 establish six different methods for the valuation of unlisted shares. These methods are based on the use of:

(a) recent transaction prices (type i in the list above);

(b) net asset values, based on accounting data (type ii);

(c) present values or P/E ratios, by discounting forecasted future profits (types ii and iii);

(d) market capitalisation or price-to-book value (P/B) ratios (types ii and iii);

(e) own funds at book value (type ii);

(f) the apportioning of global values (type iii).

A4.4 Essentially, three different valuation methods are applied in practice. Unlisted shares should be estimated with reference to:

(a) the value of listed shares (where appropriate);

(b) the value of own funds; or

(c) discounted forecasted profits, applying an appropriate market price-to-earnings ratio to the smoothed recent earnings of the institutional unit.

A4.5 However, these estimates should take into account differences between listed and unlisted shares (notably as regards their liquidity) and the corporation's area of activity.

[53] Various studies have been carried out looking at this issue. A Study Group on Shares and Other Equity was set up by the European Monetary Institute in 1997 to deal with the issue of valuing unquoted shares. It undertook test exercises aimed at comparing six valuation methods for unquoted shares, looking at two sectors across three countries. The main conclusion of the study group's final report in 1998 was that there was no clear recommendation that could be implemented easily. To follow up on this work, a Eurostat Working Group on Unquoted Shares was established in 2002, with an OECD task force being set up some years later.

Implementation of valuation methods

A4.6 No single valuation method is prescribed by international statistical standards. Flexibility is encouraged in the choice of method, and methods are not ranked. The precise choice of method is left to compilers and is dependent on the availability of data and market conditions in each economy. However, some methods (such as P/E and P/B ratios) are commonly used by valuation practitioners, whereas the OFBV method has been developed by statisticians in an attempt to achieve a harmonised definition of book value across countries and accounting standards.

A4.7 To apply the P/B method, the following accounting data (balance sheet positions) are required. The book value of equity is calculated as share capital (i.e. common and preferred shares) plus the contributed surplus, plus retained earnings. Stock exchange data are then matched to the book value data. P/B ratios are calculated by dividing the market value of an enterprise by its book value. The ratio of the share price to the book value may vary depending on the economic sector. It is therefore preferable to calculate the current price of unlisted shares for each economic sector. There may also be other differences between listed and unlisted corporations, which may have an impact on the estimation method.

A4.8 The OFBV method gives unlisted shares the accounting value reflected in the financial reports (annual accounts) of the corporation in question—i.e. the value of unlisted shares is equal to the book value (with the book value defined as share capital plus the contributed surplus plus retained earnings, as indicated above).

A4.9 The P/E method requires the availability of accounting data on the smoothed recent earnings of both listed and unlisted corporations, as well as the P/E ratio of listed corporations. This ratio is ultimately applied to the forecasted future profits of unlisted corporations. As with the P/B method, this ratio should be calculated for each sector in turn.

Liquidity, control and negative equity values

A4.10 The valuation of unlisted shares may need to be modified further in order to take account of issues relating to liquidity, control and negative equity values. These factors may have a significant impact on the valuation of unlisted shares.

(a) Unlisted shares typically have lower levels of liquidity than listed shares. This tends to have a negative effect on their value and should be taken into account if the impact is significant.

(b) Unlisted corporations usually have few owners (often just one). A control premium is frequently paid when an investor obtains a controlling stake in a corporation. Since this control premium will normally be offered to all shareholders, all shares in a given corporation should be valued at the same price.

(c) These valuation methods may generate negative positions, which are not consistent with the limited liability aspect of equity. For instance, the P/E method often generates negative estimates of market value, as earnings are volatile and frequently negative. BPM6 allows the inclusion of negative FDI equity positions in the IIP, but practices may differ across individual countries. One alternative would be to establish a threshold or limit for the valuation of unlisted shares, whereby the value obtained by means of the various methods would never be lower than the share capital.

Glossary

Acquisition: The purchase of newly issued securities from an issuer or the purchase of existing securities from the previous holder on the secondary market. Acquisitions are considered to have occurred when claims and obligations arise, usually in exchange for currency or transferable deposits. Net acquisitions are gross acquisitions minus disposals.

Aggregation: The summing of gross position or flow statistics. Data for a group of institutional units are equal to the sum of the gross positions or flows for all units in the group (BPM6, para. 3.110).

Allotment certificates: These are issued by a corporation to represent its shares and are traded on the stock exchange. Allotment certificates expire and are converted into shares on a one-to-one basis without any additional payment when the underlying issue is registered.

Closed-ended investment fund shares or units: These are limited in number and sometimes have a specified maturity period (typically five to seven years). New shares or units are rarely issued once the fund has been launched, and shares or units are not normally redeemable until the fund is liquidated.

Consolidation: The elimination of positions or flows between institutional units that are grouped together for statistical purposes (2008 SNA, para. 2.68). Institutional units can be consolidated at sub-sector, sector or national level, or at the level of corporate groups.

Coordinated Portfolio Investment Survey (CPIS): Conducted on an annual basis under the auspices of the IMF's Statistics Department (STA). Participation in the CPIS survey is voluntary and 73 economies currently participate. Annual data are available from 2001. The CPIS survey provides information on individual economies' year-end holdings of portfolio investment securities (equity securities and debt securities) at market value, broken down by the country of residence of the issuer of the securities. Participants use the definitions and classification criteria set out in the *Balance of Payments Manual* and the second edition (2002) of the *Coordinated Portfolio Investment Survey Guide*.

Debt security: A negotiable financial instrument serving as evidence of a debt (2008 SNA, para. 11.64).

Delisting: The removal of a listed equity security from the exchange on which it is traded. Delisting occurs because the corporation issuing the security no longer complies with the exchange's listing requirements.

Depository receipt: A financial instrument that allows a non-resident to introduce securities in a market in a form more readily acceptable to the investors in that market. A deposit-taking corporation will purchase the underlying security and then issue receipts in a currency more acceptable to the investor (IMF, *External Debt Statistics Guide,* Appendix I).

Development capital certificates (CCDs): Issued by trusts to channel investment resources to specific sectors and activities. These are similar to financial instruments issued by special-purpose acquisition companies (SPACs) in the United States, income trusts in Canada, and infrastructure funds in Australia.

Disposal: The sale of securities to the issuer on maturity or on redemption at an earlier date, or the sale of securities to a new holder on the secondary market. This is considered to have occurred where an obligation ceases to exist owing to redemption or a sale on the secondary market, usually in exchange for currency or transferable deposits.

Domestic currency: The currency that is legal tender in an economy and is issued by the monetary authority for that economy—i.e. that of an individual economy or, in a currency union, that of the common currency area to which the economy belongs (BPM6, para. 3.95).

Domestic currency-denominated securities: Securities issued and settled in domestic currency.

Equity: All instruments and records acknowledging claims on the residual value of a corporation or quasi-corporation after the claims of all creditors have been met.

Equity securities: Negotiable financial instruments, comprising listed shares and unlisted shares.

Financial corporation sector: Sector consisting of all resident corporations that are engaged principally in the provision of financial services (including insurance and pension funding services) to other institutional units (2008 SNA, para. 4.98).

Financial derivatives: Negotiable financial instruments, but not securities. These are linked to specific financial or non-financial assets or indices and allow financial risks to be traded in financial markets in their own right.

Flow: Economic actions and the effects of events within a given accounting period (BPM6, para. 3.2).

Foreign currencies: All currencies other than the domestic currency (BPM6, para. 3.95).

Foreign currency-denominated securities: Securities issued and settled in foreign currencies.

Foreign direct investor: An entity or group of related entities that is able to exercise control or a significant degree of influence over another entity that is a resident of a different economy (BPM6, para. 6.11).

"**From-whom-to-whom**" **framework**: The presentation of debt securities holdings broken down by debtor/creditor. This is identical to the flow-of-funds presentation (2008 SNA, Chapter 17).

General government sector: Sector consisting of legal entities established by political processes that exercise legislative, judicial or executive authority over other institutional units within a given area (2008 SNA, para. 4.117).

Global aggregates: Debt and equity securities aggregates for the world as a whole and for different areas and countries.

Group of corporations: A parent corporation which controls several subsidiaries (some of which may control subsidiaries of their own, and so on).

Household sector: Sector consisting of groups of persons who share the same accommodation, pool some or all of their income and wealth, and consume certain types of good and service (mainly housing and food) collectively. This also covers unincorporated enterprises (2008 SNA, para. 4.149).

Institutional investors: Important holders of debt and equity securities, including investment funds (both money market funds (MMFs) and non-MMFs), insurance corporations and pension funds (OECD Institutional Investors' Assets database).

Investment funds: Collective investment schemes that raise funds by issuing shares or units to the public. The proceeds are invested in financial and non-financial assets (usually real estate).

Investment fund shares or units: These represent a claim on part of the value of an established investment fund.

Issuer/holder (debtor/creditor) principle: This captures a transaction between two institutional units in the accounts of the two transactors and allows the change of holder (creditor) to be recorded in the financial account of the issuer (debtor). Alternatively, in the case, for example, of the assumption of equity or debt, it allows the change of issuer (debtor) to be recorded in the financial account of the holder (creditor).

Listing: The entry of a corporation in the share register of a given marketplace or stock exchange, allowing its shares to be traded.

Market value: The price at which debt securities are acquired or disposed of in transactions between willing parties, excluding commissions, fees and taxes (2008 SNA, para. 3.122), but including accrued interest.

Money market funds (MMFs): Investment funds that invest only or primarily in short-term money market securities, such as treasury bills, certificates of deposit and commercial paper.

Money market fund shares or units: These represent a claim on part of the value of an established money market fund.

Negotiable: This refers to the fact that legal ownership is readily capable of being transferred from one owner to another by means of delivery or endorsement (BPM6, para. 5.15).

Non-financial corporation sector: Sector consisting of corporations whose principal activity is the production of market goods or non-financial services (2008 SNA, para. 4.94).

Non-profit institutions serving households: Legal entities engaged principally in the production of non-market services for households or the community in general whose main resources are voluntary contributions (2008 SNA, para. 2.17 (e)).

Open-ended investment fund shares or units: These are issued and redeemed on a continuous basis, or at certain predefined (short-term) intervals. The most popular types of open-ended investment fund are exchange-traded funds (ETFs) and money market funds. An open-ended investment fund is divided equally into shares or units, which vary in price in direct proportion to variations in the fund's net asset value (NAV).

Original owner: An institutional unit that is an originator or purchases assets from an originator in the secondary market.

Other change in the volume of assets: A change in the quantity or physical characteristics of debt or equity securities, or a change in classification.

Other financial corporations: Financial corporations other than the central bank, other money-issuing corporations and securitisation corporations.

Other money-issuing corporations: Deposit-taking corporations and money market funds that issue liabilities included in the national definition of broad money.

Ownership structures: The type and composition of shareholders in a corporation. These are determined using observable measures of ownership concentration or the extent of direct/indirect ownership.

Portfolio investment: Cross-border transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets (BPM6, para. 6.54).

Position: The level of assets or liabilities at a particular point in time (BPM6, para. 3.2).

Public sector: Sector comprising general government and public financial and non-financial corporations, including the central bank.

Repurchase agreement: 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, either on a specified future date or with an "open" maturity (BPM6, para. 5.52).

Residence: The place of residence of an institutional unit is the economic territory with which it has the strongest connection—i.e. its "centre of predominant economic interest" (2008 SNA, para. 4.10).

"**Residency of holder**" **approach**: A presentation based on a breakdown of holders of equity securities by place of residence.

"**Residency of issuer**" **approach**: A presentation based on a breakdown of issuers of equity securities by place of residence.

Revaluation: This reflects changes in the prices of equity securities holdings. It also includes changes in the value of foreign currency-denominated equity securities holdings which are due to changes in exchange rates.

Security: A negotiable financial instrument (BPM6, para. 5.15).

Security-by-security (SBS) database: A micro-level database that stores statistics at the level of individual debt securities.

Shares: Negotiable financial instruments representing claims on the residual value of a corporation after the claims of all creditors have been met. These comprise listed and unlisted shares.

Transactor principle: This captures a change in the ownership of a financial asset in the accounts of the two creditors involved (i.e. the transactors), but not in the account of the debtor. Alternatively, where one institutional unit assumes the liability of another, it captures the change of debtor in the accounts of those two units, but not in that of the creditor.

Warrants: Options classified as financial derivatives. These are negotiable financial instruments giving the holder the right to buy, subject to specific conditions and for a specified period of time, a certain number of shares or bonds from the issuer of the warrant (usually a corporation).

References

Bank for International Settlements, European Central Bank and International Monetary Fund, *Handbook on Securities Statistics—Part 1: Debt Securities Issues*, Washington DC, 2009 (www.imf.org/external/np/sta/wgsd/hbook.htm).

Bank for International Settlements, European Central Bank and International Monetary Fund, *Handbook on Securities Statistics—Part 2: Debt Securities Holdings*, Washington DC, 2010 (www.imf.org/external/np/sta/wgsd/hbook.htm).

European Central Bank, *Securities issues statistics methodological notes*, Frankfurt am Main, 2005 (www.ecb.europa.eu/stats/pdf/money/securities/sec_methodological notes.pdf).

European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts 2008*, New York, 2009 (http://unstats.un.org/unsd/nationalaccount/sna2008.asp).

International Monetary Fund, *Monetary and Financial Statistics Manual*, Washington DC, 2000 (www.imf.org/external/pubs/ft/mfs/manual/index.htm).

International Monetary Fund, *Government Finance Statistics Manual 2001*, Washington DC, 2001 (www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf).

International Monetary Fund, *Coordinated Portfolio Investment Survey Guide*, 2nd edition, Washington DC, 2002 (www.imf.org/external/pubs/ft/cpis/2002/pdf/cpis_index.pdf).

International Monetary Fund, *External Debt Statistics Guide*, Washington DC, 2003 (www.imf.org/external/pubs/ft/eds/Eng/Guide/index.htm).

International Monetary Fund, *Balance of Payments and International Investment Position Manual*, 6th edition, Washington DC, 2008 (www.imf.org/external/pubs/ft/bop/2007/pdf/BPM6.pdf).

International Monetary Fund, *Monetary and Financial Statistics: Compilation Guide*, Washington DC, 2008 (www.imf.org/external/pubs/ft/cgmfs/eng/pdf/cgmfs.pdf).

International Monetary Fund, *Coordinated Direct Investment Survey Guide*, Washington DC, 2010 (www.imf.org/external/np/sta/cdis/pdf/2009/120109.pdf).

Irving Fisher Committee, Residency/Local and Nationality/Global Views of Financial Positions, *IFC Working Papers*, No 8, April 2012 (www.bis.org/ifc/publ/ifcwork08.htm).

Organisation for Economic Co-operation and Development, *Institutional Investors' Assets*, online database (http://stats.oecd.org/Index.aspx?DatasetCode=7IA).

Organisation for Economic Co-operation and Development, *OECD Principles of Corporate Governance*, Paris, 2004 (www.oecd.org/dataoecd/32/18/31557724.pdf).

UNCTAD, *Guidance on Good Practices in Corporate Governance*, New York and Geneva, 2006 (www.unctad.org/en/docs/iteteb20063_en.pdf).

Guideline of the European Central Bank of 1 August 2007 on monetary, financial institutions and markets statistics (recast) (ECB/2007/9) (www.ecb.europa.eu/ecb/legal/pdf/en_gui_2007_9_f_signed_ecb_website.pdf).

Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community (ESA 95) (http://circa.europa.eu/irc/dsis/nfaccount/info/data/esa95/en/een00sum.htm).